## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 ENGLAND

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

ENGLAND			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	60,943,124		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	10,974,709	18.0%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	4,318,717	7.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	16,295,075	26.7%	
Total Population (16-64)	39,780,134		
People with one or more 'at risk' conditions (16-64)	5,396,158	13.6%	
People with two or more 'at risk' conditions (16-64)	1,471,652	3.7%	
Total Population (65+)	10,487,551		
People with one or more 'at risk' conditions (65+)	5,167,185	49.3%	
People with two or more 'at risk' conditions (65+)	2,773,111	26.4%	
People with no 'at risk' conditions (65+)	5,320,366	50.7%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	979,616	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	173,717	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	67,990	6.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	276,282	28.2%
Total Population (16-64)	618,035	
People with one or more 'at risk' conditions (16-64)	79,371	12.8%
People with two or more 'at risk' conditions (16-64)	20,682	3.3%
Total Population (65+)	191,864	
People with one or more 'at risk' conditions (65+)	89,299	46.5%
People with two or more 'at risk' conditions (65+)	46,396	24.2%
People with no 'at risk' conditions (65+)	102,565	53.5%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 BEDFORDSHIRE, LUTON AND MILTON KEYNES STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

BEDFORDSHIRE, LUTON AND MILTON KEYNES STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,054,074	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	191,439	18.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	67,978	6.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	269,543	25.6%
Total Population (16-64)	686,464	
People with one or more 'at risk' conditions (16-64)	99,129	14.4%
People with two or more 'at risk' conditions (16-64)	25,865	3.8%
Total Population (65+)	154,433	
People with one or more 'at risk' conditions (65+)	76,329	49.4%
People with two or more 'at risk' conditions (65+)	40,315	26.1%
People with no 'at risk' conditions (65+)	78,104	50.6%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 BIRMINGHAM AND SOLIHULL STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

BIRMINGHAM AND SOLIHULL STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,318,264	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	255,027	19.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	98,683	7.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	342,816	26.0%
Total Population (16-64)	857,024	
People with one or more 'at risk' conditions (16-64)	141,570	16.5%
People with two or more 'at risk' conditions (16-64)	39,837	4.6%
Total Population (65+)	188,825	
People with one or more 'at risk' conditions (65+)	101,036	53.5%
People with two or more 'at risk' conditions (65+)	56,578	30.0%
People with no 'at risk' conditions (65+)	87,789	46.5%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,063,648	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	176,639	16.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	71,032	6.7%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	258,082	24.3%
Total Population (16-64)	722,326	
People with one or more 'at risk' conditions (16-64)	87,983	12.2%
People with two or more 'at risk' conditions (16-64)	24,205	3.4%
Total Population (65+)	163,649	
People with one or more 'at risk' conditions (65+)	82,206	50.2%
People with two or more 'at risk' conditions (65+)	45,656	27.9%
People with no 'at risk' conditions (65+)	81,443	49.8%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 BUCKINGHAMSHIRE, OXFORDSHIRE AND BERKSHIRE WEST STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

BUCKINGHAMSHIRE, OXFORDSHIRE AND BERKSHIRE WEST STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,950,709	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	281,239	14.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	104,557	5.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	462,377	23.7%
Total Population (16-64)	1,284,926	
People with one or more 'at risk' conditions (16-64)	129,685	10.1%
People with two or more 'at risk' conditions (16-64)	31,715	2.5%
Total Population (65+)	322,187	
People with one or more 'at risk' conditions (65+)	141,049	43.8%
People with two or more 'at risk' conditions (65+)	70,837	22.0%
People with no 'at risk' conditions (65+)	181,138	56.2%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 CAMBRIDGESHIRE AND PETERBOROUGH STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

CAMBRIDGESHIRE AND PETERBOROUGH STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,019,502		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	166,168	16.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	64,319	6.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	250,899	24.6%	
Total Population (16-64)	678,813		
People with one or more 'at risk' conditions (16-64)	80,606	11.9%	
People with two or more 'at risk' conditions (16-64)	21,578	3.2%	
Total Population (65+)	163,412		
People with one or more 'at risk' conditions (65+)	78,681	48.1%	
People with two or more 'at risk' conditions (65+)	41,534	25.4%	
People with no 'at risk' conditions (65+)	84,731	51.9%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 CHESHIRE AND MERSEYSIDE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

CHESHIRE AND MERSEYSIDE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	2,642,687	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	549,466	20.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	233,076	8.8%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	789,598	29.9%
Total Population (16-64)	1,691,985	
People with one or more 'at risk' conditions (16-64)	272,376	16.1%
People with two or more 'at risk' conditions (16-64)	82,751	4.9%
Total Population (65+)	499,189	
People with one or more 'at risk' conditions (65+)	259,057	51.9%
People with two or more 'at risk' conditions (65+)	147,305	29.5%
People with no 'at risk' conditions (65+)	240,132	48.1%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 CORNWALL AND THE ISLES OF SCILLY HEALTH & SOCIAL CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

CORNWALL AND THE ISLES OF SCILLY HEALTH & SOCIAL CARE PARTNERSHIP (STP)			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	587,235		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	131,329	22.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	58,023	9.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	204,781	34.9%	
Total Population (16-64)	350,298		
People with one or more 'at risk' conditions (16-64)	55,576	15.9%	
People with two or more 'at risk' conditions (16-64)	16,597	4.7%	
Total Population (65+)	145,128		
People with one or more 'at risk' conditions (65+)	71,676	49.4%	
People with two or more 'at risk' conditions (65+)	40,713	28.1%	
People with no 'at risk' conditions (65+)	73,452	50.6%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 COVENTRY AND WARWICKSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

COVENTRY AND WARWICKSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,046,168	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	176,450	16.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	66,555	6.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	264,869	25.3%
Total Population (16-64)	694,305	
People with one or more 'at risk' conditions (16-64)	86,288	12.4%
People with two or more 'at risk' conditions (16-64)	21,819	3.1%
Total Population (65+)	172,499	
People with one or more 'at risk' conditions (65+)	84,080	48.7%
People with two or more 'at risk' conditions (65+)	43,706	25.3%
People with no 'at risk' conditions (65+)	88,419	51.3%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 CUMBRIA AND NORTH EAST STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

CUMBRIA AND NORTH EAST STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	3,116,767		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	656,164	21.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	272,286	8.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	942,818	30.2%	
Total Population (16-64)	1,996,359		
People with one or more 'at risk' conditions (16-64)	316,290	15.8%	
People with two or more 'at risk' conditions (16-64)	91,500	4.6%	
Total Population (65+)	606,001		
People with one or more 'at risk' conditions (65+)	319,347	52.7%	
People with two or more 'at risk' conditions (65+)	177,080	29.2%	
People with no 'at risk' conditions (65+)	286,654	47.3%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 DEVON STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

DEVON STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,253,923	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	245,684	19.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	100,957	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	405,023	32.3%
Total Population (16-64)	763,654	
People with one or more 'at risk' conditions (16-64)	101,851	13.3%
People with two or more 'at risk' conditions (16-64)	28,370	3.7%
Total Population (65+)	295,309	
People with one or more 'at risk' conditions (65+)	135,970	46.0%
People with two or more 'at risk' conditions (65+)	71,293	24.1%
People with no 'at risk' conditions (65+)	159,339	54.0%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 DORSET STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

DORSET STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	810,866	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	161,654	19.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	68,535	8.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	264,906	32.7%
Total Population (16-64)	494,286	
People with one or more 'at risk' conditions (16-64)	64,891	13.1%
People with two or more 'at risk' conditions (16-64)	17,908	3.6%
Total Population (65+)	195,586	
People with one or more 'at risk' conditions (65+)	92,334	47.2%
People with two or more 'at risk' conditions (65+)	49,826	25.5%
People with no 'at risk' conditions (65+)	103,252	52.8%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 EAST LONDON HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

EAST LONDON HEALTH & CARE PARTNERSHIP (STP)		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	2,364,810	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	346,789	14.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	120,539	5.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	447,607	18.9%
Total Population (16-64)	1,694,273	
People with one or more 'at risk' conditions (16-64)	213,857	12.6%
People with two or more 'at risk' conditions (16-64)	55,000	3.2%
Total Population (65+)	217,355	
People with one or more 'at risk' conditions (65+)	116,537	53.6%
People with two or more 'at risk' conditions (65+)	62,234	28.6%
People with no 'at risk' conditions (65+)	100,818	46.4%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 FRIMLEY HEALTH & CARE (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

FRIMLEY HEALTH & CARE (STP)		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	815,574	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	133,610	16.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	50,475	6.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	198,070	24.3%
Total Population (16-64)	532,293	
People with one or more 'at risk' conditions (16-64)	66,953	12.6%
People with two or more 'at risk' conditions (16-64)	17,030	3.2%
Total Population (65+)	126,623	
People with one or more 'at risk' conditions (65+)	62,163	49.1%
People with two or more 'at risk' conditions (65+)	32,612	25.8%
People with no 'at risk' conditions (65+)	64,460	50.9%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 GLOUCESTERSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

GLOUCESTERSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	667,069	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	132,132	19.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	54,044	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	205,336	30.8%
Total Population (16-64)	414,887	
People with one or more 'at risk' conditions (16-64)	61,775	14.9%
People with two or more 'at risk' conditions (16-64)	16,811	4.1%
Total Population (65+)	139,979	
People with one or more 'at risk' conditions (65+)	66,775	47.7%
People with two or more 'at risk' conditions (65+)	36,488	26.1%
People with no 'at risk' conditions (65+)	73,204	52.3%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 GREATER MANCHESTER HEALTH & SOCIAL CARE PARTNERSHIP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1.2.3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

GREATER MANCHESTER HEALTH & SOCIAL CARE PARTNERSHIP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	3,103,533	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	572,339	18.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	228,058	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	789,822	25.4%
Total Population (16-64)	2,044,413	
People with one or more 'at risk' conditions (16-64)	306,922	15.0%
People with two or more 'at risk' conditions (16-64)	88,431	4.3%
Total Population (65+)	457,832	
People with one or more 'at risk' conditions (65+)	240,349	52.5%
People with two or more 'at risk' conditions (65+)	135,172	29.5%
People with no 'at risk' conditions (65+)	217,483	47.5%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 HAMPSHIRE AND THE ISLE OF WIGHT STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

HAMPSHIRE AND THE ISLE OF WIGHT STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,903,527		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	350,005	18.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	141,858	7.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	550,591	28.9%	
Total Population (16-64)	1,205,519		
People with one or more 'at risk' conditions (16-64)	160,115	13.3%	
People with two or more 'at risk' conditions (16-64)	44,388	3.7%	
Total Population (65+)	380,303		
People with one or more 'at risk' conditions (65+)	179,717	47.3%	
People with two or more 'at risk' conditions (65+)	95,521	25.1%	
People with no 'at risk' conditions (65+)	200,586	52.7%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 HEREFORDSHIRE AND WORCESTERSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

HEREFORDSHIRE AND WORCESTERSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	792,123	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	157,157	19.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	62,965	7.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	253,155	32.0%
Total Population (16-64)	481,458	
People with one or more 'at risk' conditions (16-64)	68,459	14.2%
People with two or more 'at risk' conditions (16-64)	17,947	3.7%
Total Population (65+)	180,127	
People with one or more 'at risk' conditions (65+)	84,129	46.7%
People with two or more 'at risk' conditions (65+)	44,215	24.5%
People with no 'at risk' conditions (65+)	95,998	53.3%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 HERTFORDSHIRE AND WEST ESSEX STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

