JOINT STRATEGIC NEEDS ASSESSMENT

September 2025

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1 Introduction

A Joint Strategic Needs Assessment (JSNA) looks at the current and future health and care needs of local populations to inform and guide the planning of health, well-being, and social care services within a local area (Scottish Government, 2015). JSNAs include information on demographics and local health and wellbeing outcomes, as well as the wider social, cultural, economic, and environmental factors that influence the health of the population, which are often referred to as the 'wider determinants of health' or 'building blocks of health'. This JSNA covers the population of the East Lothian Council area.

The JSNA is a key document for the East Lothian Integration Joint Board (IJB), helping to support its role in the strategic planning and commissioning of health and social care services for the people of East Lothian. This includes the development of a Strategic Plan for the area, and its review at three-year intervals. The IJB's current Strategic Plan covers the period of 2022 to 2025, and will be reviewed and updated over the course of 2025, with a new Plan agreed towards the end of the year. The JSNA also provides an important source of information to inform ongoing service, policy, and strategy development and supports the completion of Impact Assessments that are required to assess the potential positive or negative impacts on the local population of changes to policy, strategy, or service delivery.

Please note that an East Lothian Health and Social Care Partnership service utilisation section is being developed and will be incorporated with this JSNA once finalised.

2 Methodology

A working group was formed to lead the scoping and development of the JSNA process (see Appendix 1). It is recommended that collaboration between partners is maximised in the development of JSNAs (Scottish Needs Assessment Programme, 1998). As such, the group had representation from the East Lothian Health and Social Care Partnership, Public Health Scotland Local Intelligence Support Team [LIST], NHS Lothian Public Health Intelligence Team and NHS Lothian East Lothian Partnership and Place Team. Key tasks were identified to scope what should be included in the JSNA, analyse available data sources and identify gaps in data. Data were pulled from a variety of sources including, but not limited to, the National Records of Scotland, the 2022 Scotland Census, ScotPHO Profiles, GP Prevalence Data, and the 2024 Lothian Population Health Survey.

This JSNA features carefully selected indicators to provide a robust and nuanced picture of health and wellbeing in East Lothian, with a focus on both positive health outcomes and areas for improvement. It puts the data in context, providing a clear, solution-focused narrative of what the included data are telling us about the population. Where appropriate, local data are judged against Scottish, UK, or global data to understand how East Lothian compares more widely.

2.1 A Note on Confidence Intervals

The analyses presented in this report are estimates of results for the whole population, around which there are boundaries of precision (called confidence intervals) within which the 'true' result lies. 95% confidence intervals are used throughout this report. 95% is commonly used as a standard confidence level in significance testing, which strikes a balance between precision and the ability to

draw conclusions from a given dataset. A higher degree of confidence (e.g., a 99% confidence interval) would necessitate wider intervals to encompass the range of values that we are 99% confident that true population value lies in.

Graphs throughout this report indicate the precision of estimates with small black bars. The width of confidence intervals is influenced by the sampling methodology, and the distribution and number of responses in a certain category (with fewer responses leading to wider/less precise estimates, and vice-versa). Where confidence intervals overlap, this indicates that we cannot be sure there is a 'true' population difference between these groups. Moreover, wider confidence intervals for East Lothian-only graphs may be largely explained by having smaller number of respondents for the area compared to the whole of Lothian. As such, it is still useful to assess overall trends, especially if it is similar to what is observed for Lothian graphs.

3 Contextualising the East Lothian JSNA

KEY MESSAGES:

- Disparities across the socioeconomic gradient persist but are most pronounced between the least and most deprived communities. These have been further exacerbated by the legacy of austerity, COVID-19 pandemic and ongoing cost of living crisis which has put economic pressures on vulnerable groups in society.
- Places which invest more in public health tend to experience better health outcomes. In addition to offering good economic value, strategic investments in prevention are vital for improving population health and system efficiency.
- Addressing deeper structural inequalities is essential for sustainable improvement in population health and must happen alongside improving access to quality health care.

3.1 Health Inequities & the Social Determinants of Health

East Lothian's socioeconomic and political landscape is evolving. Like many areas across Scotland and the UK, the area is experiencing stalling/reversing life expectancy trends, an ageing population, an increase in the proportion of people with multiple long-term conditions, a cost of living crisis, emerging threats in infectious diseases and antimicrobial resistance, and growing disparities between the most deprived and least deprived groups which have been further exacerbated by the COVID-19 pandemic. Moreover, East Lothian has also been negatively impacted by UK Government economic austerity policies (McCartney et al., 2022), geopolitics, climate change, and conflicts across the globe. All of

these have placed significant financial pressures on households, increasing their reliance on health and social care services whilst budgets are stretched, meaning that services need to do more with less. Adapting to a rapidly growing population, balancing growth, sustainability, and need in an environment with significant funding pressures is complex.

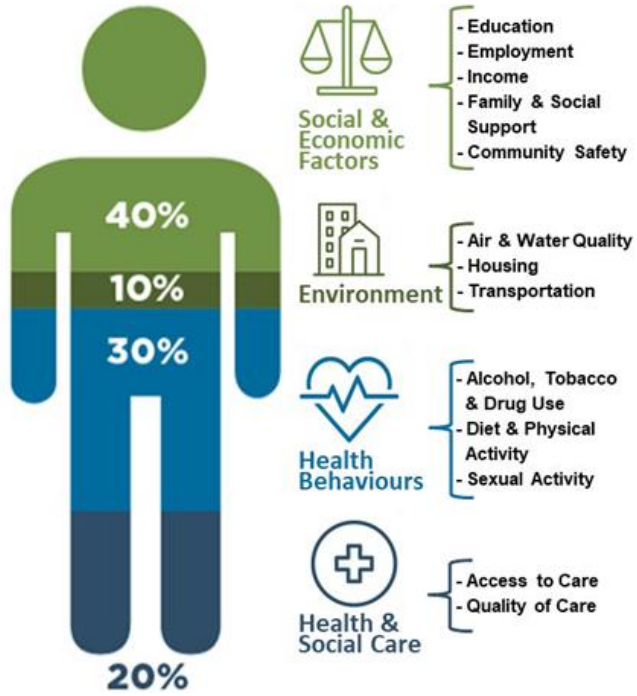
A key aim of the JSNA is to highlight inequities in health. These are the systematic, avoidable, and unfair differences in people's health that exist across the population and between specific groups (Public Health Scotland [PHS], 2024). In Scotland, this term is often used interchangeably with 'health inequalities,' however this JSNA will use 'inequalities' to denote the difference between groups and 'inequities' to specify differences which are unjust and avoidable.

Health outcomes are not equal across the population in East Lothian, and certain groups consistently experience worse health outcomes due to circumstances largely outside of their control. Individuals with protected characteristics, as per the Equality Act 2010, often experience significant health inequities, facing barriers in accessing healthcare and experiencing poorer health outcomes. For instance, Black women in the UK are almost 3 times as likely than White women to die because of complications during and following pregnancy and childbirth (MBRRACE-UK, 2024), while individuals with learning disabilities in Scotland have a life expectancy that is, on average, 20 years less than the general population (O'Leary et al., 2017). Furthermore, there is often insufficient data regarding the health needs of disadvantaged groups, both locally and nationally, making it difficult to accurately assess and address these inequities.

Although the provision of quality healthcare is important in supporting people when they are ill, it is widely recognised that the main drivers of population health are beyond health and social care services (McAdams, 2023; Donkin et al., 2017;

Buck and Maguire, 2015). For many diseases, acting at the point at which someone presents with a health condition can often be too late. Instead, it is the social and environmental conditions in which we are born, live, work, and age that more heavily shape health outcomes.

Figure 3.1. Drivers of health & wellbeing



As illustrated in Error! Reference source not found.[1], these factors, which are called the social determinants or 'building blocks' of health, are estimated to contribute between 45 to 60% of the variation in health status (Buck and Maguire, 2015). Whilst the above figure is a useful illustration, it is important to highlight that these drivers of health status are not mutually exclusive. For example, health-related behaviours are themselves directly and indirectly shaped

[1] Infographic is adopted from Chief Medical Officer for Scotland Annual Report 2022-23 (Scottish Government, 2023a). Caution is warranted in interpreting the percentage breakdown because the drivers of health variation are not mutually exclusive.

by the wider determinants of health, influencing the options that are available to people and often limiting opportunities to be healthy (Macdonald et al., 2018).

Health inequities are driven by the unequal distribution of resources and opportunities linked to the social determinants. People can face inequities based on socio-economic factors (e.g., income, work status, etc.), geography (e.g., living in rural vs. urban areas), identity characteristics (e.g., race, gender, age, disability, etc.) or non-identity based social exclusion (e.g., homelessness, substance use, etc.), which all impact health and wellbeing.

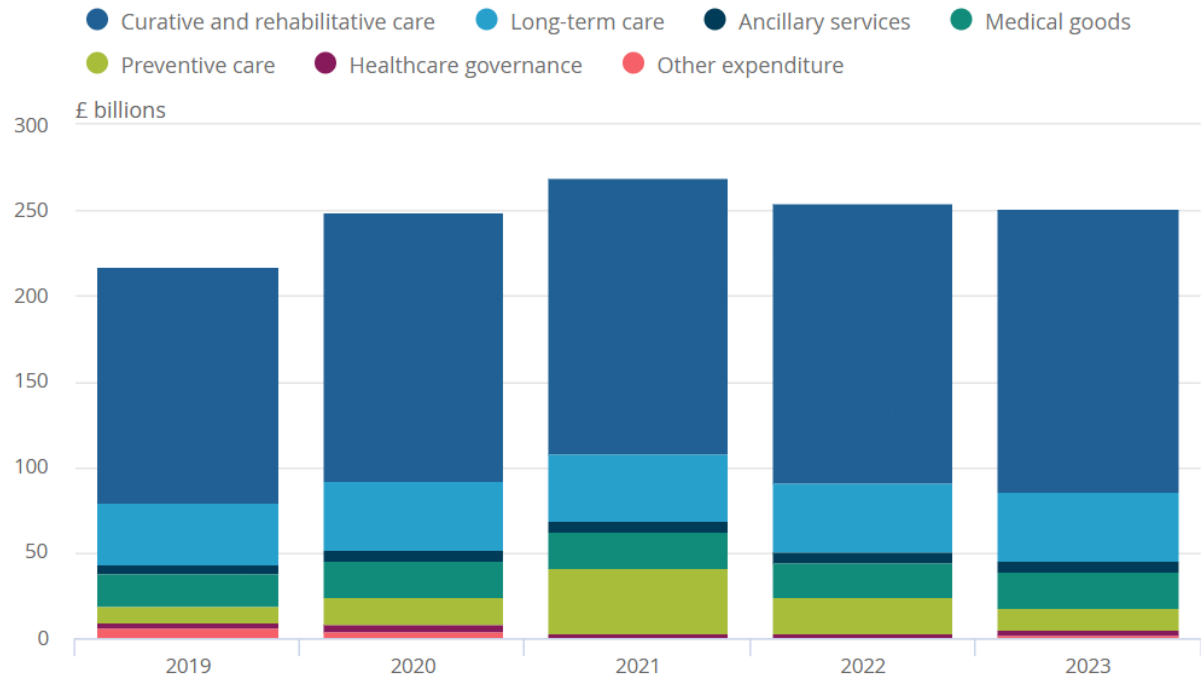
3.2 Measuring Deprivation and Inequity: A Note on SIMD

The Scottish Index of Multiple Deprivation (SIMD) is commonly used across Scotland as a relative measure of deprivation based on seven domains (income, employment, education, health, access to services, crime, and housing) (Scottish Government, 2020a). SIMD helps decision-makers understand the challenges faced by communities and identify areas that need the most investment, helping to target policies and funding to reduce inequities. While SIMD does provide insight into area-based deprivation, it cannot be used to identify deprived individuals because not everyone living in deprived areas is deprived, and many people who face deprivation do not live in deprived areas. For instance, over half of people who have low income (55%) do not live in the 20% most deprived areas of Scotland (McCartney and Hoggett, 2023). Furthermore, SIMD cannot be used to determine how much more deprived one area is than another, and it has not been updated since 2020, meaning that the impact of major events such as the COVID-19 pandemic, Brexit, and the cost-of-living crisis are not considered. As such, this JSNA used SIMD alongside other, more localised data to provide a more nuanced view of deprivation and inequities in East Lothian.

3.3 The Benefits of Prevention

It is estimated that, on average, only 3% (ranging between 0.6 – 8.2%) of national health sector budgets in Europe is spent on public health (World Health Organisation [WHO], 2014). UK government health expenditure data from 2019 to 2022 highlights the stark contrast between investment in clinical treatment and preventive care. As shown in Error! Reference source not found., the share of government expenditure attributed to preventive care more than tripled from 4.4% in 2019 to 14.1% in 2021 (primarily due to the establishment of programmes responding to the COVID-19 pandemic) (Office for National Statistics, 2024). However, this had dropped to 8.2% in 2022, illustrating that the increased share of investment in prevention was not sustained.

Figure 3.2. UK governments health expenditure by function in real terms 2023 prices, £ billion, 2019 to 2022



Countries which invest more in public health tend to experience better health outcomes (WHO, 2014). Well-chosen public health interventions are generally considered to represent good value for money because they can improve

population health and wellbeing, ease the demand on public services, and support economic growth (WHO, 2014). Evidence from a systematic review by Masters and colleagues (2017) found that the median return on investment (ROI) for public health intervention was £14 for every £1 invested, with returns varying depending on the type of prevention, ranging from £5 per £1 for secondary and tertiary interventions (e.g., disease management) to as high as £46 per £1 for primary prevention interventions (e.g., smoking ban) (Masters et al., 2017).

This is particularly pertinent considering the ever-increasing demands on health and social care in East Lothian and Scotland as a whole. Projections from the Scottish Burden of Disease study indicate that the national annual disease burden will increase by 21% by 2043 despite an overall decline in the projected population over the same period (PHS, 2022a). Investment in prevention has the power to improve population health and yield cost-savings for services who are stretched thin.

4 Understanding our Population

KEY MESSAGES

- Life expectancy has been stalling or reversing in East Lothian since around 2015, reflecting the Scottish pattern. A socioeconomic gradient is observed for both life expectancy and healthy life expectancy with both indicators reducing with increasing deprivation.
- East Lothian is the second fastest growing local authority area in Scotland, at a rate of over 10% per decade, and is projected to grow to 121,743 by the year 2043.
- The largest projected increases are in the older population, with an expected increase of 41% in those aged over 65 years which is likely to require higher levels of health and social care service provision.
- Over one fifth of East Lothian's population (22.4%) report that their daily activity is impacted to some degree by a longer-term health issue or disability.
- Whilst East Lothian is generally less deprived than the rest of Scotland, there are clusters of area-based deprivation particularly in Musselburgh, Prestonpans and Tranent.
- There is a need to improve the quality of data relating to protected characteristics groups (e.g. ethnicity, gypsy travellers, LGBTQI+ and disability) to allow for better identification of needs, targeted interventions and the development of effective policies.

This section provides an overview of the East Lothian population, describing previous and projected population growth and covering some of the characteristics of the East Lothian population in terms of age, gender, ethnicity, disability, and life expectancy. It includes information on the distribution of the population across both rural and urban areas and looks in some detail at levels of deprivation across different areas, whilst recognising the additional factors, besides geography, that contribute to deprivation.

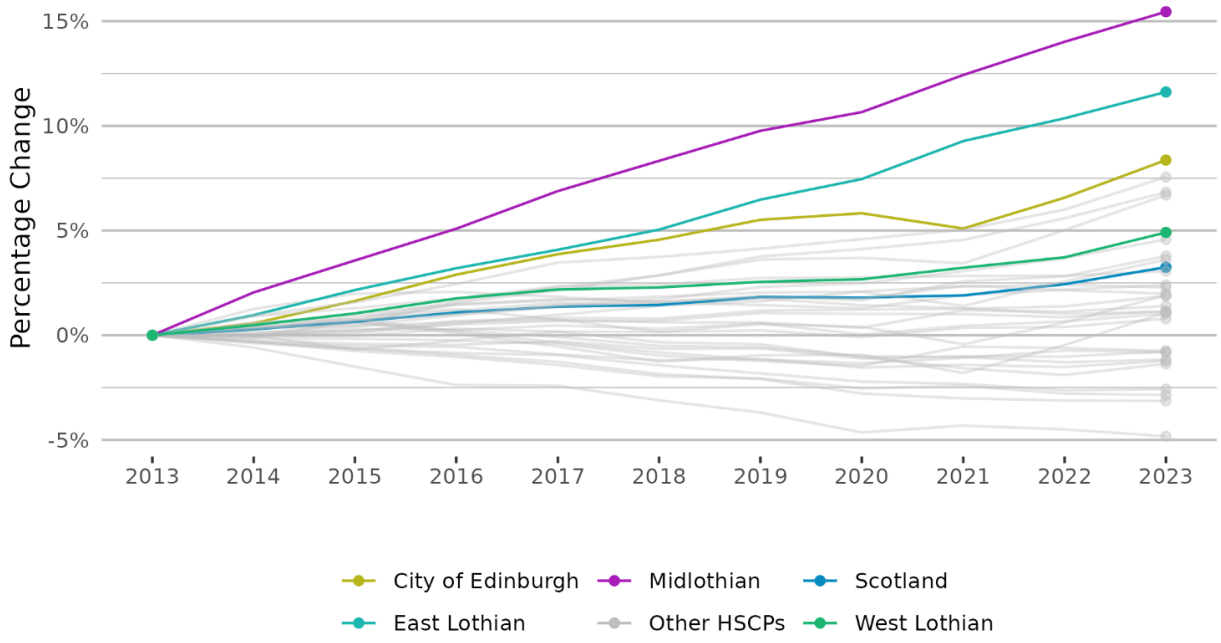
4.1 Population Trends

4.1.1 Current Population

Population growth is significant in terms of the increasing pressure it puts on local infrastructure and public services. This includes everything from roads and waste management, to housing, education, policing, environment health, fire and rescue services, social work, social care, and health. The changing age profile of the population is also a key consideration in the planning and provision of infrastructure and services. For example, an increased older population places further demand on health and social care services, whilst more families mean that additional school places are needed.

