

## Cost of Living Crisis in York Understanding and reducing the Health impacts

Data pack - November 2022







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## Introduction



#### Purpose of this pack

- The Population Health Hub (PHH) is a multi-organisation group which brings together colleagues from the local authority, health, public health, and business intelligence to enable, analyse and undertake public health management approaches in York.
- In the context of growing winter pressures and the cost of living crisis, the PHH has
  created this pack to provide information about people in York whose health is likely to
  be affected by the cost of living crisis, including people who have respiratory conditions
  who may be at risk of harm from winter and cold homes.



#### How can this pack support you?



- At the beginning of each section we have included a list of support available that may
  improve health and wellbeing outcomes for those most vulnerable, to support the citywide response to the cost-of-living crisis and winter.
- We hope this pack supports an understanding of need in York for practitioners and services, and provides helpful information on where to go if someone you are supporting needs help.

## Summary of Findings



Finding	Recommendation
Financial vulnerability to the COL crisis is likely to affect health. Higher levels of respiratory admissions are seen in wards where UC claims are highest.	Every opportunity should be taken to signpost people in contact with healthcare services to support available, particularly working in these wards
Air pollution contributes a significant amount of disease, hospital admissions and death in York. Changes in car use during the COVID-19 pandemic had a substantial effect. Worse levels of PM2.5 to the south around Fulford & Heslington ward and over to the west in Copmanthorpe.	A number of actions can be taken to improve exposure to outdoor air quality and poor indoor air quality, and healthcare professionals should seek to learn more using the resources highlighted in this pack.
There is a threefold difference geographically in York between the ward with the highest number of people living in fuel poverty (Hull road and the lowest number (Copmanthorpe).	A number of actions can be taken to improve the quality of housing in partnership, and local authority and healthcare professionals should seek to learn more using the resources highlighted in this pack.
Acomb, York City Centre, Tang Hall, Heworth South and the Groves, Westfield, Chapelfields and Foxwood and Clifton North had significantly higher rates of admission for respiratory conditions than other areas of the city.	Identification of individuals and targeted support delivered.
There are a number of risk factors for poorer outcomes for those with COPD or Asthma including smoking , high BMI (highlight), AQ, temperature	Chance to improve coding, risk stratification around COPD and Asthma Reviews in Primary Care and undertake COPD case finding.
Large variability in asthma and COPD reviews, some practice improved a huge amount to clear backlog	Increase number of reviews, risk stratify, automatic referral to pulmonary rehab if indicated and stop smoking services.
Poor quality housing, fuel poverty and energy inefficiency can have negative impacts on health and wellbeing outcomes.	Every opportunity should be taken to educate practitioners about the risks associated with poor quality housing using the resources outlined in this pack.

## High Priority City Wards for Action



Ward	Concerns
Heworth	<ul> <li>Significantly higher respiratory emergency hospital admissions</li> <li>In top four areas of universal credit claimant rates</li> <li>Ward with one of the highest proportion of households in fuel poverty (19.5%)</li> <li>Higher numbers of households with overcrowding based on overall room occupancy levels than the national average</li> <li>Low number of housing with EPC certificates of C and above (17%)</li> </ul>
Westfield	<ul> <li>Significantly higher respiratory emergency hospital admissions</li> <li>Area with highest universal credit claimant rates</li> <li>Ward with one of the highest proportion of households in fuel poverty (16.9%)</li> </ul>
Clifton	<ul> <li>Significantly higher respiratory emergency hospital admissions</li> <li>In top four areas of universal credit claimant rates</li> <li>Ward with one of the highest proportion of households in fuel poverty (20.3%)</li> </ul>

## Summary of support available



#### **Cost of Living:**

#### **Financial support:**

- Winter Fuel Payment: Overview GOV.UK (www.gov.uk)
- Cold Weather Payment: Overview GOV.UK (www.gov.uk)
- Community Food York Google My Maps
- York Foodbank | Helping Local People in Crisis
- York Talk Money | Live Well York
- Benefits and money City of York Council
- All Local Area Coordinators City of York Council
- Healthy Eating | Wise About Food | England
- Free support for unpaid carers (yorkcarerscentre.co.uk)

#### Saving energy in your home:

- Find ways to save energy in your home GOV.UK (www.gov.uk)
- Save money by saving energy City of York Council
- York Energy Advice Warmer homes for less

#### **Health and wellbeing:**

#### Winter Health:

- How to stay well in winter NHS (www.nhs.uk)
- Winter health City of York Council
- Advice and Information Directory Healthwatch York

#### **Self-management of conditions:**

- Adult Asthma Action Plan
- Your COPD self-management plan
- What can I do to manage my bronchiectasis?
- CYC Health Trainers City of York Council

#### For advice about children or young people:

- When should I worry
- The Little Orange Book
- Children's Ambulatory Treatment Hub

#### Health and wellbeing:

- Healthwatch York guide to mental health and wellbeing in York
- York Safe Haven
- Mental Health Helpline for Urgent Help NHS (www.nhs.uk)
- Home York and Selby IAPT
- Support with mental health City of York Council
- Every Mind Matters NHS (www.nhs.uk)
- Urgent support Every Mind Matters NHS (www.nhs.uk)



# Understanding financial vulnerability



## Universal credit in York on a page

#### **Summary**

- In York in Aug 2022 there were 11,346 people in receipt of UC (6.7% of the adult population), this is down from a peak of 12,696 in 2020, but still significancy higher than the 2019 figure of 5,559.
- Of the 11,346 receiving UC, 53% were not in employment while the remaining 47% were in employment.
- When accounting for ward population size, Westfield has the highest number of UC claimants (152 per 1000 residents) and Heworth Without the least (26 per 1000 residents).
- Of the 4 areas identified as having significantly higher Respiratory emergency hospital admissions (see later slides), three of those have the highest UC claimant rates (Westfield, Clifton and Heworth).

#### Support available

#### **Financial support:**

- Help with your Universal Credit claim City of York Council
- Winter Fuel Payment: Overview GOV.UK (www.gov.uk)
- Cold Weather Payment: Overview GOV.UK (www.gov.uk)
- Community Food York Google My Maps
- York Foodbank | Helping Local People in Crisis
- York Talk Money | Live Well York
- Benefits and money City of York Council
- All Local Area Coordinators City of York Council
- Healthy Eating | Wise About Food | England
- Free support for unpaid carers (yorkcarerscentre.co.uk)

#### **Health and wellbeing:**

- · Healthwatch York guide to mental health and wellbeing in York
- York Safe Haven
- Mental Health Helpline for Urgent Help NHS (www.nhs.uk)
- Home York and Selby IAPT
- Support with mental health City of York Council
- Every Mind Matters NHS (www.nhs.uk)
- Urgent support Every Mind Matters NHS (www.nhs.uk)

## Universal Credit recipients



Row Labels	In employment 2022_	Not in employment 2022_	Total 2022_
Westfield	730	919	1651
Heworth	526	567	1092
Guildhall	470	600	1064
Clifton	403	502	910
Holgate	464	437	903
Micklegate	308	400	707
Huntington & New Earswick	354	332	683
Hull Road	290	348	641
Acomb	256	289	547
Rawcliffe & Clifton Without	267	256	526
Dringhouses & Woodthorpe	264	253	513
Fishergate	183	221	402
Haxby & Wigginton	191	145	335
Osbaldwick & Derwent	154	156	311
Strensall	140	141	276
Rural West York	87	135	227
Fulford & Heslington	85	94	175
Bishopthorpe	48	60	112
Copmanthorpe	61	40	100
Wheldrake	51	35	88
Heworth Without	37	49	83
Grand Total	5369	5979	11346

- Universal Credit (UC) is for those on a low income or unemployed. It replaces several other benefits into one single payment (Child Tax Credit, Housing Benefit, Income Support, income-based Jobseeker's Allowance (JSA), income-related Employment and Support Allowance (ESA) and Working Tax Credit).
- In York in Aug 2022 there were 11,346 people in receipt of UC (6.7% of the adult population), this is down from a peak of 12,696 in 2020, but still significancy higher than the 2019 figure of 5,559.
- Of the 11,346 receiving UC, 53% were not in employment while the remaining 47% were in employment.
- The number of UC recipients varies across the wards, with the most recipients being in Westfield (1651) and the least in Heworth Without (83).