HERTFORDSHIRE AND WEST ESSEX STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,581,676		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	261,037	16.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	101,453	6.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	400,488	25.3%	
Total Population (16-64)	1,016,161		
People with one or more 'at risk' conditions (16-64)	123,968	12.2%	
People with two or more 'at risk' conditions (16-64)	32,221	3.2%	
Total Population (65+)	266,344		
People with one or more 'at risk' conditions (65+)	126,893	47.6%	
People with two or more 'at risk' conditions (65+)	67,195	25.2%	
People with no 'at risk' conditions (65+)	139,451	52.4%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 HUMBER, COAST AND VALE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

HUMBER, COAST AND VALE STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,753,387		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	345,562	19.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	138,743	7.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	539,615	30.8%	
Total Population (16-64)	1,094,511		
People with one or more 'at risk' conditions (16-64)	156,617	14.3%	
People with two or more 'at risk' conditions (16-64)	43,135	3.9%	
Total Population (65+)	373,378		
People with one or more 'at risk' conditions (65+)	179,325	48.0%	
People with two or more 'at risk' conditions (65+)	93,882	25.1%	
People with no 'at risk' conditions (65+)	194,053	52.0%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 JOINED UP CARE DERBYSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

JOINED UP CARE DERBYSHIRE STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,051,418		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	212,264	20.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	85,160	8.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	316,586	30.1%	
Total Population (16-64)	665,419		
People with one or more 'at risk' conditions (16-64)	102,411	15.4%	
People with two or more 'at risk' conditions (16-64)	28,103	4.2%	
Total Population (65+)	208,274		
People with one or more 'at risk' conditions (65+)	103,952	49.9%	
People with two or more 'at risk' conditions (65+)	55,891	26.8%	
People with no 'at risk' conditions (65+)	104,322	50.1%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 KENT AND MEDWAY STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

KENT AND MEDWAY STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,931,154	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	356,174	18.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	140,140	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	549,493	28.5%
Total Population (16-64)	1,201,805	
People with one or more 'at risk' conditions (16-64)	164,799	13.7%
People with two or more 'at risk' conditions (16-64)	44,754	3.7%
Total Population (65+)	372,222	
People with one or more 'at risk' conditions (65+)	178,903	48.1%
People with two or more 'at risk' conditions (65+)	93,066	25.0%
People with no 'at risk' conditions (65+)	193,319	51.9%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 LANCASHIRE AND SOUTH CUMBRIA ICS

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

LANCASHIRE AND SOUTH CUMBRIA ICS			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,772,706		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	370,264	20.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	156,203	8.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	538,552	30.4%	
Total Population (16-64)	1,117,508		
People with one or more 'at risk' conditions (16-64)	177,066	15.8%	
People with two or more 'at risk' conditions (16-64)	52,815	4.7%	
Total Population (65+)	347,545		
People with one or more 'at risk' conditions (65+)	179,257	51.6%	
People with two or more 'at risk' conditions (65+)	101,003	29.1%	
People with no 'at risk' conditions (65+)	168,288	48.4%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 LEICESTER, LEICESTERSHIRE AND RUTLAND STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

LEICESTER, LEICESTERSHIRE AND RUTLAND STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,174,905		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	205,749	17.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	78,406	6.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	308,716	26.3%	
Total Population (16-64)	769,257		
People with one or more 'at risk' conditions (16-64)	104,017	13.5%	
People with two or more 'at risk' conditions (16-64)	26,952	3.5%	
Total Population (65+)	198,587		
People with one or more 'at risk' conditions (65+)	95,620	48.2%	
People with two or more 'at risk' conditions (65+)	50,073	25.2%	
People with no 'at risk' conditions (65+)	102,967	51.8%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 LINCOLNSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

LINCOLNSHIRE STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	787,911		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	162,456	20.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	65,929	8.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	255,531	32.4%	
Total Population (16-64)	478,726		
People with one or more 'at risk' conditions (16-64)	71,334	14.9%	
People with two or more 'at risk' conditions (16-64)	19,741	4.1%	
Total Population (65+)	179,714		
People with one or more 'at risk' conditions (65+)	86,639	48.2%	
People with two or more 'at risk' conditions (65+)	45,341	25.2%	
People with no 'at risk' conditions (65+)	93,075	51.8%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 MID AND SOUTH ESSEX STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

MID AND SOUTH ESSEX STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,223,825		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	218,404	17.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	85,281	7.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	342,586	28.0%	
Total Population (16-64)	763,193		
People with one or more 'at risk' conditions (16-64)	100,456	13.2%	
People with two or more 'at risk' conditions (16-64)	26,419	3.5%	
Total Population (65+)	234,843		
People with one or more 'at risk' conditions (65+)	110,661	47.1%	
People with two or more 'at risk' conditions (65+)	57,357	24.4%	
People with no 'at risk' conditions (65+)	124,182	52.9%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NORFOLK AND WAVENEY HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NORFOLK AND WAVENEY HEALTH & CARE PARTNERSHIP (STP)		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,049,788	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	209,259	19.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	82,453	7.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	342,473	32.6%
Total Population (16-64)	634,975	
People with one or more 'at risk' conditions (16-64)	87,170	13.7%
People with two or more 'at risk' conditions (16-64)	23,220	3.7%
Total Population (65+)	249,024	
People with one or more 'at risk' conditions (65+)	115,810	46.5%
People with two or more 'at risk' conditions (65+)	58,186	23.4%
People with no 'at risk' conditions (65+)	133,214	53.5%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NORTH LONDON PARTNERS IN HEALTH & CARE (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NORTH LONDON PARTNERS IN HEALTH & CARE (STP)			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,787,147		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	236,415	13.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	83,926	4.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	335,669	18.8%	
Total Population (16-64)	1,302,565		
People with one or more 'at risk' conditions (16-64)	127,570	9.8%	
People with two or more 'at risk' conditions (16-64)	32,031	2.5%	
Total Population (65+)	193,453		
People with one or more 'at risk' conditions (65+)	94,199	48.7%	
People with two or more 'at risk' conditions (65+)	49,538	25.6%	
People with no 'at risk' conditions (65+)	99,254	51.3%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NORTH WEST LONDON HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NORTH WEST LONDON HEALTH & CARE PARTNERSHIP (STP)			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	2,791,679		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	389,890	14.0%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	137,175	4.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	539,672	19.3%	
Total Population (16-64)	2,048,398		
People with one or more 'at risk' conditions (16-64)	218,448	10.7%	
People with two or more 'at risk' conditions (16-64)	54,542	2.7%	
Total Population (65+)	299,905		
People with one or more 'at risk' conditions (65+)	150,123	50.1%	
People with two or more 'at risk' conditions (65+)	79,423	26.5%	
People with no 'at risk' conditions (65+)	149,782	49.9%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NORTHAMPTONSHIRE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NORTHAMPTONSHIRE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	782,413	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	143,112	18.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	56,496	7.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	209,549	26.8%
Total Population (16-64)	502,266	
People with one or more 'at risk' conditions (16-64)	72,274	14.4%
People with two or more 'at risk' conditions (16-64)	20,007	4.0%
Total Population (65+)	131,988	
People with one or more 'at risk' conditions (65+)	65,551	49.7%
People with two or more 'at risk' conditions (65+)	35,539	26.9%
People with no 'at risk' conditions (65+)	66,437	50.3%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NOTTINGHAM AND NOTTINGHAMSHIRE HEALTH AND CARE STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NOTTINGHAM AND NOTTINGHAMSHIRE HEALTH AND CARE STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,116,179	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	212,312	19.0%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	87,764	7.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	300,809	26.9%
Total Population (16-64)	740,891	
People with one or more 'at risk' conditions (16-64)	109,353	14.8%
People with two or more 'at risk' conditions (16-64)	32,228	4.3%
Total Population (65+)	184,734	
People with one or more 'at risk' conditions (65+)	96,237	52.1%
People with two or more 'at risk' conditions (65+)	54,143	29.3%
People with no 'at risk' conditions (65+)	88,497	47.9%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 OUR HEALTHIER SOUTH EAST LONDON STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

OUR HEALTHIER SOUTH EAST LONDON STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	2,070,047	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	311,885	15.1%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	111,692	5.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	428,395	20.7%
Total Population (16-64)	1,480,720	
People with one or more 'at risk' conditions (16-64)	182,406	12.3%
People with two or more 'at risk' conditions (16-64)	47,835	3.2%
Total Population (65+)	232,422	
People with one or more 'at risk' conditions (65+)	115,912	49.9%
People with two or more 'at risk' conditions (65+)	61,273	26.4%
People with no 'at risk' conditions (65+)	116,510	50.1%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SHROPSHIRE AND TELFORD AND WREKIN STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SHROPSHIRE AND TELFORD AND WREKIN STP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	508,264	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	105,960	20.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	43,317	8.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	161,743	31.8%
Total Population (16-64)	312,555	
People with one or more 'at risk' conditions (16-64)	48,042	15.4%
People with two or more 'at risk' conditions (16-64)	13,389	4.3%
Total Population (65+)	110,196	
People with one or more 'at risk' conditions (65+)	54,413	49.4%
People with two or more 'at risk' conditions (65+)	29,286	26.6%
People with no 'at risk' conditions (65+)	55,783	50.6%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SOMERSET STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SOMERSET STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	581,341		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	118,075	20.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	48,302	8.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	191,615	33.0%	
Total Population (16-64)	346,763		
People with one or more 'at risk' conditions (16-64)	48,742	14.1%	
People with two or more 'at risk' conditions (16-64)	13,372	3.9%	
Total Population (65+)	139,787		
People with one or more 'at risk' conditions (65+)	66,247	47.4%	
People with two or more 'at risk' conditions (65+)	34,339	24.6%	
People with no 'at risk' conditions (65+)	73,540	52.6%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SOUTH WEST LONDON HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1.2.3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SOUTH WEST LONDON HEALTH & CARE PARTNERSHIP (STP)		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,748,851	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	232,966	13.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	84,976	4.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	347,463	19.9%
Total Population (16-64)	1,220,343	
People with one or more 'at risk' conditions (16-64)	123,022	10.1%
People with two or more 'at risk' conditions (16-64)	31,077	2.5%
Total Population (65+)	214,189	
People with one or more 'at risk' conditions (65+)	99,692	46.5%
People with two or more 'at risk' conditions (65+)	51,906	24.2%
People with no 'at risk' conditions (65+)	114,497	53.5%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SOUTH YORKSHIRE AND BASSETLAW STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SOUTH YORKSHIRE AND BASSETLAW STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,587,565		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	319,869	20.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	129,141	8.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	449,453	28.3%	
Total Population (16-64)	1,037,289		
People with one or more 'at risk' conditions (16-64)	160,930	15.5%	
People with two or more 'at risk' conditions (16-64)	46,236	4.5%	
Total Population (65+)	274,345		
People with one or more 'at risk' conditions (65+)	144,761	52.8%	
People with two or more 'at risk' conditions (65+)	80,474	29.3%	
People with no 'at risk' conditions (65+)	129,584	47.2%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 STAFFORDSHIRE & STOKE ON TRENT STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

