### July 2023

### ASTHMA+ LUNG UK

BREATHING UNEQUAL

Examining health inequalities and lung conditions

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# Foreword

This is the first report from our *Life with a Lung Condition* survey, which gained over 14,000 responses from people with lung conditions in early 2023. These responses have shed new light on the experiences many people with a lung condition face, how they manage their condition and what care they receive for it. The findings from the survey used in this report reveal a picture where those who have the least suffer the most.

We have known for a long time about the close relationship between lung conditions and health inequalities. Factors such as smoking, poor housing and air pollution contribute to the unequal burden carried by the poorest. Reading this report, what shocked me from this new analysis was that the cost-of-living crisis has rapidly exacerbated the problem. Our supporters told us last year about their deep concerns about being able to afford to pay for essentials over the winter – being able to heat their home, to pay their rent or mortgage and to pay for prescriptions. With these pressures, it is sadly little surprise that people with lung conditions with lower incomes are having trouble managing their condition, and attending hospital at a higher frequency. Troublingly, this group at highest risk are also struggling to access the care they need.

We are not without hope, and we should not be overawed by the complexity of the issue. Based on the issues identified from the survey responses and other supporting evidence, we have developed several policy calls that, if implemented, would improve the lives of the most disadvantaged people with lung conditions. They would keep people out of hospital and help save lives. Those struggling with their lung conditions on low incomes need targeted support, and key factors that affect poorer people more – such as tobacco and air pollution – need particular attention. The findings in this report should be a wake-up call not just for policymakers, but for those who care about fairness and everyone having the opportunity to live well with a lung condition.



Schooly

Sarah Woolnough Chief Executive, Asthma + Lung UK

# Executive summary

Healthy lungs are vital for overall health and well-being, being able to breathe and exercise, immunity, and quality of life. However, if you are a person with a lung condition such as asthma, bronchiectasis, or chronic obstructive pulmonary disease (COPD), where you live and how wealthy you are affects your chances of managing your lung condition well, how often you might go to hospital, and your chances of living a long life. This is because lung conditions are caused and/or triggered by exposure to things that are often related to socioeconomic status including air pollution, poor housing, tobacco smoking, and access to healthcare services. All of these are drivers of health inequalities: unfair, avoidable, and systematic differences in health between different groups within society.

At Asthma + Lung UK, we believe that good lung health and the ability to breathe freely are a basic right. Lung health should not be a lottery, and access to sufficient health care should not be based on an individual's postcode. The economic scarring from the COVID-19 pandemic, and the current cost-of-living crisis, are widening health inequalities across the UK. Unless the government takes action to close the gap and reduce the impacts of health inequalities, there will continue to be long-term negative impact on the health and economy of the UK for decades to come.

We used data from our online survey of over 14,000 people with lung conditions – the first Asthma + Lung UK *Life with a Lung Condition* survey – to find out how income is impacting people with lung conditions, and the results highlighted stark lung health inequalities. The survey covered a wide range of topics to find out the wide-ranging impact and variation in lung health and care. In conducting this research, we also recognise that the experiences and circumstances of all people with lower incomes with lung conditions are not the same. Their economic circumstance will interact with their protected characteristics<sup>\*1</sup> and inform the differences this report shows. In this report, we explore the disproportionate burden of lung conditions on marginalised and disadvantaged communities and shed new light on how the disparities faced impact access to healthcare services across the UK. It sets out the changes needed to reduce lung health inequalities and help ensure millions of people's right to breathe.

<sup>\*</sup> These are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

### Our key findings

Our analysis has shown that, of the poorest 20% of people who responded:



**70%** live with uncontrolled asthma symptoms reducing their quality of life and increasing the risk of hospital admission and death;



**1 in 4** are impacted by breathlessness on a daily basis, interfering with their day-to-day activities;

**70%** have had their income impacted by the cost-of-living crisis, and are struggling to afford their rent or mortgage, heating, food, prescriptions, and other household bills;



**70%** feel their lung condition has worsened and 61% feel that they need more support now than they did a year ago;

Only **37%** were able to access same-day GP care, compared to 50% of the wealthiest 20%.

We also found that, when compared to the wealthiest people, the most deprived were twice as likely to be admitted to hospital in an emergency and die from a lung condition and they were up to 9 times more likely to die in winter.

The findings in this report should be a wake-up call to policymakers. Poor lung health drives health inequalities, and health inequalities drive poor lung health. You cannot impact one without tackling the other. Every aspect of healthcare for people with lung conditions is affected and the case for tacking lung health inequalities has never been clearer.

### What we want to see

The disparities faced by underserved and overlooked communities are multi-faceted but can be addressed with straightforward solutions. Policymakers can play a crucial role in mitigating health inequalities by providing comprehensive policy changes that will target the most vulnerable and address the gap in outcomes between people with lung conditions.

These policy changes should include tailored financial support for those on low incomes to protect those who are most at risk of lung conditions, and most vulnerable to the impact of the cost-of-living crisis. This should span energy bill support, a scheme to reimbursement electricity costs linked to life-saving medical devices, a Cleaner Travel Access Fund, and the introduction of free prescriptions for everyone with a lung condition in England to bring NHS England in line with the rest of the UK.

Prevention strategies are vital in the fight for lung health. Fully resourced respiratory strategies must be rolled out across all UK health services encompassing prevention, early diagnosis, and treatment. Smoking is the biggest driver of preventable lung disease and health inequalities, responsible for half of the difference in life expectancy between the richest and poorest in society.<sup>2</sup> As a result tobacco control plans must also be strengthened across the UK to prevent millions more people developing lung conditions.

Respiratory data collection must be improved and include the collection of data of those facing economic hardship to enable the identification of individuals and groups that require the most lung health support and resources. Policies to provide this support must be co-designed with the communities they are designed for: those most at risk of lung conditions, and under-represented in policymaking.

Finally, we want to see a commitment of long-term, outcome-based health inequalities funding for local authorities and Integrated Care Systems to reverse the cuts that have been made to public spending over recent years. This report will demonstrate how lung health inequalities can be tackled if we implement co-produced, data-led, comprehensive policy changes across the UK.

# Key policy recommendations

Reduce the impact that the cost-of-living crisis is having on those with lung conditions by providing tailored financial support to people with lung conditions on low incomes.



All national health services to roll out fully resourced respiratory strategies covering prevention, early diagnosis, and treatment.



Establish a Cleaner Travel Access Fund to help those who need it most to transition to cleaner modes of transport.



Strengthen tobacco control plans in each of the UK's four nations.

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Ensure health inequality policies are co-produced with the communities they are designed to support, specifically those communities who have been most overlooked by policymakers, most at risk of lung conditions, and under-represented in policymaking.

Improve the data collected within the NHS on respiratory patients and their outcomes, ensuring communities with lower incomes are included in data collection.



# Chapter 1 – How do health inequalities affect people with lung conditions?

This chapter explores the impact of health inequalities on people with lung conditions, by analysing data from the *Life with a Lung Condition* survey and other publicly available datasets. It is well established that people living in the poorest communities across the UK are twice as likely to develop a lung condition and seven times more likely to die from a lung condition;<sup>3</sup> this data shows that people from lower socioeconomic status backgrounds are less likely to be able to self-manage their condition and control their lung condition, resulting in the increased presence of symptoms that interfere with their quality of life. This has been magnified by the current cost-of-living crisis in the UK which has put the affordability of basic necessities, including food and energy bills, out of reach for many, and is forcing more people to make choices to the detriment of their lung health. Furthermore, the most deprived communities face an unfair burden of respiratory mortality exacerbated by winter pressures.

### What are Health inequalities?

Health inequalities are unfair, avoidable, and systematic differences in health between different groups within society. These differences include how long people are likely to live, the health conditions they may experience and the care that is available to them. People living in areas of high deprivation, those from ethnic minorities<sup>\*</sup> and those from inclusion health groups<sup>\*</sup> are most at risk of experiencing health inequalities.

80% of our health is determined by 'social determinants of health'. This includes things like employment opportunities and income, housing conditions and air quality, and behaviours such as tobacco smoking and diet and exercise. Only 20% of our health is determined by other things such as genetics, family history, and access to/quality of care available. These social determinants are the driver behind the social gradient of health: the more deprivation an individual faces, the more health problems they are likely to have. Addressing health inequalities requires acknowledging the impact of social determinants of health; these factors drive the development and exacerbation of lung conditions. Addressing social determinants of health is fundamental to improving lung health and reducing health inequalities.

Health inequality is an issue that affects many areas of healthcare, and it is absolutely crucial when trying to understand who is most affected by lung conditions, and what impact they have on healthcare. In the 13 years since Sir Michael Marmot published his ground-breaking report on health inequalities, not enough has changed. *Fair Society, Healthy Lives* detailed how health inequalities result from social inequalities, and that action on health inequalities requires action across all the social determinants of health yet we have not seen the actions required to remove the inequities that contribute to lung conditions being the third biggest killer in the UK. To avoid preventable deaths from respiratory disease, underlying health inequalities must be tackled.

<sup>\*</sup> The terms 'ethnic minority' or 'ethnic minorities' refer to people belonging to ethnic groups that are in the minority in the context of the population of the United Kingdom

Inclusion health groups are defined as people who experience homelessness, drug and alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, sex workers, people in contact with the justice system and victims of modern slaver

### The poorest people are more likely to have uncontrolled asthma

Patients with asthma are assessed for the level of symptom control and are classified as having uncontrolled asthma if they have daily symptoms and need to use their SABA reliever more than twice a week, their asthma wakes them up during the night or their activity is limited as a result of their asthma. Patients are categorised as having well-controlled asthma symptoms if none of these features are present. Asthma is a variable condition, and the extent of symptoms can vary dramatically between individuals, depending on exposure to triggers such as dust, mould, pollen, changes in the weather and air pollution. The *Life with a Lung Condition* survey showed that 71% of people on the lowest incomes (below £20,000 annually) who responded live with uncontrolled asthma symptoms compared with 58% of people on the highest incomes (above £70,000 annually).\* Thus, the most deprived people are 23% more likely to live with uncontrolled asthma and additional data shows that these people are half as likely to have well-controlled asthma, compared to the least deprived people (breakdowns can be seen in Figure 1).