## UC claimants by ward, per 1,000 residents



Ward	UC claimants / 1000 residents
Westfield	
	152
Clifton	112
Heworth	92
Holgate	87
Acomb	75
Huntington & New Earswick	66
Guildhall	65
Micklegate	63
Fulford & Heslington	57
Dringhouses & Woodthorpe	54
Rawcliffe & Clifton Without	54
Hull Road	48
Osbaldwick & Derwent	45
Strensall	43
Fishergate	42
Rural West York	36
Haxby & Wigginton	34
Bishopthorpe	33
Copmanthorpe	30
Wheldrake	27
Heworth Without	26
Total	65

- When accounting for ward population size,
   Westfield has the highest number of UC claimants (152 per 1000 residents) and Heworth Without the least (26 per 1000 residents).
- Of the 4 areas identified as having significantly higher Respiratory emergency hospital admissions, three of those have the highest UC claimant rates (Westfield, Clifton and Heworth).
- Heworth ward was also identified as having significantly higher Asthma emergency hospital admission rates. This ward has the third highest UC claimant rate.



# Understanding environmental vulnerability – air pollution



## Air Pollution in York on a page

#### **Summary**

- Severe air pollution can adversely affect both short- and longterm health as well as the environment.
- DEFRA estimates for 2020 air pollution (PM2.5- released from transport, wood burning stoves and coal fires) was responsible for 4.5% of all deaths in York, around 1 in 20 deaths. This was 5.6% of all deaths in 2019, and was significantly reduced by COVID-19-related air quality improvements in 2020.
- This prompted an investment of £1.6million in 2021 to create UK's first voluntary clean air zone (<a href="https://www.local.gov.uk/case-studies/city-york-caz">https://www.local.gov.uk/case-studies/city-york-caz</a>).
- With good air quality management processes in place, air pollution levels can be monitored live so the appropriate resources can be in place to control any breaches.

#### Support available

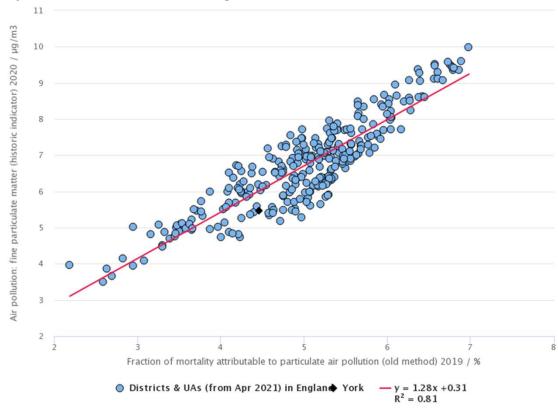
- <u>Find ways to save energy in your home GOV.UK</u>
   (www.gov.uk)
- Save money by saving energy City of York
   Council
- York Energy Advice Warmer homes for less
- Greener Practice Greener Practice UK's primary care sustainability network
- Your home and your lungs | Asthma + Lung UK (blf.org.uk)
- Indoor Air Quality | Allergy UK | National Charity
- York Air Quality Management Areas (AQMA) –
   City of York Council

### Introduction

- Air pollution is defined as "Contamination of indoor or outdoor environment by a chemical, biological or physical agent which modifies the atmosphere's natural characteristics." World Health Organisation (WHO)
- Significant public health issue leading to:
  - The health of residents being compromised
  - An unpleasant environment in the city for both residents and visitors
  - Climate change
  - Damage to historic buildings



## Correlation Between Air Pollution Levels and Attributable Mortality by Local Authorities (LA) in England Fingertips: Public Health Profiles



Data shows a strong correlation ( $R^2 = 0.81$ ) between high air pollution levels and deaths that can be directly linked to their exposure

## **UK Rankings**



- York is ranked 5/55 The Ends UK Clean Air Ranking 2022 (see overleaf) and has an overall clean city score of 7.68/10 (GetAgent).
- Annual Average Air Quality Index score of 20. AQI scores are from 0-500. 50 and below represents good air quality (https://uk-air.defra.gov.uk/airpollution/daqi?view=more-info).
- Scored 3<sup>rd</sup> best for air quality nationallybelow that of Exeter and Plymouth; and 11<sup>th</sup> for green behaviour.
- Lower scores given for water quality (37) and public realm (31): safe communal spaces that create healthier, safer and more cohesive communities.

#### The ENDS Clean Cities Index 2022: England's 10 cleanest cities

To view the ranking in full, visit endsreport.com/cities

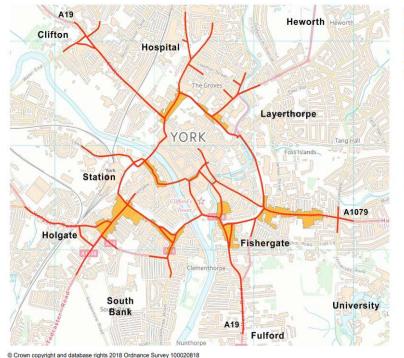
Overall rank	Primary urban area	Air quality	Climate	Water quality	Public realm	Green behaviour
1	Exeter	1	3	5	33	31
2	Worthing	5	1	28	42	14
3	Brighton	6	8	21	28	15
4	Plymouth	2	14	7	55	41
5	York	3	25	37	31	11
6	Peterborough	21	7	15	35	30
7	Barnsley	4	51	19	1	21
8	Oxford	23	20	46	27	2
9	Milton Keynes	38	12	45	4	4
10	Bournemouth	46	2	34	40	3

https://www.getagent.co.uk/cleanest-cities

## Air Quality Management Areas (AQMAs)



- National health-based standards protect vulnerable members of society (elderly, very young, those with chronic respiratory illness) from impacts of poor air quality
- AQMAs are declared where national "air quality objective" set by the Government is exceeded. Air Quality Action Plans (AQAPs) are set up in those areas
- Air quality monitoring has been undertaken in York since 1999 in which time five areas of city centre were identified that would likely breach NO<sub>2</sub> objectives.
- York AQMAs' locations include much of central York :
  - Gillygate
  - Lowther Street and Lord Mayor's Walk
  - Blossom Street
  - Nunnery Lane
  - Piccadilly and Fishergate amongst others.



City of York Council Air Quality Management Area for Nitrogen Dioxide Order No. 5





The northern-most suburbs of Clifton and Wigginton Road are also included. To the south, Fulford Road

## **Types of Air Pollutants**



There are several different types of air pollutants, however the most common and harmful that are recorded in York include:

#### Particulate Matter (PM)

- Everything in the air that is not a gas
- Consists of large variety of chemical compounds and materials- some toxic -Generally caused by anthropogenic sources such as domestic wood burning and tyre and brake wear from vehicles
- Small size of PM can enter bloodstream leading to heart, brain disease plus other organ disorders
- Classified by size: fractions measuring less than 10μm = PM10; fractions measuring less than 2.5μm = PM2.5
- Air Quality Standards Regulations 2010 require concentrations of PM in UK must not exceed:
  - Annual average of 40μm/m³ for PM10
  - 24-hour average of 50μm/m³ more than 34 times in single year for PM10
  - Annual average of 20μm/m³ for PM2.5

#### Nitrogen Dioxide (NO<sub>2</sub>)

- Or NO, when referring to nitrous oxides
- NO<sub>2</sub> is a highly reactive gas caused by burning fuel
- Forms from emissions from motor vehicles as well as power plants and off-road equipment
- Short-term exposure can lead to inflammation of airways and 1susceptibility to respiratory infections and allergens
- Existing heart and lung conditions can be exacerbated
- NO<sub>x</sub> precursors to formation of ozone (O<sub>3</sub>)
   which can trigger inflammation of
   respiratory tract, eyes, nose, and throat, and
   asthma attacks

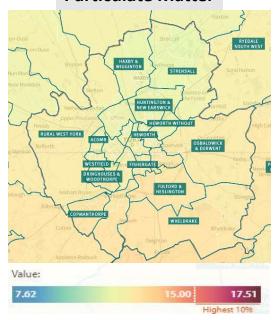
#### Sulphur Dioxide (SO<sub>2</sub>)

- Or SO<sub>v</sub> when referring to sulphuric oxides
- A corrosive, acidic gas mainly produced from combustion of coal or crude oil
- Direct exposure associated with asthma, chronic bronchitis, and lead to irritation and constriction of airways
- Combined with water vapour in atmosphere, it forms acid rain that damages ecosystems, buildings and freshwater/forest habitats
- Historically, played a key role in respiratoryrelated deaths in the 1952 London smog
- Creates PM when combined with NO<sub>x</sub> and NH<sub>3</sub>