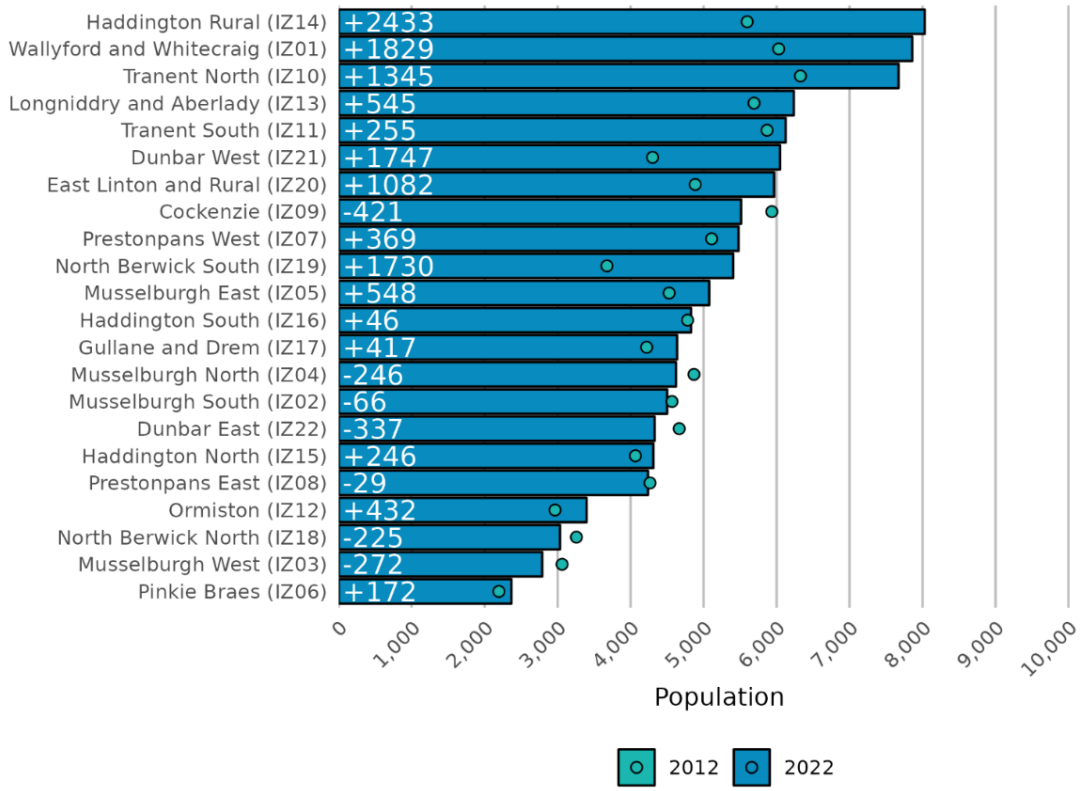
At the point of the 2022 Census, East Lothian's population sat at 112,300 (National Records of Scotland [NRS], 2023). The current NRS 2023 mid-year estimates put the population at 113,740 persons, slightly higher than the census figure (NRS, 2024a). Figures show that the East Lothian population grew from 101,900 to 113,740 over the ten-year period up to the 2023 mid-year estimate, an increase of 11,840 individuals (11.6% growth). This level of growth meant that East Lothian experienced the second largest percentage increase in population for all Scottish local authority areas, with only Midlothian experiencing a higher level of population growth (see Figure).

Figure 4.1. East Lothian Percentage Population Change from 2013 to 2023 by HSCP Ranking (NRS, 2024a)



Estimates for smaller areas within East Lothian show that the largest percentage growth in population was in North Berwick South, with a 47.1% increase in population. Overall, out of the 22 Intermediate Zones, 15 saw an increase in population, with just 7 areas experiencing a reduction in population (see Figure 4.2).

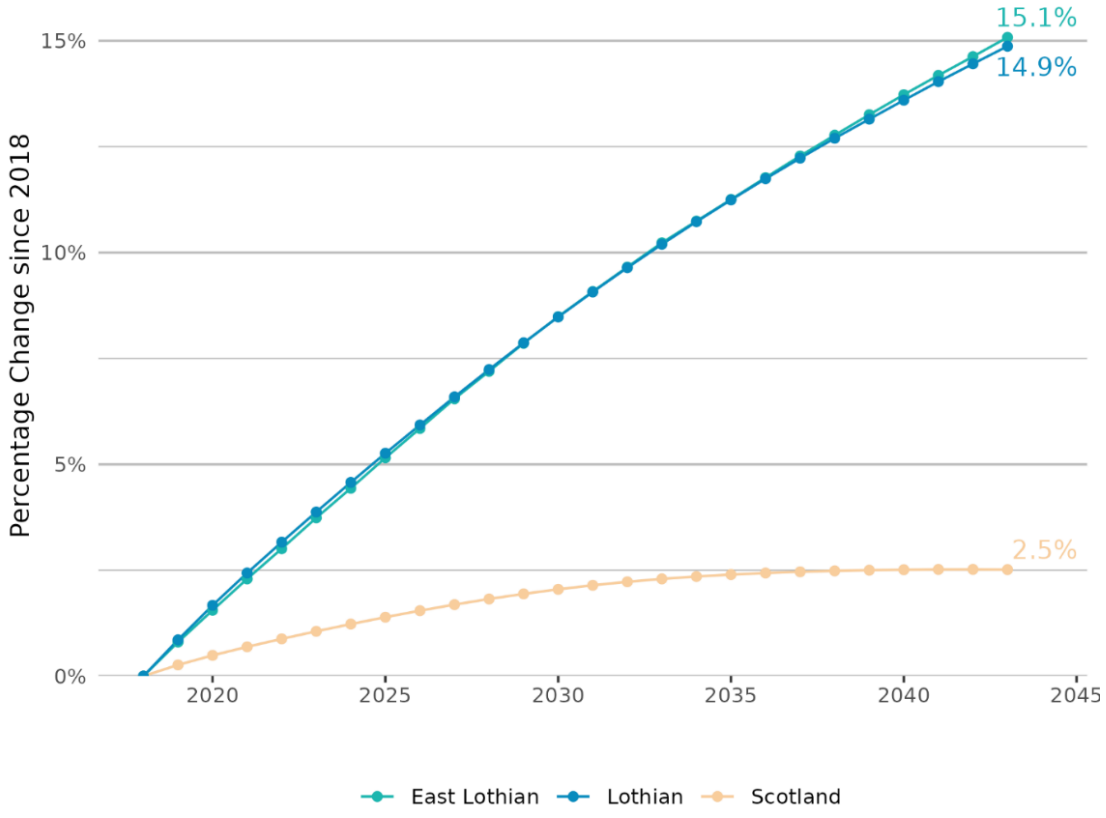
Figure 4.2. East Lothian Change in Population Estimates from 2012 to 2022 by Intermediate Zone (NRS, 2024b)



4.1.2 Projected Growth

Using 2018-based population estimates (NRS, 2020), the East Lothian population is projected to grow to 121,743 by the year 2043, an increase of 15.1% from 2018, and an additional 15,953 people (see Figure 4.3). The only age group projected to decrease in size is children (aged 0-15), with an estimated change of minus 1.1%. The working age population will increase by 11.5%, but the largest increases will be seen in the older population, with an increase of 40.8% in the pensionable age (66 years plus). Furthermore, the number of people aged over 75 is set to increase by 94.3% (2020).

Figure 4.3. East Lothian Projected Population Growth from 2018 to 2043 (NRS, 2020)



This growing older population has implications with regards to the number of people who are likely to require higher levels of health and social care service provision. This is supported by evidence which shows that prevalence of multiple long-term conditions (i.e. people with two or more long-term conditions) increases with age, with the highest proportion amongst those aged 65 years and older (National Institute for Health and Social Care Research [NIHR], 2021; Chen et al., 2020; Stafford et al., 2018; Barnett et al., 2012).

The East Lothian 2023 Housing Land Audit estimates new housing development planned for completion between 2023 and 2030 will provide accommodation for around 15,500 people (East Lothian Council [ELC], 2023). Although this additional

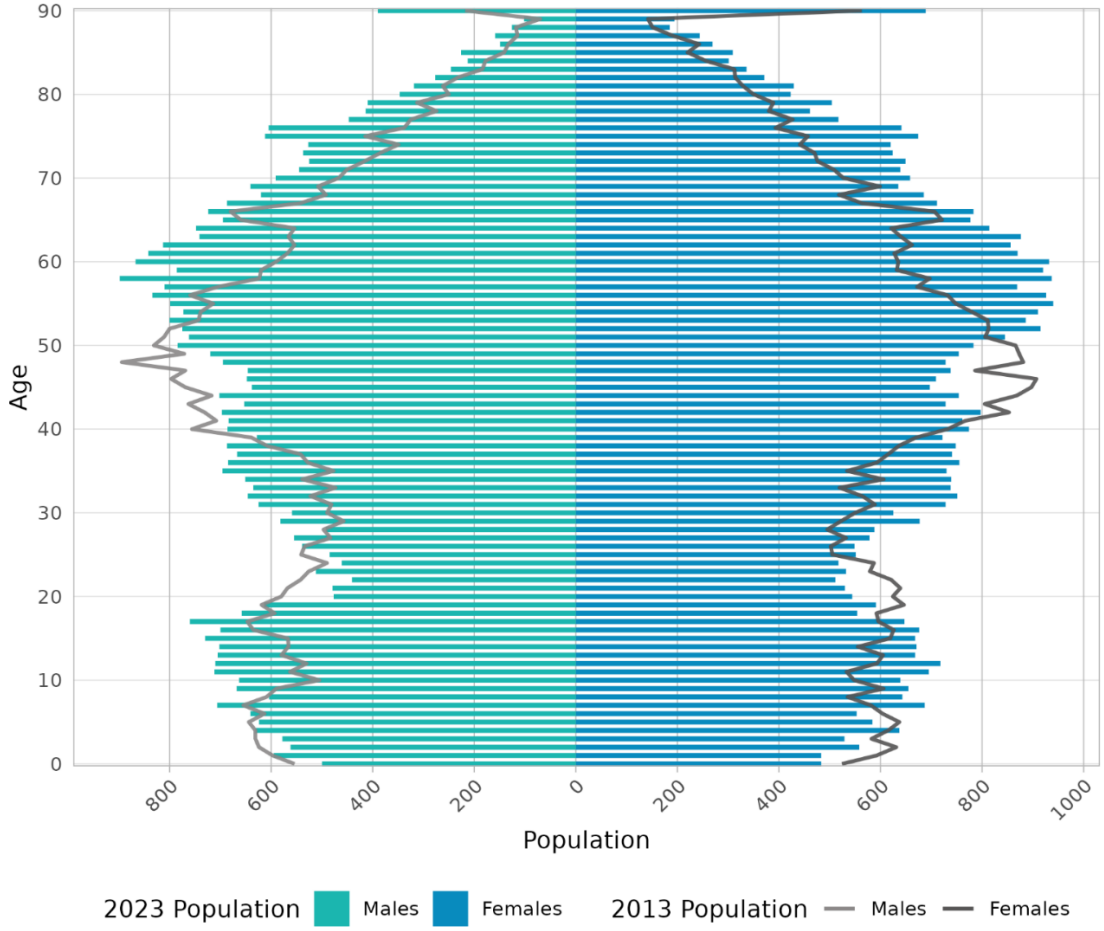
housing will respond to some of the NRS estimated 'natural' population growth[2], it is also likely to attract additional inward migration to East Lothian which may not yet be captured in population projections.

4.1.3 Age and Sex

East Lothian's population is 52% female (59,240 persons) and 48% male (54,500 persons). The median age in East Lothian is 44.9 years, which is higher than that of Lothian (39.4 years) and Scotland (42.9 years) (NRS, 2024a). The age profile of the population changed between 2013 to 2023; with the under 16 age group reducing from 18.5% to 17.8% whilst pensionable age (66 years and over) increased from 17.5% to 20%. The working age population (16-65-year-olds) decreased from 64.1% to 62% (2024a). The age and sex profile of East Lothian is illustrated in Figure 4.4.

[2] NRS estimates are based on projected births, deaths, and migration – the migration element being calculated on the previous migration patterns

Figure 4.4. East Lothian Population Estimates by Age & Sex for years 2013 & 2023 (NRS, 2024a)



4.1.4 Selection of Protected Characteristics Groups

4.1.4.1 Ethnicity

According to the 2022 Scottish Census, 97% of the total East Lothian respondents identified with the ethnic group White, a change of 1% from the 2011 Census (98%) (NRS, 2024c). This is a higher than the percentage identifying as White for Scotland as a whole (93%).

The largest ethnic group within the White category is White Scottish, making up 79% of the total East Lothian respondents. Followed by White British which accounts for 12% of the total respondents. White Irish and White Polish each account for approximately 1% of the population (a total of 2.4%). The White

Gypsy Traveller ethnic group makes up 0.05% of the total respondent population (2024c).

The next largest ethnic group is Asian, Asian Scottish, or Asian British, consisting of 1% of the East Lothian respondents. The following ethnic groups, African (0.2%), Caribbean or Black (0.08%), and Other Ethnic Groups (0.4%) make up 0.7% of the respondents from East Lothian (NRS, 2024c).

The term 'Minority Ethnic Group' refers to all groups other than White Scottish and White British (includes others within the White category: White Polish, White Irish, and White Gypsy/Traveller). Within Scotland, the Minority Ethnic Group grew between 2011 and 2022, with the percentage of people identifying as being within this group increasing from 8.2% to 12.9% (NRS, 2024c). The percentage in this grouping also grew in East Lothian, increasing from 5.2% in 2011 to 8.5% in 2022. In East Lothian the percentage of population identifying as Asian/Asian Scottish/Asian British, African, Other Ethnic Groups have increased from 2011 to 2022. While the percentage of population identifying as White, and Caribbean/Black have decreased from over the same time frame.

4.1.4.2 LGBTQ+

As of the 2022 Scottish Census 88.8% of the total East Lothian respondents who are aged 16 and over identify as Heterosexual Straight, slightly above the Scottish percentage of 87.8% (NRS, 2024d).

A total of 3.2% of East Lothian respondents identified as gay or lesbian (1.5%), bisexual (1.4%), or as 'other sexual orientation' (0.4%). A proportion of census respondents (7.9%) chose to leave this section unanswered; this was also seen in the Scottish population (8.2% of respondents) (NRS, 2024d).

As of the 2022 Census, within East Lothian 0.3% of the population above the age of 16 identified as being transgender or having a transgender history. This is slightly below the percentage of the Scottish population (0.4%). In both Scotland and East Lothian 5.9% of respondents did not answer this question (NRS, 2024d). The 2022 Census did not ask residents about other gender identities, such as non-binary, genderfluid or agender.

The Scottish Government's Equality Impact Assessment for the census acknowledged that official data likely undercounts people identifying as LGBTQ+ due to the voluntary nature of the sex and gender questions and varying levels of comfort among respondents in disclosing their sexual orientation and trans status (Scottish Government, 2021a).

4.1.4.3 Disability

As part of the 2022 Scotland Census, people were asked about the extent to which their day-to-day activity was limited by a long-term health problem or disability that was expected to last at least 12 months, including problems related to old age (NRS, 2024e).

In East Lothian, 13.2% (14,864 people) identified that their day-to-day activities were limited 'a little', with a further 9.2% (10,326 people) saying they were limited 'a lot' (NRS, 2024e). This equates to a total of 22.4% (25,190 people) whose daily activity is impacted to some degree by a longer-term health issue or disability. This percentage is higher in both categories ('a little' / 'a lot') than in Lothian as a whole, but below the Scottish level.