Indeed, previous A+LUK surveys demonstrated that poorer people are more likely to struggle to control their asthma and experience more COPD exacerbations,<sup>4,5</sup> highlighting the link between income level and risk of exacerbation. This data shows that the burden of respiratory disease falls most heavily on the poorest in society, resulting in more severe symptoms, which can lead to hospitalisation and is detrimental to quality of life.



Figure 1: Proportion of respondents with uncontrolled asthma, by household income

<sup>\*</sup> See Appendix C, data table 3 for income classifications.

### Breathlessness is felt the most by the people who have the least

Being out of breath can be a terrifying and debilitating experience and yet for almost a quarter (24%) of the poorest respondents in our survey, breathlessness always impacted their daily activities compared to only 1 in 12 (8%) of the most affluent respondents. This means that the poorest respondents are three times as likely to experience breathlessness daily and the most affluent respondents are three times as likely to never have issues with breathlessness.<sup>\*</sup> Additionally, the most deprived survey participants were more than twice as likely to have given up work due to their breathlessness, with over 1 in 4 (27%) falling into this category compared to only 1 in 8 (12%) of the least deprived survey participants, highlighting the toll and detrimental knock-on effects that breathlessness can have.



<sup>\* 7.7%</sup> of the most affluent of survey participants never experienced breathlessness, compared to only 2.4% of the most deprived survey participants.

### The poorest cannot afford necessities required to maintain their lung health

Due to the current economic climate in the UK creating a cost-of-living crisis, financial inequalities are particularly pertinent. Our data shows that the cost-of-living crisis has affected the quality of life of many people with lung conditions in ways that can be detrimental to their lung health. The cost-of-living crisis experienced by the UK over the past year has disproportionately affected the poorest people, with 7 in 10 (71%) of the lowest income survey respondents saying that it has impacted their income level, compared to 1 in 4 (27%) of the highest income survey respondents. As expected, the lower the income of a survey respondent, the more likely they are to have had their income impacted by the crisis.

Rising costs have particularly impacted vulnerable groups including people with disabilities: a recent survey found that 57% are concerned about the cost of their energy bills, and only 9% of respondents said that rising costs have not impacted them on a daily basis.6



#### Figure 3: Has the cost-of-living crisis affected your income level?

In the Life with a Lung Condition survey, almost one fifth (18%) of all respondents can't afford their rent or mortgage, two fifths (39%) can't afford to heat their homes and one quarter can't afford food (25%) or other household bills (24%). These numbers are staggering. Alarmingly, these numbers are even more stark when looking at the poorest survey participants - one in three (33%) can't afford their rent or mortgage and almost three fifths (58%) can't afford heating costs, while two fifths (40%) are unable to pay for food and other household bills.

Poor housing conditions are closely linked to lung conditions: indoor pollutants including dust, dirt, or gases in the air have been linked to lung conditions like asthma, COPD and lung cancer. People on lower incomes are also less likely to own their own properties, and the burden of responsibility for upkeep often lies with landlords, councils or housing associations. Poor ventilation and inadequately heated homes can lead to damp and mould developing which is known to worsen certain lung conditions like asthma, or even cause aspergillosis. Cold homes are often the result of poor-quality housing and poverty, both of which pose a significant risk to the development or exacerbation of respiratory disease.

People of low socioeconomic status are more likely to rent their home; approximately half (53%) of households with a weekly income of less than £99 live in rented social housing, compared to just 4% of those earning a weekly income of £1,000+. Alarmingly, a study found that over half of tenants (51%) had issues with damp or mould.<sup>7</sup> The link between respiratory conditions in children and damp is well documented;<sup>8</sup> exposure to air pollution in early years has a lifelong impact, including childhood asthma development and restricted lung function growth. Air pollution may alter structural and mechanical characteristics of infants' lungs and contribute to deficits in later life.<sup>9</sup> Indeed, Howden-Chapman et al demonstrated that installation of more efficient heating systems reduced asthma symptoms and consequent exacerbations in children,<sup>10</sup> highlighting the link between cold temperatures and poor lung health.

Within the lowest household income bracket, around 1 in 10 surveyed (see Figure 4 for breakdown) could not afford each basic necessity, even before the cost-of-living crisis escalated prices.



In addition to these financial pressures directly impacting lung condition management, financial constraints can also cause stress, which is a trigger of lung conditions for 1 in 3 (34%) of survey respondents. The cost-of-living crisis is unequally impacting the poorest in society, who are more likely to have a respiratory disease and are especially vulnerable to rising costs for necessities. This is detrimental to self-management which – together with stress as a trigger – is likely to increase the chance of a hospital admission due to an exacerbation and result in further lung health deterioration. Lifelong respiratory conditions can have a significant impact on an individual's quality of life, employment abilities, and costs to the NHS, thus it is vital that action is taken to avoid this.

"I've had asthma all my life and since the cost-of-living crisis I can't afford to put my heating on which has caused black mould in my home, being wheelchair bound too doesn't help, but the more I get stressed the worse my asthma gets."

**Survey respondent** 



### Smoking is associated with deprivation

Tobacco smoking is the biggest cause of preventable illness and death in the UK;<sup>11</sup> it is estimated to cause 1 in 4 cancer deaths and is well established as a cause of lung conditions including COPD, pneumonia, and obstructive sleep apnoea. Whilst smoking rates have broadly declined over the past 50 years, they remain disproportionately high in certain communities. In 2021, smoking was 3.5 times more prevalent among people in the lowest decile of the index of multiple deprivation compared to the least deprived decile in England, and 3.4 times more prevalent in Wales.<sup>12</sup> Smoking rates also continue to be highest in Scotland's most deprived areas, underlining smoking as a key ongoing health inequality challenge.<sup>13</sup>

The *Life with a Lung Condition* survey confirmed this link, showing that two thirds (66%) of the most affluent have never smoked compared to only one third (34%) of the most deprived.\* Only 1.8% of the most affluent in the survey reported a current smoking status compared to 10% of the most deprived – the poorest were 5.5 times more likely to be a current smoker. Indeed, there is an inverse relationship between income and smoking status – the higher a survey respondent's salary, the less likely they are to currently smoke and the more likely they are never to have smoked. As smoking is the leading preventable cause of respiratory disease, areas with high smoking rates are pockets of increased prevalence of respiratory illness and poor lung health, which must be addressed to reduce the incidence of lung conditions in the UK.

Higher rates of smoking are also found among those who already experience health and social inequalities, such as people with a mental health condition, people in contact with the criminal justice system, and LGBTQ+ people. Higher rates of smoking both drive and exacerbate these inequalities; smoking drives poor lung health which damages employment opportunities and income, making it more difficult for smokers to maintain full employment to state pension age.<sup>14</sup> Smoking and deprivation have a co-dependent relationship that must be tackled in order to improve the nation's lung health.



<sup>\*</sup> When asked about smoking status, other options for this question included having given up and use of e-cigarettes (vapes); see Appendix B survey question 12.

### Winter respiratory pressures unfairly impact the poorest in society

Respiratory illnesses are a major driver of winter pressures, as the functionality of the respiratory system is compromised once temperatures drop below 16°C.<sup>15</sup> In the *Life with a Lung Condition* survey, two thirds (68%) of respondents report cold weather as a trigger for their lung condition, 7 out of 10 (71%) participants find that colds and influenza trigger their lung condition and over one third (38%) say that moulds and fungi exacerbate their lung condition. These data demonstrate that lung conditions are more symptomatic during winter months due to increased presence of triggers and reduced respiratory system function.



This puts pressure on the health services. Analysis conducted using Met Office data by Nuffield Trust showed that below 5°C, each 1°C drop in temperature results in a 10% increase in mortality risk<sup>16</sup> and a 19% increase in GP appointments<sup>12</sup> for respiratory conditions. Respiratory conditions have contributed around 33%<sup>12</sup> to excess winter mortality historically, while in 2020, 2 in every 5 (40%) excess winter deaths were attributable to respiratory disease.<sup>17</sup>

The Office for National Statistics (ONS) publishes an annual excess winter mortality index score which provides a measure of the increase in mortality over winter compared to summer and is comparable across age, sex and geographical location.<sup>\*</sup> There is great inequality in winter mortality – the death toll is nearly 3 times as high in the coldest houses compared to the warmest houses.<sup>12</sup> Indeed, the coldest 25% of housing stock is accountable for over 1 in 5 (21.5%) of all excess winter deaths.<sup>1,12</sup> Children living in these homes experience double the risk of developing respiratory illnesses.<sup>12</sup> Comparison of the most and least deprived local authorities revealed that the most deprived communities experience an 8.7 (England), 3.9 (Wales), 2.9 (Scotland) and 2.1 (Northern Ireland) times<sup>+</sup> increased risk of death in the winter, compared to the most affluent communities. This once again demonstrates the heightened impact of health inequalities during the winter months.

<sup>\*</sup> This is all-cause mortality, not cause-specific.

<sup>&</sup>lt;sup>†</sup> Above and beyond the excess winter deaths that occur in the warmest housing.

<sup>\*</sup> See Appendix C, table 1 for breakdown of results.