STAFFORDSHIRE & STOKE ON TRENT STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,129,418		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	234,457	20.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	91,547	8.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	347,522	30.8%	
Total Population (16-64)	703,493		
People with one or more 'at risk' conditions (16-64)	112,410	16.0%	
People with two or more 'at risk' conditions (16-64)	29,826	4.2%	
Total Population (65+)	227,288		
People with one or more 'at risk' conditions (65+)	114,223	50.3%	
People with two or more 'at risk' conditions (65+)	60,301	26.5%	
People with no 'at risk' conditions (65+)	113,065	49.7%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SUFFOLK AND NORTH EAST ESSEX ICS

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SUFFOLK AND NORTH EAST ESSEX ICS			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,020,852		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	202,582	19.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	82,513	8.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	321,395	31.5%	
Total Population (16-64)	622,791		
People with one or more 'at risk' conditions (16-64)	88,234	14.2%	
People with two or more 'at risk' conditions (16-64)	24,064	3.9%	
Total Population (65+)	226,313		
People with one or more 'at risk' conditions (65+)	107,500	47.5%	
People with two or more 'at risk' conditions (65+)	57,194	25.3%	
People with no 'at risk' conditions (65+)	118,813	52.5%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SURREY HEARTLANDS HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SURREY HEARTLANDS HEALTH & CARE PARTNERSHIP (STP)			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,126,307		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	174,630	15.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	68,291	6.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	286,793	25.5%	
Total Population (16-64)	719,060		
People with one or more 'at risk' conditions (16-64)	76,455	10.6%	
People with two or more 'at risk' conditions (16-64)	19,027	2.6%	
Total Population (65+)	204,234		
People with one or more 'at risk' conditions (65+)	92,071	45.1%	
People with two or more 'at risk' conditions (65+)	48,108	23.6%	
People with no 'at risk' conditions (65+)	112,163	54.9%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 SUSSEX HEALTH AND CARE PARTNERSHIP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

SUSSEX HEALTH AND CARE PARTNERSHIP		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,804,528	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	332,337	18.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	134,379	7.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	536,106	29.7%
Total Population (16-64)	1,132,940	
People with one or more 'at risk' conditions (16-64)	142,203	12.6%
People with two or more 'at risk' conditions (16-64)	38,109	3.4%
Total Population (65+)	384,704	
People with one or more 'at risk' conditions (65+)	180,935	47.0%
People with two or more 'at risk' conditions (65+)	94,583	24.6%
People with no 'at risk' conditions (65+)	203,769	53.0%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 THE BLACK COUNTRY AND WEST BIRMINGHAM STP

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

THE BLACK COUNTRY AND WEST BIRMINGHAM STP			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,462,364		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	286,385	19.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	109,218	7.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	390,996	26.7%	
Total Population (16-64)	945,203		
People with one or more 'at risk' conditions (16-64)	153,535	16.2%	
People with two or more 'at risk' conditions (16-64)	41,928	4.4%	
Total Population (65+)	224,823		
People with one or more 'at risk' conditions (65+)	120,212	53.5%	
People with two or more 'at risk' conditions (65+)	65,012	28.9%	
People with no 'at risk' conditions (65+)	104,611	46.5%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 WEST YORKSHIRE AND HARROGATE HEALTH & CARE PARTNERSHIP (STP)

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

WEST YORKSHIRE AND HARROGATE HEALTH & CARE PARTNERSHIP (STP)		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	2,609,304	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	475,657	18.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	184,282	7.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	677,280	26.0%
Total Population (16-64)	1,711,984	
People with one or more 'at risk' conditions (16-64)	250,999	14.7%
People with two or more 'at risk' conditions (16-64)	68,187	4.0%
Total Population (65+)	408,938	
People with one or more 'at risk' conditions (65+)	207,315	50.7%
People with two or more 'at risk' conditions (65+)	112,517	27.5%
People with no 'at risk' conditions (65+)	201,623	49.3%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BARNSLEY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BARNSLEY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	259,958		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	56,951	21.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	24,116	9.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	78,525	30.2%	
Total Population (16-64)	166,148		
People with one or more 'at risk' conditions (16-64)	28,994	17.5%	
People with two or more 'at risk' conditions (16-64)	8,973	5.4%	
Total Population (65+)	47,453		
People with one or more 'at risk' conditions (65+)	25,879	54.5%	
People with two or more 'at risk' conditions (65+)	14,757	31.1%	
People with no 'at risk' conditions (65+)	21,574	45.5%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BASILDON AND BRENTWOOD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BASILDON AND BRENTWOOD CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	278,533		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	48,196	17.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	18,803	6.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	74,525	26.8%	
Total Population (16-64)	174,960		
People with one or more 'at risk' conditions (16-64)	22,871	13.1%	
People with two or more 'at risk' conditions (16-64)	6,053	3.5%	
Total Population (65+)	49,912		
People with one or more 'at risk' conditions (65+)	23,583	47.2%	
People with two or more 'at risk' conditions (65+)	12,365	24.8%	
People with no 'at risk' conditions (65+)	26,329	52.8%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BASSETLAW CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BASSETLAW CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	117,953		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	25,335	21.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	10,141	8.6%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	37,924	32.2%	
Total Population (16-64)	72,822		
People with one or more 'at risk' conditions (16-64)	11,546	15.9%	
People with two or more 'at risk' conditions (16-64)	3,180	4.4%	
Total Population (65+)	25,449		
People with one or more 'at risk' conditions (65+)	12,860	50.5%	
People with two or more 'at risk' conditions (65+)	6,815	26.8%	
People with no 'at risk' conditions (65+)	12,589	49.5%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	979,616	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	173,717	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	67,990	6.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	276,282	28.2%
Total Population (16-64)	618,035	
People with one or more 'at risk' conditions (16-64)	79,371	12.8%
People with two or more 'at risk' conditions (16-64)	20,682	3.3%
Total Population (65+)	191,864	
People with one or more 'at risk' conditions (65+)	89,299	46.5%
People with two or more 'at risk' conditions (65+)	46,396	24.2%
People with no 'at risk' conditions (65+)	102,565	53.5%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BEDFORDSHIRE, LUTON AND MILTON KEYNES CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BEDFORDSHIRE, LUTON AND MILTON KEYNES CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,054,074	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	191,439	18.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	67,978	6.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	269,543	25.6%
Total Population (16-64)	686,464	
People with one or more 'at risk' conditions (16-64)	99,129	14.4%
People with two or more 'at risk' conditions (16-64)	25,865	3.8%
Total Population (65+)	154,433	
People with one or more 'at risk' conditions (65+)	76,329	49.4%
People with two or more 'at risk' conditions (65+)	40,315	26.1%
People with no 'at risk' conditions (65+)	78,104	50.6%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BERKSHIRE WEST CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BERKSHIRE WEST CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	568,117		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	75,672	13.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	26,786	4.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	124,449	21.9%	
Total Population (16-64)	377,837		
People with one or more 'at risk' conditions (16-64)	35,783	9.5%	
People with two or more 'at risk' conditions (16-64)	8,420	2.2%	
Total Population (65+)	85,731		
People with one or more 'at risk' conditions (65+)	36,954	43.1%	
People with two or more 'at risk' conditions (65+)	17,802	20.8%	
People with no 'at risk' conditions (65+)	48,777	56.9%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BIRMINGHAM AND SOLIHULL CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BIRMINGHAM AND SOLIHULL CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,318,264		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	255,027	19.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	98,683	7.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	342,816	26.0%	
Total Population (16-64)	857,024		
People with one or more 'at risk' conditions (16-64)	141,570	16.5%	
People with two or more 'at risk' conditions (16-64)	39,837	4.6%	
Total Population (65+)	188,825		
People with one or more 'at risk' conditions (65+)	101,036	53.5%	
People with two or more 'at risk' conditions (65+)	56,578	30.0%	
People with no 'at risk' conditions (65+)	87,789	46.5%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BLACK COUNTRY AND WEST BIRMINGHAM CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BLACK COUNTRY AND WEST BIRMINGHAM CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,462,364	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	286,385	19.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	109,218	7.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	390,996	26.7%
Total Population (16-64)	945,203	
People with one or more 'at risk' conditions (16-64)	153,535	16.2%
People with two or more 'at risk' conditions (16-64)	41,928	4.4%
Total Population (65+)	224,823	
People with one or more 'at risk' conditions (65+)	120,212	53.5%
People with two or more 'at risk' conditions (65+)	65,012	28.9%
People with no 'at risk' conditions (65+)	104,611	46.5%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BLACKBURN WITH DARWEN CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BLACKBURN WITH DARWEN CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	175,956		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	37,116	21.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,747	8.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	48,343	27.5%	
Total Population (16-64)	113,352		
People with one or more 'at risk' conditions (16-64)	20,737	18.3%	
People with two or more 'at risk' conditions (16-64)	6,102	5.4%	
Total Population (65+)	25,493		
People with one or more 'at risk' conditions (65+)	14,266	56.0%	
People with two or more 'at risk' conditions (65+)	8,288	32.5%	
People with no 'at risk' conditions (65+)	11,227	44.0%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BLACKPOOL CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BLACKPOOL CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	171,289		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	40,929	23.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,952	10.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	57,178	33.4%	
Total Population (16-64)	108,158		
People with one or more 'at risk' conditions (16-64)	21,248	19.6%	
People with two or more 'at risk' conditions (16-64)	6,962	6.4%	
Total Population (65+)	34,664		
People with one or more 'at risk' conditions (65+)	18,415	53.1%	
People with two or more 'at risk' conditions (65+)	10,743	31.0%	
People with no 'at risk' conditions (65+)	16,249	46.9%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BOLTON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BOLTON CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	308,406	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	56,372	18.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	22,072	7.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	80,485	26.1%
Total Population (16-64)	195,079	
People with one or more 'at risk' conditions (16-64)	28,519	14.6%
People with two or more 'at risk' conditions (16-64)	7,980	4.1%
Total Population (65+)	49,157	
People with one or more 'at risk' conditions (65+)	25,044	50.9%
People with two or more 'at risk' conditions (65+)	13,571	27.6%
People with no 'at risk' conditions (65+)	24,113	49.1%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BRADFORD DISTRICT AND CRAVEN CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BRADFORD DISTRICT AND CRAVEN CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	645,816		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	123,270	19.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	47,908	7.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	169,889	26.3%	
Total Population (16-64)	412,249		
People with one or more 'at risk' conditions (16-64)	66,847	16.2%	
People with two or more 'at risk' conditions (16-64)	18,942	4.6%	
Total Population (65+)	97,668		
People with one or more 'at risk' conditions (65+)	51,049	52.3%	
People with two or more 'at risk' conditions (65+)	27,759	28.4%	
People with no 'at risk' conditions (65+)	46,619	47.7%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BRIGHTON AND HOVE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BRIGHTON AND HOVE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	338,000		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	41,458	12.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,907	4.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	65,363	19.3%	
Total Population (16-64)	250,729		
People with one or more 'at risk' conditions (16-64)	21,787	8.7%	
People with two or more 'at risk' conditions (16-64)	5,341	2.1%	
Total Population (65+)	42,240		
People with one or more 'at risk' conditions (65+)	18,335	43.4%	
People with two or more 'at risk' conditions (65+)	9,332	22.1%	
People with no 'at risk' conditions (65+)	23,905	56.6%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,063,648	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	176,639	16.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	71,032	6.7%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	258,082	24.3%
Total Population (16-64)	722,326	
People with one or more 'at risk' conditions (16-64)	87,983	12.2%
People with two or more 'at risk' conditions (16-64)	24,205	3.4%
Total Population (65+)	163,649	
People with one or more 'at risk' conditions (65+)	82,206	50.2%
People with two or more 'at risk' conditions (65+)	45,656	27.9%
People with no 'at risk' conditions (65+)	81,443	49.8%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BUCKINGHAMSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BUCKINGHAMSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	570,635	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	91,335	16.0%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	34,494	6.0%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	149,856	26.3%
Total Population (16-64)	357,912	
People with one or more 'at risk' conditions (16-64)	41,854	11.7%
People with two or more 'at risk' conditions (16-64)	10,409	2.9%
Total Population (65+)	104,613	
People with one or more 'at risk' conditions (65+)	46,092	44.1%
People with two or more 'at risk' conditions (65+)	23,390	22.4%
People with no 'at risk' conditions (65+)	58,521	55.9%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS BURY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS BURY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	201,376		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	37,700	18.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,719	7.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	55,071	27.3%	
Total Population (16-64)	127,683		
People with one or more 'at risk' conditions (16-64)	18,781	14.7%	
People with two or more 'at risk' conditions (16-64)	5,153	4.0%	
Total Population (65+)	34,617		
People with one or more 'at risk' conditions (65+)	17,246	49.8%	
People with two or more 'at risk' conditions (65+)	9,277	26.8%	
People with no 'at risk' conditions (65+)	17,371	50.2%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CALDERDALE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CALDERDALE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	220,587		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	42,745	19.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	16,623	7.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	63,255	28.7%	
Total Population (16-64)	140,348		
People with one or more 'at risk' conditions (16-64)	22,021	15.7%	
People with two or more 'at risk' conditions (16-64)	6,057	4.3%	
Total Population (65+)	39,763		
People with one or more 'at risk' conditions (65+)	19,253	48.4%	
People with two or more 'at risk' conditions (65+)	10,258	25.8%	
People with no 'at risk' conditions (65+)	20,510	51.6%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CAMBRIDGESHIRE AND PETERBOROUGH CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CAMBRIDGESHIRE AND PETERBOROUGH CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,019,502		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	166,168	16.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	64,319	6.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	250,899	24.6%	
Total Population (16-64)	678,813		
People with one or more 'at risk' conditions (16-64)	80,606	11.9%	
People with two or more 'at risk' conditions (16-64)	21,578	3.2%	
Total Population (65+)	163,412		
People with one or more 'at risk' conditions (65+)	78,681	48.1%	
People with two or more 'at risk' conditions (65+)	41,534	25.4%	
People with no 'at risk' conditions (65+)	84,731	51.9%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CANNOCK CHASE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CANNOCK CHASE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	128,265		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	28,068	21.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	11,371	8.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	40,438	31.5%	
Total Population (16-64)	79,610		
People with one or more 'at risk' conditions (16-64)	13,572	17.0%	
People with two or more 'at risk' conditions (16-64)	3,658	4.6%	
Total Population (65+)	25,987		
People with one or more 'at risk' conditions (65+)	13,617	52.4%	
People with two or more 'at risk' conditions (65+)	7,538	29.0%	
People with no 'at risk' conditions (65+)	12,370	47.6%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CASTLE POINT AND ROCHFORD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CASTLE POINT AND ROCHFORD CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	180,670		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	35,960	19.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,628	8.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	58,899	32.6%	
Total Population (16-64)	107,625		
People with one or more 'at risk' conditions (16-64)	14,243	13.2%	
People with two or more 'at risk' conditions (16-64)	3,713	3.4%	
Total Population (65+)	43,698		
People with one or more 'at risk' conditions (65+)	20,759	47.5%	
People with two or more 'at risk' conditions (65+)	10,703	24.5%	
People with no 'at risk' conditions (65+)	22,939	52.5%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CHESHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CHESHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	778,368		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	151,313	19.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	61,972	8.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	237,343	30.5%	
Total Population (16-64)	483,505		
People with one or more 'at risk' conditions (16-64)	68,379	14.1%	
People with two or more 'at risk' conditions (16-64)	18,668	3.9%	
Total Population (65+)	164,327		
People with one or more 'at risk' conditions (65+)	78,297	47.6%	
People with two or more 'at risk' conditions (65+)	42,492	25.9%	
People with no 'at risk' conditions (65+)	86,030	52.4%	

## Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS CHORLEY AND SOUTH RIBBLE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS CHORLEY AND SOUTH RIBBLE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	182,286		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	36,574	20.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	15,687	8.6%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	54,570	29.9%	
Total Population (16-64)	112,909		
People with one or more 'at risk' conditions (16-64)	16,438	14.6%	
People with two or more 'at risk' conditions (16-64)	4,795	4.2%	
Total Population (65+)	36,918		
People with one or more 'at risk' conditions (65+)	18,922	51.3%	
People with two or more 'at risk' conditions (65+)	10,688	29.0%	
People with no 'at risk' conditions (65+)	17,996	48.7%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS COUNTY DURHAM CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS COUNTY DURHAM CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	561,675		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	122,085	21.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	50,483	9.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	175,640	31.3%	
Total Population (16-64)	359,689		
People with one or more 'at risk' conditions (16-64)	58,890	16.4%	
People with two or more 'at risk' conditions (16-64)	17,175	4.8%	
Total Population (65+)	113,036		
People with one or more 'at risk' conditions (65+)	59,481	52.6%	
People with two or more 'at risk' conditions (65+)	32,689	28.9%	
People with no 'at risk' conditions (65+)	53,555	47.4%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS COVENTRY AND WARWICKSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1.2.3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS COVENTRY AND WARWICKSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,046,168	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	176,450	16.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	66,555	6.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	264,869	25.3%
Total Population (16-64)	694,305	
People with one or more 'at risk' conditions (16-64)	86,288	12.4%
People with two or more 'at risk' conditions (16-64)	21,819	3.1%
Total Population (65+)	172,499	
People with one or more 'at risk' conditions (65+)	84,080	48.7%
People with two or more 'at risk' conditions (65+)	43,706	25.3%
People with no 'at risk' conditions (65+)	88,419	51.3%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS DERBY AND DERBYSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS DERBY AND DERBYSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,051,418	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	212,264	20.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	85,160	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	316,586	30.1%
Total Population (16-64)	665,419	
People with one or more 'at risk' conditions (16-64)	102,411	15.4%
People with two or more 'at risk' conditions (16-64)	28,103	4.2%
Total Population (65+)	208,274	
People with one or more 'at risk' conditions (65+)	103,952	49.9%
People with two or more 'at risk' conditions (65+)	55,891	26.8%
People with no 'at risk' conditions (65+)	104,322	50.1%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS DEVON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS DEVON CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,253,923	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	245,684	19.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	100,957	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	405,023	32.3%
Total Population (16-64)	763,654	
People with one or more 'at risk' conditions (16-64)	101,851	13.3%
People with two or more 'at risk' conditions (16-64)	28,370	3.7%
Total Population (65+)	295,309	
People with one or more 'at risk' conditions (65+)	135,970	46.0%
People with two or more 'at risk' conditions (65+)	71,293	24.1%
People with no 'at risk' conditions (65+)	159,339	54.0%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS DONCASTER CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS DONCASTER CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	320,622		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	67,066	20.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	26,951	8.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	95,188	29.7%	
Total Population (16-64)	202,943		
People with one or more 'at risk' conditions (16-64)	33,429	16.5%	
People with two or more 'at risk' conditions (16-64)	9,354	4.6%	
Total Population (65+)	59,227		
People with one or more 'at risk' conditions (65+)	31,105	52.5%	
People with two or more 'at risk' conditions (65+)	17,121	28.9%	
People with no 'at risk' conditions (65+)	28,122	47.5%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS DORSET CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS DORSET CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	810,866		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	161,654	19.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	68,535	8.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	264,906	32.7%	
Total Population (16-64)	494,286		
People with one or more 'at risk' conditions (16-64)	64,891	13.1%	
People with two or more 'at risk' conditions (16-64)	17,908	3.6%	
Total Population (65+)	195,586		
People with one or more 'at risk' conditions (65+)	92,334	47.2%	
People with two or more 'at risk' conditions (65+)	49,826	25.5%	
People with no 'at risk' conditions (65+)	103,252	52.8%	

## Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST AND NORTH HERTFORDSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST AND NORTH HERTFORDSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	608,804		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	98,735	16.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	37,467	6.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	152,919	25.1%	
Total Population (16-64)	395,674		
People with one or more 'at risk' conditions (16-64)	46,745	11.8%	
People with two or more 'at risk' conditions (16-64)	11,630	2.9%	
Total Population (65+)	102,664		
People with one or more 'at risk' conditions (65+)	48,480	47.2%	
People with two or more 'at risk' conditions (65+)	25,096	24.4%	
People with no 'at risk' conditions (65+)	54,184	52.8%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST LANCASHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST LANCASHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	385,574		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	82,798	21.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	33,805	8.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	115,680	30.0%	
Total Population (16-64)	241,616		
People with one or more 'at risk' conditions (16-64)	41,863	17.3%	
People with two or more 'at risk' conditions (16-64)	12,249	5.1%	
Total Population (65+)	69,809		
People with one or more 'at risk' conditions (65+)	36,927	52.9%	
People with two or more 'at risk' conditions (65+)	20,873	29.9%	
People with no 'at risk' conditions (65+)	32,882	47.1%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST LEICESTERSHIRE AND RUTLAND CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1.2.3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST LEICESTERSHIRE AND RUTLAND CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	335,559		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	62,106	18.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	24,416	7.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	102,269	30.5%	
Total Population (16-64)	204,311		
People with one or more 'at risk' conditions (16-64)	27,025	13.2%	
People with two or more 'at risk' conditions (16-64)	6,760	3.3%	
Total Population (65+)	73,574		
People with one or more 'at risk' conditions (65+)	33,411	45.4%	
People with two or more 'at risk' conditions (65+)	17,297	23.5%	
People with no 'at risk' conditions (65+)	40,163	54.6%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST RIDING OF YORKSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST RIDING OF YORKSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	303,284		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	65,317	21.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	27,113	8.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	106,039	35.0%	
Total Population (16-64)	178,185		
People with one or more 'at risk' conditions (16-64)	25,830	14.5%	
People with two or more 'at risk' conditions (16-64)	7,112	4.0%	
Total Population (65+)	78,671		
People with one or more 'at risk' conditions (65+)	37,949	48.2%	
People with two or more 'at risk' conditions (65+)	19,748	25.1%	
People with no 'at risk' conditions (65+)	40,722	51.8%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST STAFFORDSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST STAFFORDSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	142,535		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	28,267	19.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	11,286	7.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	41,584	29.2%	
Total Population (16-64)	89,649		
People with one or more 'at risk' conditions (16-64)	13,923	15.5%	
People with two or more 'at risk' conditions (16-64)	3,781	4.2%	
Total Population (65+)	26,754		
People with one or more 'at risk' conditions (65+)	13,437	50.2%	
People with two or more 'at risk' conditions (65+)	7,335	27.4%	
People with no 'at risk' conditions (65+)	13,317	49.8%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS EAST SUSSEX CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS EAST SUSSEX CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	562,490		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	114,435	20.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	47,299	8.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	190,076	33.8%	
Total Population (16-64)	332,106		
People with one or more 'at risk' conditions (16-64)	46,103	13.9%	
People with two or more 'at risk' conditions (16-64)	12,816	3.9%	
Total Population (65+)	140,791		
People with one or more 'at risk' conditions (65+)	65,150	46.3%	
People with two or more 'at risk' conditions (65+)	33,918	24.1%	
People with no 'at risk' conditions (65+)	75,641	53.7%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS FRIMLEY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS FRIMLEY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	815,574		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	133,610	16.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	50,475	6.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	198,070	24.3%	
Total Population (16-64)	532,293		
People with one or more 'at risk' conditions (16-64)	66,953	12.6%	
People with two or more 'at risk' conditions (16-64)	17,030	3.2%	
Total Population (65+)	126,623		
People with one or more 'at risk' conditions (65+)	62,163	49.1%	
People with two or more 'at risk' conditions (65+)	32,612	25.8%	
People with no 'at risk' conditions (65+)	64,460	50.9%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS FYLDE AND WYRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS FYLDE AND WYRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	176,306	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	40,825	23.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,906	10.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	65,113	36.9%
Total Population (16-64)	102,043	
People with one or more 'at risk' conditions (16-64)	16,108	15.8%
People with two or more 'at risk' conditions (16-64)	4,691	4.6%
Total Population (65+)	47,970	
People with one or more 'at risk' conditions (65+)	23,682	49.4%
People with two or more 'at risk' conditions (65+)	13,035	27.2%
People with no 'at risk' conditions (65+)	24,288	50.6%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS GLOUCESTERSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS GLOUCESTERSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	667,069	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	132,132	19.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	54,044	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	205,336	30.8%
Total Population (16-64)	414,887	
People with one or more 'at risk' conditions (16-64)	61,775	14.9%
People with two or more 'at risk' conditions (16-64)	16,811	4.1%
Total Population (65+)	139,979	
People with one or more 'at risk' conditions (65+)	66,775	47.7%
People with two or more 'at risk' conditions (65+)	36,488	26.1%
People with no 'at risk' conditions (65+)	73,204	52.3%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS GREATER PRESTON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS GREATER PRESTON CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	219,818	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	38,661	17.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	16,141	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	54,429	24.8%
Total Population (16-64)	146,890	
People with one or more 'at risk' conditions (16-64)	19,288	13.1%
People with two or more 'at risk' conditions (16-64)	5,724	3.9%
Total Population (65+)	33,527	
People with one or more 'at risk' conditions (65+)	17,759	53.0%
People with two or more 'at risk' conditions (65+)	10,139	30.2%
People with no 'at risk' conditions (65+)	15,768	47.0%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HALTON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HALTON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	129,912		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	29,214	22.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	12,711	9.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	39,290	30.2%	
Total Population (16-64)	83,185		
People with one or more 'at risk' conditions (16-64)	15,502	18.6%	
People with two or more 'at risk' conditions (16-64)	4,983	6.0%	
Total Population (65+)	22,729		
People with one or more 'at risk' conditions (65+)	12,653	55.7%	
People with two or more 'at risk' conditions (65+)	7,549	33.2%	
People with no 'at risk' conditions (65+)	10,076	44.3%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HAMPSHIRE, SOUTHAMPTON AND ISLE OF WIGHT CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HAMPSHIRE, SOUTHAMPTON AND ISLE OF WIGHT CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,670,696		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	311,256	18.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	126,665	7.6%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	496,359	29.7%	
Total Population (16-64)	1,044,083		
People with one or more 'at risk' conditions (16-64)	139,275	13.3%	
People with two or more 'at risk' conditions (16-64)	38,551	3.7%	
Total Population (65+)	348,221		
People with one or more 'at risk' conditions (65+)	163,118	46.8%	
People with two or more 'at risk' conditions (65+)	86,440	24.8%	
People with no 'at risk' conditions (65+)	185,103	53.2%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HEREFORDSHIRE AND WORCESTERSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HEREFORDSHIRE AND WORCESTERSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	792,123	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	157,157	19.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	62,965	7.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	253,155	32.0%
Total Population (16-64)	481,458	
People with one or more 'at risk' conditions (16-64)	68,459	14.2%
People with two or more 'at risk' conditions (16-64)	17,947	3.7%
Total Population (65+)	180,127	
People with one or more 'at risk' conditions (65+)	84,129	46.7%
People with two or more 'at risk' conditions (65+)	44,215	24.5%
People with no 'at risk' conditions (65+)	95,998	53.3%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HERTS VALLEYS CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HERTS VALLEYS CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	661,623		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	107,282	16.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	41,824	6.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	163,632	24.7%	
Total Population (16-64)	426,259		
People with one or more 'at risk' conditions (16-64)	51,712	12.1%	
People with two or more 'at risk' conditions (16-64)	13,694	3.2%	
Total Population (65+)	107,367		
People with one or more 'at risk' conditions (65+)	51,017	47.5%	
People with two or more 'at risk' conditions (65+)	27,228	25.4%	
People with no 'at risk' conditions (65+)	56,350	52.5%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HEYWOOD, MIDDLETON AND ROCHDALE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HEYWOOD, MIDDLETON AND ROCHDALE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	233,629		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	46,238	19.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	18,075	7.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	63,737	27.3%	
Total Population (16-64)	147,996		
People with one or more 'at risk' conditions (16-64)	25,294	17.1%	
People with two or more 'at risk' conditions (16-64)	7,339	5.0%	
Total Population (65+)	36,337		
People with one or more 'at risk' conditions (65+)	18,838	51.8%	
People with two or more 'at risk' conditions (65+)	10,392	28.6%	
People with no 'at risk' conditions (65+)	17,499	48.2%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS HULL CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS HULL CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	305,279		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	58,613	19.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	22,555	7.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	80,353	26.3%	
Total Population (16-64)	202,412		
People with one or more 'at risk' conditions (16-64)	32,356	16.0%	
People with two or more 'at risk' conditions (16-64)	9,178	4.5%	
Total Population (65+)	46,084		
People with one or more 'at risk' conditions (65+)	24,344	52.8%	
People with two or more 'at risk' conditions (65+)	13,052	28.3%	
People with no 'at risk' conditions (65+)	21,740	47.2%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS IPSWICH AND EAST SUFFOLK CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS IPSWICH AND EAST SUFFOLK CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	409,442		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	77,344	18.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	30,871	7.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	125,881	30.7%	
Total Population (16-64)	250,558		
People with one or more 'at risk' conditions (16-64)	34,439	13.7%	
People with two or more 'at risk' conditions (16-64)	8,969	3.6%	
Total Population (65+)	88,983		
People with one or more 'at risk' conditions (65+)	40,446	45.5%	
People with two or more 'at risk' conditions (65+)	21,510	24.2%	
People with no 'at risk' conditions (65+)	48,537	54.5%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS KENT AND MEDWAY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS KENT AND MEDWAY CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,931,154	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	356,174	18.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	140,140	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	549,493	28.5%
Total Population (16-64)	1,201,805	
People with one or more 'at risk' conditions (16-64)	164,799	13.7%
People with two or more 'at risk' conditions (16-64)	44,754	3.7%
Total Population (65+)	372,222	
People with one or more 'at risk' conditions (65+)	178,903	48.1%
People with two or more 'at risk' conditions (65+)	93,066	25.0%
People with no 'at risk' conditions (65+)	193,319	51.9%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS KERNOW CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS KERNOW CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	587,235		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	131,329	22.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	58,023	9.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	204,781	34.9%	
Total Population (16-64)	350,298		
People with one or more 'at risk' conditions (16-64)	55,576	15.9%	
People with two or more 'at risk' conditions (16-64)	16,597	4.7%	
Total Population (65+)	145,128		
People with one or more 'at risk' conditions (65+)	71,676	49.4%	
People with two or more 'at risk' conditions (65+)	40,713	28.1%	
People with no 'at risk' conditions (65+)	73,452	50.6%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS KIRKLEES CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS KIRKLEES CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	447,839		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	84,420	18.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	32,435	7.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	121,702	27.2%	
Total Population (16-64)	289,057		
People with one or more 'at risk' conditions (16-64)	44,383	15.4%	
People with two or more 'at risk' conditions (16-64)	11,998	4.2%	
Total Population (65+)	74,191		
People with one or more 'at risk' conditions (65+)	36,909	49.7%	
People with two or more 'at risk' conditions (65+)	19,828	26.7%	
People with no 'at risk' conditions (65+)	37,282	50.3%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS KNOWSLEY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS KNOWSLEY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	162,974		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	36,955	22.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	16,189	9.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	48,179	29.6%	
Total Population (16-64)	105,267		
People with one or more 'at risk' conditions (16-64)	20,022	19.0%	
People with two or more 'at risk' conditions (16-64)	6,591	6.3%	
Total Population (65+)	26,738		
People with one or more 'at risk' conditions (65+)	15,514	58.0%	
People with two or more 'at risk' conditions (65+)	9,393	35.1%	
People with no 'at risk' conditions (65+)	11,224	42.0%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS LEEDS CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS LEEDS CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	917,064		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	147,973	16.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	56,175	6.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	212,274	23.1%	
Total Population (16-64)	627,479		
People with one or more 'at risk' conditions (16-64)	77,929	12.4%	
People with two or more 'at risk' conditions (16-64)	19,997	3.2%	
Total Population (65+)	129,375		
People with one or more 'at risk' conditions (65+)	65,074	50.3%	
People with two or more 'at risk' conditions (65+)	35,184	27.2%	
People with no 'at risk' conditions (65+)	64,301	49.7%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS LEICESTER CITY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS LEICESTER CITY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	437,246		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	72,434	16.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	26,046	6.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	94,209	21.5%	
Total Population (16-64)	306,028		
People with one or more 'at risk' conditions (16-64)	43,121	14.1%	
People with two or more 'at risk' conditions (16-64)	11,308	3.7%	
Total Population (65+)	48,630		
People with one or more 'at risk' conditions (65+)	26,855	55.2%	
People with two or more 'at risk' conditions (65+)	14,181	29.2%	
People with no 'at risk' conditions (65+)	21,775	44.8%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS LINCOLNSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS LINCOLNSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	787,911		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	162,456	20.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	65,929	8.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	255,531	32.4%	
Total Population (16-64)	478,726		
People with one or more 'at risk' conditions (16-64)	71,334	14.9%	
People with two or more 'at risk' conditions (16-64)	19,741	4.1%	
Total Population (65+)	179,714		
People with one or more 'at risk' conditions (65+)	86,639	48.2%	
People with two or more 'at risk' conditions (65+)	45,341	25.2%	
People with no 'at risk' conditions (65+)	93,075	51.8%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS LIVERPOOL CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS LIVERPOOL CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	562,946		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	107,469	19.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	45,255	8.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	141,751	25.2%	
Total Population (16-64)	392,557		
People with one or more 'at risk' conditions (16-64)	59,735	15.2%	
People with two or more 'at risk' conditions (16-64)	18,766	4.8%	
Total Population (65+)	78,044		
People with one or more 'at risk' conditions (65+)	43,762	56.1%	
People with two or more 'at risk' conditions (65+)	25,878	33.2%	
People with no 'at risk' conditions (65+)	34,282	43.9%	