## **Air Pollutant Levels**

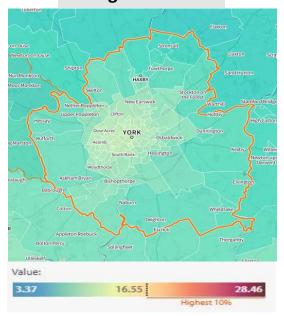
## YORK Population Health Hub

#### **Particulate Matter**



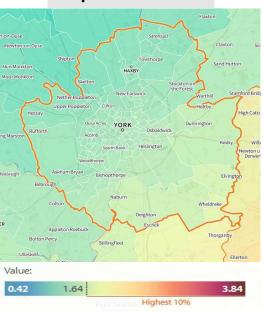
- PM levels are moderate
- Better levels in north of York from Clifton out to Strensall
- Worse levels to south around Fulford & Heslington ward and over to west in Copmanthorpe

#### **Nitrogen Dioxide**



- York's outer areas generally have lower levels with higher levels observed from the ring-road inwards
- Central York levels are still within medium-low levels
- Air Quality Standards Regulations 2010 require annual mean concentration must not exceed 40 μg/m³

#### **Sulphur Dioxide**

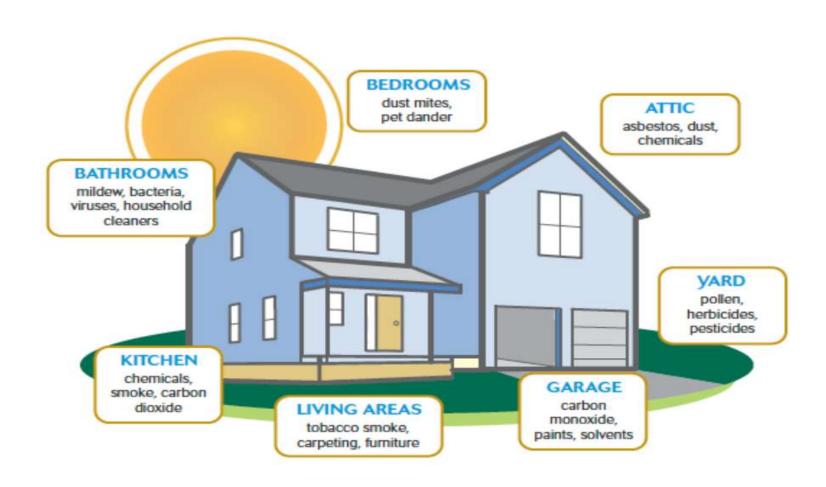


- Levels are observed at their highest in the south-eastern border with East Riding of Yorkshire. These levels are amongst the highest 10% nationally
- Central York levels are around 1.64 ppm- within recommended permissible exposure limit (PEL)

Images taken from Shape Atlas

### **Common Areas of Indoor Pollution**









#### **Outdoor Air Pollution**

- York Clean Air Zone- CYC Air Quality Team pioneered UK's first holistic Low Emission Strategy in 2012 to ensure air pollution and carbon emissions were reduced concurrently:
  - Clean Air Zone (CAZ) in York City Centre- substituted electric and ultra-low emission buses with older diesel ones
  - Currently, 33 electric buses, 21 of which are double decker's operating mainly on Park & Ride routes
- Walk or cycle wherever possible
- Use public transport
- Organise car trips and ensure regular vehicle maintenance and accelerate gently, obeying the speed limits
- Limit idling to 30 seconds
- Car share

#### **Indoor Air Pollution**

- Ensure house is regularly maintained- treat mould and damp as soon as possible
- Open windows- helps ventilation
- Smokefree homes
- Regularly bath pets- where possible, keep them out of bedrooms
- Avoid air fresheners, scented candles, incense
- Vacuum frequently
- Avoid open fires
- Minimise carpeting
- Use natural cleaning solutions- white vinegar and lemon is excellent
- Consider an air purifier/dehumidifier



# Understanding housing vulnerability – poor homes



## Housing Vulnerability in York on a page

#### **Summary**

- Poor quality housing, fuel poverty and energy inefficiency can have negative impacts on health and wellbeing outcomes.
- Damp, overcrowded, inaccessible and unsafe homes can cause risks to individuals physical and mental health.
- In 2020, 13,172 people were living in fuel poverty, representing 14.7% of the population (2020).
- Hull Road, Clifton, Heworth, Fishergate, Guildhall and West Field all have high proportions of households in fuel poverty.
- Southbank has the highest number of energy inefficient homes, with just 11% of housing having a EPC certificate of C or above.

#### Support available

- Find ways to save energy in your home GOV.UK (www.gov.uk)
- Save money by saving energy City of York
   Council
- York Energy Advice Warmer homes for less
- Greener Practice Greener Practice UK's primary care sustainability network
- Your home and your lungs | Asthma + Lung UK (blf.org.uk)
- Indoor Air Quality | Allergy UK | National Charity
- York Air Quality Management Areas (AQMA) –
   City of York Council

## **Housing conditions**



- The right home environment is essential to health and wellbeing. It is a wider determinant of health, protects and improves health and wellbeing, and prevents physical and mental ill health.
- There are risks to an individual's physical and mental health associated with living in:
  - o a cold, damp, or otherwise hazardous home (an unhealthy home)
  - o a home that doesn't meet the household's needs due to risks such as being overcrowded or inaccessible to a disabled or older person (an unsuitable home)
  - a home that does not provide a sense of safety and security including precarious living circumstances and/or homelessness (an unstable home)
- A <u>report</u> by BRE suggests that in 2011 cold and damp homes cost the NHS an estimated £864m in first year treatment costs. They contribute to excess winter deaths and illnesses, particularly from cardiovascular and respiratory disease.
- The recent tragic loss of a 2 year old who died of a <u>respiratory condition caused by exposure to the mould</u> in his flat, as ruled by a coroner, emphasises how vital good quality housing is to health.
- In York:
  - 13,172 people were living in fuel poverty, representing 14.7% of the population (2020).
  - 5 wards in York (Micklegate, Fishergate, Guildhall, Heworth and Hull Road) had higher numbers of households with overcrowding based on overall room occupancy levels than the national average.

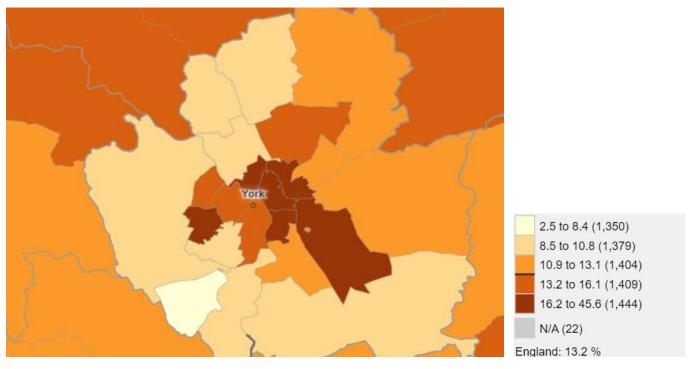


Public Health England developed a checklist to enable local partners to review the extent to which their plans for improved health and wellbeing recognise that the home can make a difference to outcomes, and include action to address any issues:

Improving health through the home: a checklist

## Fuel poverty in York (2020 data)





 Wards with highest proportion of households in fuel poverty:

Hull Road: 25.9%

• Clifton: 20.3

• Heworth: 19.5%

• Fishergate: 19.3%

• Guildhall: 18.7%

Westfield: 16.9%

#### **Health impacts**

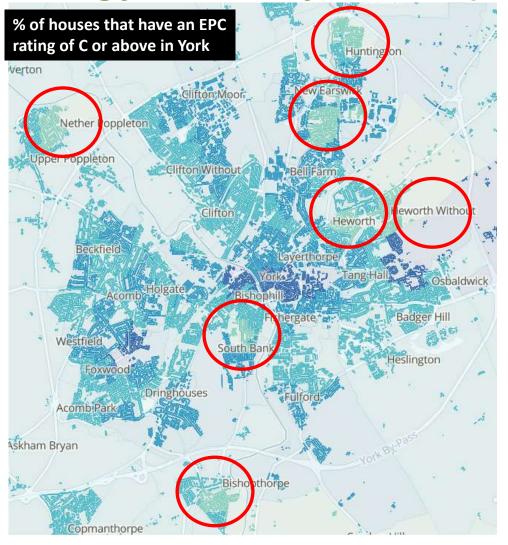
- Homes that are cold due to fuel poverty exacerbate health inequalities.
- Cold homes can cause and worsen respiratory conditions, cardiovascular diseases, poor mental health, dementia, hypothermia and problems with childhood development. In some circumstances, health problems may be exacerbated to a degree that they may cause death.