#### Figure 7: Excess winter (all-cause) mortality index, by Index of Multiple Deprivation (IMD)



Clearly, winter is a deadly time of year for a plethora of reasons with respiratory diseases contributing significantly and this effect is magnified for the most deprived segments of the population, in part driven by poor-quality, cold, damp housing.



### Poorer people are more likely to die an avoidable death from respiratory disease

Avoidable mortality is used as an indicator to measure the contribution of healthcare to improvements in population health and is the combination of preventable deaths i.e., public health and primary prevention interventions, and treatable deaths i.e., keeping people well and out of hospital through secondary prevention and treatment.\* The ONS publishes this avoidable mortality dataset on an annual basis for England, Wales, and Scotland (but not Northern Ireland). Rates of avoidable mortality show stark geographical differences with the most deprived local authorities twice as likely to experience avoidable deaths compared to the least deprived areas – 2.7 times in England, 2.1 times in Scotland and 1.9 times in Wales.'

The avoidable mortality rate is the number of deaths that could be averted either by preventing disease or through effective healthcare. For respiratory disease, the avoidable mortality rate has improved by 18% on average across England and Scotland over the past 20 years. However, this pales in comparison to advances made for cardiovascular diseases where the equivalent improvement was 58% on average for England and Scotland. In Wales, the avoidable mortality rate worsened by 4% for respiratory disease and decreased by 56% for cardiovascular disease over the changes to avoidable mortality rates across the three nations for respiratory disease and cardiovascular disease over the past 2 decades.<sup>\*</sup> In 2020, the preventable mortality rate for respiratory disease was over double the treatable mortality rate across the UK. Over the past 20 years, greater reductions have been achieved for respiratory treatable mortality with an average of 27% fall across England and Scotland, compared to respiratory preventable mortality which showed an average reduction of 12%. This shows that there have been greater improvements in effective healthcare and treatments for respiratory disease over the past 20 years while prevention of disease onset is lagging behind. This suggests that more emphasis should now be placed on primary prevention measures such as smoking cessation services, tackling toxic air pollution, and improving the quality of housing to reduce the prevalence of lung condition causes and triggers.



\* See Appendix C, table 1 for breakdown of results.

<sup>\*</sup> The Office for National Statistics defines avoidable mortality as 'deaths that are preventable or treatable'. Preventable mortality covers those 'causes of death that can be mainly avoided through effective public health and primary prevention interventions' e.g. before disease onset. Treatable mortality means those 'causes of death that can be mainly avoided through timely and effective healthcare interventions including secondary prevention and treatment' e.g. after disease onset.

<sup>&</sup>lt;sup>\*</sup> Full breakdown of data analysis can be seen in Appendix C, table 20.

### Where you live impacts your risk of lung disease

There is a stark north-south divide in respiratory outcomes in England, with 6 out of the 10 areas with the highest deaths from lung conditions being in the northwest of the country.<sup>18</sup> *Our Lung Health Lottery* analysis,<sup>15</sup> in Figure 9,<sup>19</sup> shows that the respiratory death rate is correlated with deprivation in England.



As can be seen in Table 1, the most deprived local authorities have much higher emergency hospital admissions and death rates for respiratory disease, when compared to the least deprived local authorities.<sup>\*</sup> This demonstrates that those living in the most deprived communities are at much higher risk of being admitted to hospital and dying from a lung condition than those in the least deprived communities. In Northern Ireland, the most deprived local authority, Armagh City, Banbridge & Craigavon, had a lower emergency hospital respiratory admission rate than that of the least deprived local authority, Fermanagh & Omagh, highlighting that the link between deprivation and respiratory disease is complex and impacted by a myriad of factors.

Where you live can also have a big impact on your exposure to air pollution. Air pollution, including nitrogen dioxide (NO<sub>2</sub>) and particulate matter, can cause lung conditions and worsen existing conditions including asthma and COPD. Overall, air pollution contributes to up to 43,000 early deaths per year in the UK.<sup>20</sup>

The poorest people in the UK are more likely to live near busy main roads and are therefore exposed to higher levels of roadside air pollution.<sup>21</sup> In London, 46% of the most deprived neighbourhoods have NO<sub>2</sub> levels above legal limits, compared with just 2% of the least deprived neighbourhoods.<sup>22</sup> In 2019, average annual concentrations of NO<sub>2</sub> were up to 27% higher in areas of London where people of ethnic minority backgrounds were most likely to live, compared to areas where people of a white background were most likely to live.<sup>23</sup>

There is less car ownership in lower income and ethnic minority groups.<sup>24</sup> Across ethnic groupings recorded<sup>+</sup> by the National Travel Survey, white people were always most likely to have access to a car<sup>25</sup> with black people in the UK at least twice as likely to have no access to a car or van, a figure that has remained broadly consistent since 2002.<sup>26</sup> Only a third of people in the lowest income group<sup>+</sup> own a car or van, compared to over 90% in the highest income group.<sup>27</sup>

<sup>\*</sup> Using the English Indices of Multiple Deprivation 2019 and ICD10 codes J00-J99 classification for respiratory disease.

The ethnic groupings recorded by the National Travel Survey were Asian, Black, Mixed, White, and Other.

<sup>\*</sup> The lowest income decile corresponds to an annual income below £13,114.

Table 1: The most deprived communities experience much higher admissions and deaths from respiratory diseases

			Emergency respiratory admissions (rate per 100k)	Respiratory deaths (rate per 100k)
England	Most deprived LA	Blackpool	1060.17	153.62
	Least deprived LA	Wokingham	582.05	73.9
	% worse		82%	108%
Wales	Most deprived LA	Blaenau Gwent	773.4	163.51
	Least deprived LA	Monmouthshire	533.1	93.79
	% worse		45%	74%
Scotland	Most deprived LA	Glasgow City	991.28	95.89
	Least deprived LA	Orkney Islands	808.04	31.06
	% worse		23%	209%
Northern Ireland	Most deprived LA	Armagh City, Banbridge & Craigavon	968.06	161.41
	Least deprived LA	Fermanagh and Omagh	1374.44	102.74
	% worse		-30%	57%

In 2017, the Chief Medical Officer described air pollution as a 'triple jeopardy' for these socially deprived communities, showing they faced inequalities deriving from social and behavioural determinants of health, higher exposure to air pollution, and a disproportionately large health effect compared with more socioeconomically advantaged groups.<sup>28</sup> It is a huge injustice that the people who contribute the least to air pollution are being burdened most by the health impacts of it.

This chapter has shown how health inequalities affect people with lung conditions and put the poorest people with lung conditions at a higher risk of poorly managing their symptoms, going to hospital, or even dying. The next chapter will explore how health inequalities impact how healthcare is accessed and by whom.

Joseph, from Blackpool, has had brittle asthma since he was a child, and was diagnosed with COPD in his twenties. Following a severe infection in November 2019, Joseph was advised by doctors to retire from the job he loved and to spend quality time with his family making precious memories. With the cost-of-living crisis, and increasing energy bills, he is worried about the rising costs of running the three machines he relies on to breathe.

He says:

"The prices are astronomical. I pay £400 a month to my energy company – that's more than double what I paid before. I've had to switch off other appliances in the house to try to make ends meet. Not running my medical machines is just not an option for me, because if I turn them off, I won't survive."

"I use an oxygen concentrator 24/7, so the electricity costs are high. You do get a small percentage of the electricity that you use back on that machine. What you don't get back is the electricity used for the other two other machines I have to use. One is a CPAP machine I have to be on overnight, and certain times through the day, if I didn't go on that my body would be poisoned with carbon dioxide, and I would pass away. I also have to use a nebulizer six times a day for 15-minute periods. And again, you don't get any compensation for that either. So, the only help you do really get is a small percentage of how much your oxygen concentrator is used. Some people think you get everything back. You don't. You only get a percentage of it."

"There's no way you can pick between the choice of either heating or eating. I don't have a choice. I've got to be able to breathe. So, I've got to have the machines on. And if I can't afford to have them on, what would happen? Would they turn my electric or heating off? Because I need to be able to stay warm. And the machines to deliver my medication. And I've got to fund it. We need more help. They should bring in a scheme for reimbursement for all machines if they're needed to keep you living on a daily basis."

Living in Blackpool, one of England's most deprived towns, Joseph has also experienced how a lack of staff in A&E can have a scary impact on the care received at hospital.

He told us:

"The last time I was in hospital, about two years ago, I had to wait in A&E for 12 hours. But in February I fell ill with COVID, I also had pneumonia, I was very ill. But they couldn't find a bed for me straightaway. I had to wait a day and a half to go onto a ward to be given proper COVID medication for people with compromised immunity."

## Chapter 2 – What is the impact of health inequality in lung conditions on how healthcare is accessed?

Inequitable access to healthcare services can result in certain groups receiving less or sub-optimal care, which often leads to poorer experiences and poorer health outcomes. This particularly applies to those from inclusion health groups.<sup>\*</sup>

Existing health inequalities, exacerbated by the cost-of-living crisis, mean those on lower incomes suffer from worse lung condition symptoms. Poor symptom control and frequent exacerbations among poorer people affect the frequency of care needed, and the data indicates that those who need the most support may be struggling to access it. People need access to care and support to prevent and treat their lung conditions. Poverty can mean that people cannot afford to take time off work, pay for travel to appointments, or afford their prescriptions, meaning they miss out on essential care and treatment to prevent them developing a lung condition or making it worse.

<sup>\*</sup> Inclusion health groups are discussed in the *What are health inequalities?* box in Chapter 1.

In our *Life with a Lung Condition* survey, 70.7% of those in the lowest household income category (below £20,000 a year) told us that their lung condition had got worse in the past 12 months, compared to 54.0% of people in the highest income category. This data shows a clear income gradient – the lower your household income, the more likely you are to assess that your lung condition has deteriorated over the past year.