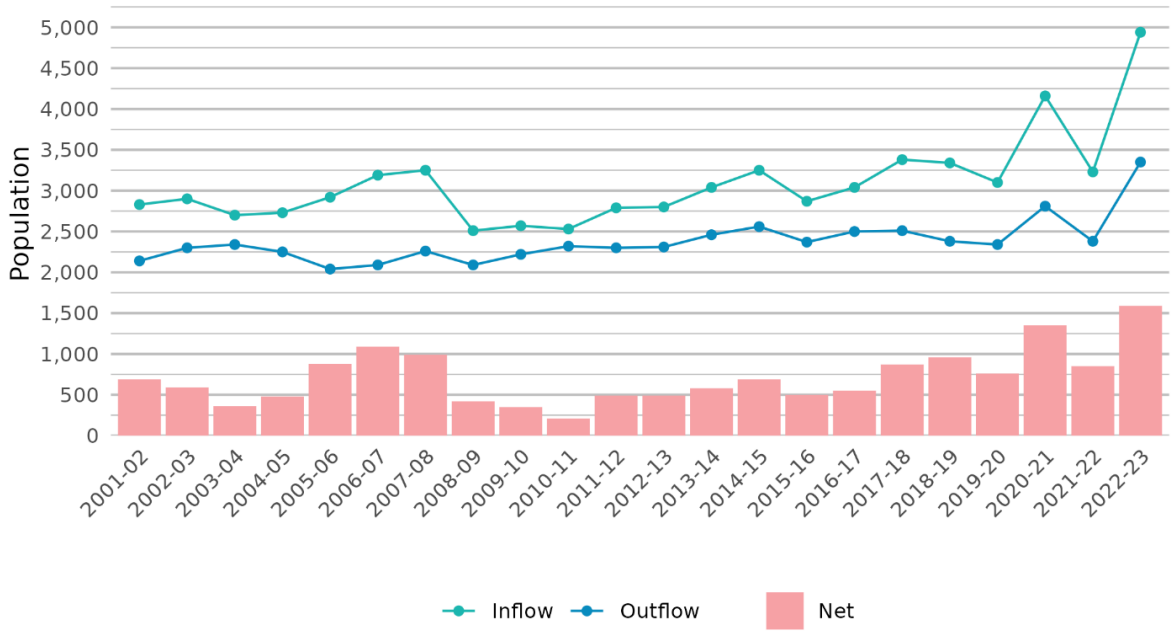
The Census also found that 5,400 people were identified as having a learning disability, learning difficulty or developmental disorder. This equated to an age-

sex standardised rate of 5 per 100 population, which is slightly below the Scottish rate of 5.2 per 100 population (NRS, 2024e)

4.1.5 Migration

There was a positive net migration into East Lothian for all years between 2001/02 and 2021/22 – meaning that the number of people moving into East Lothian was higher than the number moving out (see Figure). The highest level of both inflow and outflow migration took place in 2022/23. More recent data showed a positive net migration of 1,590 individuals between mid-2022 and mid-2023, a higher level than in the previous 20 years (NRS, 2025).

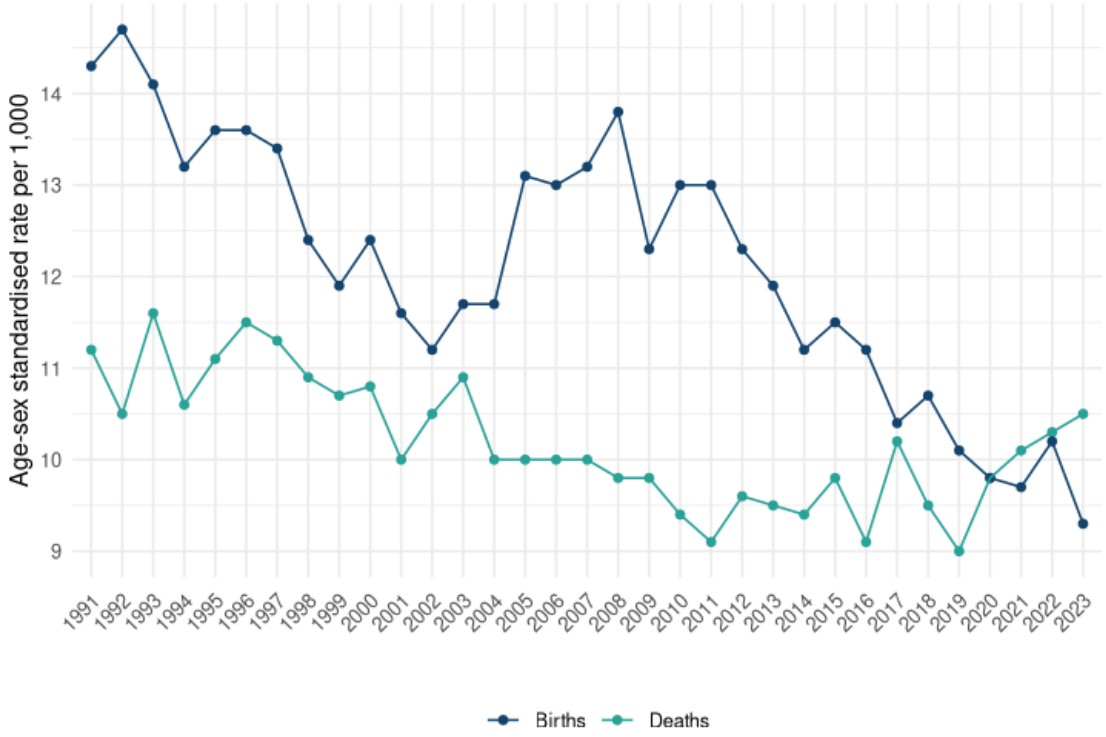
Figure 4.5. East Lothian Migration Flow by Financial Year (NRS, 2025)



4.1.6 Births and Deaths

The rate of both births and deaths decreased in East Lothian between 1991 to 2023. Between mid-2022 and mid-2023 there were a greater number of deaths (950) than births (1,278), a natural change of 328 individuals.

Figure 4.6. East Lothian Age-sex Standardised Birth and Death Rates per 1,000 in East Lothian, 1991 – 2023 (NRS, 2024f; 2024g)



4.1.7 Life Expectancy and Healthy Life Expectancy

As of 2021-2023, the life expectancy at birth of females in East Lothian was 82 years and males was 78.8 years. As shown in Figure 4.7, life expectancy in East Lothian is either equal to or higher than Lothian and Scottish life expectancy for males and females (NRS, 2024h). Healthy life expectancy (HLE)[3] for period of 2019-2021 was 68.4 for females and 60.7 for males in East Lothian. This was higher than the Scottish average for both males and females. East Lothian females had a higher HLE than Lothian females, but this was not the case for males (see Figure 4.8).

[3] A measure of the average number of years a person would expect to live in good health

Figure 4.7. Male and Female Life Expectancy (2021-2023) and Healthy Life Expectancy at Birth (2019-2021) for East Lothian, Lothian, and Scotland (NRS, 2022a)

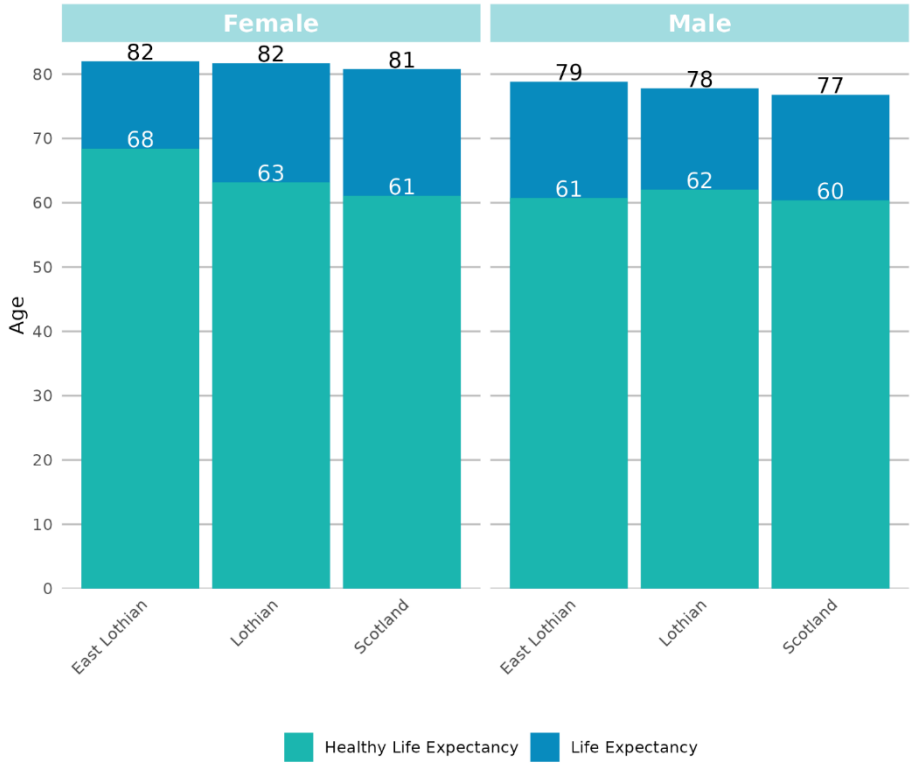
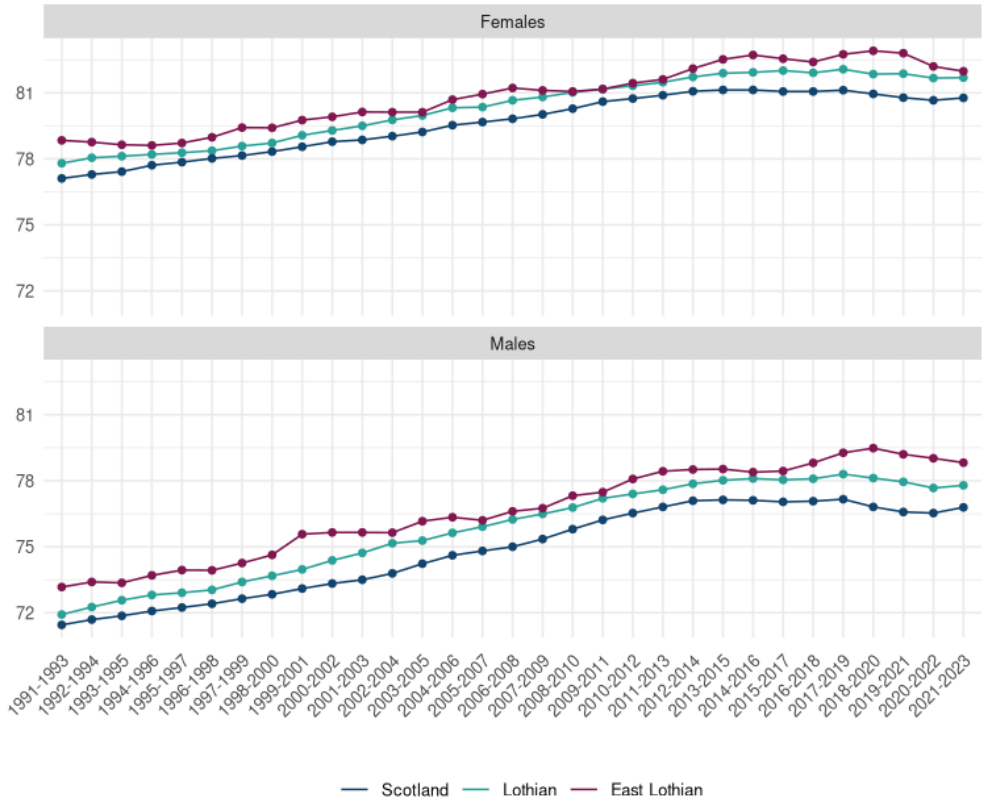


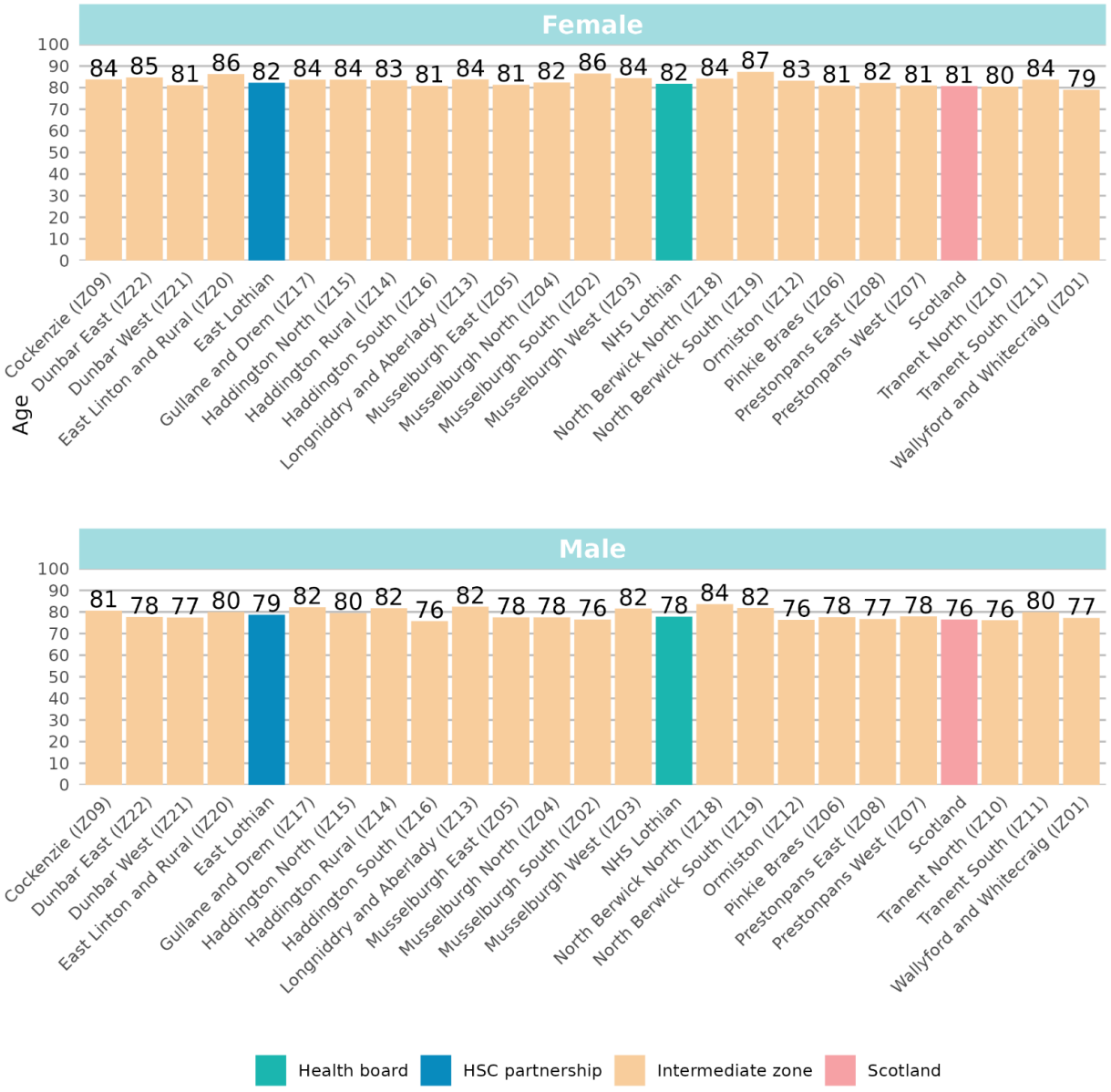
Figure 4.8. Life Expectancy at Birth From 1991 to 2023 in Scotland, Lothian, and East Lothian (NRS, 2024h)



Male and female life expectancy for people in East Lothian, Lothian, and Scotland increased from 2002 to 2020. However, since 2015, life expectancy has shown a less pronounced increase for both females and males in East Lothian. Indeed, it appears to be reversing from 2019-2021 in (see Figure 4.8).

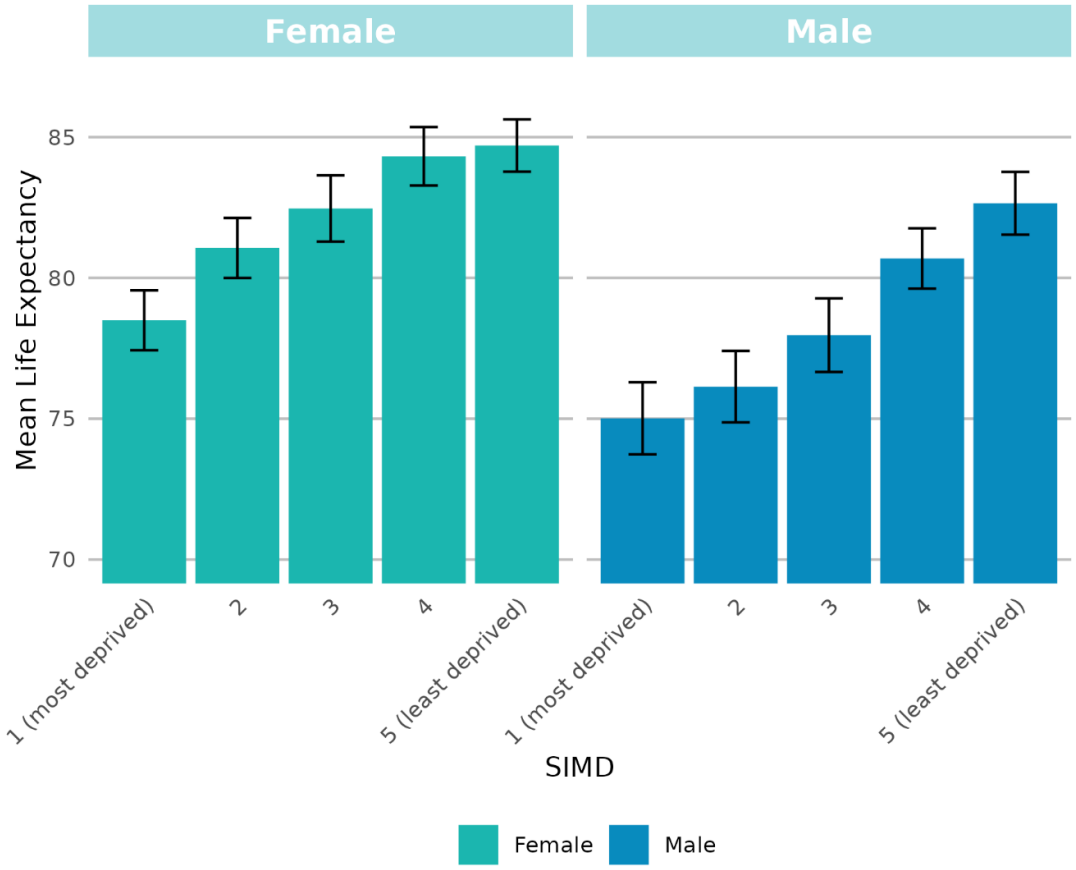
When assessed at intermediate zone level (see Figure 4.9), for females, the highest life expectancy was 87 years (North Berwick South) and the lowest was 79 years (Wallyford and Whitecraig). For males, the highest life expectancy was 84 years (North Berwick North) and the lowest was 76 years (Haddington South, Musselburgh South, Ormiston, and Tranent North).