Public Health Outcomes Framework - Data - OHID (phe.org.uk)

<u>Local Health - Office for Health Improvement and Disparities - Indicators: maps, data and charts</u>

## **Energy Efficiency in York (2021 data)**





Area	% of homes with EPC rating of C or above
Yorkshire and Humber Average	38%
Southbank	11%
New Earswick	14%
Heworth Without	16%
Heworth	17%
Nether Poppleton	17%
Bishopthorpe	18%
Huntington	19%

Energy efficiency (ons.gov.uk)



## Respiratory Conditions



## Respiratory Conditions in York on a page

#### **Summary**

- Certain areas of the city have higher emergency attendances and admission rates for respiratory conditions than others.
- Clifton North had the highest respiratory ED attendance and emergency admission rates by LSOA.
- Heworth had significantly higher emergency admission rates for Asthma than other wards in the city.
- There are multiple risk factors for people living with asthma or COPD including smoking and BMIs of over 30.
- QOF achievement for COPD and Asthma reviews has increased but there is variation across practices.
- In all practices over half of u19s on the asthma register have a record of either a personal smoking status or exposure to second hand smoke.

#### Support available

#### Winter Health:

- How to stay well in winter NHS (www.nhs.uk)
- Winter health City of York Council
- Advice and Information Directory Healthwatch York

#### Self-management of conditions:

- Adult Asthma Action Plan
- Your COPD self-management plan
- What can I do to manage my bronchiectasis?
- The CYC Health Trainers can offer free confidential one-to-one support and guidance, face-to-face or remotely <u>CYC Health Trainers –</u> City of York Council

#### For advice about children or young people:

- When should I worry
- The Little Orange Book
- Children's Ambulatory Treatment Hub



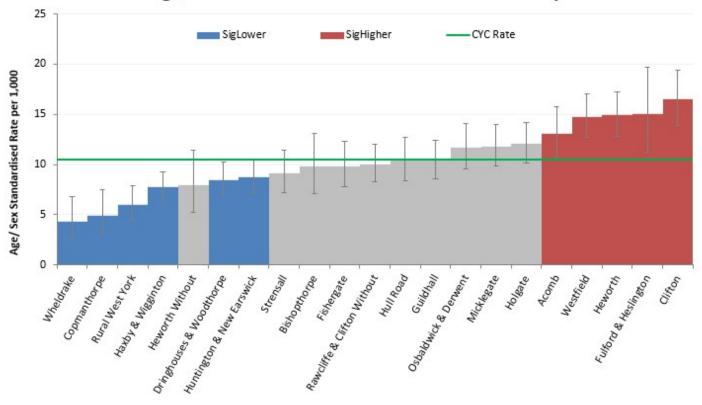
## Emergency Department Attendance Rates for Respiratory Conditions by Geography

Please see Annex B for methodology.

## Respiratory ED Attendance Rates by Ward



#### Age/ Sex Standardised ED Attendance Rates by Ward

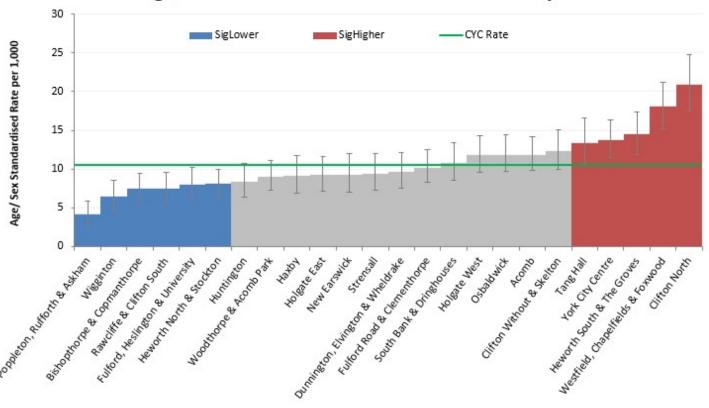


- This graph shows the respiratory ED attendance rates by Ward in York from Apr-19 to Mar-22.
- Acomb, Westfield, Heworth, Fulford and Heslington and Clifton had significantly higher rates of admission for respiratory conditions than other areas of the city.

## Respiratory ED Attendance Rates by MSOA



#### Age/ Sex Standardised ED Attendance Rates by MSOA



- This graph shows the respiratory ED attendance rates by MSOA in York from Apr-19 to Mar-22.
- Tang Hall, York City Centre,
  Heworth South and the
  Groves, Westfield,
  Chapelfields and Foxwood
  and Clifton North had
  significantly higher rates of
  admission for respiratory
  conditions than other areas of
  the city.

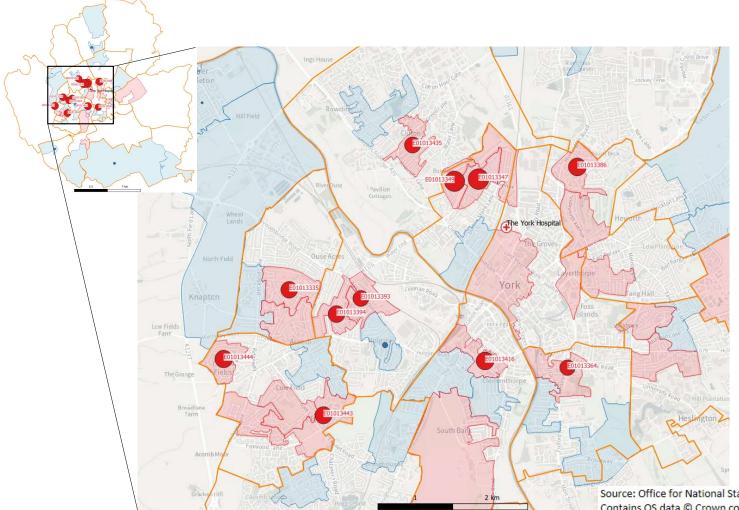
## Respiratory ED Attendance Rates by LSOA



	LSOA	MSOA	Main Road	DSR per 1,000
	E01013347	Clifton North	Kingsway North	37.0
	E01013349	Clifton North	Burdyke Avenue	33.8
	E01013443	Westfield, Chapelfields & Foxwood	Kingsway West/ Gale Lane	31.7
	E01013416	York City Centre	Scarcroft Road	25.1
	E01013399	Tang Hall	Burlington Avenue	25.0
_	E01013366	York City Centre	Gillygate/ Lord Mayor's Walk	22.8
ghe	E01013386	Heworth South & The Groves	Huntington Road	22.7
Significantly Higher	E01013444	Westfield, Chapelfields & Foxwood	Chapelfields Road	21.7
Ę	E01013383	Heworth South & The Groves	Fith & Fourth Avenue	21.5
2	E01013341	Bishopthorpe & Copmanthorpe	Acaster Lane	21.4
E90	E01013335	Acomb	Ostman Road	21.2
S	E01013398	Tang Hall	Tang Hall Lane	20.6
	E01013393	Holgate West	Poppleton Road	20.3
	E01013435	Clifton Without & Skelton	Rawcliffe Lane / Green Lane	19.7
	E01013336	Acomb	Carr Lane	18.8
	E01013350	Clifton North	Burton Green/ Rowntree Ave	18.6
	E01013359	Woodthorpe & Acomb Park	Hob Moor/ Thanet Road	18.6
YC				11.8
7000	F01013/17	Holgate East	Albemarle Road	3.6
₹ .		Fulford Road & Clementhorpe	Fulford Road	3.2
Significantly Lower		Rawcliffe & Clifton South	Bootham	2.9
£ 3		Bishopthorpe & Copmanthorpe	Top Lane	2.9
Sig		Poppleton, Rufforth & Askham	Millfield Lane	1.6

- This table shows the respiratory ED attendance rates by LSOA in York from Apr-19 to Mar-22.
- The rates are sorted from highest to lowest.
- The top part of the table (pink) shows LSOAs with a rate significantly higher than the CYC rate (green).
- The bottom part of the table (blue) shows a selection of LSOAs with the lowest rates.
- The MSOA and 'Main Road' give an indication of geography.

## Respiratory ED Attendance Rates by LSOA





- This map shows the LSOAs with the highest (red) and lowest (blue) respiratory ED attendance rates in York from Apr-19 to Mar-22.
- The main map is zoomed in to the city centre. See smaller inset map of CYC for extent.
- The highest rates are those LSOAs with a red circle. The red shaded areas are also significantly higher but have smaller rates.
- The blue areas have the lowest rates.