Do you feel that you need more support now to manage your lung condition than you did 12 months ago?

### Access to primary care

Areas of higher deprivation tend to have fewer general practitioners (GPs) per head<sup>29</sup> and our survey found that this manifested as those on lower incomes waiting longer for care. When we asked survey respondents whether they feel they need more support to manage their lung condition now than they did 12 months ago, 61% of respondents in the lowest income band need more support, compared to 47.5% of those in the wealthiest category. However, despite this self-assessed need of extra support, those who need the most support are not always receiving it as quickly as they would like. Figure 11 shows that only 37.1% of those in the lowest income band could access a same-day GP appointment when they tried to access care in the prior six months. Over half of people in the highest income bracket received a same-day appointment. 7.2% in the lowest income group were not able to access care at their GP practice at all.



### Access to secondary and emergency care

It is not just primary care where waiting for care is more commonplace for those on lower incomes: more deprived areas also tend to have lower rates of admission to elective care than less deprived areas<sup>30</sup> with people in the most deprived areas 2.1 times more likely to experience a wait of more than one year for elective secondary care compared to people in the least deprived areas.<sup>31</sup>

Income levels also have an impact on use of emergency care for lung conditions. Previous A+LUK research shows that there are significant differences in both hospital admission rates and mortality rates in different parts of the UK.<sup>32</sup> Analysis of data requested from NHS England<sup>33</sup> highlights the impact of deprivation on emergency hospital usage. Data for emergency admissions shows that the poorer you are, the more likely you are to have an unplanned hospital admission.

Children with asthma are particularly affected. In the 2021/22 emergency admissions data, children with asthma from the poorest 10% were four times more likely to be admitted to hospital in an emergency than the least deprived 10%. Using Index of Multiple Deprivation<sup>34</sup> data to ascribe deprivation levels to those in hospital for a respiratory condition in England, the poorest 20% of people contributed 24.4% of all respiratory admissions. For COPD, this proportion rose to 28.4%; for adults with asthma 26.3% and for children with asthma, 29.2%. The proportions for each quintile are in Figure 12.



Emergency hospital admissions for respiratory conditions have a familiar seasonal pattern of hospital activity. There is a small hayfever spike in May, then a lull in the summer months of July and August, with peaks in admissions in December and January. This peak in admissions is the key driver behind winter pressures on the health services. For every degree drop in temperature below 5°C, respiratory consultations increase by 10%, with further increases in emergency care.<sup>35</sup> Our analysis of emergency admissions in England\* shows this seasonal variation. The pattern affects all income ranges. However, the most deprived 10% have a higher rate of admissions in the summer months than the wealthiest group do in the winter. This again shows how the numbers of poorer people with lung conditions ending up in hospital is impacting NHS capacity.

<sup>\*</sup> The COVID-19 pandemic had a significant impact on emergency admission figures for respiratory conditions, with reductions in admissions due to lower levels of respiratory viruses, and reticence to use NHS services. Data for April and May 2021, when England was still under various levels of lockdown, are affected by this.



This higher use of emergency care is the result of the higher rates of poor symptom control we observed earlier. Poorer people with lung conditions are facing greater challenges in managing their condition and are ending up in hospital. Evidence<sup>36,37</sup> also shows that the most economically deprived groups are also more likely to end up readmitted to hospital after an initial admission, with children with asthma particularly at risk. This indicates that discharge arrangements are not always working for poorer people, and further interventions are needed to prevent further deterioration and readmissions.

Encouragingly, deprivation seems to be negatively associated with time taken to get to hospital using public transport, with the most deprived 10% of households in England having to take on average just over a 30-minute journey using public transport to get to hospital compared to 45 minutes for the 10% least deprived. This is partly explained by the most deprived more commonly living in urban, built-up areas for housing and employment opportunities, which are better served by public transport.<sup>38</sup>



### **Financial barriers to accessing healthcare**

Symptom control and accessing care are challenges for the most deprived groups. In England, there is a further barrier present, which is prescription charges. People with lung conditions are not exempt from paying for their prescriptions.<sup>\*,39</sup> Not accessing the prescriptions needed has an impact on symptom control and could lead to exacerbations and avoidable emergency admissions. Our previous research<sup>40</sup> has shown that affording to pay for prescriptions is a significant issue that has persisted for many years and leads to people with lung conditions cutting back on using their medicines, and even cutting back on food and other essentials to pay for their medicines. Our survey results show that the recent cost-of-living crisis has exacerbated this issue.



I couldn't afford this before the cost of living crisis, and I can't now

<sup>\*</sup> Unless they fall into one of the exemption categories, such as being over 60, on a very low income or having another condition that is exempt from payment. There are no prescription charges in Scotland, Wales or Northern Ireland.

"The cost of living doesn't just make you decide between 'heating and eating' but makes you ration your meds (such as inhalers) as you cannot afford to get a prepayment card, yet you REALLY cannot afford to pay for prescriptions very easily.

Add to that the fact that doctors are 'rationing' or dictating when you can and can't get a repeat on inhalers; it makes for some VERY badly controlled asthma.

I can get by sometimes with breathing exercises and techniques; but this doesn't always work, especially in colder or icy weather.

A lot of other conditions mean you get free prescriptions. Diabetic? Get free prescriptions. Blood clots? Get free prescriptions. Can't breathe? Tough."

**Survey respondent** 

For those living in England who have to pay for their prescriptions, only 53.6% of respondents in the lowest income category could afford to pay for their prescriptions, compared to 94.0% of the highest income group. The cost-of-living crisis has made prescription charges unaffordable to over a quarter (27.6%) of people in the lowest income category, and 16.9% of overall respondents. We have already seen what the impact the cost-of-living crisis has had on people with lung conditions being able to heat their homes and pay for essentials, so it is sadly not a surprise that being able to pay for medicines that help control and relieve symptoms is also affected. This is a real cause for concern.

With the burden of some diseases, including COVID-19, falling on ethnic minority groups,<sup>41</sup> it is no surprise that there is a sense of mistrust in the NHS. A 2023 review of black people's experiences of primary care in the UK highlighted their mistrust of clinicians and the health system, which often negatively impacted their views of UK primary care services. This was compounded by the financial barriers to interacting with primary care services, including the financial implications of taking time off work and/or seeking childcare for young children, as well as language barriers.<sup>42</sup> When information is not communicated in an easily understandable or culturally sensitive way, it can lead people to a misunderstanding of their disease, and a lack of awareness of the systems in place to support them.

It is clear from our survey results that lung conditions are driven by health inequalities, with issues such as where you live, exposure to air pollution, smoking status, ethnicity, and lifestyle factors all contributing to differences in incidence, symptom control and outcomes of all lung conditions. Household income and deprivation level affect every interaction people with lung conditions have with healthcare services, from accessing primary care and getting prescriptions to using emergency care. These inequalities are longstanding, and the recent cost-of-living crisis has exacerbated them. It has put poorer people with lung conditions at the greatest risk. We need to take action on this, and the recommendations we have made will help ensure that where you live and what your income is do not determine that you suffer the worst from lung conditions.

Emma Leggott is the Manager of Poverty Proofing© Healthcare. This is a consultation model created by Children North East to support healthcare teams to listen to the experiences of their patients, staff and stakeholders on how poverty impacts them. They then provide tailored guidance to support improvements across the healthcare setting in areas such as access, experience and engagement.

#### She says:

"Poverty Proofing© started in schools, using the voice of children to come up with recommendations on how inequalities can be addressed within the school day. We've since developed poverty proofing© in other areas like health, leisure, and arts and culture, as poverty doesn't just end at three o'clock when the school bell goes."

"Poverty Proofing© Healthcare can be adapted to any kind of setting, whether it be primary care, or secondary care; it's really flexible and it's bespoke, we design it to work within whichever kind of setting that we're doing."

The ethos of poverty proofing<sup>©</sup> is that no activity should identify, exclude, treat differently or make assumptions about anyone on the basis of their income or access to resources, and minimising the impact of poverty on healthcare provision is key to breaking the link between an individual's income and their opportunity to live a long, healthy life.

### "It's systems thinking and systems design around accessing healthcare that makes sure that the person in society with the least resources is still able to get the same amount of care as the person with the most."

When discussing the types of barriers that people face when accessing health care, Emma said:

"There are physical challenges that people have like access to transport, there are physical costs like paying for prescriptions, and there are hidden costs like childcare and time off work. But there's also those more cultural and social things, welcoming environments, inclusion, patient perceptions, their understanding."

#### She shared the two most important aspects of the protocol:

"A key part of poverty proofing is the staff training. Raising awareness, capacity building and improving people's understanding of poverty and the extent of it in the UK. We must challenge people's unconscious biases and how they view people, especially when they're accessing services. And so, we do that as a fundamental part of poverty proofing."

"We do a universal consultation; speaking to families, children, young people, patients, and then using their voice to really highlight, from their perspective, what the key problems are for them in terms of accessing care. We go out into wider community as well, because the nature of poverty proofing is that if you're not able to access healthcare, you won't be one of those people who are at the healthcare setting that have managed to get themselves there and are engaging with it."

Through reflection and evaluation of the system changes Poverty Proofing© Health Care puts into place, they are able to assess how the recommendations and the considerations that they have made have transpired into actioned. Despite only being in its first few years, Poverty Proofing© Health Care has shown that simple mindset changes, and empowerment of healthcare professionals can have impactful benefits on the services they are able to provide to those who are experiencing poverty, and Emma has a vision for the expansion of this methodology across the NHS.

"It would be absolutely fantastic if we could be embed it across all the different Integrated Care Boards across the country. It's one thing that the NHS can do, imagine a country where we could say the NHS is Poverty Proofed."