Figure 4.9. Male and Female Life Expectancy (2021-2023) at Birth (2019-2021) for East Lothian, East Lothian's Intermediate Zones, NHS Lothian, and Scotland (NRS, 2024h)



With respect to deprivation, there is a strong relationship between SIMD and life expectancy for both males and females where life expectancy increases with decreasing deprivation. This is illustrated for East Lothian in Figure 4.10.

Figure 4.10. East Lothian Mean Life Expectancy at Birth by Sex and SIMD Quintile, 2019-2023 (NRS, 2024h)



4.1.8 Urban-Rural Classification

East Lothian local authority area covers 679 square kilometres (km), making up 39% of the overall Lothian area. Population density for East Lothian (167 persons per square km) is lower than the Lothian level (553) but higher than Scotland (70 persons per square km). As shown in Figure 4.11, majority of the population (40%) live in what are classified as 'other urban areas' and none of East Lothian is classified as remote (either as 'remote small towns' or 'remote rural areas'). **Error! Reference source not found.** provides a breakdown of urban-rural classification by intermediate zone population estimates.

Figure 4.11. East Lothian, NHS Lothian & Scotland Population Estimates by Urban-Rural Classification (NRS, 2022b)

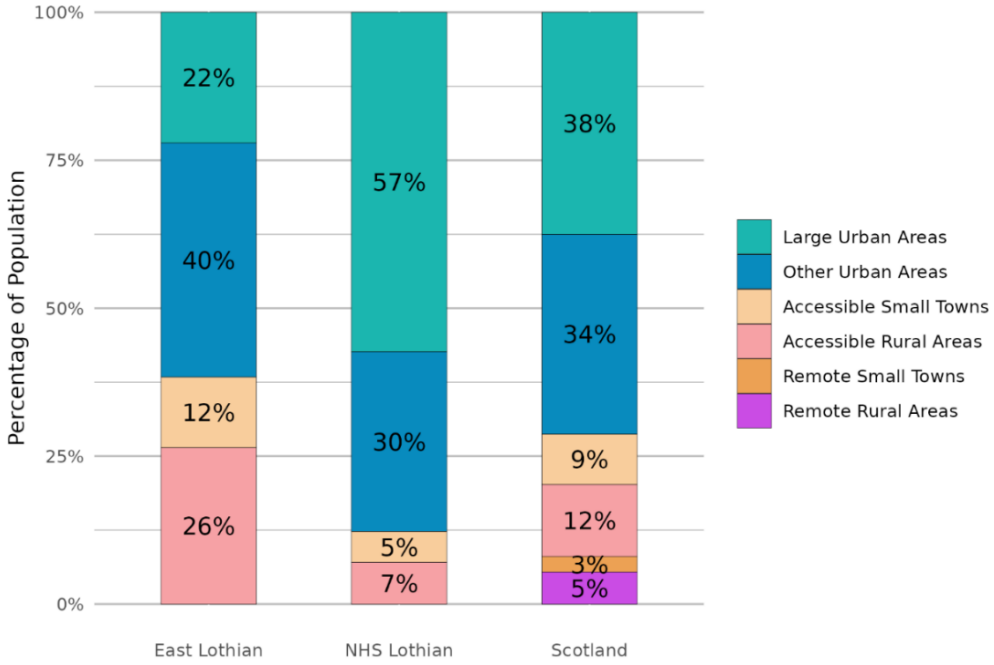
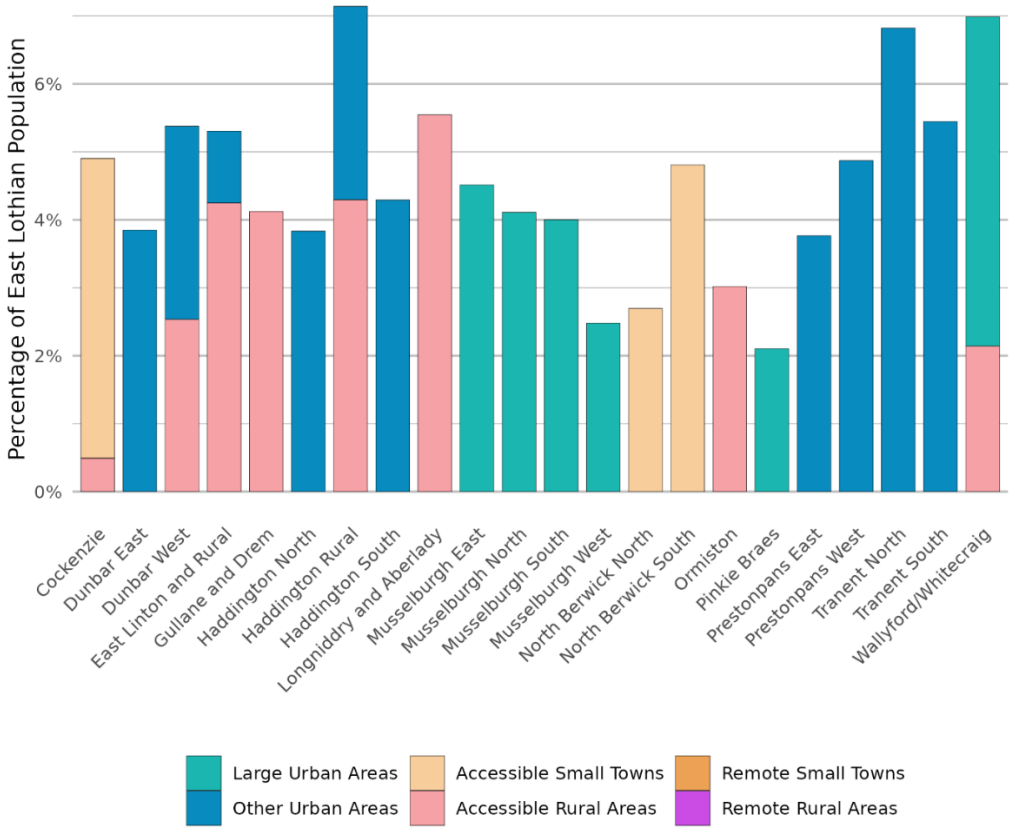


Figure 4.12. East Lothian Intermediate Zone Population Estimates by Urban-Rural Classification (PHS, 2023a; 2024b)

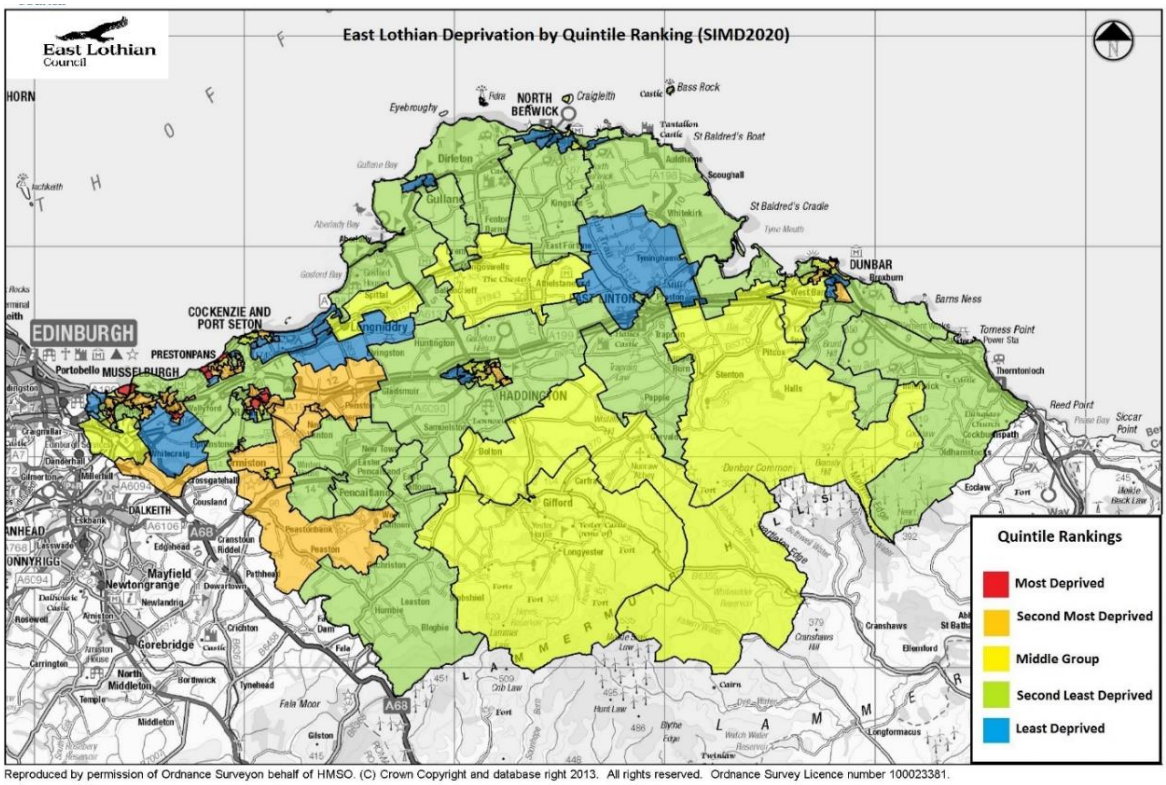


4.1.9 Understanding Deprivation in East Lothian

4.1.9.1 SIMD

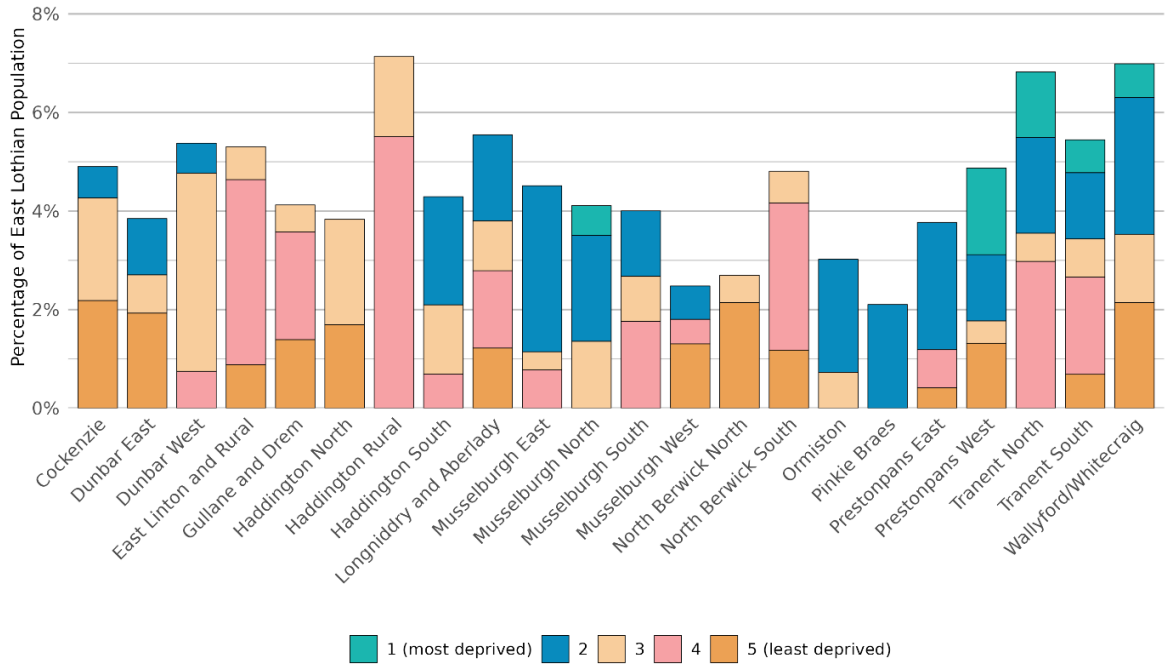
According to the Scottish Index of Multiple Deprivation (PHS, 2020), East Lothian is generally less deprived than most of Scotland. In 2020, two out of East Lothian's 132 data zones fell within the '10% most deprived' areas in Scotland, and 8 data zones were in the '20% most deprived'. Though this is positive, evidence indicates a slight increase in deprivation when compared to 2016 SIMD data whereby none of the East Lothian data zones were in the 10% most deprived and only 6 were in the 20% most deprived. As demonstrated in Figure 4.13, the western half of East Lothian sees more area-based deprivation, with clusters of more deprived areas in Musselburgh, Prestonpans, and Tranent. This can be seen by the red (SIMD 1, 20% most deprived) and orange (SIMD 2) colours on the map. Some data zones in Haddington and Dunbar also fall within the 40% most deprived areas of Scotland.

Figure 4.13. Map showing East Lothian Deprivation by Quintile Ranking



A breakdown of SIMD by the 22 intermediate zones in East Lothian is provided in Figure 4.14. Three East Lothian intermediate zones are in the top 15% of most deprived areas of Scotland (Tranent North, Prestonpans West, and Musselburgh North – SIMD ranking: 660, 688 and 1017 respectively). North Berwick North experiences the least area-based deprivation, with majority of residents living in the least deprived quintile (SIMD 5) and no residents in the 40% most deprived quintiles (SIMD 1 and 2).

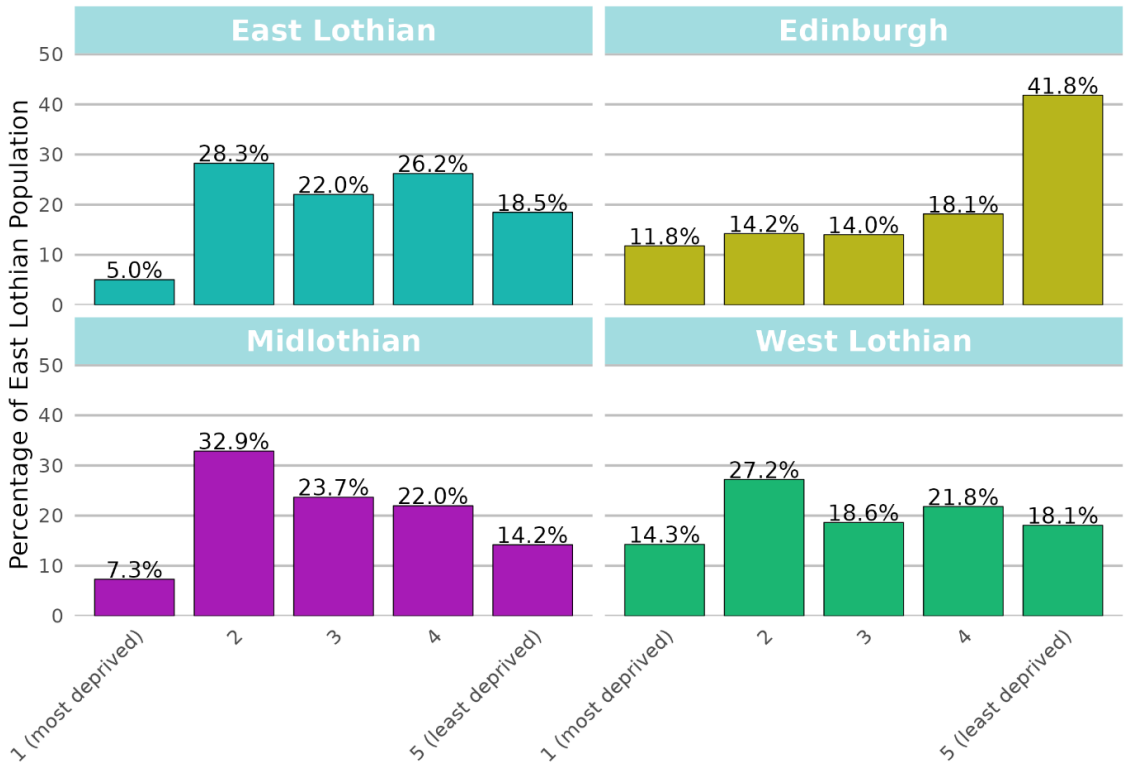
Figure 4.14. East Lothian Intermediate Zone Population Estimates (2021) by SIMD, Percentage of East Lothian Total Population (Scottish Government, 2020b)



When compared to other local authorities in Lothian, East Lothian has the lowest percentage of residents living in SIMD 1 areas. As can be seen from Figure 4.15, the area shares some similarities with Midlothian and West Lothian for SIMD 2-5. As the least deprived local authority in Scotland, Edinburgh has a significantly higher percentage of residents living in the 20% least deprived areas (SIMD 5)

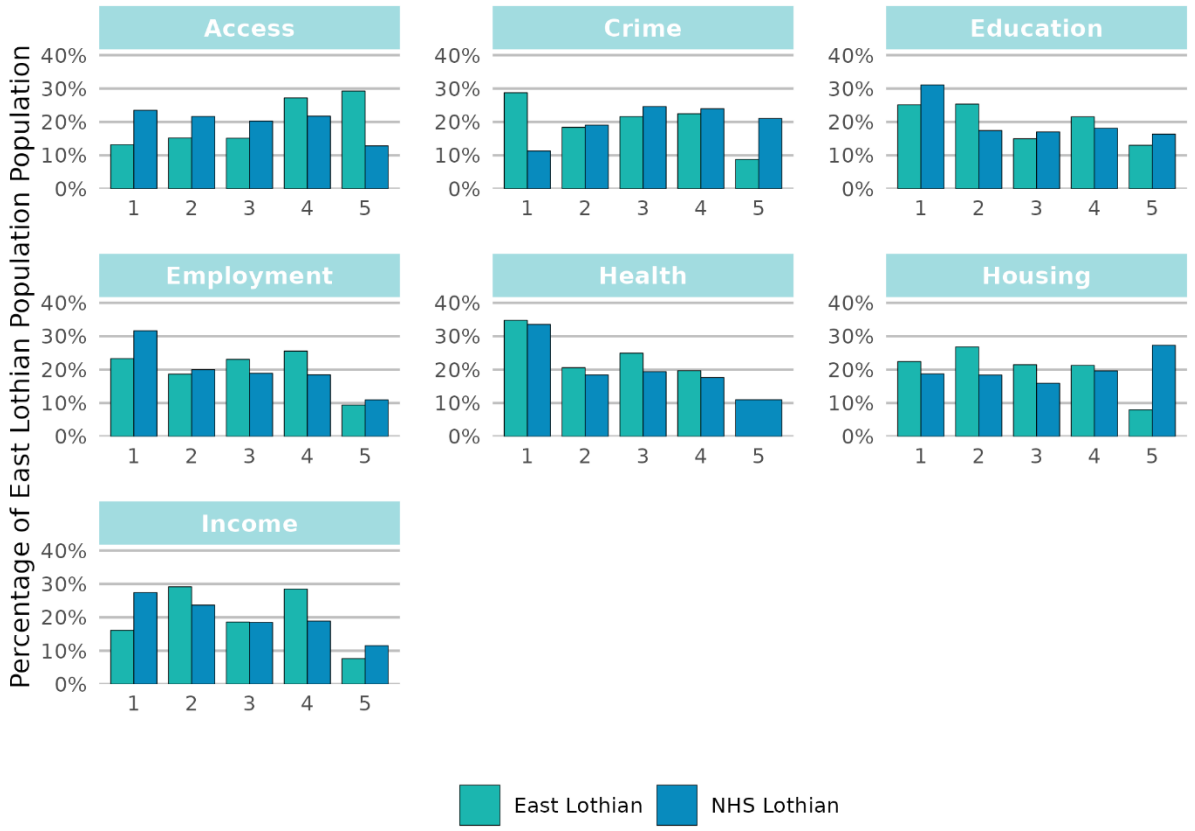
than East Lothian but has more than double the proportion of residents living in the 20% most deprived areas (SIMD 1).