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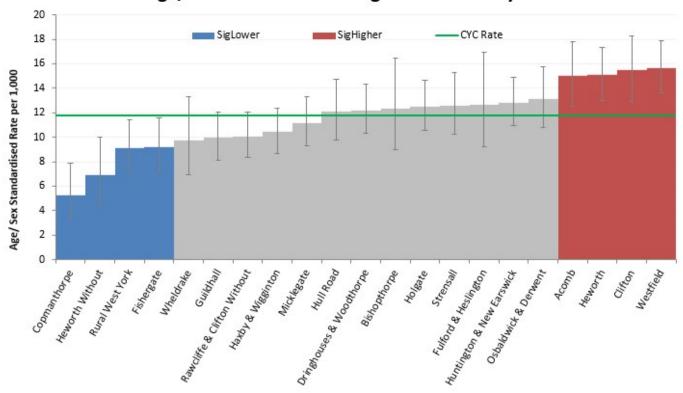
## Emergency Admission Rates for Respiratory Conditions by Geography

Please see Annex B for methodology.

## Respiratory Emergency Admission Rates by Ward



#### Age/ Sex Standardised Emg Admit Rates by Ward

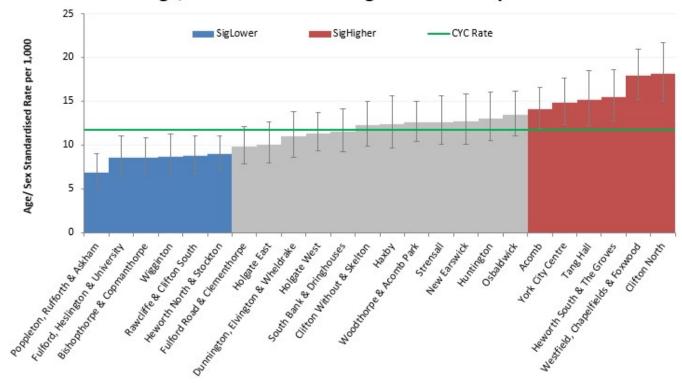


- This graph shows the respiratory emergency admission rates by Ward in York from Apr-19 to Mar-22.
- Acomb, Heworth, Clifton and Westfield had significantly higher rates of admission for respiratory conditions than other areas of the city.

## Respiratory Emergency Admission Rates by MSOA



#### Age/ Sex Standardised Emg Admit Rates by MSOA



- This graph shows the respiratory emergency admission rates by MSOA in York from Apr-19 to Mar-22.
- Tang Hall, Heworth South and the Groves, Westfield, Chapelfields and Foxwood and Clifton North had significantly higher rates of admission for respiratory conditions than other areas of the city.

## Respiratory Emergency Admission Rates by LSOA

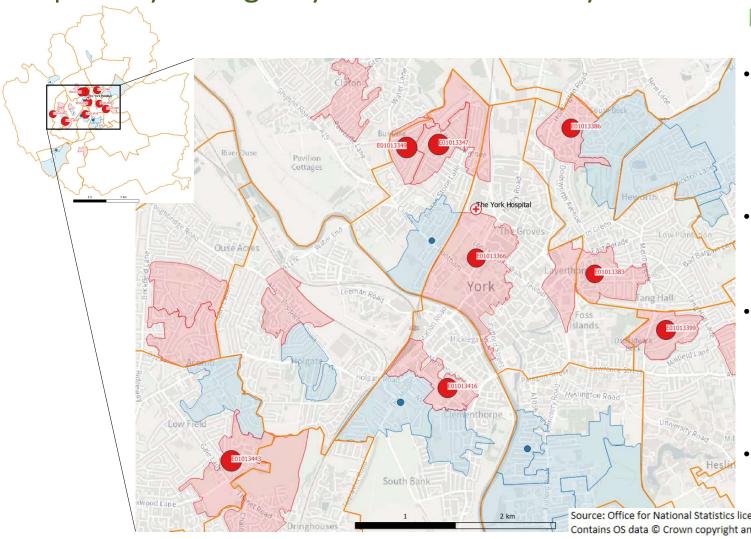


	LSOA	MSOA	Main Road	DSR per 1,000
	E01013347	Clifton North	Kingsway North	37.0
	E01013349	Clifton North	Burdyke Avenue	33.8
	E01013443	Westfield, Chapelfields & Foxwood	Kingsway West/ Gale Lane	31.7
	E01013416	York City Centre	Scarcroft Road	25.1
	E01013399	Tang Hall	Burlington Avenue	25.0
_	E01013366	York City Centre	Gillygate/ Lord Mayor's Walk	22.8
Significantly Higher	E01013386	Heworth South & The Groves	Huntington Road	22.7
Ξ	E01013444	Westfield, Chapelfields & Foxwood	Chapelfields Road	21.7
ŧ	E01013383	Heworth South & The Groves	Fith & Fourth Avenue	21.5
Ē	E01013341	Bishopthorpe & Copmanthorpe	Acaster Lane	21.4
5	E01013335	Acomb	Ostman Road	21.2
S	E01013398	Tang Hall	Tang Hall Lane	20.6
	E01013393	Holgate West	Poppleton Road	20.3
	E01013435	Clifton Without & Skelton	Rawcliffe Lane / Green Lane	19.7
	E01013336	Acomb	Carr Lane	18.8
	E01013350	Clifton North	Burton Green/ Rowntree Ave	18.6
	E01013359	Woodthorpe & Acomb Park	Hob Moor/ Thanet Road	18.6
CYC				11.8
≥		Holgate East	Albemarle Road	3.6
ant er		Fulford Road & Clementhorpe	Fulford Road	3.2
Significantly Lower		Rawcliffe & Clifton South	Bootham	2.9
Sign		Bishopthorpe & Copmanthorpe	Top Lane	2.7
	E01013427	Poppleton, Rufforth & Askham	Millfield Lane	1.6

- This table shows the respiratory emergency admission rates by LSOA in York from Apr-19 to Mar-22.
- The rates are sorted from highest to lowest.
- The top part of the table (pink) shows LSOAs with a rate significantly higher than the CYC rate (green).
- The bottom part of the table (blue) shows a selection of LSOAs with the lowest rates.
- The MSOA and 'Main Road' give an indication of geography.

Respiratory Emergency Admission Rates by LSOA





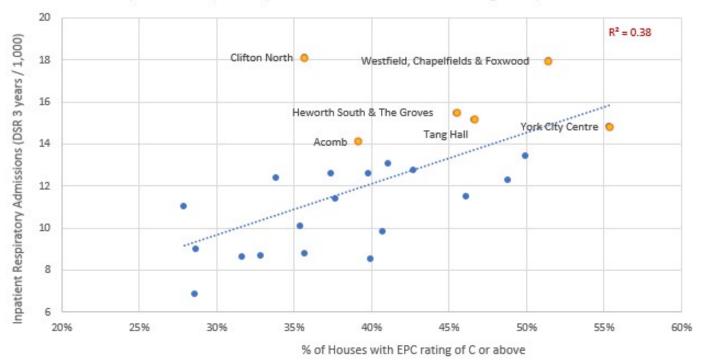
- This map shows the LSOAs with the highest (red) and lowest (blue) respiratory emergency admission rates in York from Apr-19 to Mar-22.
- The main map is zoomed in to the city centre. See smaller inset map of CYC for extent.
- The highest rates are those LSOAs with a red circle. The red shaded areas are also significantly higher but have smaller rates.
- The blue areas have the lowest rates.

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# Inpatient Respiratory Admission versus EPC Rating by C+ Rates by MSOA







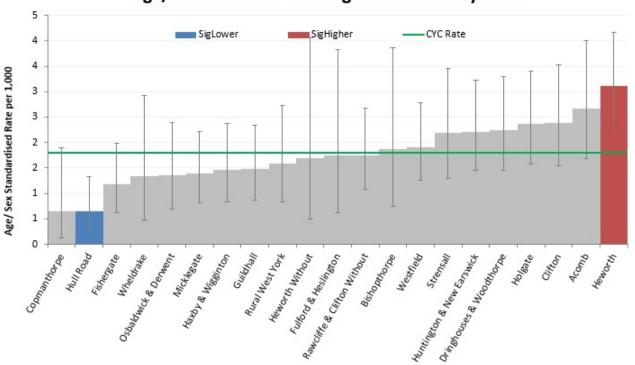
- This graph shows the Inpatient Respiratory Admission versus EPC (energy performance certificate) Rating by C+ Rates by MSOA in York from Apr-19 to Mar-22.
- There are many caveats around the EPC data (it is not available for every house and it is not always up to date).
- Despite some inconsistent evidence, household energy efficiency interventions can improve cardiovascular and respiratory health outcomes.\*

Household energy efficiency and health: Area-level analysis of hospital admissions in England - PMC (nih.gov)

# Asthma Emergency Admission Rates by Ward



## Age/ Sex Standardised Emg Admit Rates by Ward

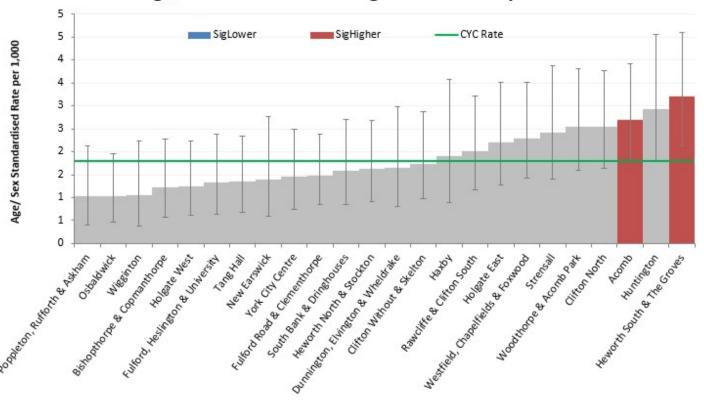


- This graph shows the emergency admission rates for Asthma by Ward in York from Apr-19 to Mar-22.
- Heworth had significantly higher emergency admission rates for Asthma than other wards in the city.