# Chapter 3 – What do we want to see?

There is a plethora of evidence for both practical and innovative policy changes that could improve lung health in the UK, and clinical leaders across the sector recognise the need to work towards reducing health inequalities. This is evidenced by work such as the Royal College of Physicians Inequalities in Health Alliance,<sup>43</sup> and British Thoracic Society's recent position statement on health inequalities and respiratory.<sup>44</sup> However, a lack of capacity and willingness across government to prioritise respiratory conditions remains a major barrier. The government has committed to reducing health inequalities but is yet to provide sufficient resources and strategies required to achieve the change that is needed.

We're calling on policymakers across the UK to implement the following 7 recommendations.

Reduce the impact that the cost-of-living crisis is having on those with lung conditions by providing tailored financial support to people with lung conditions on low incomes.

The economic burden of the cost-of-living crisis is forcing people to cut back on food and medicines, and is preventing people from sufficiently heating their homes, thereby exacerbating their lung conditions. This burden is impacting those on lower incomes significantly more than higher earners. The government must provide tailored financial support to people with lung conditions on low incomes. This should include energy bill support, and a scheme to reimburse any electricity costs linked to life-saving medical devices such as ventilators.

We are also calling on the Secretary of State for Health and Social Care to introduce free prescriptions for everyone with a lung condition. In England, paying for prescriptions is a significant financial barrier to people accessing the treatment they need to breathe, and in many cases has led people to not take their medication and to be at risk of their condition worsening, and even death. Prescription Prepayment Certificates (PPCs) allow people to purchase all their prescriptions upfront, but when people are already struggling to pay for their prescriptions, paying upfront for a PPC will be even harder. We believe that no one should have to pay to breathe. The cost of prescriptions unfairly affects those on lower incomes. As these are the most vulnerable to lung conditions too, this represents a huge burden on their health. Many chronic conditions, such as diabetes, already receive free prescriptions for people with respiratory conditions in England must be stopped; all respiratory conditions must be added to the prescription charges exemptions list.

Asthma + Lung UK's helpline team are trained to give you information on many aspects of living with a lung condition, including any social and practical difficulties you might be having. When it comes to government financial help through welfare benefits, grants, funding, and addressing fuel poverty, there are several avenues to explore. Our helpline team can offer advice, information, and support on what's available, who may be eligible and how to claim. This includes:

Welfare benefits eligibility such as disability benefits and pension credits

Grants and funding that may be available to individuals or households

Charitable organisations that may provide financial assistance

Fuel poverty support including energy efficiency schemes and winter fuel payments

Signposting to local authorities, social services, or housing departments to inquire about available assistance and seek guidance on the application process

#### Prescription costs

Compensation advice for asbestos related lung conditions

It's important to remember, eligibility criteria and available support can vary depending on your region, and specific circumstances.

Last year the Helpline Team supported over 26,000 people living with or caring for someone with a lung condition on all aspects of living with a lung condition.

You can call our helpline on 0300 222 5800.



All national health services to roll out fully resourced respiratory strategies covering prevention, early diagnosis, and treatment.

Lung disease has long been under-prioritised within health services leading to poor outcomes, especially for those on the lowest incomes. To combat this, each nation of the UK should have a respiratory strategy in place with full funding and ambitions to improve the nation's lung health.

Building on NHS England's Long-Term Plan,<sup>45</sup> the upcoming government-led Major Conditions Strategy provides a perfect opportunity to further improve the respiratory strategy in England. It must include commitments to prevent people developing lung conditions by tackling smoking and air pollution; diagnosing lung conditions earlier and more accurately through expanded access to spirometry and other diagnostic tests; and treating lung conditions through proficient basic care, pulmonary rehabilitation, and access to the best new medicines. This strategy should also outline how to ensure better integrated working within local NHS systems; improving multidisciplinary working throughout the patient pathway will address key co-morbidities and break down barriers between teams, so it is easier for healthcare professionals to support their patients together. Crucially, the Major Conditions Strategy must include clear and ambitions plans to reduce health inequalities throughout the healthcare system.

In Scotland the workforce needs to be expanded to sufficiently implement the Respiratory Care Action Plan.<sup>46</sup> In Northern Ireland, we are calling for the Department of Health to urgently develop a new Lung Health Strategy, to restart, rebuild and transform respiratory services in primary and secondary care. Similarly, we are calling for the Welsh government to develop a Respiratory Disease Improvement Plan to implement the new quality statement. Tackling lung health inequalities and sufficient workforce planning should be integrated into all of these strategies.



Air pollution exposure is closely linked to lung conditions and impacts those on lower incomes more, therefore action on this is a key opportunity to improve the lung health of those most vulnerable. We are calling for a scrappage scheme to be rolled out to areas that implement class D clean air zones, for people on low incomes and people whose mobility is affected by lung and other health conditions to switch their polluting vehicles in exchange for a financial grant.

We believe people should be supported to use the cleanest transport option they can access, but that they should also have agency over their travel decisions. We also know that people with lung conditions and other health and mobility problems may still need to use a car. These people need to be supported to access cleaner transport and should be eligible for the Cleaner Travel Access Fund. Our recent research showed that more than half of people would like to use cleaner transport options more often than they currently do but there are several significant barriers that limit people's ability to make cleaner journeys.<sup>17</sup> Therefore, we propose that grants of £3,000 be given for people to scrap their car for a grant for a bike/e-bike pass, free public transport, or for money towards purchasing an electric vehicle.

By focusing this financial incentive on those with lower incomes, it will enable those most vulnerable to the impacts of air pollution an opportunity to change their travel behaviour and access cleaner travel solutions that suit their needs.



Strengthen tobacco control plans in each of the UK's four nations.

Smoking tobacco is a key driver of health inequality and poor lung health, and this makes it a prime opportunity to improve health for those most vulnerable. Despite this, the largest cut in public health spending since 2015/16 has been for stop smoking services and tobacco control.<sup>47</sup> To replace this lack of public health spending, a new levy on the tobacco industry should be put into place with the money gained used across the UK to fund much needed restoration to smoking cessation services.

The 2022 Khan Review<sup>48</sup> laid out 15 recommendations to making the UK smokefree by 2030, including increased investment, funded through a tobacco industry levy; an increased age of sale; the promotion of vaping as a smoking cessation tool; and improved prevention through the health service. The government's response to this review, and subsequent proposals, fall very short of these recommendations. By focusing on personal responsibility to stop smoking and ignoring broader, more effective measures, the government is failing to fulfil its responsibility for public health. The government needs to revisit this and strengthen tobacco control plans in each of the four nations.

We want the UK government to restore comprehensive, fully resourced, smoking cessation services using a levy on tobacco manufacturers in order to provide secure funding. The legal age of sale should be increased to 21 to prevent young adults becoming addicted to this deadly habit. Vaping should continue to be an option for adults to use to quit smoking, but the advertising of e-cigarettes should be regulated so that they cannot be promoted to children through 'fun' flavours, brightly coloured designs, and pocket money price points. And prevention should be integrated into every facet of the health service with advice and support to quit smoking to be available at every interaction a patient has with the NHS.

Ensure health inequality policies are co-produced with the communities they are designed to support, specifically those communities who have been most overlooked by policymakers, most at risk of lung conditions, and under-represented in policymaking.

Policies addressing health inequalities should be incorporated into all sectors. But the opinions of policymakers are often of those less likely to be experiencing these inequalities, which does not provide the first-hand knowledge required to be able to ensure these policies are intersectional and effective. Sourcing representatives from disadvantaged and underrepresented communities, such as faith and community leaders, can enable those voices to be heard. Careful consideration must be made when deciding who to collaborate with: policymakers must accurately identify those who are most disadvantaged, and ensure their consultation is accessible and safe. Those most vulnerable and at risk of lung conditions must be included, their needs prioritised, and the risks they face mitigated, but these people may also need more support in order to contribute and these needs must be met. An effective way of accessing these individuals is through the voluntary, community and social enterprise (VCSE) sector, who have pre-established trusted and sustainable relationships. Using community coordinators and researchers recruited from the local community can ensure that the cultural requirements of the target population are understood and met, whilst still hearing the voice of lived experience. Resources produced must be translated in appropriate alternative languages or formats e.g., braille, and created with visual aids to ensure people with low literacy levels can still access the healthcare they need.

Building trust between vulnerable groups and the healthcare system is vital, and likely only achieved by working with them, and optimising community programmes that already exist. Investing in VCSE sector programmes is a great way to overcome the barrier of healthcare mistrust and provide funding for the enhancement of programmes that are already established, trusted, and accessible to lesser-heard-from communities.

Improve the data collected within the NHS on respiratory patients and outcomes, ensuring disadvantaged communities are included in data collection.

Good-quality data is essential for enabling policymakers and healthcare professionals to identify the specific needs of different minority groups, respond with appropriate strategies for the group, and track the impact of these strategies. However, it is well established that certain groups are largely invisible in published statistics, including those whose literacy skills are low, as well as people for whom English may be a second language, people with disabilities, residents of communal establishments such as hostels, and groups such as Gypsy, Roma and Traveller communities.<sup>49</sup> Not only is the current collection of respiratory data poor, but inclusion health groups are also excluded from accessing healthcare, and therefore health data capturing, worsening the barriers to accessing and providing appropriate lung health support to them. It is also harder to see which local NHS areas are doing well in delivering respiratory care and which need more support.