Figure 4.15. Percentage of Lothian Population Estimates (2021) by SIMD Quintile (PHS, 2020; 2024b)



Looking at the 7 domains that make up SIMD (see Figure 4.16), East Lothian generally experiences less area-based income and employment deprivation than the NHS Lothian health board. In contrast, East Lothian has a higher population living in the 20% most deprived areas in terms of crime, health, and housing than the health board. The biggest disparity is seen in crime, where almost 30% of East Lothian residents are in quintile 1 compared to about 10% of residents across the health board. East Lothian experiences the most deprivation in relation to health, with most residents living in the bottom 40% most deprived areas for the health domain.

Figure 4.16. Percentage of East Lothian and NHS Lothian Population Estimates (2021) by SIMD Quintile Domain (1 = Most Deprived) (PHS, 2020; 2024b)



4.1.9.2 Triangulating with other Important Sources of Information

Though SIMD can be useful in giving us an indication on the level of deprivation in an area, it still has several limitations as outlined in sub-section 3.2 above and can thus be misleading when assessed in its own. That is why it is important to complement SIMD with other sources of information. To expand, despite East Lothian being relative affluent area when assessed by SIMD, individuals and families across the locality are increasingly facing hardship. The demand for public and third sector services aimed at those experiencing or at risk of poverty has risen significantly over the last several years, which appears to show a higher level of need than reflected by SIMD. For example, recent statistics from the Trussell Trust found that total number of food parcels delivered to East Lothian residents increased by 226% between 2018 and 2025, making the East Lothian Foodbank the 5th busiest foodbank in all of Scotland (Trussell Trust, 2025).

> *"We're certainly seeing a change in those that are coming through the door... As well as demand rising, I've seen the needs of people becoming more complex and the deprivation seems much more apparent."— Elaine, Director of the East Lothian Foodbank* (Trussell Trust, 2024)

The Ridge in Dunbar, a social enterprise that provides person-centred and holistic support for local people, saw the number of professional and self-referrals they received for support nearly double between 2022-23 and 2023-24 (The Ridge, 2024). Similarly, the Bridges Project, a Musselburgh-based charity supporting young people in East and Midlothian, saw a record 146 young people on their waiting list in 2023-2024 (Bridges Project, 2024).

There are some potential explanations for this apparent discrepancy between SIMD and service demand. As mentioned earlier, SIMD has not been updated since 2020 and thus does not reflect the impact of COVID-19, the cost-of-living crisis, and the continued impacts of Brexit on people's income and resources. Another reason is that the cost of living in East Lothian is generally higher than the Scottish average, which is the metric used to determine income-based deprivation as part of SIMD. Although there is no single collated cost of living metric we can draw upon, there are several factors that evidence higher costs for East Lothian residents, which causes income to not go as far as it may in other areas:

- East Lothian is one of the most expensive local authorities in Scotland to buy a home, with the median price *of residential property sales* in 2023-2024 being £283,227, the highest in Scotland (Registrars of Scotland, 2024).
- A significant proportion of East Lothian's housing stock is older, particularly in rural areas, where homes are more likely to be poorly insulated and

require costly upgrades reach modern energy efficiency standards (ELC, 2024a).

- Approximately 26% of East Lothian is classed as 'accessible rural', and rurality is associated with a higher cost of living. For example, research suggests that people living in rural areas pay more for bus fares and are more likely than those in the rest of Scotland to spend over £100 per month on fuel for their cars (Scottish Government, 2021b).

It is important to note that facing hardship in one or more of the 7 domains of SIMD, however, is not limited to those living in areas of high deprivation. Annual referral data provided by the East Lothian Foodbank shows that 7.5% of referrals across the county in 2023 came from the North Berwick Coastal Area despite this being the most affluent part of East Lothian (Community Participation & Campaigns Lead, 2024). Clusters of people facing hardship in affluent areas (traditionally referred to as 'pockets of poverty') often face a double burden due to the lack of resources and services to support people experiencing financial hardship. This can be seen from an excerpt of a conversation with a member of the Working for Change Collective (a community group in East Lothian aiming to ensure that voices of people who have experienced hardship are integral to decision-making by public and third sector organisations):

> *"When I lived in Gullane I did not have the access to services that I have [now living] in Prestonpans. While I had some amazing friends who really took care of me in the toughest of times, other than visiting the GP there was no real support available."* (Working for Change Collective, 2024)

The inaccessibility of support for such individuals and families is often further exacerbated by ongoing challenges with transport, rurality, mental health and

poverty-related stigma. More data is needed to better understand the unique needs of people facing hardship in more affluent areas of East Lothian.

The issues raised in this section highlight the importance of not solely relying on SIMD as a measure of deprivation. Therefore, this JSNA will draw on a variety of data sources to get a more complete picture of inequities in East Lothian.

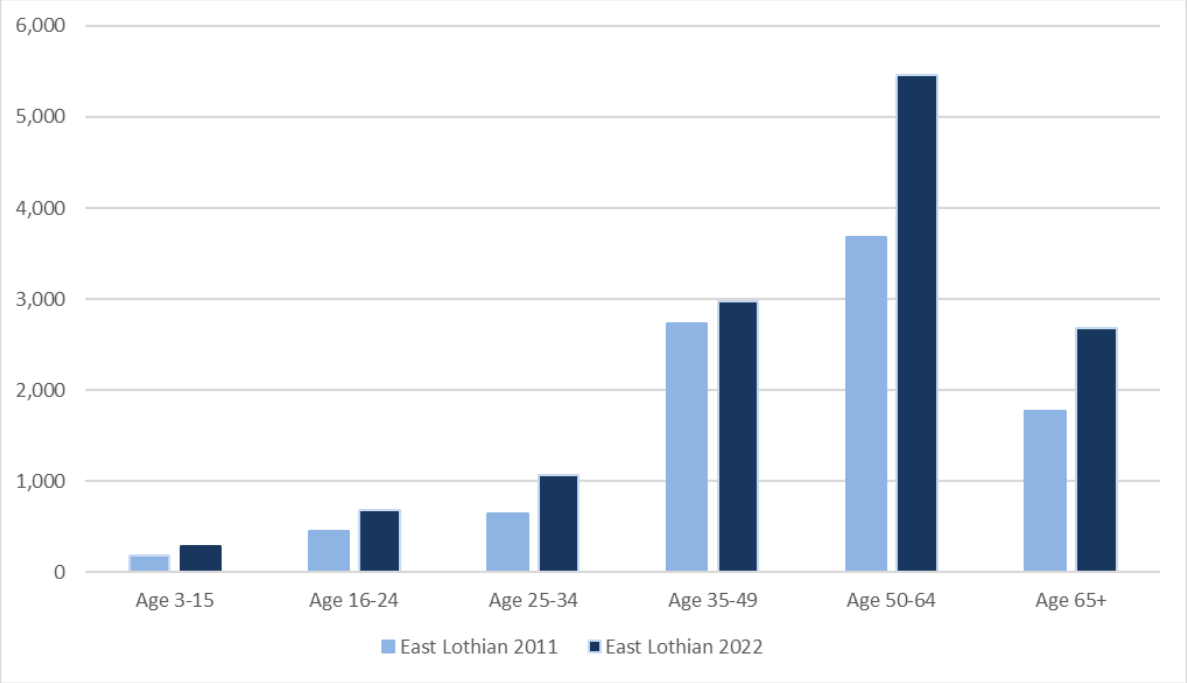
4.1.9.3 Unpaid Carers

The growing number of people providing unpaid care both locally and nationally reflects the increase in the older age groups and the percentage of the population with a limiting health condition or disability.

The 2022 census asked about unpaid care provided by individuals to family, friends, neighbours, or others in relation to support required because of long-term physical or mental ill health or disability or problems related to old age. At a Scottish level, 627,000 people identified that they were unpaid carers, an increase of 27.5% since the 2011 census (NRS, 2013; 2024e).

For East Lothian, the number of unpaid carers increased by 38.7% from 9,475 at the time of the 2011 census to 13,147 in the 2022 census (NRS, 2013; 2024e). As shown in Figure 4.17 The number of unpaid carers increased across all age groups, with the greatest increase in the 50-64 age group which is line with Scottish trends.

Figure 4.17. Number of people who reported that they provide unpaid care, by age, East Lothian 2011 / 2022 census comparison (NRS, 2013; 2024e)



The majority of unpaid carers (7,985) in East Lothian provided between 1 and 19 hours of care a week, while 2,864 provided 50 hours or more a week (NRS, 2024e).

Table 4.1. Number of hours spent caring

Number of hours spent caring	Number of carers
1-19	7,985
20-34	1,167
35-49	1,127
50+	2,864
TOTAL	13,147

5 The Building Blocks of Health

KEY MESSAGES:

- Improving health outcomes and reducing inequities requires a strategic focus on the foundational building blocks of health, including education, income and employment, transport, housing, social connection and the environment – all of which contribute to shaping people's lives and creating opportunities for wellbeing.
- Inequity extends beyond poverty (especially within context of SIMD). Instead, it encompasses disparities in access to opportunities, resources, and power due to various factors like ethnicity, gender, and socioeconomic status. Addressing these broader forms of inequity is vital because they can undermine social cohesion and perpetuate cycles of disadvantage.
- Inequitable access to the building blocks of health in East Lothian exacerbates health inequities by creating barriers for health and social care provision. These inequities are particularly prevalent for people experiencing poverty, people with disabilities, others facing mobility barriers, and people living in rural areas.

The conditions in which people are born, grow, live, work, and age, play a significant role in health outcomes and disparities (Marmot et al., 2010; Wilkinson and Pickett, 2009). These wider determinants include socioeconomic status, education, employment and housing - which create the structural and environmental contexts that shape health outcomes. The interplay of these factors can also exacerbate health inequities among vulnerable populations. For instance, homelessness may be accompanied by mental health issues, substance abuse, and chronic diseases. Those from lower socioeconomic backgrounds can

experience increased barriers to accessing healthcare, leading to disparities in preventive care, chronic disease management, and overall health outcomes. Similarly inadequate housing can contribute to respiratory illnesses, while limited access to nutritious food can lead to malnutrition and obesity. We have a responsibility to address these inequities. Therefore, it is essential to consider an inequities lens in the planning and delivery of services to meet the needs of those most in need.

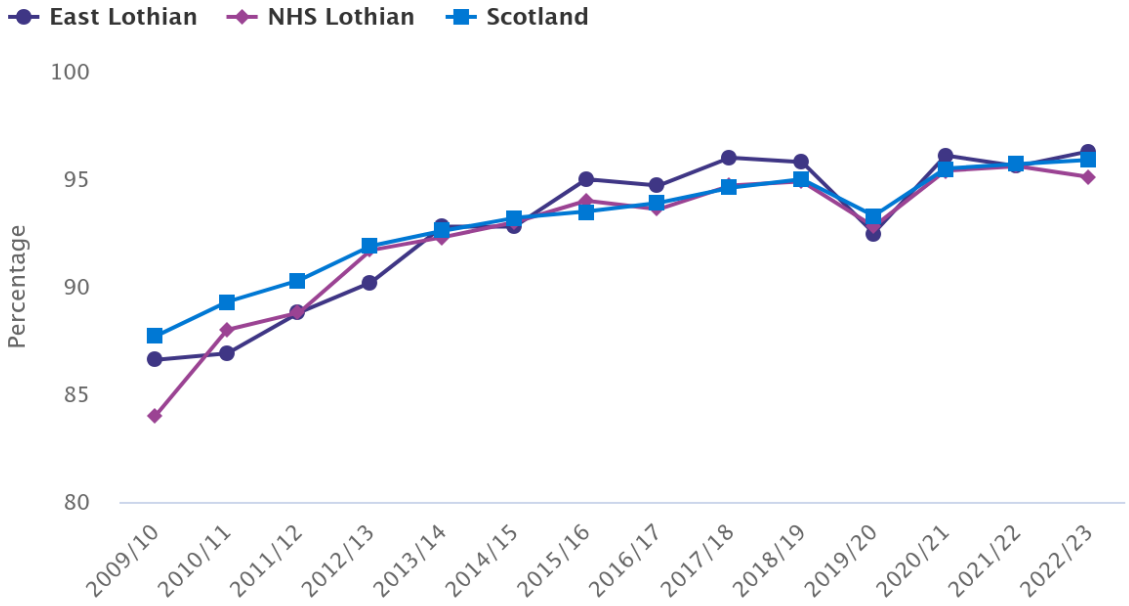
5.1 Education

Education is a key building block for health and well-being and can increase our chances of living a long and healthy life. It influences many aspects of our lives through multiple interconnected pathways such as employment opportunities and working conditions, health literacy and health-related behaviours, and our sense of control and level of social support (Leavey and Bunbury, 2021). Access to good education can therefore help lift the more disadvantaged groups out of poverty and reduce socioeconomic inequalities. The importance of education and schools to societies was perhaps most evident during the COVID-19 pandemic.

Data from the Scottish Public Health Observatory [ScotPHO] (2024a) allows us to assess how East Lothian compares in relation to Lothian and the national average on key education-related indicators. When looking at trends in school leavers who end up in positive destinations[4] at 9 month follow up (see Figure), East Lothian has witnessed an increase of about 10% from 2009/10 (86.6%) to 2022/23 (96.3%) (2024a). Similar trends are seen for Lothian and Scotland.

[4] Includes higher education, further education, employment, training, voluntary work or activity agreements

Figure 5.1. School leavers in positive destinations, 2009/10 to 2022/23 (ScotPHO, 2024a)

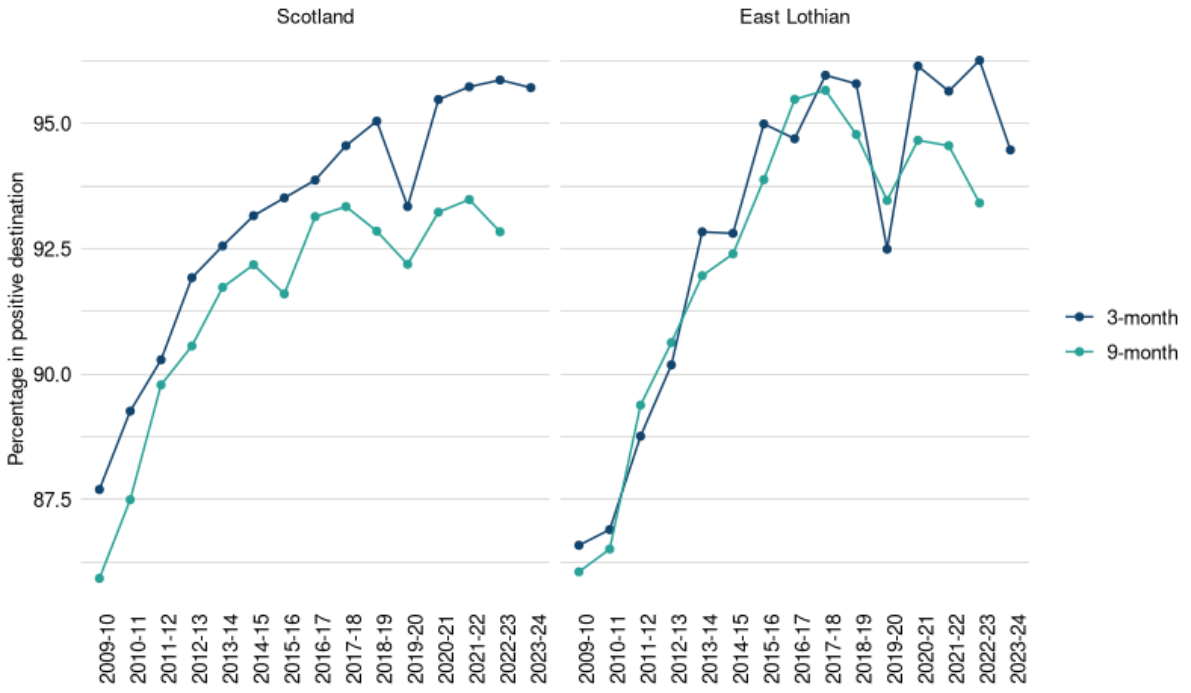


From the above data, East Lothian performs relatively well in young people leaving school to positive destinations. However, caution is warranted in interpreting this data because the definition of what constitutes positive destination is broad and not all young people sustain their path. For example, when reviewing the positive destinations of the Growing and Changing group[5], each young person left school with a 'positive destination' but about three months later all had quit college due to factors such as distance required to travel, additional costs associated with college and struggling with workload. Similarly, qualitative data received from East Lothian Works (a service to support the people of East Lothian into employment) highlights this discrepancy for some young people, who do not always end up in a positive destination despite initially categorised in this group (East Lothian Works, 2025).