# Asthma Emergency Admission Rates by MSOA



## Age/ Sex Standardised Emg Admit Rates by MSOA



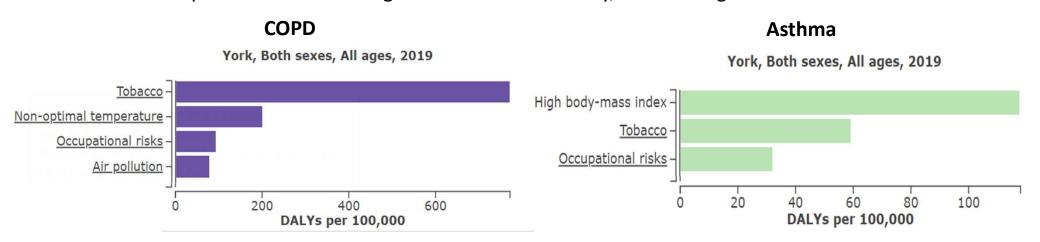
- This graph shows the emergency admission rates for Asthma by MSOA in York from Apr-19 to Mar-22.
- Acomb and Heworth had significantly higher emergency admission rates for Asthma than other wards in the city.



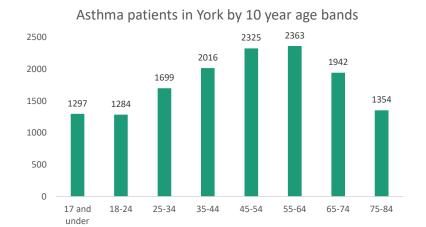
# Asthma and COPD – population health insights from York PCN primary care records

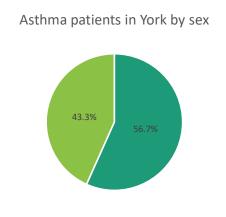
# The burden of COPD and Asthma – international evidence from the GBD study

- Substantial burden of disability and death from COPD and Asthma. GBD data shows that in 2019, for COPD York saw:
  - A loss of 2615 Disability Adjusted Life Years (DALYs)
  - 61.84 deaths per 100,000 population
- GBD data shows that in 2019, for Asthma York saw:
  - A loss of 786 Disability adjusted life years (DALYs)
  - 1.64 deaths per 100,000 population
- There are multiple risk factors causing this death and disability, with the highest shown below:



# Asthma patients in York – demographic patterns





## **Ethnicity**

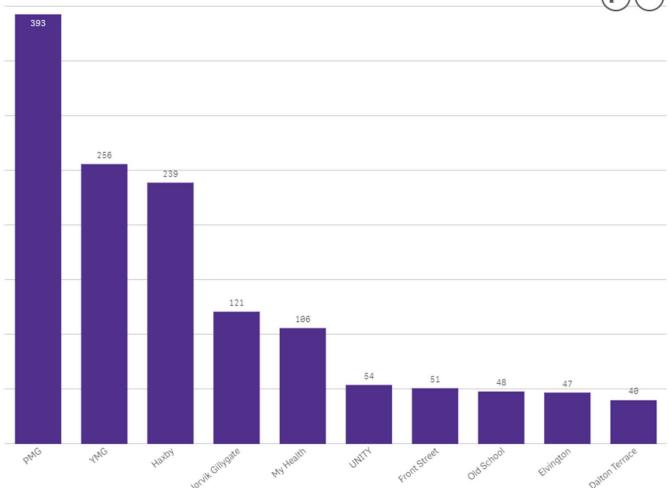
	Patients	% of Patients
White British	11369	91.5%
All other white	354	2.8%
Asian/Asian British	167	1.3%
Black / African / Carribean /		
Black British	90	0.7%
Mixed/ multiple ethnicity	30	0.2%
Other	54	0.4%
Not stated	364	2.9%

## Risk factors / social circumstances

■ Female ■ Male

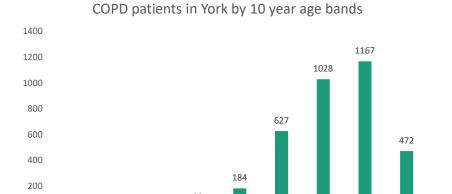
	Patients	% of Patients
Smoking	1641	11.1%
BMI 30+	2234	15.2%
COPD	963	6.5%
Depression	3398	23.1%
Bronchiectasis	255	1.7%
Housebound	188	1.3%
Carer	640	4.3%





1355 patients in York have a secondary care Asthma code but no primary care code

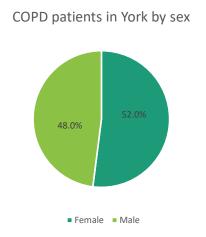
# **COPD** patients in York – demographic patterns



45-54

55-64

65-74



## Ethnicity

35-44

25-34

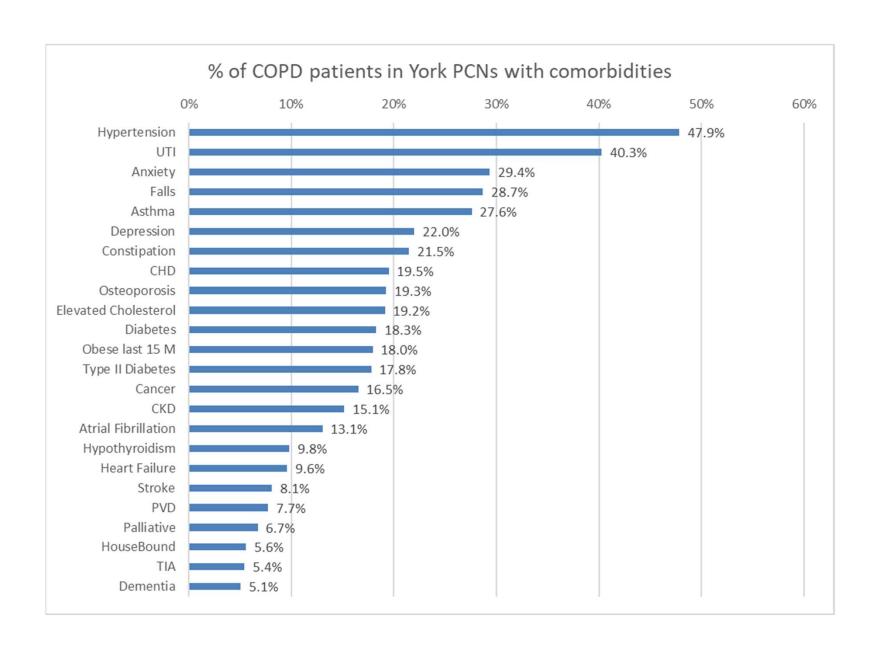
17 and

under

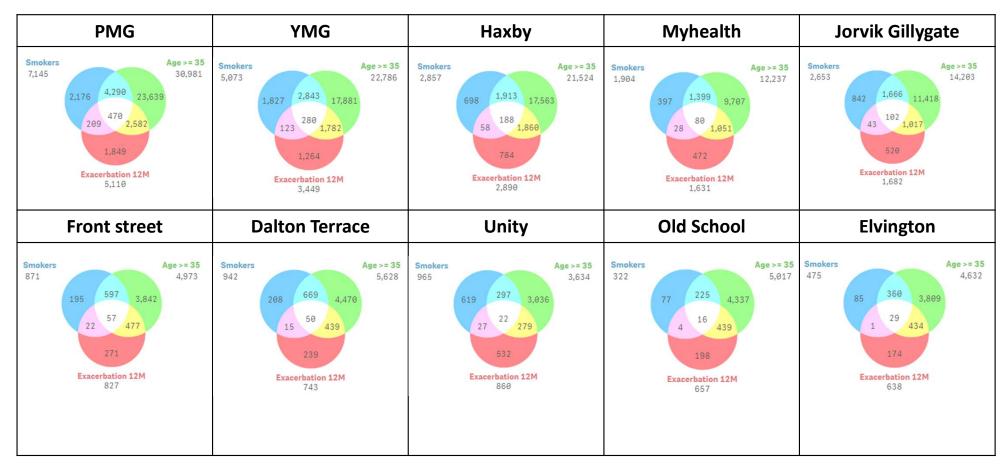
	Patients	% of Patients
White British	2843	96.3%
All other white	44	1.5%
Asian/Asian British	6	0.2%
Black / African / Carribean /		
Black British	5	0.2%
Mixed/ multiple ethnicity	2	0.1%
Other	1	0.0%
Not stated	52	1.8%