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS MANCHESTER CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS <sup>14</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS MANCHESTER CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	702,510		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	107,775	15.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	40,126	5.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	135,828	19.3%	
Total Population (16-64)	510,545		
People with one or more 'at risk' conditions (16-64)	67,390	13.2%	
People with two or more 'at risk' conditions (16-64)	19,005	3.7%	
Total Population (65+)	62,426		
People with one or more 'at risk' conditions (65+)	34,373	55.1%	
People with two or more 'at risk' conditions (65+)	20,075	32.2%	
People with no 'at risk' conditions (65+)	28,053	44.9%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS MID ESSEX CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS MID ESSEX CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	392,166	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	69,459	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	26,660	6.8%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	112,893	28.8%
Total Population (16-64)	242,890	
People with one or more 'at risk' conditions (16-64)	30,574	12.6%
People with two or more 'at risk' conditions (16-64)	7,736	3.2%
Total Population (65+)	80,133	
People with one or more 'at risk' conditions (65+)	36,699	45.8%
People with two or more 'at risk' conditions (65+)	18,488	23.1%
People with no 'at risk' conditions (65+)	43,434	54.2%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS MORECAMBE BAY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS MORECAMBE BAY CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	351,249	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	70,911	20.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	30,599	8.7%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	109,392	31.1%
Total Population (16-64)	223,198	
People with one or more 'at risk' conditions (16-64)	31,066	13.9%
People with two or more 'at risk' conditions (16-64)	9,308	4.2%
Total Population (65+)	76,381	
People with one or more 'at risk' conditions (65+)	37,900	49.6%
People with two or more 'at risk' conditions (65+)	20,971	27.5%
People with no 'at risk' conditions (65+)	38,481	50.4%

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NEWCASTLE GATESHEAD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NEWCASTLE GATESHEAD CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	547,775	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	98,173	17.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	39,795	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	136,497	24.9%
Total Population (16-64)	378,862	
People with one or more 'at risk' conditions (16-64)	50,213	13.3%
People with two or more 'at risk' conditions (16-64)	13,912	3.7%
Total Population (65+)	83,036	
People with one or more 'at risk' conditions (65+)	44,712	53.8%
People with two or more 'at risk' conditions (65+)	25,260	30.4%
People with no 'at risk' conditions (65+)	38,324	46.2%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORFOLK AND WAVENEY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORFOLK AND WAVENEY CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	1,049,788	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	209,259	19.9%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	82,453	7.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	342,473	32.6%
Total Population (16-64)	634,975	
People with one or more 'at risk' conditions (16-64)	87,170	13.7%
People with two or more 'at risk' conditions (16-64)	23,220	3.7%
Total Population (65+)	249,024	
People with one or more 'at risk' conditions (65+)	115,810	46.5%
People with two or more 'at risk' conditions (65+)	58,186	23.4%
People with no 'at risk' conditions (65+)	133,214	53.5%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH CENTRAL LONDON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH CENTRAL LONDON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,787,147		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	236,415	13.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	83,926	4.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	335,669	18.8%	
Total Population (16-64)	1,302,565		
People with one or more 'at risk' conditions (16-64)	127,570	9.8%	
People with two or more 'at risk' conditions (16-64)	32,031	2.5%	
Total Population (65+)	193,453		
People with one or more 'at risk' conditions (65+)	94,199	48.7%	
People with two or more 'at risk' conditions (65+)	49,538	25.6%	
People with no 'at risk' conditions (65+)	99,254	51.3%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH CUMBRIA CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH CUMBRIA CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	324,203	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	67,994	21.0%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	27,889	8.6%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	103,992	32.1%
Total Population (16-64)	201,022	
People with one or more 'at risk' conditions (16-64)	30,683	15.3%
People with two or more 'at risk' conditions (16-64)	8,610	4.3%
Total Population (65+)	71,534	
People with one or more 'at risk' conditions (65+)	35,536	49.7%
People with two or more 'at risk' conditions (65+)	18,994	26.6%
People with no 'at risk' conditions (65+)	35,998	50.3%

## Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH EAST ESSEX CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH EAST ESSEX CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	357,130	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	72,308	20.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	29,917	8.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	112,744	31.6%
Total Population (16-64)	217,731	
People with one or more 'at risk' conditions (16-64)	31,295	14.4%
People with two or more 'at risk' conditions (16-64)	8,949	4.1%
Total Population (65+)	79,215	
People with one or more 'at risk' conditions (65+)	38,779	49.0%
People with two or more 'at risk' conditions (65+)	20,462	25.8%
People with no 'at risk' conditions (65+)	40,436	51.0%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH EAST LINCOLNSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH EAST LINCOLNSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	160,082		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	34,282	21.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,346	9.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	51,010	31.9%	
Total Population (16-64)	96,111		
People with one or more 'at risk' conditions (16-64)	16,032	16.7%	
People with two or more 'at risk' conditions (16-64)	4,870	5.1%	
Total Population (65+)	33,697		
People with one or more 'at risk' conditions (65+)	16,969	50.4%	
People with two or more 'at risk' conditions (65+)	9,216	27.3%	
People with no 'at risk' conditions (65+)	16,728	49.6%	

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH EAST LONDON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH EAST LONDON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	2,364,810		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	346,789	14.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	120,539	5.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	447,607	18.9%	
Total Population (16-64)	1,694,273		
People with one or more 'at risk' conditions (16-64)	213,857	12.6%	
People with two or more 'at risk' conditions (16-64)	55,000	3.2%	
Total Population (65+)	217,355		
People with one or more 'at risk' conditions (65+)	116,537	53.6%	
People with two or more 'at risk' conditions (65+)	62,234	28.6%	
People with no 'at risk' conditions (65+)	100,818	46.4%	

## **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH LINCOLNSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH LINCOLNSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	179,642	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	36,526	20.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,572	8.1%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	55,945	31.1%
Total Population (16-64)	111,088	
People with one or more 'at risk' conditions (16-64)	16,610	15.0%
People with two or more 'at risk' conditions (16-64)	4,669	4.2%
Total Population (65+)	38,151	
People with one or more 'at risk' conditions (65+)	18,732	49.1%
People with two or more 'at risk' conditions (65+)	9,692	25.4%
People with no 'at risk' conditions (65+)	19,419	50.9%

## Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





## DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH STAFFORDSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH STAFFORDSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	213,484	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	45,281	21.2%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,686	8.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	69,718	32.7%
Total Population (16-64)	132,353	
People with one or more 'at risk' conditions (16-64)	20,231	15.3%
People with two or more 'at risk' conditions (16-64)	5,210	3.9%
Total Population (65+)	48,090	
People with one or more 'at risk' conditions (65+)	23,653	49.2%
People with two or more 'at risk' conditions (65+)	12,210	25.4%
People with no 'at risk' conditions (65+)	24,437	50.8%

## **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH TYNESIDE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH TYNESIDE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	219,226		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	47,814	21.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	19,873	9.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	68,130	31.1%	
Total Population (16-64)	137,889		
People with one or more 'at risk' conditions (16-64)	22,439	16.3%	
People with two or more 'at risk' conditions (16-64)	6,321	4.6%	
Total Population (65+)	44,068		
People with one or more 'at risk' conditions (65+)	23,752	53.9%	
People with two or more 'at risk' conditions (65+)	13,251	30.1%	
People with no 'at risk' conditions (65+)	20,316	46.1%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH WEST LONDON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH WEST LONDON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	2,791,679		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	389,890	14.0%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	137,175	4.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	539,672	19.3%	
Total Population (16-64)	2,048,398		
People with one or more 'at risk' conditions (16-64)	218,448	10.7%	
People with two or more 'at risk' conditions (16-64)	54,542	2.7%	
Total Population (65+)	299,905		
People with one or more 'at risk' conditions (65+)	150,123	50.1%	
People with two or more 'at risk' conditions (65+)	79,423	26.5%	
People with no 'at risk' conditions (65+)	149,782	49.9%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTH YORKSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTH YORKSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	434,790		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	86,556	19.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	34,867	8.0%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	143,520	33.0%	
Total Population (16-64)	262,443		
People with one or more 'at risk' conditions (16-64)	35,765	13.6%	
People with two or more 'at risk' conditions (16-64)	9,426	3.6%	
Total Population (65+)	105,591		
People with one or more 'at risk' conditions (65+)	48,627	46.1%	
People with two or more 'at risk' conditions (65+)	25,061	23.7%	
People with no 'at risk' conditions (65+)	56,964	53.9%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTHAMPTONSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTHAMPTONSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	782,413		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	143,112	18.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	56,496	7.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	209,549	26.8%	
Total Population (16-64)	502,266		
People with one or more 'at risk' conditions (16-64)	72,274	14.4%	
People with two or more 'at risk' conditions (16-64)	20,007	4.0%	
Total Population (65+)	131,988		
People with one or more 'at risk' conditions (65+)	65,551	49.7%	
People with two or more 'at risk' conditions (65+)	35,539	26.9%	
People with no 'at risk' conditions (65+)	66,437	50.3%	

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NORTHUMBERLAND CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NORTHUMBERLAND CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	327,104	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	76,463	23.4%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	32,100	9.8%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	115,933	35.4%
Total Population (16-64)	195,958	
People with one or more 'at risk' conditions (16-64)	33,480	17.1%
People with two or more 'at risk' conditions (16-64)	9,538	4.9%
Total Population (65+)	80,283	
People with one or more 'at risk' conditions (65+)	40,813	50.8%
People with two or more 'at risk' conditions (65+)	22,163	27.6%
People with no 'at risk' conditions (65+)	39,470	49.2%

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS NOTTINGHAM AND NOTTINGHAMSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS NOTTINGHAM AND NOTTINGHAMSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,116,179		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	212,312	19.0%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	87,764	7.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	300,809	26.9%	
Total Population (16-64)	740,891		
People with one or more 'at risk' conditions (16-64)	109,353	14.8%	
People with two or more 'at risk' conditions (16-64)	32,228	4.3%	
Total Population (65+)	184,734		
People with one or more 'at risk' conditions (65+)	96,237	52.1%	
People with two or more 'at risk' conditions (65+)	54,143	29.3%	
People with no 'at risk' conditions (65+)	88,497	47.9%	

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS OLDHAM CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS OLDHAM CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	254,289	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	49,467	19.5%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	19,019	7.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	68,076	26.8%
Total Population (16-64)	159,968	
People with one or more 'at risk' conditions (16-64)	26,611	16.6%
People with two or more 'at risk' conditions (16-64)	7,427	4.6%
Total Population (65+)	39,051	
People with one or more 'at risk' conditions (65+)	20,442	52.3%
People with two or more 'at risk' conditions (65+)	11,168	28.6%
People with no 'at risk' conditions (65+)	18,609	47.7%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS OXFORDSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS OXFORDSHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	811,957		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	114,232	14.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	43,277	5.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	188,072	23.2%	
Total Population (16-64)	549,177		
People with one or more 'at risk' conditions (16-64)	52,048	9.5%	
People with two or more 'at risk' conditions (16-64)	12,886	2.3%	
Total Population (65+)	131,843		
People with one or more 'at risk' conditions (65+)	58,003	44.0%	
People with two or more 'at risk' conditions (65+)	29,645	22.5%	
People with no 'at risk' conditions (65+)	73,840	56.0%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS PORTSMOUTH CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS PORTSMOUTH CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	232,831		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	38,749	16.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	15,193	6.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	54,232	23.3%	
Total Population (16-64)	161,436		
People with one or more 'at risk' conditions (16-64)	20,840	12.9%	
People with two or more 'at risk' conditions (16-64)	5,837	3.6%	
Total Population (65+)	32,082		
People with one or more 'at risk' conditions (65+)	16,599	51.7%	
People with two or more 'at risk' conditions (65+)	9,081	28.3%	
People with no 'at risk' conditions (65+)	15,483	48.3%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS ROTHERHAM CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS ROTHERHAM CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	259,317	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	59,238	22.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	23,926	9.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	82,541	31.8%
Total Population (16-64)	162,921	
People with one or more 'at risk' conditions (16-64)	31,097	19.1%
People with two or more 'at risk' conditions (16-64)	9,280	5.7%
Total Population (65+)	49,159	
People with one or more 'at risk' conditions (65+)	25,856	52.6%
People with two or more 'at risk' conditions (65+)	14,208	28.9%
People with no 'at risk' conditions (65+)	23,303	47.4%