[5] A community group in East Lothian which aims to ensure that voices of young people (16-18yrs) who have experienced hardship are integral to decision-making by public and third sector organisations. Operates in a similar way to Working for Change Collective described above.

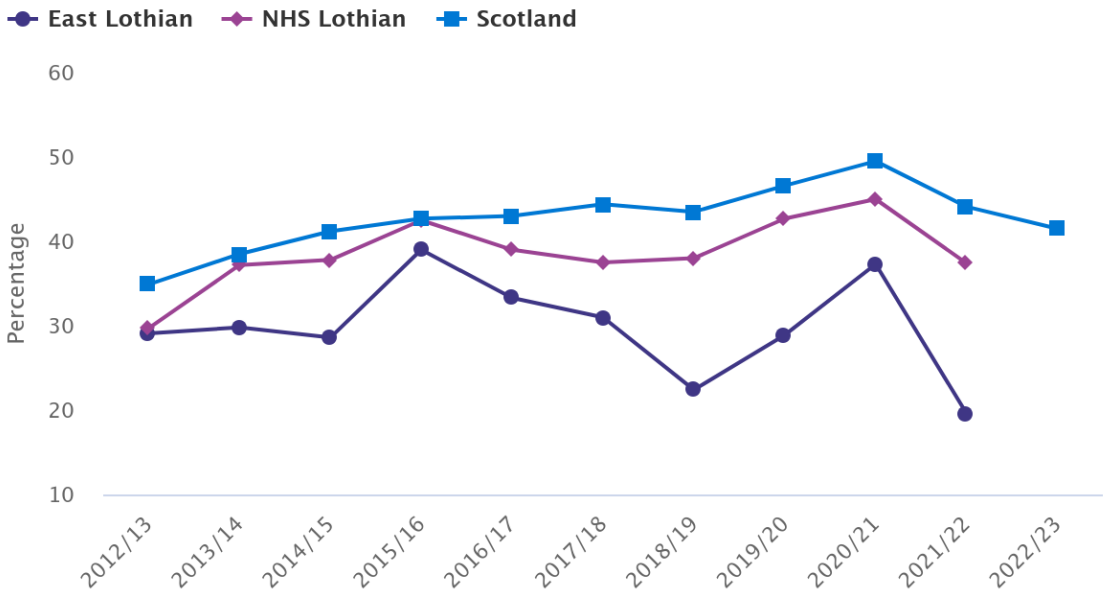
Furthermore, analysis of data on the proportion of school leavers in positive destinations at three versus nine months highlights that it may be increasingly difficult for young people to maintain a positive post-school destination, particularly post-pandemic. Whilst from 2010 onwards both three and nine month assessments were at similar levels, and both improving over time, a trends from 2021 onwards consistently show a smaller proportion in positive destinations at nine months compared to initial three month assessments. This mirrors patterns at Scotland level (see Figure 5.2)

Figure 5.2. Positive post-school destinations at 3- and 9-month follow up. East Lothian and Scotland 2009/10 – 2023/24 (Scottish Government, 2024b)



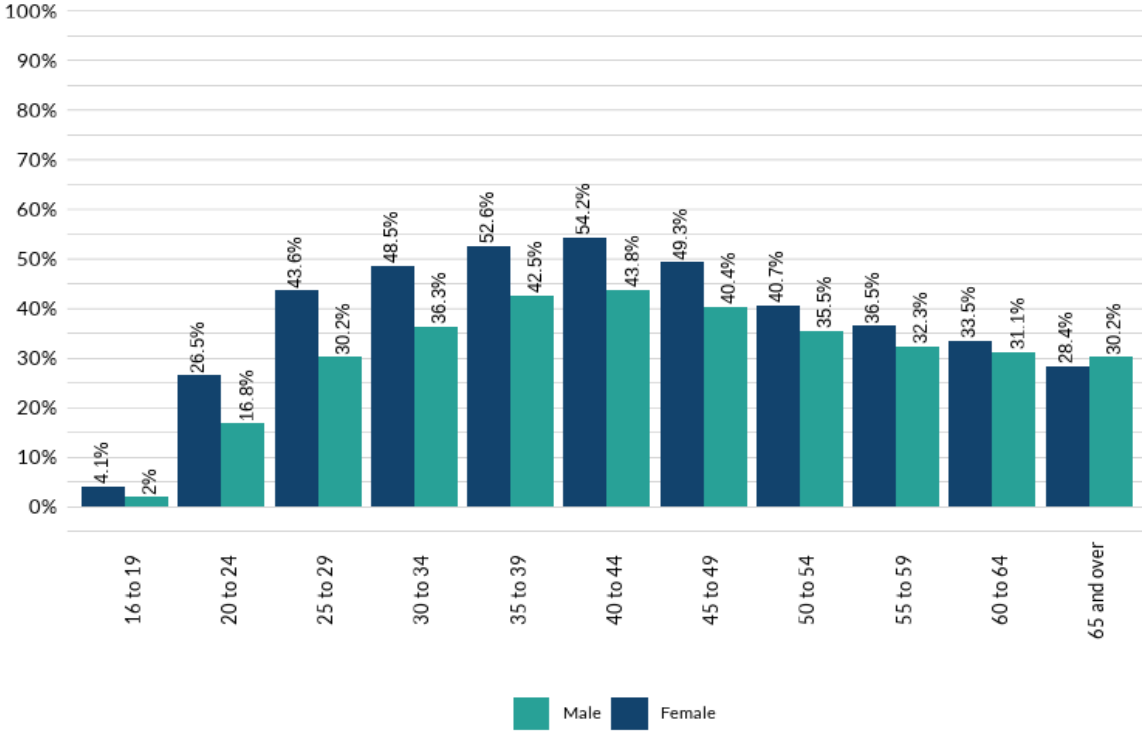
With respect to data for school leavers with 1 or more qualifications at SCQF level 4, there is little difference between East Lothian, NHS Lothian and Scotland. However, there is noticeable difference at SCQF level 6, with East Lothian consistently having a lower proportion in comparison (see Figure 5.3) (ScotPHO, 2024a).

Figure 5.3. School leavers with 1 or more qualification at SCQF Level 6, 2012/13 to 2022/23 (ScotPHO, 2024a)



Data from NHS Lothian Public Health Survey 2023 provides further information relating to education outcomes in East Lothian. As demonstrated in Figure 5.4, a higher proportion of females reported having a degree across almost all age groups, which is consistent with evidence elsewhere (NHS Lothian, 2024).

Figure 5.4. Percentage of people aged 16 years and over with degree level qualifications or above by sex and age, 2022, East Lothian (NHS Lothian, 2024)



When assessed at intermediate zone level, unsurprisingly, more deprived areas generally had a higher proportion of residents with no qualifications whilst the opposite was true for more affluent areas (NRS, 2024i). The latter also had a higher proportion of people with degree level qualifications or higher.

Table 5.1. Types of qualifications by intermediate zones, 2022, East Lothian (NRS, 2024i)

Highest level of qualification	No qualifications	Lower school qualifications	Upper school qualifications	Apprenticeship qualifications	Further Education and sub-degree Higher Education qualifications incl. HNC/HNDs	Degree level qualifications or above
East Lothian	**14.53%**	**19.78%**	**11.36%**	**8.12%**	**11.60%**	**34.62%**
Wallyford/Whitecraig	16.3%	20.2%	15.0%	8.8%	13.1%	26.5%
Musselburgh South	15.0%	19.9%	11.8%	9.1%	12.1%	32.1%
Musselburgh West	13.9%	18.3%	11.9%	10.6%	12.8%	32.6%
Musselburgh North	15.3%	17.6%	10.7%	6.2%	12.4%	37.9%
Musselburgh East	18.2%	24.0%	10.8%	7.4%	11.3%	28.4%
Pinkie Braes	16.2%	28.5%	10.0%	9.6%	11.7%	23.8%
Prestonpans West	20.8%	25.2%	9.8%	10.1%	12.3%	21.8%
Prestonpans East	21.2%	25.7%	10.4%	10.5%	11.2%	21.1%
Cockenzie	16.2%	21.4%	13.3%	10.2%	12.6%	26.2%
Tranent North	17.2%	23.9%	11.7%	10.9%	11.9%	24.4%
Tranent South	14.4%	25.2%	13.2%	10.8%	13.2%	23.1%
Ormiston	16.9%	22.7%	10.2%	10.2%	12.8%	27.1%
Longniddry and Aberlady	13.6%	18.8%	10.4%	8.4%	10.9%	37.8%
Haddington Rural	8.6%	13.5%	10.6%	5.7%	11.6%	49.9%
Haddington North	13.0%	17.8%	10.9%	8.5%	11.9%	37.9%
Haddington South	18.3%	20.0%	11.0%	7.5%	11.6%	31.6%
Gullane and Drem	10.5%	14.4%	10.4%	5.2%	8.3%	51.2%
North Berwick North	10.7%	12.6%	9.6%	4.0%	8.1%	55.2%
North Berwick South	9.2%	14.7%	11.3%	5.6%	9.4%	49.8%
East Linton and Rural	8.7%	14.1%	11.3%	5.3%	11.3%	49.2%
Dunbar West	13.9%	20.8%	10.6%	7.0%	11.8%	36.0%
Dunbar East	14.2%	19.0%	11.3%	7.4%	10.7%	37.3%

5.2 Income and Employment

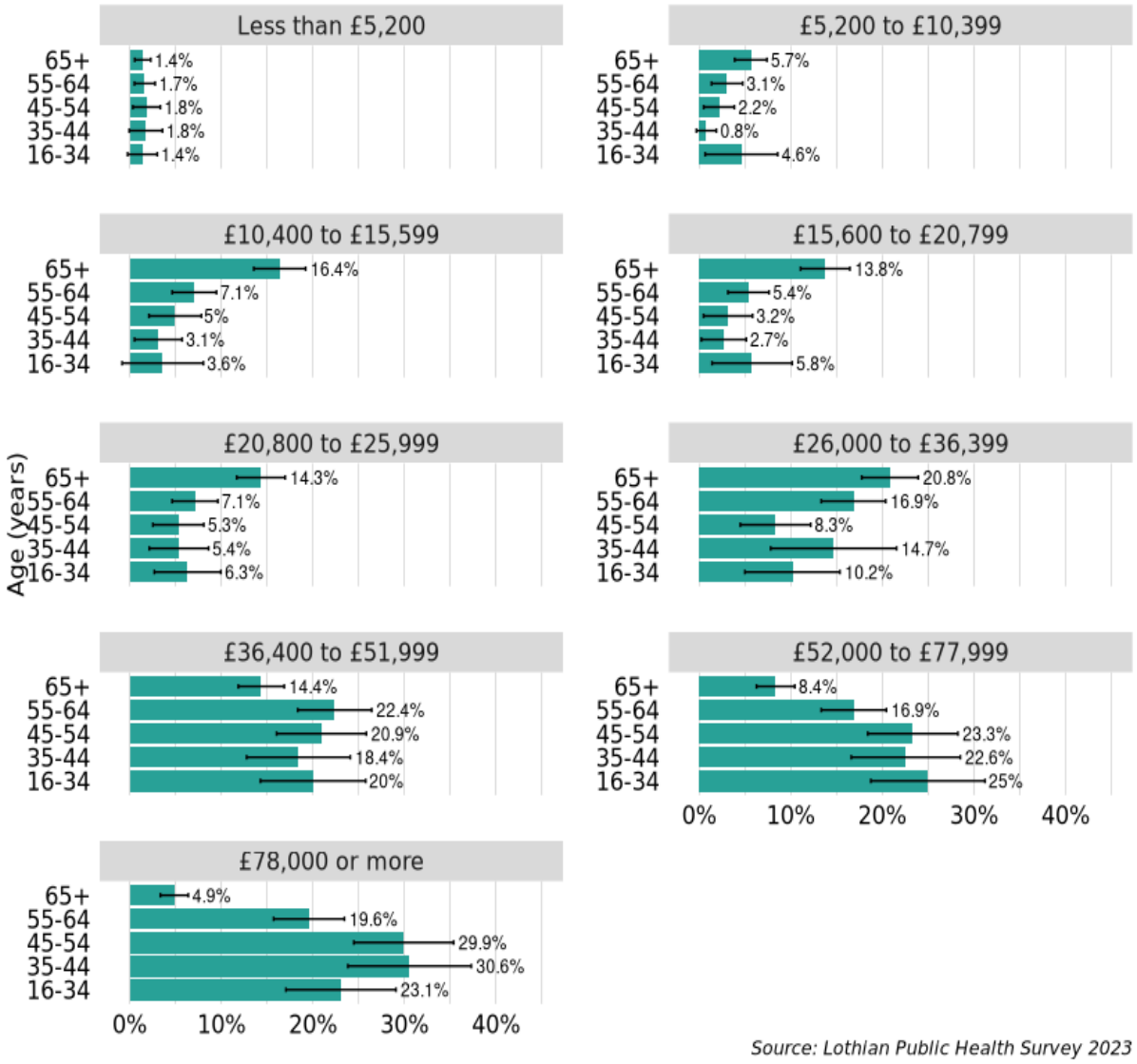
Income and employment are key social determinants of population health and inequities in health. Good employment can lead to an improvement in health and reduce the risk of premature mortality. Evidence has shown that gaining a job from unemployment is associated with an improvement in mental health, whilst the opposite is true for those moving into unemployment (Kromydas et al., 2021).

However, it is important to emphasise that not all forms of employment lead to positive outcomes. Work that poses higher physical or mental harm to workers, is insecure (e.g. short term or zero-hour contracts) or is poorly paid, and thus does not lift people out of poverty, can have many negative effects including being damaging to health (Katikireddi et al., 2018).

Researchers at Loughborough University calculated the minimum annual income for a person to live well, named the Minimum Income Standard (MIS). The 2024 calculations for a single person are £28,000 and increases to £69,400 for a couple with two children (Davis et al., 2024).

Data from the NHS Lothian Public Health Survey 2023 provides some detail on household income. As illustrated in Figure 5.5, the majority who earned £52,000 and over tended to be under 65 years, whilst most who earned below £36,400 were over 65 years (NHS Lothian, 2024). We therefore need to consider the impact that low income amongst this group, especially since we have a growing ageing population in East Lothian.

Figure 5.5. Age-group respondents in each self-reported income band, 2022, East Lothian (NHS Lothian, 2024)

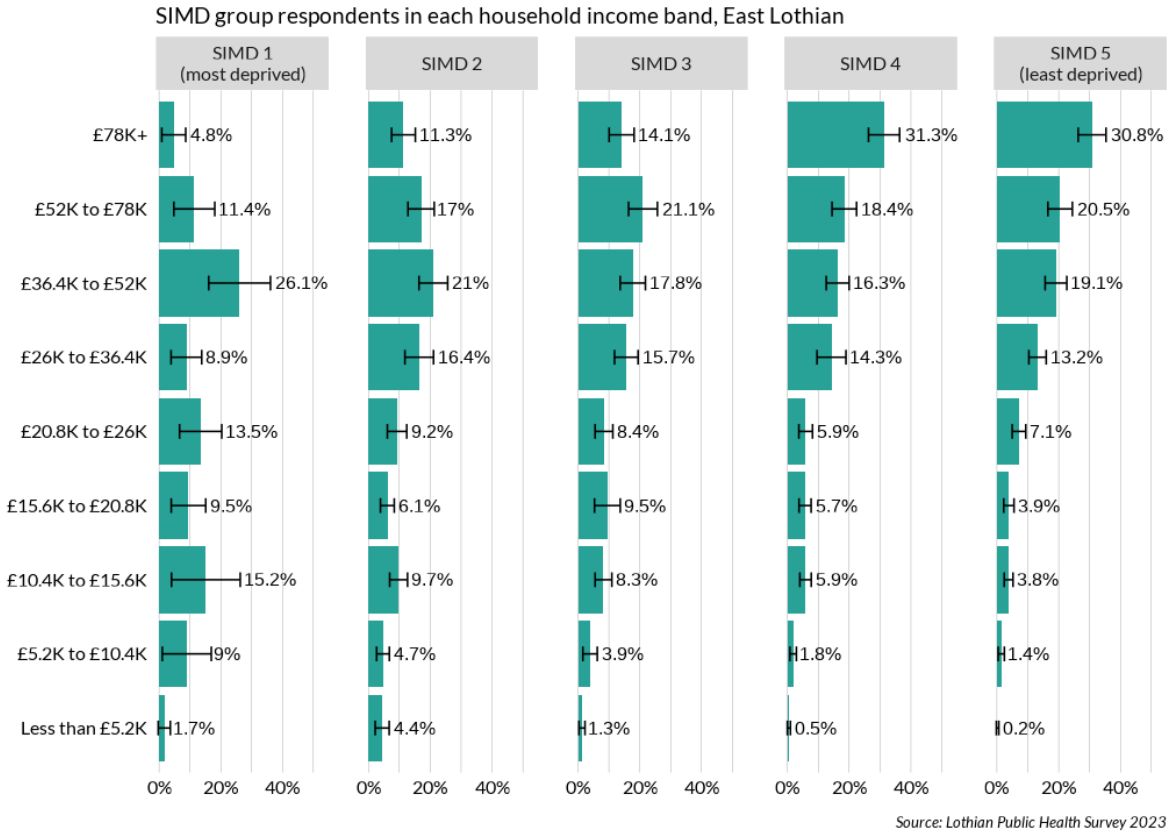


Source: Lothian Public Health Survey 2023

The survey also looked at the average household income in each SIMD quintile. Unsurprisingly, the data shows that the almost one third of those living in the least deprived areas (quintiles 4 and 5) have average household income over £78,000 whilst the more deprived areas had more people in lower income bands (NHS Lothian, 2024). The fact that you still have respondents in SIMD quintiles 1 and 2 earning over £78,000 whilst the more affluent areas also had people with low incomes highlights an important point made earlier in section 3.2 – in that

not everyone living in deprived areas is deprived and not all people living in affluent areas are affluent.