We are calling for improvements in data collection on diagnostics and treatment outcomes, as well as ensuring respiratory patient experiences of receiving care are recorded. This should include outreach, local-level engagement, to build trust. By actively improving the capturing of data for inclusion health groups, we will better be

able to identify those that require targeted interventions to protect their lung health; therefore we are calling for data to be captured at every entry point to the healthcare system. This data can be used to understand variations in care, and prompt additional resources or support for communities that appear to be experiencing poorer levels of access to healthcare, interventions, or outcomes. We are also calling for primary care data to be included in the National Respiratory Audit Programme (NRAP) for England and Wales.

In addition, joining up and sharing healthcare data across regions, networks, and healthcare providers will enable all parts of the system to provide better ongoing care, as well as identify groups that require more specific care than others.

Commit to long-term, outcome-based health inequalities funding for local authorities and Integrated Care Systems.

Forty-two Integrated Care Systems (ICSs) have been established across England and are central to the NHS Long-Term Plan delivery. One of their 4 aims is to tackle inequalities in outcomes, experience, and access, therefore guaranteed long-term health inequalities funding is needed to drive the reduction of health inequalities across their local areas. Since 2015/2016, the public health grant has been cut by 26% on a real terms per person basis,<sup>50</sup> thus we are calling for an increased level of public health spending to reverse the cuts that have been made over the past 8 years. We also note that the UK Government decided against publishing a Health Disparities White Paper.<sup>51</sup>

Using improved data collection, as recommended above, each ICS will be able to identify which groups in their area require more support and targeted lung health improvements, thereby funnelling this restored funding into the communities and individuals that require it the most. Focusing this funding on areas of deprivation allows for the greatest impact on the most vulnerable. Furthermore, funding should not be tied to specific interventions, but instead outcome targets, which will allow funding to be used in an adaptable and population-specific way.
# Conclusion

This report has shown the scale of health inequalities among people with lung conditions. Where you live and your income level distinctly impact your chances of living well with a lung condition, and what care you will receive. Poor symptom control, higher rates of exposure to environmental triggers and access to care contribute to higher rates of hospital admissions and mortality among poorer people with lung conditions. This is an issue that has persisted for many years, with the recent cost-of-living crisis exacerbating existing inequalities. People with lung conditions are struggling more than they have for decades. The findings in this report should be a wake-up call to policymakers. Every aspect of healthcare for people with lung conditions is affected. The case for tacking health inequalities through respiratory health has never been clearer.

This is a multi-faceted issue but is solvable with straightforward solutions. We have proposed a series of policy changes that will address the disparities faced by disadvantaged communities and improve outcomes for all people with lung conditions:

- 1. Reduce the impact that the cost-of-living crisis is having on those with lung conditions by providing tailored financial support to people with lung conditions on low incomes.
- 2. All national health services to roll out fully resourced respiratory strategies covering prevention, early diagnosis, and treatment.
- 3. Establish a Cleaner Travel Access Fund to help those who need it most to transition to cleaner modes of transport.
- 4. Strengthen tobacco control plans in each of the UK's four nations.
- 5. Ensure health inequality policies are co-produced with the communities they are designed to support, specifically those who are most disadvantaged, most at risk of lung conditions, and under-represented in policymaking.
- 6. Improve the data collected within the NHS on respiratory patients and their outcomes, ensuring disadvantaged communities are included in data collection.
- 7. Commit to long-term, outcome-based health inequalities funding for local authorities and Integrated Care Systems.

By following our recommendations and making fully resourced policy changes that improve people's lung health, Westminster and the devolved governments will be able to protect the health service, make economic gains, and improve the lung health of the whole of the UK.



# Appendices

This report was written by Laura Williamson, Anna Francis, and Andrew Cumella.

The survey was conducted by, and analysis done by Anna Francis and Andrew Cumella.

### About the survey

This report uses data from Asthma + Lung UK's *Life with a Lung Condition* survey, which ran online from January 2023 to March 2023. We used paid and organic (i.e. through our own existing social media channels) social media promotion, as well as promoting the survey to our supporters through our email list and on our website. This survey covered all people with lung conditions. After data cleaning, the survey received 14, 460 responses. The survey was open to all people with lung conditions. Tables of the data used in the report and the number of respondents used are available below.

We recognise that the survey may not be fully representative of all people with lung conditions and their experiences. The online nature of the survey is a barrier for those who do not have access online, and the length and content of the survey potentially a further barrier for those with lower health literacy. The survey will also reflect those who are motivated to share their experiences of living with a lung condition – it is self-selecting.

We would like to thank those who took the survey for sharing their experiences of living with a lung condition and receiving care for it.

For more information on the data used in this report, email **data@asthmaandlung.org.uk**.

### **Appendix A: Survey questions**

#### 1. Which nation do you live in?

- a. England
- b. Northern Ireland
- c. Scotland
- d. Wales
- e. Other
- 2. What is the total annual income of your household (before tax and deductions, but including benefits/allowances)?
  - a. Below £20,000
  - b. £20,000-£30,000
  - c. £30,001-£40,000
  - d. £40,001-70,000
  - e. Above £70,000
  - f. Prefer not to say

#### 3. What lung condition(s) do you have?

- a. Asthma
- b. COPD (Chronic obstructive pulmonary disease)
- c. Bronchiectasis
- d. Interstitial lung disease (ILD)
- e. Long covid
- f. Mesothelioma
- g. Sarcoidosis
- h. I don't have a lung condition
- i. Other

#### 4. When do you get out of breath?

- a. I'm not troubled by being out of breath, except on strenuous exercise
- b. I'm short of breath when hurrying on level ground or walking up a slight hill
- c. I walk slower than most people on the level, stop after a mile or so, or stop after 15 minutes of walking at my own pace
- I stop for breath after walking about
  100 yards or after a few minutes on level ground
- e. I'm too breathless to leave the house, or breathless when dressing and undressing

## 5. In the last 4 weeks, have you had any usual asthma symptoms such as cough, wheeze, chest tightness or shortness of breath during the day, more than twice a week?

- a. Yes
- b. No
- c. Don't remember

- 6. In the last 4 weeks, have you been woken up during the night because of your asthma?
  - a. Yes
  - b. No
  - c. Don't remember
- 7. In the last 4 weeks, have you needed to use your reliever inhaler more than twice a week?
  - a. Yes
  - b. No
  - c. Don't remember
- 8. In the last 4 weeks, has your asthma interfered with usual daily activities, for example work/ housework or taking part in activities?
  - a. Yes
  - b. No
  - c. Don't remember

## 9. Does breathlessness affect your normal day-to-day activities?

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Very often
- f. Always

## 10. Have you had to give up any of the following because of your breathlessness?

- a. Hobbies
- b. Exercise
- c. Ability to care for my family (e.g. parents or children)
- d. Meeting friends
- e. Work
- f. Voluntary roles
- g. Sex
- h. I have not had to give up or change anything
- i. Relationship with partner/spouse
- j. Other

## 11. Which of the following triggers your lung condition?

- a. Air pollution
- b. Alcohol
- c. Changes in weather
- d. Cleaning products
- e. Cold weather
- f. Colds and flu
- g. Drinks (excluding alcohol)
- h. Dust
- i. Emotions
- j. Exercise
- k. Food
- I. Hormonal changes
- m. Hot weather
- n. Moulds and fungi
- o. Other people smoking cigarettes
- p. Other people using e-cigarettes (vaping)
- q. Paint fumes
- r. Perfumes and aerosols
- s. Pets
- t. Pollen
- u. Something at work
- v. Stress
- w. When I use e-cigarettes
- x. When I smoke
- y. None of the above
- z. Other

#### 12. Do you smoke?

- a. Yes
- b. I used to, but have given up
- c. I used to smoke, and I now use e-cigarettes (vapes)
- d. I have never smoked, but I use e-cigarettes (vapes)
- e. I have never smoked

## 13. Have you tried to access care for your lung condition over the last 6 months?

- a. Yes at the GP
- b. Yes at A&E
- c. Yes with NHS 111
- d. Yes for an appointment with a hospital specialist
- e. No

#### 14. How long did you have to wait to get care?

- a. I was able to get the care I needed the same day
- b. 1-3 days
- c. 4-7 days
- d. 1-2 weeks
- e. 3-4 weeks
- f. 1–2 months
- g. 3–4 months
- h. 5-6 months
- i. 6–12 months
- j. 12 months+
- k. I have not been able to access care yet

## 15. Do you feel your lung condition has got worse in the past 12 months?

- a. Yes
- b. No

## 16. Do you feel that you need more support to manage your lung condition now than you did 12 months ago?

- a. Yes
- b. No

## 17. Has the cost-of-living crisis affected your income level?

- a. Yes
- b. No

#### 18. How has the cost-of-living crisis affected the following?

Paying for:	l could afford this before, but can't now	l couldn't afford this before, + can't now	I can afford this	l don't pay for this	Don't know
Rent/mortgage					
Heating home					
Other bills					
Prescriptions					
Food					
Leisure activities					

## **Appendix B: Data tables**

Tables 1 and 20 are analyses of publicly available datasets while Tables 2–19 are analyses of A+LUK *Life with a Lung Condition* survey.

## Table 1. Comparison of most and least deprived local authorities in England, Wales, Scotland and Northern Ireland based on *Lung Health Lottery* work.