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SALFORD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SALFORD CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	292,146	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	51,780	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	21,797	7.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	67,650	23.2%
Total Population (16-64)	200,329	
People with one or more 'at risk' conditions (16-64)	29,328	14.6%
People with two or more 'at risk' conditions (16-64)	9,011	4.5%
Total Population (65+)	36,237	
People with one or more 'at risk' conditions (65+)	20,367	56.2%
People with two or more 'at risk' conditions (65+)	12,370	34.1%
People with no 'at risk' conditions (65+)	15,870	43.8%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SHEFFIELD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SHEFFIELD CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	629,715	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	111,279	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	44,007	7.0%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	155,275	24.7%
Total Population (16-64)	432,455	
People with one or more 'at risk' conditions (16-64)	55,864	12.9%
People with two or more 'at risk' conditions (16-64)	15,449	3.6%
Total Population (65+)	93,057	
People with one or more 'at risk' conditions (65+)	49,061	52.7%
People with two or more 'at risk' conditions (65+)	27,573	29.6%
People with no 'at risk' conditions (65+)	43,996	47.3%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SHROPSHIRE, TELFORD AND WREKIN CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SHROPSHIRE, TELFORD AND WREKIN CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	508,264	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	105,960	20.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	43,317	8.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	161,743	31.8%
Total Population (16-64)	312,555	
People with one or more 'at risk' conditions (16-64)	48,042	15.4%
People with two or more 'at risk' conditions (16-64)	13,389	4.3%
Total Population (65+)	110,196	
People with one or more 'at risk' conditions (65+)	54,413	49.4%
People with two or more 'at risk' conditions (65+)	29,286	26.6%
People with no 'at risk' conditions (65+)	55,783	50.6%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOMERSET CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOMERSET CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	581,341		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	118,075	20.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	48,302	8.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	191,615	33.0%	
Total Population (16-64)	346,763		
People with one or more 'at risk' conditions (16-64)	48,742	14.1%	
People with two or more 'at risk' conditions (16-64)	13,372	3.9%	
Total Population (65+)	139,787		
People with one or more 'at risk' conditions (65+)	66,247	47.4%	
People with two or more 'at risk' conditions (65+)	34,339	24.6%	
People with no 'at risk' conditions (65+)	73,540	52.6%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTH EAST LONDON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

'AT RISK' CONDITIONS' <sup>4</sup>			
Atrial Fibrillation	Heart Failure	Immunocompromised:	
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy	
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer	
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants	
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome	
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants	
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases	
COPD	Parkinson's Disease	Rheumatoid Arthritis	
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis	
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease	
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)	
Diabetes	Severe Asthma		
Epilepsy	Severe Interstitial Lung Disease		

NHS SOUTH EAST LONDON CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	2,070,047	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	311,885	15.1%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	111,692	5.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	428,395	20.7%
Total Population (16-64)	1,480,720	
People with one or more 'at risk' conditions (16-64)	182,406	12.3%
People with two or more 'at risk' conditions (16-64)	47,835	3.2%
Total Population (65+)	232,422	
People with one or more 'at risk' conditions (65+)	115,912	49.9%
People with two or more 'at risk' conditions (65+)	61,273	26.4%
People with no 'at risk' conditions (65+)	116,510	50.1%

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTH EAST STAFFORDSHIRE AND SEISDON PENINSULA CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1.2.3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTH EAST STAFFORDSHIRE AND SEISDON PENINSULA CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	209,172	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	42,963	20.5%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,055	8.2%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	65,908	31.5%
Total Population (16-64)	128,117	
People with one or more 'at risk' conditions (16-64)	19,519	15.2%
People with two or more 'at risk' conditions (16-64)	5,191	4.1%
Total Population (65+)	45,115	
People with one or more 'at risk' conditions (65+)	22,170	49.1%
People with two or more 'at risk' conditions (65+)	11,641	25.8%
People with no 'at risk' conditions (65+)	22,945	50.9%

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTH SEFTON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

	'AT RISK' CONDITIONS <sup>14</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTH SEFTON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	151,537		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	34,244	22.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,548	9.6%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	47,727	31.5%	
Total Population (16-64)	95,678		
People with one or more 'at risk' conditions (16-64)	17,056	17.8%	
People with two or more 'at risk' conditions (16-64)	5,249	5.5%	
Total Population (65+)	29,563		
People with one or more 'at risk' conditions (65+)	16,080	54.4%	
People with two or more 'at risk' conditions (65+)	9,115	30.8%	
People with no 'at risk' conditions (65+)	13,483	45.6%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTH TYNESIDE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTH TYNESIDE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	156,176		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	34,062	21.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	14,626	9.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	48,101	30.8%	
Total Population (16-64)	99,698		
People with one or more 'at risk' conditions (16-64)	16,458	16.5%	
People with two or more 'at risk' conditions (16-64)	4,853	4.9%	
Total Population (65+)	30,713		
People with one or more 'at risk' conditions (65+)	16,674	54.3%	
People with two or more 'at risk' conditions (65+)	9,626	31.3%	
People with no 'at risk' conditions (65+)	14,039	45.7%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTH WEST LONDON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTH WEST LONDON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,748,851		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	232,966	13.3%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	84,976	4.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	347,463	19.9%	
Total Population (16-64)	1,220,343		
People with one or more 'at risk' conditions (16-64)	123,022	10.1%	
People with two or more 'at risk' conditions (16-64)	31,077	2.5%	
Total Population (65+)	214,189		
People with one or more 'at risk' conditions (65+)	99,692	46.5%	
People with two or more 'at risk' conditions (65+)	51,906	24.2%	
People with no 'at risk' conditions (65+)	114,497	53.5%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTHEND CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTHEND CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	190,094	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	34,745	18.3%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	13,937	7.3%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	53,800	28.3%
Total Population (16-64)	119,917	
People with one or more 'at risk' conditions (16-64)	16,663	13.9%
People with two or more 'at risk' conditions (16-64)	4,639	3.9%
Total Population (65+)	36,044	
People with one or more 'at risk' conditions (65+)	16,989	47.1%
People with two or more 'at risk' conditions (65+)	9,077	25.2%
People with no 'at risk' conditions (65+)	19,055	52.9%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SOUTHPORT AND FORMBY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SOUTHPORT AND FORMBY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	123,190		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	27,730	22.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	12,089	9.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	43,913	35.6%	
Total Population (16-64)	72,787		
People with one or more 'at risk' conditions (16-64)	11,252	15.5%	
People with two or more 'at risk' conditions (16-64)	3,410	4.7%	
Total Population (65+)	31,883		
People with one or more 'at risk' conditions (65+)	15,700	49.2%	
People with two or more 'at risk' conditions (65+)	8,546	26.8%	
People with no 'at risk' conditions (65+)	16,183	50.8%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS ST HELENS CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS ST HELENS CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	193,071	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	43,713	22.6%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	19,134	9.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	61,714	32.0%
Total Population (16-64)	120,544	
People with one or more 'at risk' conditions (16-64)	21,226	17.6%
People with two or more 'at risk' conditions (16-64)	6,695	5.6%
Total Population (65+)	39,003	
People with one or more 'at risk' conditions (65+)	21,002	53.8%
People with two or more 'at risk' conditions (65+)	12,180	31.2%
People with no 'at risk' conditions (65+)	18,001	46.2%

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS STAFFORD AND SURROUNDS CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS STAFFORD AND SURROUNDS CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	147,456		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	29,602	20.1%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	11,474	7.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	47,122	32.0%	
Total Population (16-64)	90,069		
People with one or more 'at risk' conditions (16-64)	12,927	14.4%	
People with two or more 'at risk' conditions (16-64)	3,273	3.6%	
Total Population (65+)	33,252		
People with one or more 'at risk' conditions (65+)	15,732	47.3%	
People with two or more 'at risk' conditions (65+)	8,035	24.2%	
People with no 'at risk' conditions (65+)	17,520	52.7%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS STOCKPORT CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS STOCKPORT CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	308,670	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	61,902	20.1%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	25,966	8.4%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	90,357	29.3%
Total Population (16-64)	193,750	
People with one or more 'at risk' conditions (16-64)	29,898	15.4%
People with two or more 'at risk' conditions (16-64)	8,750	4.5%
Total Population (65+)	58,207	
People with one or more 'at risk' conditions (65+)	29,752	51.1%
People with two or more 'at risk' conditions (65+)	16,844	28.9%
People with no 'at risk' conditions (65+)	28,455	48.9%

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS STOKE ON TRENT CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS STOKE ON TRENT CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	288,506		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	60,276	20.9%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	22,675	7.9%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	82,752	28.7%	
Total Population (16-64)	183,695		
People with one or more 'at risk' conditions (16-64)	32,238	17.5%	
People with two or more 'at risk' conditions (16-64)	8,713	4.7%	
Total Population (65+)	48,090		
People with one or more 'at risk' conditions (65+)	25,614	53.3%	
People with two or more 'at risk' conditions (65+)	13,542	28.2%	
People with no 'at risk' conditions (65+)	22,476	46.7%	

### Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SUNDERLAND CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SUNDERLAND CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	282,539		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	64,176	22.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	27,508	9.7%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	88,999	31.5%	
Total Population (16-64)	181,388		
People with one or more 'at risk' conditions (16-64)	31,765	17.5%	
People with two or more 'at risk' conditions (16-64)	9,654	5.3%	
Total Population (65+)	55,441		
People with one or more 'at risk' conditions (65+)	30,618	55.2%	
People with two or more 'at risk' conditions (65+)	17,538	31.6%	
People with no 'at risk' conditions (65+)	24,823	44.8%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS SURREY HEARTLANDS CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS SURREY HEARTLANDS CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	1,126,307		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	174,630	15.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	68,291	6.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	286,793	25.5%	
Total Population (16-64)	719,060		
People with one or more 'at risk' conditions (16-64)	76,455	10.6%	
People with two or more 'at risk' conditions (16-64)	19,027	2.6%	
Total Population (65+)	204,234		
People with one or more 'at risk' conditions (65+)	92,071	45.1%	
People with two or more 'at risk' conditions (65+)	48,108	23.6%	
People with no 'at risk' conditions (65+)	112,163	54.9%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS TAMESIDE AND GLOSSOP CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS TAMESIDE AND GLOSSOP CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	242,256		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	48,445	20.0%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	19,865	8.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	68,052	28.1%	
Total Population (16-64)	154,308		
People with one or more 'at risk' conditions (16-64)	24,698	16.0%	
People with two or more 'at risk' conditions (16-64)	7,254	4.7%	
Total Population (65+)	41,488		
People with one or more 'at risk' conditions (65+)	21,881	52.7%	
People with two or more 'at risk' conditions (65+)	12,261	29.6%	
People with no 'at risk' conditions (65+)	19,607	47.3%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS TEES VALLEY CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1\_20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS TEES VALLEY CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	698,069		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	145,397	20.8%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	60,012	8.6%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	205,526	29.4%	
Total Population (16-64)	441,853		
People with one or more 'at risk' conditions (16-64)	72,362	16.4%	
People with two or more 'at risk' conditions (16-64)	21,437	4.9%	
Total Population (65+)	127,890		
People with one or more 'at risk' conditions (65+)	67,761	53.0%	
People with two or more 'at risk' conditions (65+)	37,559	29.4%	
People with no 'at risk' conditions (65+)	60,129	47.0%	