Figure 5.6. SIMD group respondents in each household income band, 2022, East Lothian (NHS Lothian, 2024)



Though income is a useful indicator, it does not provide a complete picture of poverty and deprivation on its own and it is therefore important to draw on a range of indicators to for a fuller understanding. For example, as demonstrated in Figure 5.7, data from Social Security Scotland (2024)on the proportion of Scottish Child Benefit applications by SIMD quintile shows that people in SIMD 2 (43%) and 3 (19%) accounted for the biggest uptake and are thus at risk of falling into poverty and may require additional support. This data is further broken down by intermediate zone and area partnerships (see Figure 5.8).

Figure 5.7. Scottish Child Benefit uptake by SIMD Quintile, 2024, East Lothian, (NRS, 2023; Social Security Scotland, 2024)

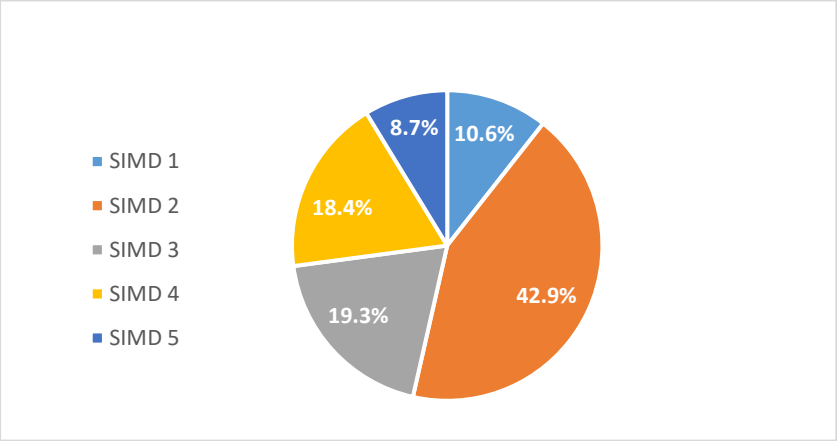
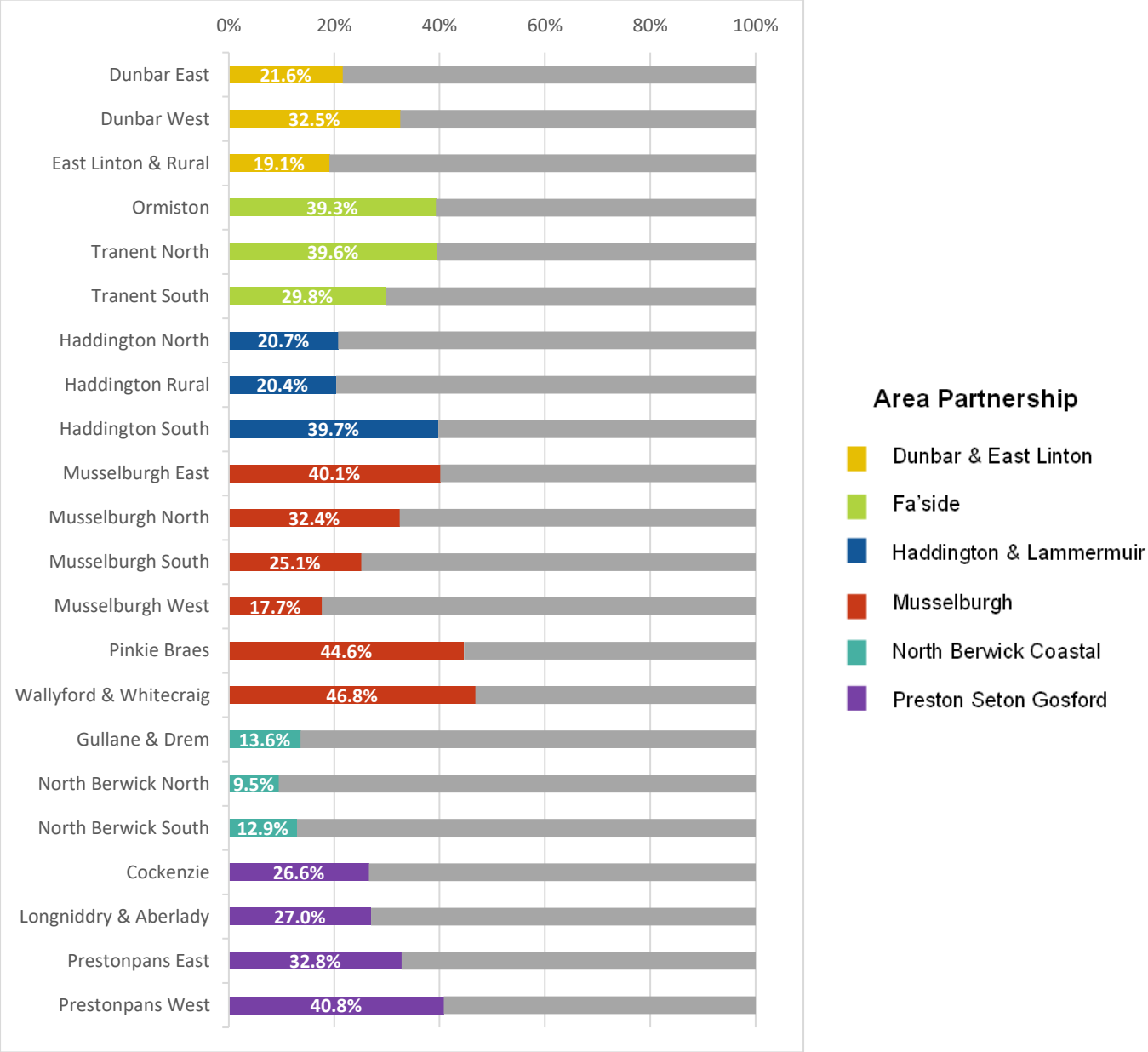
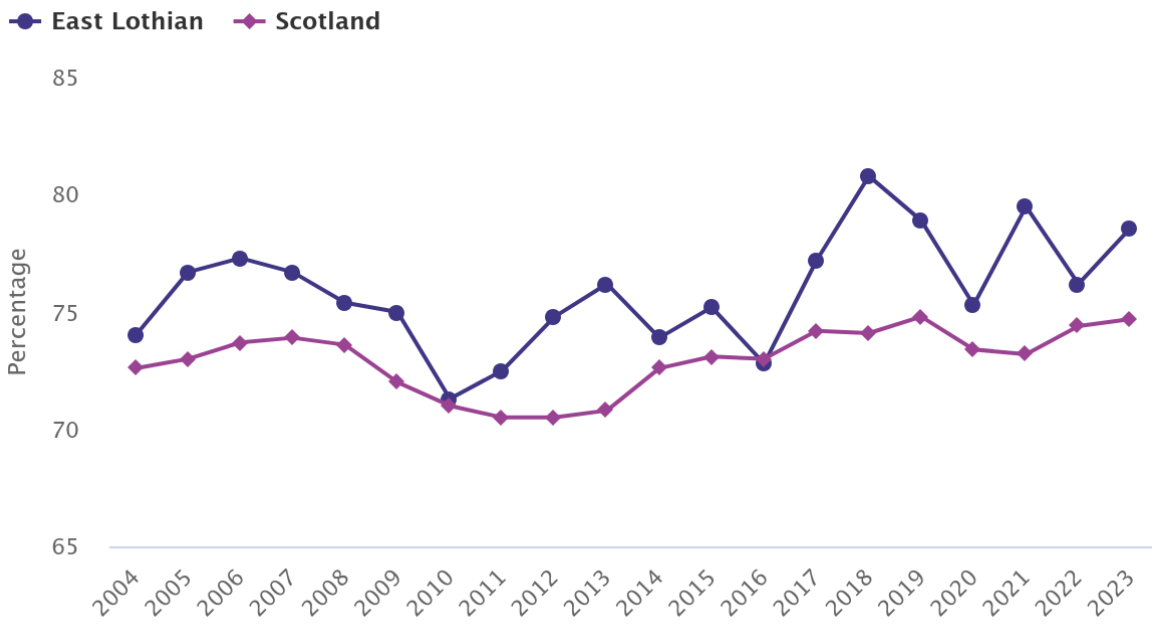


Figure 5.8. Scottish Child Benefit uptake by intermediate zone and area partnership, 2024, East Lothian (NRS, 2023; Social Security Scotland, 2024)



East Lothian generally performs better than the Scottish average when looking at trends in employment rates (see Figure 5.9).

Figure 5.9. Employment rate for 16-64 year olds (ScotPHO, 2024a)

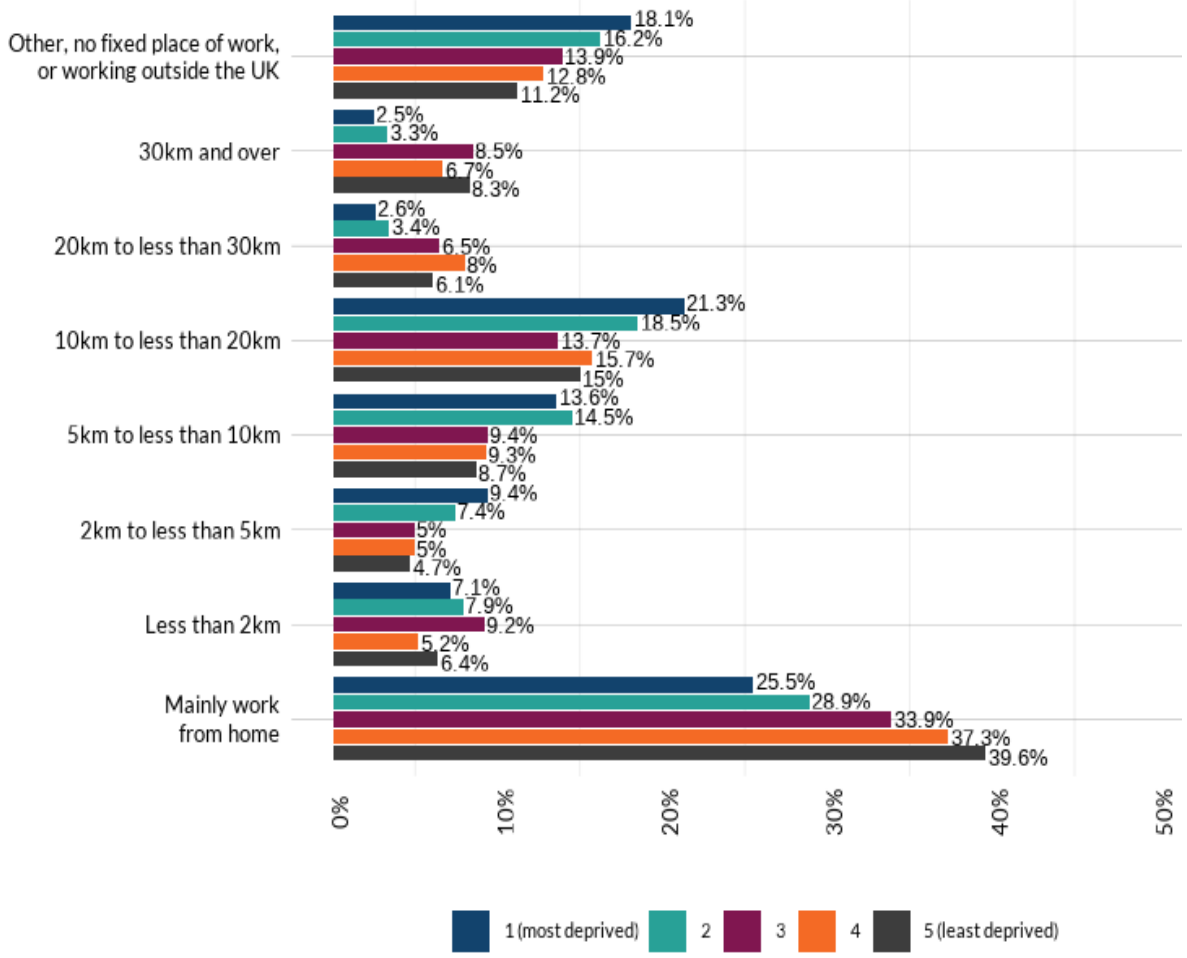


Yet the locality tends to have a significantly lower job density[6] compared to the national average, which is consistent with evidence that a significant proportion of the working age population tend to travel out with the area for work (Office for National Statistics, 2023). This is partly reflected in Figure 5.10 when looking at proportion of residents who have no fixed place of work/working outside of UK and those who travel long distances to work. Interestingly, there is a socioeconomic gradient in relation to working from home, with the likelihood decreasing with increasing levels of deprivation. One possible explanation is that people living in more deprived are likely to work in manual labour, skilled trades

[6] Job density is calculated on the number of jobs per working age population. For example, job density of 1 means there is one job for every person of working age in the population.

and hospitality jobs that require them to be physically in the workplace and they are also less likely to have autonomy in their roles.

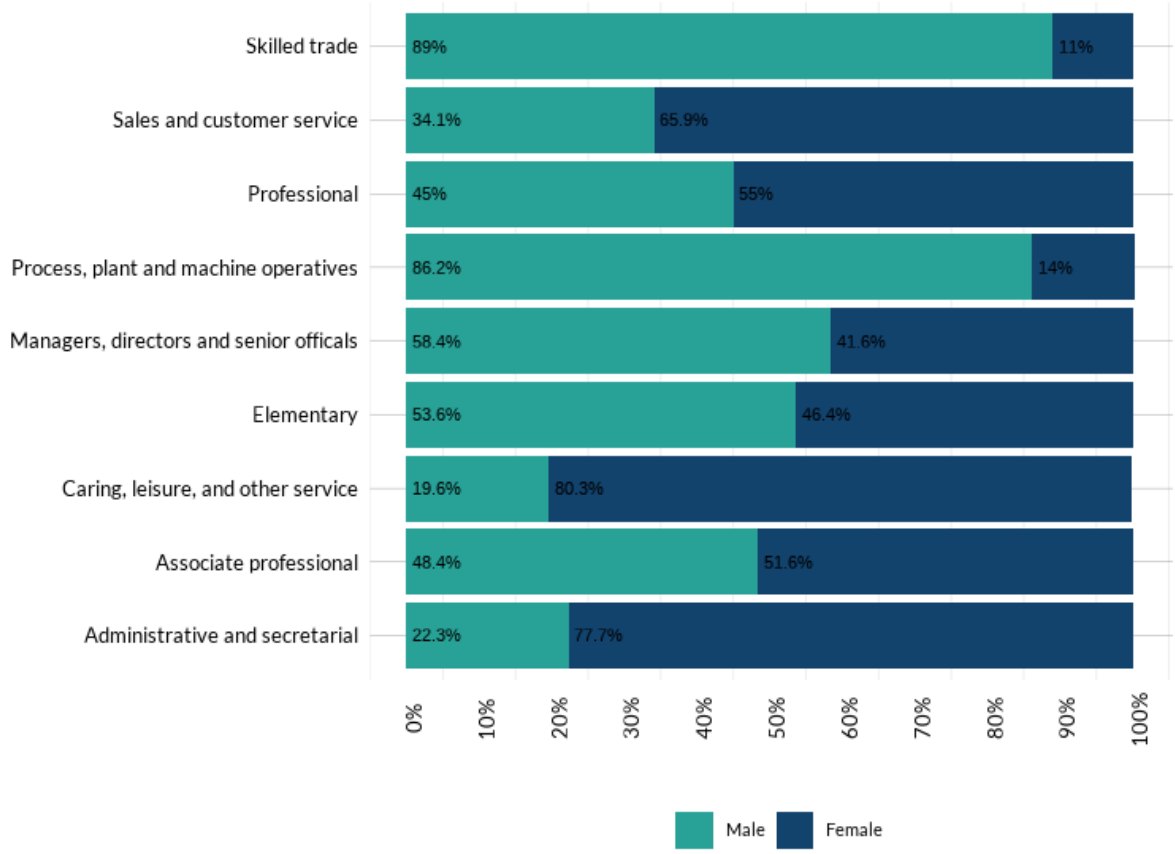
Figure 5.10. Distance travelled to work by SIMD quintile, East Lothian (NRS, 2024i)



Approximately 1,500 people aged 16 and over were unemployed (people actively looking for work) in the year ending December 2023 in East Lothian (NRS, 2024i). This equates to an unemployment rate of 2.6% which decreased slightly compared to 2022 (2.7%) and remains lower than the Scottish average 3.5%. With respect to economic inactivity (people who are neither employed nor actively seeking work), there was a decrease from 22.7% (14,700) in 2022 to 17.6% (11,600) in 2023 in East Lothian, which is lower than the Scotland rate of 22.5% (2024i).