Nation a	nd Local Authority	Emergency respiratory admissions (rate per 100k)	Respiratory deaths (rate per 100k)	Current smokers (%)	Winter mortality index (%)	Avoidable mortality rate (per 100k)
England	Most deprived LA – Blackpool	1060.17	153.62	20.6	69.2	425.5
	Least deprived LA – Wokingham	582.05	73.9	6.7	8	158.3
	% and times worse (most deprived vs least deprived)	82% 1.82	108% 2.08x	2.08% 3.08x	765% 8.65x	169% 2.69x
Wales	Most deprived LA – Blaenau Gwent	773.4	163.51	19.2	59.2	337.2
	Least deprived LA – Monmouthshire	533.1	93.79	10.3	15.2	180.8
	% and times worse (most deprived vs least deprived)	45% 1.45	74% 1.74x	86% 1.86x	289% 3.89x	87% 1.87x
Scotland	Most deprived LA – Glasgow City	991.28	95.89	20	27.2	494.9
	Least deprived LA – Orkney Islands	808.04	31.06	10.4	9.3	217.8
	% and times worse (most deprived vs least deprived)	23% 1.23x	209% 3.09x	92% 1.92x	1.92% 2.92x	172% 2.72x
Northern Ireland	Most deprived LA – Armagh City, Banbridge & Craigavon	968.06	161.41	13.8	57.2	-
	Least deprived LA – Fermanagh and Omagh	1374.44	102.74	16.4	27.2	_
	% and times worse (most deprived vs least deprived)	-30% 0.70x	57% 1.57x	-16% 0.84x	110% 2.10x	-

#### Table 2: Which nation do you live in?

Nation	Respondents	Percentage
England	11,689	80.9%
Northern Ireland	323	2.2%
Scotland	1,359	9.4%
Wales	891	6.2%
Other	188	1.3%
Total	14,450	100%

## Table 3: What is the total annual income of your household (before tax and deductions, but including benefits/ allowances)?

Total annual household income	Respondents	Percentage	Quintile	Deprivation
Below £20,000	4,673	40.5%	Poorest 20%	Most deprived
£20,000-£30,000	2,873	24.9%	Poorer 20%	More deprived
£30,001-£40,000	1,645	14.3%	Middle 20%	Middle
£40,001-£70,000	1,665	14.4%	Richer 20%	Less deprived
Above £70,000	677	5.9%	Richest 20%	Least deprived
Total	11,533	100%		

#### Table 4: What lung condition(s) do you have?

Lung condition	Respondents	Percentage
Asthma	10,077	69.7%
COPD	4,821	33.3%
Bronchiectasis	1,932	13.4%
Interstitial lung disease (ILD)	654	4.5%
Long covid	892	6.2%
Mesothelioma	19	O.1%
Sarcoidosis	179	1.2%
Other	777	5.6%
Total	14,450	N/A

#### Table 5a: When do you get out of breath? (Number of respondents)

State of breathlessness	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
I'm not troubled by being out of breath, except on strenuous exercise	463	482	355	514	251	2,065
I'm short of breath when hurrying on level ground, or walking up a slight hill	1,809	1,277	767	735	297	4,885
I walk slower than most people on the level, stop after a mile or so, or stop after 15 minutes of walking at my own pace	708	429	212	204	60	1,613
l stop for breath after walking about 100 yards or after a few minutes on level ground	1,165	490	235	163	46	2,099
I'm too breathless to leave the house, or breathless when dressing or undressing	502	181	68	38	21	810
Total	4,647	2,859	1,637	1,654	675	11,472

#### Table 5b: When do you get out of breath? (Percentage of respondents)

State of breathlessness	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			% of Respo	ondents		
I'm not troubled by being out of breath, except on strenuous exercise	10.0%	16.9%	21.7%	31.1%	37.2%	18.0%
I'm short of breath when hurrying on level ground, or walking up a slight hill	38.9%	44.7%	46.9%	44.4%	44.0%	42.6%
I walk slower than most people on the level, stop after a mile or so, or stop after 15 minutes of walking at my own pace	15.2%	15.0%	13.0%	12.3%	8.9%	14.1%
l stop for breath after walking about 100 yards or after a few minutes on level ground	25.1%	17.1%	14.4%	9.9%	6.8%	18.3%
I'm too breathless to leave the house, or breathless when dressing or undressing	10.8%	6.3%	4.2%	2.3%	3.1%	7.1%
Total	100%	100%	100%	100%	100%	100%

## Table 6: In the last 4 weeks, have you had any usual asthma symptoms such as cough, wheeze, chest tightness of shortness of breath during the day, more than twice a week?

Response	Respondents	Percentage
Yes	8,165	81.9%
No	1,688	16.9%
Don't remember	113	1.1%
Total	9,966	100%

#### Table 7: In the last 4 weeks, have you been woken up during the night because of your asthma?

Response	Respondents	Percentage
Yes	5,039	50.6%
No	4,615	46.3%
Don't remember	311	3.1%
Total	9,965	100%

#### Table 8: In the last 4 weeks, have you needed to use your reliever inhaler more than twice a week?

Response	Respondents	Percentage
Yes	7,321	73.3%
No	2,586	25.9%
Don't remember	76	0.8%
Total	9,983	100%

## Table 9: In the last 4 weeks, has your asthma interfered with your usual daily activities, for example work/housework or taking part in activities?

Response	Respondents	Percentage
Yes	6,012	60.1%
No	3,864	38.6%
Don't remember	127	1.3%
Total	10,003	100%

Asthma control level was assessed using GINA questions (box 4 on page 15 of the linked document):

In the last 4 weeks, has the patient had:

- Daytime symptoms more than twice per week?
- Any night waking due to asthma?
- SABA reliever needed more than twice per week?
- Any activity limitation due to asthma?

#### Well controlled = none of these

Partly controlled = 1–2 of these

Uncontrolled = 3-4 of these

#### Table 10a: Asthma control level (Number of respondents)

Asthma control level	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		l	Number of Re	spondents		
Well controlled	191	203	144	189	80	807
Partly controlled	589	481	337	384	146	1,937
Uncontrolled	1,884	1,124	645	711	307	4,671
Total	2,664	1,808	1,126	1,284	533	7,415

#### Table 10b: Asthma control level (Percentage of respondents)

Asthma control level	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		P	ercentage of I	Respondents		
Well controlled	7.2%	11.2%	12.8%	14.7%	15.0%	10.9%
Partly controlled	22.1%	26.6%	29.9%	29.9%	27.4%	26.1%
Uncontrolled	70.7%	62.2%	57.3%	55.4%	57.6%	63.0%
Total	100%	100%	100%	100%	100%	100%

#### Table 11a: Does breathlessness affect your normal day-to-day activities? (Number of respondents)

Frequency	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All		
		Number of Respondents						
Never	110	97	88	92	52	439		
Rarely	432	422	339	424	201	1,818		
Sometimes	1,421	1,076	625	683	254	4,059		
Often	936	527	283	232	75	2,053		
Very often	652	327	133	119	38	1,269		
Always	1,102	414	170	112	56	1,854		
Total	4,653	2,863	1,638	1,662	676	11,492		

#### Table 11b: Does breathlessness affect your normal day-to-day activities? (Percentage of respondents)

Frequency	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		P	ercentage of I	Respondents		
Never	2.4%	3.4%	5.4%	5.5%	7.7%	3.8%
Rarely	9.3%	14.7%	20.7%	25.5%	29.7%	15.8%
Sometimes	30.5%	37.6%	38.2%	41.1%	37.6%	35.3%
Often	20.1%	18.4%	17.3%	14%	11.1%	17.9%
Very often	14.0%	11.4%	8.1%	7.2%	5.6%	11.0%
Always	23.7%	14.5%	10.4%	6.7%	8.3%	16.1%
Total	100%	100%	100%	100%	100%	100%

#### Table 12a: Have you had to give up any of the following because of your breathlessness? (Number of respondents)

Item	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
Hobbies	1,391	692	366	315	143	2,907
Exercise	2,761	1,511	781	753	282	6,088
Ability to care for my family (e.g. parents or children)	686	315	159	111	56	1,327
Meeting friends	1,275	561	242	238	113	2,429
Work	1,259	522	228	244	82	2,335
Voluntary roles	559	251	133	88	29	1,060
Sex	755	379	187	158	64	1,543
I have not had to give up or change anything	893	815	554	595	265	3,122
Relationship with partner/spouse	240	106	43	41	9	439
Other	207	116	63	68	23	477
Total	N/A	N/A	N/A	N/A	N/A	N/A

## Table 12b: Have you had to give up any of the following because of your breathlessness? (Percentage of respondents)

ltem	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		P	ercentage of I	Respondents		
Hobbies	29.8%	24.1%	22.2%	18.9%	21.1%	25.2%
Exercise	59.1%	52.6%	47.5%	45.2%	41.7%	52.8%
Ability to care for my family (e.g. parents or children)	14.7%	11.0%	9.7%	6.7%	8.3%	11.5%
Meeting friends	27.3%	19.5%	14.7%	14.3%	16.7%	21.1%
Work	26.9%	18.2%	13.9%	14.7%	12.1%	20.2%
Voluntary roles	12.0%	8.7%	8.1%	5.3%	4.3%	9.2%
Sex	16.2%	13.2%	11.4%	9.5%	9.5%	13.4%
I have not had to give up or change anything	19.1%	28.4%	33.7%	35.7%	39.1%	27.1%
Relationship with partner/spouse	5.1%	3.7%	2.6%	2.5%	1.3%	3.8%
Other	4.4%	4.0%	3.8%	4.0%	3.4%	4.1%
Total	N/A	N/A	N/A	N/A	N/A	N/A

#### Table 13: Which of the following triggers your lung condition?

Trigger	Respondents	Percentage
Air pollution	7,893	54.6%
Alcohol	862	6.0%
Changes in weather	9,779	67.6%
Cleaning products	6,622	45.8%
Cold weather	9,776	67.6%
Colds and flu	10,304	71.3%
Drinks (excluding alcohol)	301	2.1%
Dust	7,850	54.3%
Emotions	4,619	31.9%
Exercise	7,730	53.5%
Food	1,313	9.1%
Hormonal changes	1,011	7.0%
Hot weather	4,938	34.2%
Moulds and fungi	5,482	37.9%
Other people smoking cigarettes	7,366	50.9%
Other people using e-cigarettes (vaping)	4,302	29.8%
Paint fumes	5,497	38.0%
Perfumes and aerosols	6,186	42.8%
Pets	2,685	18.6%
Pollen	5,545	38.4%
Something at work	561	3.9%
Stress	4,993	34.5%
When I use e-cigarettes	160	1.1%
When I smoke	411	2.8%
None of the above	172	1.2%
Other	411	2.8%
Total	N/A	N/A