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS THURROCK CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS THURROCK CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	182,362		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	30,044	16.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	11,253	6.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	42,469	23.3%	
Total Population (16-64)	117,801		
People with one or more 'at risk' conditions (16-64)	16,105	13.7%	
People with two or more 'at risk' conditions (16-64)	4,278	3.6%	
Total Population (65+)	25,056		
People with one or more 'at risk' conditions (65+)	12,631	50.4%	
People with two or more 'at risk' conditions (65+)	6,724	26.8%	
People with no 'at risk' conditions (65+)	12,425	49.6%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS TRAFFORD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS TRAFFORD CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	237,389		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	43,211	18.2%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,627	7.4%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	63,030	26.6%	
Total Population (16-64)	149,978		
People with one or more 'at risk' conditions (16-64)	20,692	13.8%	
People with two or more 'at risk' conditions (16-64)	5,695	3.8%	
Total Population (65+)	40,591		
People with one or more 'at risk' conditions (65+)	20,772	51.2%	
People with two or more 'at risk' conditions (65+)	11,650	28.7%	
People with no 'at risk' conditions (65+)	19,819	48.8%	

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS VALE OF YORK CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS VALE OF YORK CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	370,310		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	64,268	17.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	25,290	6.8%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	102,748	27.7%	
Total Population (16-64)	244,272		
People with one or more 'at risk' conditions (16-64)	30,024	12.3%	
People with two or more 'at risk' conditions (16-64)	7,880	3.2%	
Total Population (65+)	71,184		
People with one or more 'at risk' conditions (65+)	32,704	45.9%	
People with two or more 'at risk' conditions (65+)	17,113	24.0%	
People with no 'at risk' conditions (65+)	38,480	54.1%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WAKEFIELD CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WAKEFIELD CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	377,998		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	77,249	20.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	31,141	8.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	110,160	29.1%	
Total Population (16-64)	242,851		
People with one or more 'at risk' conditions (16-64)	39,819	16.4%	
People with two or more 'at risk' conditions (16-64)	11,193	4.6%	
Total Population (65+)	67,941		
People with one or more 'at risk' conditions (65+)	35,030	51.6%	
People with two or more 'at risk' conditions (65+)	19,488	28.7%	
People with no 'at risk' conditions (65+)	32,911	48.4%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WARRINGTON CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WARRINGTON CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	213,744		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	41,761	19.5%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	17,731	8.3%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	60,499	28.3%	
Total Population (16-64)	137,272		
People with one or more 'at risk' conditions (16-64)	20,735	15.1%	
People with two or more 'at risk' conditions (16-64)	6,244	4.5%	
Total Population (65+)	38,415		
People with one or more 'at risk' conditions (65+)	19,677	51.2%	
People with two or more 'at risk' conditions (65+)	11,245	29.3%	
People with no 'at risk' conditions (65+)	18,738	48.8%	

### Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WEST ESSEX CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WEST ESSEX CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	311,249		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	55,020	17.7%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	22,162	7.1%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	83,937	27.0%	
Total Population (16-64)	194,228		
People with one or more 'at risk' conditions (16-64)	25,511	13.1%	
People with two or more 'at risk' conditions (16-64)	6,897	3.6%	
Total Population (65+)	56,313		
People with one or more 'at risk' conditions (65+)	27,396	48.6%	
People with two or more 'at risk' conditions (65+)	14,871	26.4%	
People with no 'at risk' conditions (65+)	28,917	51.4%	

### Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WEST LANCASHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WEST LANCASHIRE CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	110,228		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	22,450	20.4%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	9,366	8.5%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	33,847	30.7%	
Total Population (16-64)	69,342		
People with one or more 'at risk' conditions (16-64)	10,318	14.9%	
People with two or more 'at risk' conditions (16-64)	2,984	4.3%	
Total Population (65+)	22,783		
People with one or more 'at risk' conditions (65+)	11,386	50.0%	
People with two or more 'at risk' conditions (65+)	6,266	27.5%	
People with no 'at risk' conditions (65+)	11,397	50.0%	

### **Notes**

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WEST LEICESTERSHIRE CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

'AT RISK' CONDITIONS' <sup>4</sup>				
Atrial Fibrillation	Heart Failure	Immunocompromised:		
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy		
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer		
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants		
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome		
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants		
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases		
COPD	Parkinson's Disease	Rheumatoid Arthritis		
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis		
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease		
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)		
Diabetes	Severe Asthma			
Epilepsy	Severe Interstitial Lung Disease			

NHS WEST LEICESTERSHIRE CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	402,100	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	71,209	17.7%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	27,944	6.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	112,238	27.9%
Total Population (16-64)	258,918	
People with one or more 'at risk' conditions (16-64)	33,871	13.1%
People with two or more 'at risk' conditions (16-64)	8,884	3.4%
Total Population (65+)	76,383	
People with one or more 'at risk' conditions (65+)	35,354	46.3%
People with two or more 'at risk' conditions (65+)	18,595	24.3%
People with no 'at risk' conditions (65+)	41,029	53.7%

### Notes

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WEST SUFFOLK CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WEST SUFFOLK CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	254,280	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	52,930	20.8%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	21,725	8.5%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	82,770	32.6%
Total Population (16-64)	154,502	
People with one or more 'at risk' conditions (16-64)	22,500	14.6%
People with two or more 'at risk' conditions (16-64)	6,146	4.0%
Total Population (65+)	58,115	
People with one or more 'at risk' conditions (65+)	28,275	48.7%
People with two or more 'at risk' conditions (65+)	15,222	26.2%
People with no 'at risk' conditions (65+)	29,840	51.3%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WEST SUSSEX CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WEST SUSSEX CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	904,038	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	176,444	19.5%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	72,173	8.0%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	280,667	31.0%
Total Population (16-64)	550,105	
People with one or more 'at risk' conditions (16-64)	74,313	13.5%
People with two or more 'at risk' conditions (16-64)	19,952	3.6%
Total Population (65+)	201,673	
People with one or more 'at risk' conditions (65+)	97,450	48.3%
People with two or more 'at risk' conditions (65+)	51,333	25.5%
People with no 'at risk' conditions (65+)	104,223	51.7%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WIGAN BOROUGH CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

, ,		,
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WIGAN BOROUGH CCG		
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION
Total Population (all ages)	322,862	
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	69,449	21.5%
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	28,792	8.9%
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	97,536	30.2%
Total Population (16-64)	204,777	
People with one or more 'at risk' conditions (16-64)	35,711	17.4%
People with two or more 'at risk' conditions (16-64)	10,817	5.3%
Total Population (65+)	59,721	
People with one or more 'at risk' conditions (65+)	31,634	53.0%
People with two or more 'at risk' conditions (65+)	17,564	29.4%
People with no 'at risk' conditions (65+)	28,087	47.0%

### Notes

This is a cross-sectional analysis as at 30<sup>th</sup> June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a





# DRAFT - Estimated 'vulnerable' populations 'at risk' of severe illness from COVID-19, in the National Commissioning Data Repository (NCDR) England- as at 30<sup>th</sup> June 2021 NHS WIRRAL CCG

Analysis derived from 'Bridges to Health' Segmentation Data Model 2.1 20210630 (Outcomes Based Healthcare), applied to NCDR datasets (NHSE and AGEM CSU) 1,2,3

,	=	•
	'AT RISK' CONDITIONS' <sup>4</sup>	
Atrial Fibrillation	Heart Failure	Immunocompromised:
Bronchiectasis	Learning Disability (inc. Down's Syndrome)	Cancer, having Chemotherapy
Cerebral Palsy	Multiple Sclerosis	Blood and Bone Marrow Cancer
Cerebrovascular Disease	Obesity	Bone Marrow and Stem Cell Transplants
Chronic Kidney Disease (inc. Renal Failure)	Other Chronic Neurological Diseases	Downs Syndrome
Chronic Liver Disease (inc. Liver Failure)	Other Chronic Respiratory Diseases	Organ Transplants
Congenital Heart Disease	Other Neurological Organ Failure (MND, PSP & Huntington's)	Rare Diseases
COPD	Parkinson's Disease	Rheumatoid Arthritis
Coronary Heart Disease	Peripheral Vascular Disease	Sarcoidosis
Cystic Fibrosis	Pulmonary Heart Disease (inc. Pulmonary Embolism)	Sickle Cell Disease
Dementia	Serious Mental Illness	Spleen Problems (inc. Splenectomy)
Diabetes	Severe Asthma	
Epilepsy	Severe Interstitial Lung Disease	

NHS WIRRAL CCG			
GROUP	NUMBER OF PEOPLE	% OF AGE GROUP POPULATION	
Total Population (all ages)	326,945		
People with one or more 'at risk' conditions (all ages) i.e. core clinically vulnerable group	77,067	23.6%	
People with two or more 'at risk' conditions (all ages) i.e. multimorbid clinically vulnerable group	33,447	10.2%	
People aged 65+ or with one or more 'at risk' conditions (all ages) i.e. older and/or clinically vulnerable group	109,182	33.4%	
Total Population (16-64)	201,190		
People with one or more 'at risk' conditions (16-64)	38,469	19.1%	
People with two or more 'at risk' conditions (16-64)	12,145	6.0%	
Total Population (65+)	68,487		
People with one or more 'at risk' conditions (65+)	36,372	53.1%	
People with two or more 'at risk' conditions (65+)	20,907	30.5%	
People with no 'at risk' conditions (65+)	32,115	46.9%	

### **Notes**

This is a cross-sectional analysis as at 30th June 2021, including all people alive and registered to a GP practice in England on that date.

Categorisation, inclusion and exclusion of specific conditions is derived from: JCVI prioritisation Cohort 63, where those conditions are currently available in the national datasets and data model.

- <sup>1</sup> Lynn J, Straube BM, Bell KM, Jencks SF. et al. Using population segmentation to provide better health for all: the 'Bridges to Health' model. The Milbank Quarterly 2007: 85(2): 185-208.
- <sup>2</sup> Outcomes Based Healthcare. Segmentation Analytics. Accessed 20 October 2021. https://outcomesbasedhealthcare.com/segmentation-analytics/
- <sup>3</sup> NHS England. NCDR Reference Library Databases. Accessed 20 October 2021. https://data.england.nhs.uk/ncdr/database/
- <sup>4</sup> Joint Committee of Vaccination and Immunisation (JCVI) conditions for Cohort 6 Table 3 within: PHE. COVID-19: the green book, chapter 14a. Accessed 20 October 2021. https://www.gov.uk/government/publications/covid-19-the-green-book-chapter-14a