## Risk factors / social circumstances

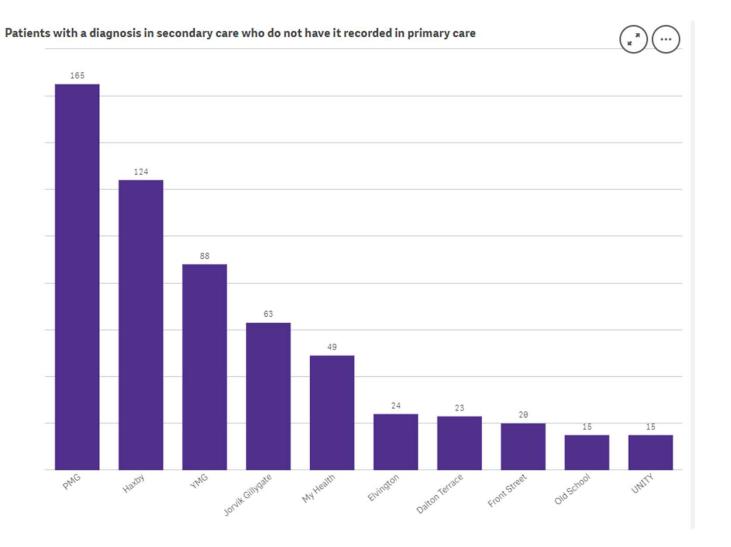
	Patients	% of Patients
Smoking	1047	29.7%
BMI 30+	609	17.3%
COPD	963	27.4%
Depression	797	22.6%
Bronchiectasis	171	4.9%
Housebound	201	5.7%
Carer	287	8.2%



# **COPD** – case finding



The boxes above show cohorts of patients at each practice who do NOT have a diagnosis of COPD, but have one or all of three risk factors (smoking, age 35+, history of respiratory exacerbation in the last 12 months). Patients fulfilling all three criteria but without a diagnosis of COPD are potential 'at-risk'



586 patients in York have a secondary care COPD code but no primary care code

# Non-Elective COPD Admissions Sep 20 - Aug 22 335 Latest 12 months | 260 Prior 12 months

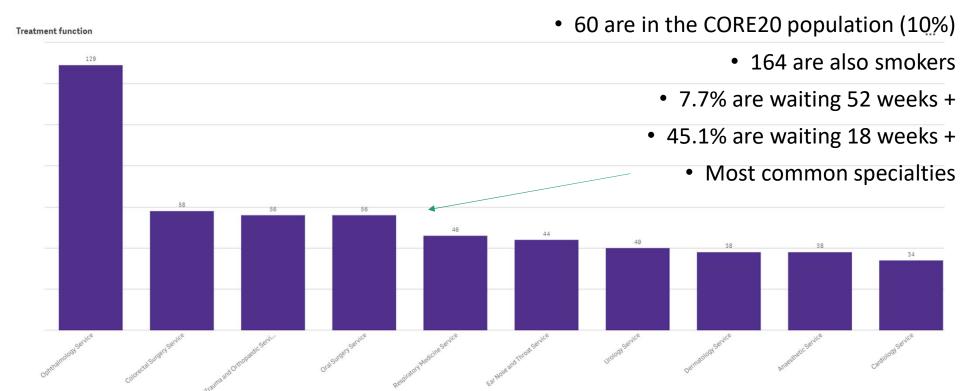


# The MRC Breathlessness Scale

Grade	Degree of breathlessness related to activities	Number of COPD patients in York with MRC score	%
1	Not troubled by breathlessness except on strenuous exercise	560	17.0%
2	Short of breath when hurrying on the level or walking up a slight hill	1279	38.9%
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace	778	23.7%
4	Stops for breath after walking about 100 yds or after a few minutes on level ground	553	16.8%
5	Too breathless to leave the house, or breathless when undressing	116	3.5%

# COPD patients on an Elective Waiting List

• 622 York PCN registered COPD patients on an EWL as of 8/11/2022





# Summary of Asthma and COPD QOF Achievement data



# Key messages

- The Quality and Outcomes Framework (QOF) is a voluntary annual reward and incentive programme for all GP practices in England, detailing practice achievement results. It is not about performance management but resourcing and rewarding good practice.
- In 2020/21 practices were focussed on COVID related activities, accounting for the lower number of some reviews undertaken during this year in some practices.

#### **Asthma**

- The number of asthma reviews has increased since 2020/21 but there is variation between practices.
- The number of u19s with a is a record of either personal smoking status or exposure to second hand smoke in the last 12 months has mostly increased in 2021/22. In all practices over half of u19s on the asthma register have a record of either a personal smoking status or exposure to second hand smoke.

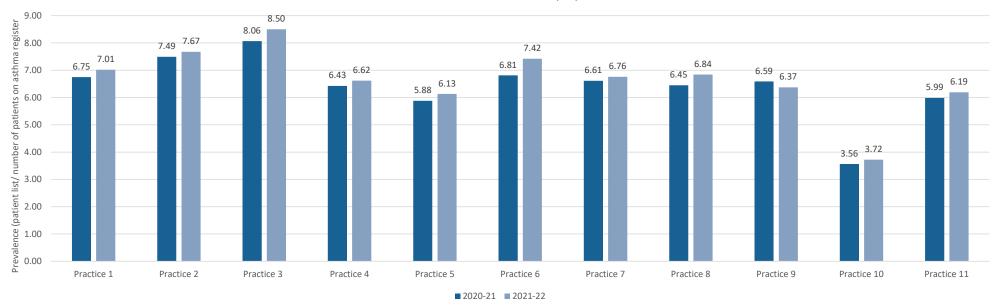
### **COPD**

- The number of COPD reviews has mostly increased since 2020/21 but there is variation between practices.
- There is variation across practices for patients with COPD and MRC dyspnoea scale >3 at any time within the last 12 months with a referral to pulmonary rehabilitation.

# Summary of QOF data on asthma prevalence 2020/21-2021/22







Asthma prevalence rates for people aged 6+ slightly increased for 10 out of 11 practices between 2020/21 and 2021/22. Pre 2020, prevalence data was collected for all-ages so direct comparisons are not possible. The all-age data for 2019 suggests prevalence rates were mostly consistent with previous years, with 4 out of 10 practices experiencing a slight increase.

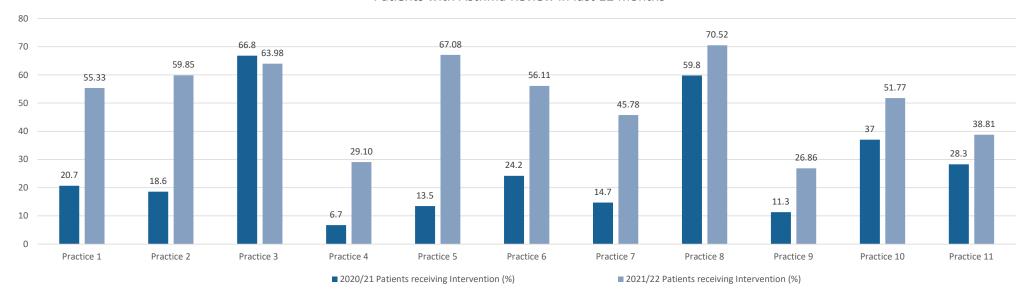
- Quality and Outcomes Framework, 2021-22 NHS Digital 2021/22 6+ data
- National General Practice Profiles Data OHID (phe.org.uk) 2020/21 6+ data and 2019/20 all-age prevalence data

# Summary of QOF data on achievement of asthma reviews 2020/21 – 2021/22



QOF	Points	Thresholds
AST007. The percentage of patients with asthma on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using a validated asthma control questionnaire, a recording of the number of exacerbations, an assessment of inhaler technique and a written personalised action plan.	20	45-70%

#### Patients with Asthma Review in last 12 months



The % of patients with asthma on the register who have had an asthma review in the last 12 months has mostly increased across practices between 2020/21 and 2021/22. In 2020/21 practices were focussed on COVID related activities, accounting for the lower number of reviews undertaken during this year in some practices. In 2021/22 there was variation in achievement rates from 26.86% to 70.52 across practices. 8 out of 11 practices met the minimum QOF threshold.