#### Table 14a: Do you smoke? (Number of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
Yes	459	165	56	46	12	738
l used to, but have given up	2,327	1,297	678	566	208	5,076
l used to smoke, and I now use e-cigarettes (vapes)	250	103	48	40	9	450
I have never smoked, but I use e-cigarettes (vapes)	17	7	7	2	1	34
I have never smoked	1,599	1,293	851	1,008	446	5,197
Total	4,652	2,865	1,640	1,662	676	11,495

#### Table 14b: Do you smoke? (Percentage of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		Pe	ercentage of I	Respondents		
Yes	9.9%	5.8%	3.4%	2.8%	1.8%	6.4%
l used to, but have given up	50.0%	45.3%	41.3%	34.1%	30.8%	44.2%
l used to smoke, and I now use e-cigarettes (vapes)	5.4%	3.6%	2.9%	2.4%	1.3%	3.9%
I have never smoked, but I use e-cigarettes (vapes)	0.4%	0.2%	0.4%	0.1%	0.1%	0.3%
I have never smoked	34.4%	45.1%	51.9%	60.6%	66.0%	45.2%
Total	100%	100%	100%	100%	100%	100%

#### Table 15a: How long did you wait to get care at your GP? (Number of respondents)

Duration	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
I was able to get the care I needed the same day	828	621	368	412	186	2,414
1–3 days	517	346	192	211	94	1,360
4–7 days	238	132	72	85	30	557
1-2 weeks	269	129	81	73	28	580
3-4 weeks	117	78	45	30	18	288
1–2 months	46	17	6	11	3	83
3-4 months	15	13	5	2	1	36
5–6 months	10	3	2	2	1	18
6–12 months	17	4	3	1	2	27
12 months+	12	5	4	5	0	26
I have not been able to access care yet	160	98	37	45	14	354
Total	2,229	1,446	815	877	377	5,744

#### Table 15b: How long did you wait to get care at your GP? (Percentage of respondents)

Duration	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
		Pe	ercentage of F	Respondents		
I was able to get the care I needed the same day	37.1%	42.9%	45.5%	47.3%	50.3%	42.3%
1–3 days	23.1%	24.0%	23.4%	23.9%	24.0%	23.5%
4-7 days	10.7%	9.2%	8.8%	9.7%	8.2%	9.5%
1-2 weeks	12.1%	8.9%	10.0%	8.1%	7.7%	9.9%
3-4 weeks	5.2%	5.4%	5.5%	3.5%	4.6%	5.1%
1–2 months	2.1%	1.2%	0.7%	1.2%	0.5%	1.5%
3–4 months	0.7%	0.8%	0.5%	0.2%	0.3%	0.6%
5–6 months	0.5%	0.2%	0.2%	0.1%	0.3%	0.4%
6–12 months	0.8%	0.4%	0.4%	0.1%	0.3%	0.4%
12 months+	0.5%	0.5%	0.5%	0.6%	0.0%	0.4%
I have not been able to access care yet	7.2%	6.7%	4.5%	5.2%	3.8%	6.3%
Total	100%	100%	100%	100%	100%	100%

#### Table 16a: Do you feel your lung condition has got worse in the past 12 months? (Number of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
Yes	3,264	1,813	986	931	365	7,359
No	1,354	1,034	647	723	311	4,069
Total	4,618	2,847	1,633	1,654	676	11,428

#### Table 16b: Do you feel your lung condition has got worse in the past 12 months? (Percentage of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All	
	Percentage of Respondents						
Yes	70.7%	63.7%	60.4%	56.3%	54.0%	64.4%	
No	29.3%	36.3%	39.6%	43.7%	46.0%	35.6%	
Total	100%	100%	100%	100%	100%	100%	

## Table 17a: Do you feel that you need more support to manage your lung condition now than you did 12 months ago? (Number of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All	
	Number of Respondents						
Yes	2,823	1,570	823	765	320	6,301	
No	1,808	1,267	815	886	353	5,129	
Total	4,631	2,837	1,638	1,651	673	11,430	

## Table 17b: Do you feel that you need more support to manage your lung condition now than you did 12 months ago? (Percentage of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
	Percentage of Respondents					
Yes	61.0%	55.3%	50.2%	46.3%	47.5%	55.1%
No	39.0%	44.7%	49.8%	53.7%	52.5%	44.9%
Total	100%	100%	100%	100%	100%	100%

#### Table 18a: Has the cost-of-living crisis affected your income level? (Number of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
			Number of Re	spondents		
Yes	3,300	1,591	819	658	180	6,548
No	1,333	1,260	821	998	493	4,905
Total	4,633	2,851	1,640	1,656	673	11,453

#### Table 18b: Has the cost-of-living crisis affected your income level? (Percentage of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All
	Percentage of Respondents					
Yes	71.2%	55.8%	49.9%	39.7%	26.7%	57.2%
No	28.8%	44.2%	50.1%	60.3%	73.3%	42.8%
Total	100%	100%	100%	100%	100%	100%

#### Table 19a: Has the cost-of-living crisis affected the following? (Number of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All		
	Number of Respondents							
Paying to heat my home								
I can afford this	1,627	1,539	1,057	1,177	554	5,954		
I could afford this before but can't now	1,760	709	292	228	43	3,032		
I couldn't afford this before and can't now	496	181	55	36	10	778		
Paying my rent/mortgage								
I can afford this	1,304	1,057	734	949	468	4,512		
I could afford this before but can't now	464	167	68	49	12	760		
I couldn't afford this before and can't now	195	45	21	10	1	272		
Paying other bills								
I can afford this	2,122	1,830	1,195	1,302	587	7,036		
I could afford this before but can't now	1,101	371	115	96	15	1,698		
I couldn't afford this before and can't now	367	113	40	18	7	545		
Paying for food								
I can afford this	2,193	1,849	1,204	1,280	585	7,111		
I could afford this before but can't now	1,141	372	138	116	22	1,789		
I couldn't afford this before and can't now	367	133	39	32	8	579		
Paying for prescriptions*								
I can afford this	436	463	384	601	360	2,244		
I could afford this before but can't now	233	141	75	73	19	541		
I couldn't afford this before and can't now	150	67	35	22	6	280		

\* England only.

#### Table 19b: Has the cost-of-living crisis affected the following? (Percentage of respondents)

	Below £20,000	£20,000- £30,000	£30,001- £40,000	£40,001- £70,000	Above £70,000	All		
	Percentage of Respondents							
Paying to heat my home								
I can afford this	41.9%	63.4%	75.3%	81.7%	91.3%	61.0%		
I could afford this before but can't now	45.3%	29.2%	20.8%	15.8%	7.1%	31.1%		
I couldn't afford this before and can't now	12.8%	7.5%	3.9%	2.5%	1.6%	8.0%		
Paying my rent/mortgage								
I can afford this	66.4%	83.3%	89.2%	94.1%	97.3%	81.4%		
I could afford this before but can't now	23.6%	13.2%	8.3%	4.9%	2.5%	13.7%		
I couldn't afford this before and can't now	9.9%	3.5%	2.6%	1.0%	0.2%	4.9%		
Paying other bills								
I can afford this	59.1%	79.1%	88.5%	91.9%	96.4%	75.8%		
I could afford this before but can't now	30.7%	16.0%	8.5%	6.8%	2.5%	18.3%		
I couldn't afford this before and can't now	10.2%	4.9%	3.0%	1.3%	1.1%	5.9%		
Paying for food								
I can afford this	59.3%	78.5%	87.2%	89.6%	95.1%	75.0%		
I could afford this before but can't now	30.8%	15.8%	10.0%	8.1%	3.6%	18.9%		
I couldn't afford this before and can't now	9.9%	5.6%	2.8%	2.2%	1.3%	6.1%		
Paying for prescriptions*								
I can afford this	53.2%	69.0%	77.7%	86.4%	93.5%	73.2%		
I could afford this before but can't now	28.4%	21.0%	15.2%	10.5%	4.9%	17.7%		
I couldn't afford this before and can't now	18.3%	10.0%	7.1%	3.2%	1.6%	9.1%		

\* England only.

#### Table 20a: Avoidable mortality rates in 2001 and 2019 for respiratory disease across England, Scotland and Wales

			Respiratory disease			
		Avoidable mortality rate	Preventable mortality rate	Treatable mortality rate		
England	2001	35.3	21.7	11.5		
	2019	30.2	19.8	8.6		
Scotland	2001	43	30.2	9.9		
	2019	33.7	26	6.9		
Wales	2001	37	23.8	12.7		
	2019	38.6	24.2	13.1		

## Table 20b: Avoidable mortality rate changes from 2001 to 2019 for respiratory and cardiovascular diseases across England, Scotland and Wales

	Respiratory disease			Car	diovascular dise	ase
	Avoidable mortality rate	Preventable mortality rate	Treatable mortality rate	Avoidable mortality rate	Preventable mortality rate	Treatable mortality rate
England	14%	9%	25%	58%	59%	58%
Scotland	22%	14%	30%	57%	56%	58%
Wales	-4%	-2%	-3%	56%	57%	55%

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#### Asthma + Lung UK

0300 222 5800 info@asthmaandlung.org.uk AsthmaAndLung.org.uk



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