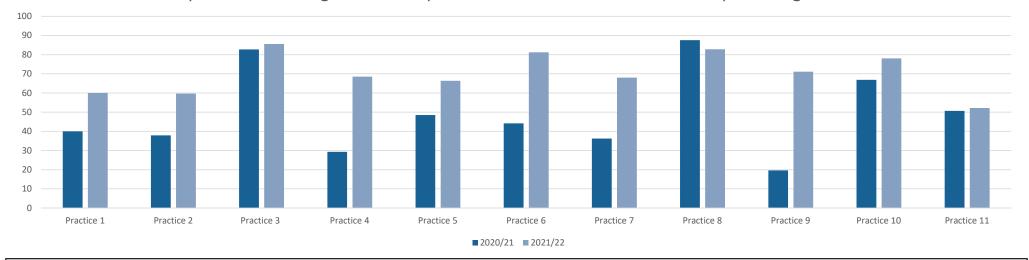
- National General Practice Profiles Data OHID (phe.org.uk) 2020/21 data
- Quality and Outcomes Framework, 2021-22 NHS Digital 2021/22 data

## Summary of QOF data on second hand smoking status 2020/21 - 2021/22



QOF	Points	Thresholds
AST008. The percentage of patients with asthma on the register aged 19 years or under, in whom there is a record of either personal smoking status or exposure to second hand smoke in the preceding 12 months.	6	45–80%

% of patients with asthma on the register aged 19 years or under, in whom there is a record of either personal smoking status or exposure to second hand smoke in the preceding 12 months.

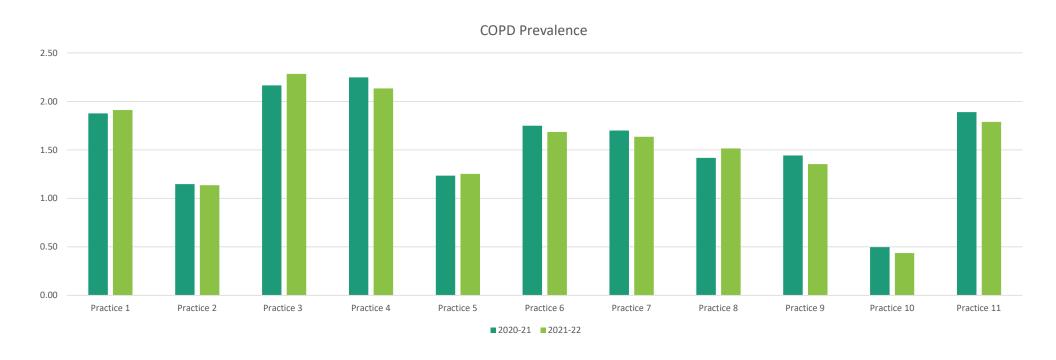


The % of patients with asthma on the register aged 19 years or under where there is a record of either personal smoking status or exposure to second hand smoke in the preceding 12 months has mostly increased across practices from 2020/21 to 2021/22. In 20221/22 all practices met the minimum QOF threshold for this measure. In 2021/22, in all practices over half of u19s on the asthma register had a record of either a personal smoking status or exposure to second hand smoke.

- Quality and Outcomes Framework, 2021-22 NHS Digital 2021/22 data
- National General Practice Profiles Data OHID (phe.org.uk) 2020/21 data



# Summary of QOF data on COPD prevalence 2020/21-2021/22



Practices have recorded minimal changes in the prevalence rate for COPD with 4 practices recording minor increases and 7 practices recording a slight decrease. This mirrors data for 2019/20 where rates remained stable.

- Quality and Outcomes Framework, 2021-22 NHS Digital COPD Prevalence 2020/21 2021/22. Number of patients with COPD diagnosis / total patient list = prevalence rate
- National General Practice Profiles Data OHID (phe.org.uk)



# Summary of QOF data on achievement of COPD reviews 2020/21 – 2021/22

QOF	Points	Thresholds
COPD010. The percentage of patients with COPD on the register, who have had a review in the preceding 12 months, including a record of the number of exacerbations and	9	50-90%
an assessment of breathlessness using the Medical Research Council dyspnoea scale.		

# % of patients with COPD review in last 12 months (denominator including PCAs)



The % of patients on the CODP register with a review in the last 12 months has mostly increased between 2020/21 and 2021/22, with 8 out of 11 practices achieving the minimum QOF threshold. In 2020/21 practices were focussed on COVID related activities, accounting for the lower number of reviews undertaken during this year in some practices. In 20221/22 there was variation in achievement rates from 36.06 to 81.51.

- Quality and Outcomes Framework, 2021-22 NHS Digital
- National General Practice Profiles Data OHID (phe.org.uk)

# Summary of QOF data on COPD and dyspnoea scale 2020/21 – 2021/22

QOF	Points	Thresholds
COPD008: The percentage of patients with COPD and Medical Research Council (MRC) dyspnoea scale ≥3 at any time in the preceding 12 months, with a subsequent record	2	40-90%
of an offer of referral to a pulmonary rehabilitation programme (excluding those who have previously attended a pulmonary rehabilitation programme)		

# % of patients COPD and MRC dyspnoea scale at ≥3 in last 12 months with record of offer to pulmonary rehab programme



There is variation across practices for patients with COPD and MRC dyspnoea scale >3 at any time within the last 12 months with a referral to pulmonary rehabilitation. 4 practices saw a decrease from 2020/21 to 2021/22. 4 practices achieved the minimum QOF threshold in 2021/22.

- Quality and Outcomes Framework, 2021-22 NHS Digital
- National General Practice Profiles Data OHID (phe.org.uk)

# Annex A: Clinical evidence



- Overview | Excess winter deaths and illness and the health risks associated with cold homes | Guidance | NICE
- Fuel Poverty, Cold Homes and Health Inequalities in the UK IHE (instituteofhealthequity.org)
- The impact of cold on the respiratory tract and its consequences to respiratory health
- Interacting effects of particulate pollution and cold temperature on cardiorespiratory mortality in Scotland
- Health effects of outdoor air pollution PMC (nih.gov)

# Annex B: Methodology



#### Emergency Department (ED) attendances for City of York (CYC) patients at York Trust:

- Attendances over 3 years (Apr-19 to Mar-22)
  - This is total attendances including patients that attend multiple times over the 3 year period with a respiratory condition.
  - This data will include patients streamed e.g. to ambulatory care and those who are admitted (some overlap with the admission figures).
- Rates are age / sex standardised (0-4, 5-18, 19-64 and 65+ years).
- All rates are per 1000 of the population.
- Snomed codes used\*:

diagnosisSnomed	diagnosisGroup1	diagnosisGroup2	diagnosisGroup3
13645005	Medical specialties	Respiratory : function	Chronic obstructive pulmonary disease (COPD)
195967001	Medical specialties	Respiratory : lower	Asthma

### **Emergency Admissions for City of York (CYC) patients at York Trust:**

- Activity over 3 years (Apr-19 to Mar-22)
  - This includes total admissions including patients that attend multiple times over the 3 year period with a respiratory condition.
- Rates are age/ sex standardised (0-4, 5-18, 19-64 and 65+ years).
- All rates are per 1000 of the population.
- Diagnosis Codes used\* (ICD10):

Category_1_C	<b>↓▼</b> Category_1_Description		diagSubGroup
■ J40-J47	□ Chronic lower respiratory diseases	<b>■J44</b>	Other chronic obstructive pulmonary disease
		⊕ J45	Asthma
		<b>■ J43</b>	Emphysema
		<b>■ J47</b>	Bronchiectasis
		<b>■J46</b>	Status asthmaticus
		<b>■J40</b>	Bronchitis, not specified as acute or chronic
		<b>■ J42</b>	Unspecified chronic bronchitis
∃ J20-J22	<ul> <li>Other acute lower respiratory infections</li> </ul>	<b>■J22</b>	Unspecified acute lower respiratory infection
		<b>□J21</b>	Acute bronchiolitis
		<b>□J20</b>	Acute bronchitis

## Asthma Emergency Admissions Methodology

- All rates are per 1000 of the population.
- This is a subset of the emergency admissions data for respiratory conditions using only the following diagnosis (ICD10) code\*:



<sup>\*</sup>The decision around which codes to use was based on clinical advice.