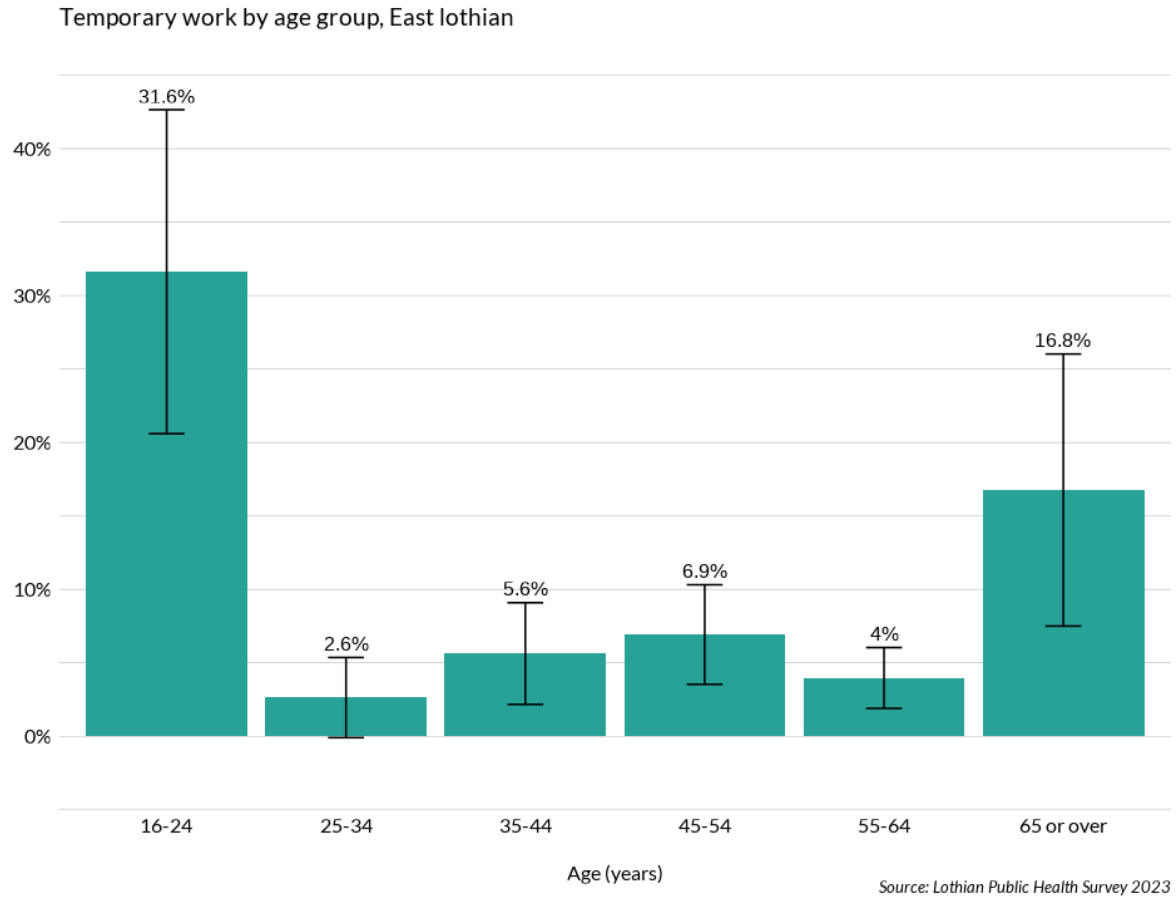
When assessing the type of employment that East Lothian residents have, we can see in Figure 5.11 that there is an apparent gender divide by particular sectors. That is, skilled trade and machine operative roles were mostly performed by males whilst caring & leisure services and administration & secretarial roles were typically undertaken by females. This gender divide is common and often jobs within the care sector are lower paid than other industries.

Figure 5.11. Occupation category of East Lothian residents (SOC 2020) by sex in 2022 (NRS, 2024i)



The NHS Lothian Public Health Survey 2023 also provides data on job security. As demonstrated in Figure 5.12, young people (aged 16-24) made up the highest proportion of East Lothian residents in temporary employment (NHS Lothian, 2024).

Figure 5.12. Temporary work by age group, 2022, East Lothian (NHS Lothian, 2024)



Though it is acknowledged that these temporary employment statistics also include young people who undertake part-time/weekend employment whilst in full time education, there is still a proportion who are not in full time education and thus can be negatively impacted by job insecurity. This is supported by recent evidence by Martin et al. (2024) which found that 2 in 3 of zero-hour contracts were provided to young people aged 16-24 (including those not in full time education). While zero-hour contracts are often deemed as a flexible way of working, the research indicated that 3 in 4 people that had a zero-hour contract were “severely job insecure”. These contracts for all ages were found to be more prevalent in women and black and ethnic minorities, highlighting that job insecurity is much more prevalent in populations who already face multiple inequities (Martin et al., 2024).

5.3 Transport, Rurality and Access Deprivation

Transport poverty, which is when individuals lack access to affordable, reliable, accessible, and safe transport, can significantly hinder people's ability to meet daily needs and participate fully in social and economic life (PHS, 2024c). In East Lothian, this form of deprivation is an ongoing concern, particularly for those living in poverty or on its margins, people in rural area, women and people with disabilities. Limited transport options can restrict access to healthcare, employment, education, and essential services, contributing to social isolation, poorer health outcomes, and increased pressure on health and social care systems (Mindell and Watkins, 2024; PHS, 2024c).

Car dependency in East Lothian remains high, with nearly half (49%) of residents driving as their main mode of travel and 83% of households having access to at least one car, which is higher than across Scotland (75%) (Stantec, 2024). This reliance is particularly pronounced in rural areas, where public transport options are limited. As illustrated in Table 5.2, over 90% of households in intermediate zones such as Haddington Rural, East Linton and Rural, and Gullane and Drem own a car or van, suggesting that car/van ownership is often a necessity rather than a choice (NRS, 2024i).

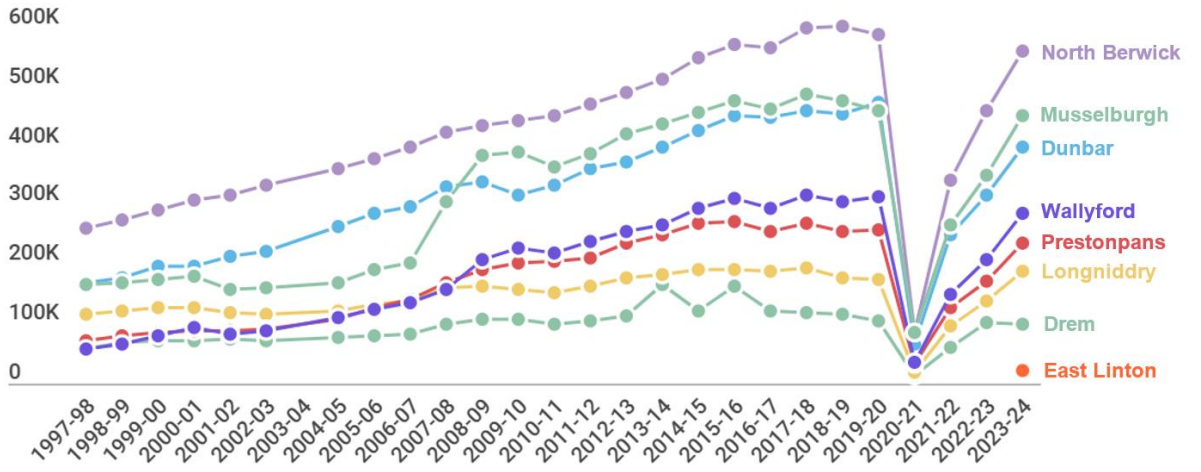
Table 5.2. Car ownership by intermediate zone in East Lothian (NRS, 2024i)

Number of cars or vans (by Intermediate Zones 2011)	No Cars or Vans	One car or van	Two cars or vans	Three cars or vans	Four or more cars or vans
Wallyford/Whitecraig	19.2%	46.5%	26.9%	6.0%	1.6%
Musselburgh South	23.4%	50.1%	21.5%	3.6%	1.3%
Musselburgh West	20.4%	46.5%	25.8%	6.3%	1.3%
Musselburgh North	39.5%	46.6%	12.1%	1.4%	0.4%
Musselburgh East	30.7%	46.9%	18.7%	3.1%	0.8%
Pinkie Braes	26.9%	45.8%	21.7%	4.2%	1.3%
Prestonpans West	25.5%	45.0%	23.4%	4.4%	1.6%
Prestonpans East	22.2%	46.3%	24.0%	4.8%	2.7%
Cockenzie	16.2%	46.6%	27.8%	7.0%	2.3%
Tranent North	20.7%	43.1%	27.9%	6.4%	2.0%
Tranent South	18.3%	42.7%	29.1%	7.5%	2.4%
Ormiston	15.4%	42.6%	31.3%	7.6%	3.2%
Longniddry and Aberlady	12.3%	43.5%	33.8%	7.3%	3.0%
Haddington Rural	5.9%	37.2%	44.1%	8.5%	4.3%
Haddington North	13.4%	46.5%	31.6%	6.9%	1.7%
Haddington South	26.4%	48.2%	19.6%	4.5%	1.2%
Gullane and Drem	9.1%	43.5%	36.5%	7.7%	3.2%
North Berwick North	21.4%	47.6%	24.7%	5.2%	1.0%
North Berwick South	13.2%	45.7%	32.4%	6.9%	1.7%
East Linton and Rural	7.2%	42.5%	37.9%	9.3%	3.1%
Dunbar West	17.3%	47.3%	28.4%	5.6%	1.3%
Dunbar East	20.5%	48.4%	24.5%	5.0%	1.7%

Public transport plays a vital role in mitigating transport poverty and positively contributes to climate change mitigation efforts, yet its availability and usage varies across the county. Although 82% of East Lothian residents reported being satisfied or very satisfied with public transport (Stantec, 2024), travel to work via public transport decreased from 18.7% in 2011 to 15.9% in 2022, excluding those who reported working mainly at home (NRS, 2024i). Furthermore, when asked about bus usages in the 2022 Scottish Household Survey, 57% of people in East Lothian reported they had not used the bus at all in the past month (Stantec, 2024).

Rail usage has generally increased since 1997 due to the rising population, new rail facilities and better services, however, data from the East Lothian Community Railway Partnership (2025) (see Figure 5.13) shows that usage remains uneven, with stations, such as Drem, Longniddry and Prestonpans seeing consistently lower levels of usage.

Figure 5.13. Rail Passenger Usage for East Lothian, 1997-2024 (East Lothian CRP, 2025)



There was a significant drop in usage in 2020-21 due to the COVID-19 pandemic, and usage has yet to return to pre-pandemic levels—potentially due to ongoing remote work, business closures, and lingering concerns about public transport safety. Furthermore, 57% of residents do not feel that train fares are a good value, highlighting affordability as a barrier to train usage (Stantec, 2024).

In areas with limited or inconvenient public transport, reliance on private vehicles deepens health and social inequities for those who cannot drive due to financial constraints, ill-health, disability, or age-related factors. For these individuals, transport poverty can restrict access to healthcare, employment, education, and social participation, all of which are critical to health and wellbeing. Despite the significance of these issues, there is limited local research into transport accessibility in East Lothian, particularly regarding the quality and coverage of public transport and active travel networks in both rural and accessible rural areas. Broader research into rural poverty highlights the compounded disadvantage faced by those living in poverty or those on the edges of poverty in areas with poor transport links (Lucas et al., 2019; Scottish Government, 2021b). A key criticism is that national poverty indicators often fail to capture the unique challenges of rural poverty, including higher living costs and reduced access to

services, factors that are especially relevant in East Lothian's more remote communities.

Efforts to improve access to public transport include initiatives like free bus travel for under-22s, which has enabled over 4.7 million journeys since its introduction in January 2022. As of April 2025, 17,533 young people in East Lothian have been issued National Entitlement Card, supporting access to education, employment, health and social care services and leisure opportunities. Additionally, there has been a 29% increase in concessionary travel passes issued to older and disabled residents over the past decade (Stantec, 2024). However, transport must be more than available—it must also be efficient, comfortable, and aligned with people's daily routines. A local NHS staff member's experience illustrates this gap:

> *"I live in Port Seton and work 8.30am to 4.30pm in Haddington alongside caring responsibilities at home. To arrive on at work on time I would leave the house at 7am to get a bus to Musselburgh to then get off and get another bus to Haddington, this journey takes 1 hour and 17 minutes whereas if I take the car, I can get to Haddington in 12 minutes."- NHS Lothian Population Health Project Manager (2024)*

The active travel landscape is also mixed. Between 2014 and 2022, there was a 44% increase in the number of people who reported walking as their main mode of travel (from 25% to 36%), and 69% of journeys less than 2 miles in 2022 were mace on foot (Stantec, 2024). Walking also remains the most common way children get to school in 2022, with notable increases in cycling (+100%) and decreases in driving (-44%) (2024). Based on Scottish Census data, the percentage of adults that commute to work by bicycle or on foot has stayed consistent at 10% since 2011 (NRS, 2024i). There is low uptake in cycling as a primary means of transportation—0% in 2022, which may be in part due to long

commuting distances, safety concerns, lack of cycling infrastructure, health conditions, cost of bicycles and their maintenance, and car-centric norms (Stantec, 2024; Transport Scotland, 2023). East Lothian Council is currently updating its Local Transport Strategy 2018-2024, including a review of the Active Travel Improvement Plan.

Transport poverty in East Lothian is not just a mobility issue; it is a public health and service delivery challenge. Addressing it requires integrated, place-based solutions that align transport planning with health and social care priorities, ensuring all residents can access the services and opportunities they need to live healthy, connected lives.

5.4 Housing

East Lothian Council's Local Housing Strategy [LHS] 2024-20 and East Lothian HSCP's Housing Contribution Statement 2024-29 (ELC, 2024a; 2024b) provide an excellent and comprehensive outline on the key issues relating to housing in the areas so will not be repeated in this JSNA. Readers are thus encouraged to access these documents for further details. Instead, this section will briefly highlight the public health significance of housing as well as the challenges and priority outcomes to address housing issues in East Lothian.

Housing has an important influence on health and wellbeing through several routes. For instance, house condition, security of tenure, homelessness, suitability to a person's needs and overcrowding can directly determine physical and mental health whilst wider housing aspects such as affordability, fuel poverty, access to communities, social isolation, location and choice can all have indirect impacts on health and wellbeing (ScotPHO, 2024b) Housing is therefore a key driving force of poverty and inequality across people's lifetime. That is,

people living in poverty are more likely to live in poor quality and insecure housing which in turn can increase risk of acute injury, developing respiratory conditions, poor mental health and hospitalisation due to factors like damp and mould, unsafe electrics and overcrowding (Faculty of Public Health, 2024; Mallorie, 2024). A well-functioning housing system in East Lothian is therefore vital to ensuring that communities flourish, including children and young people having the best start in life and those most vulnerable being supported in accordance with their needs.

A summary of the key challenges which interact with the housing system and impact health and wellbeing outcomes are outlined below[7]

- East Lothian has a complex geography, with most areas categorised as 'accessible rural'. Rurality can pose distinctive challenges for delivering services.
- East Lothian has the second fastest growing population in Scotland which adds to housing pressures and consequently impacts on waiting times for health and social care services. Furthermore, capital funding of services has not increased to match population growth, placing further pressure on meeting service demand.
- East Lothian has an ageing population, with the over 75 age-group projected to have the largest population increase (93.4% by 2043). This is creating a high demand for specialist services, including aids and adaptations.

[7] Adapted from East Lothian HSCP's Housing Contribution Statement 2024-29 and East Lothian Council's Local Housing Strategy 2024-29 (ELC 2024a; 2024b).

- The working age population is not growing at the same pace as the older population, leaving a gap in the workforce needed to deliver essential care packages to support the ageing population.
- Single person households are expected to have the largest percentage increase of all household types by 2028 which is likely to increase levels of loneliness and social isolation. This is also increasing demand for smaller properties, which are in relatively short supply across the county.
- It is estimated that fuel poverty effects at least 25% of the population (likely to be an underestimation as this is based on 2019 data). Fuel poverty increases risk of respiratory conditions through damp as well as increased levels of stress and anxiety.
- The area has a highly pressurised housing market, including high house prices, high private rents and demand for affordable housing.
- Significant homelessness pressures and increased time spent in temporary accommodation.

The vision as set out in the LHS is that by 2029 – "people in East Lothian will have access to warm, high quality, affordable homes which meet their needs and enables them to live in communities with the support and services they require". As shown in Figure 5.14, five priority outcomes to achieve this vision are outlined in the strategy.

Figure 5.14. East Lothian Council Local Housing Strategy Priority Outcomes (ELC, 2024a)

The LHS outlines a wealth of actions to be taken across the Council and in partnership with the HSCP to support the above outcomes, many of which directly contribute to improving the health and wellbeing of East Lothian's population.

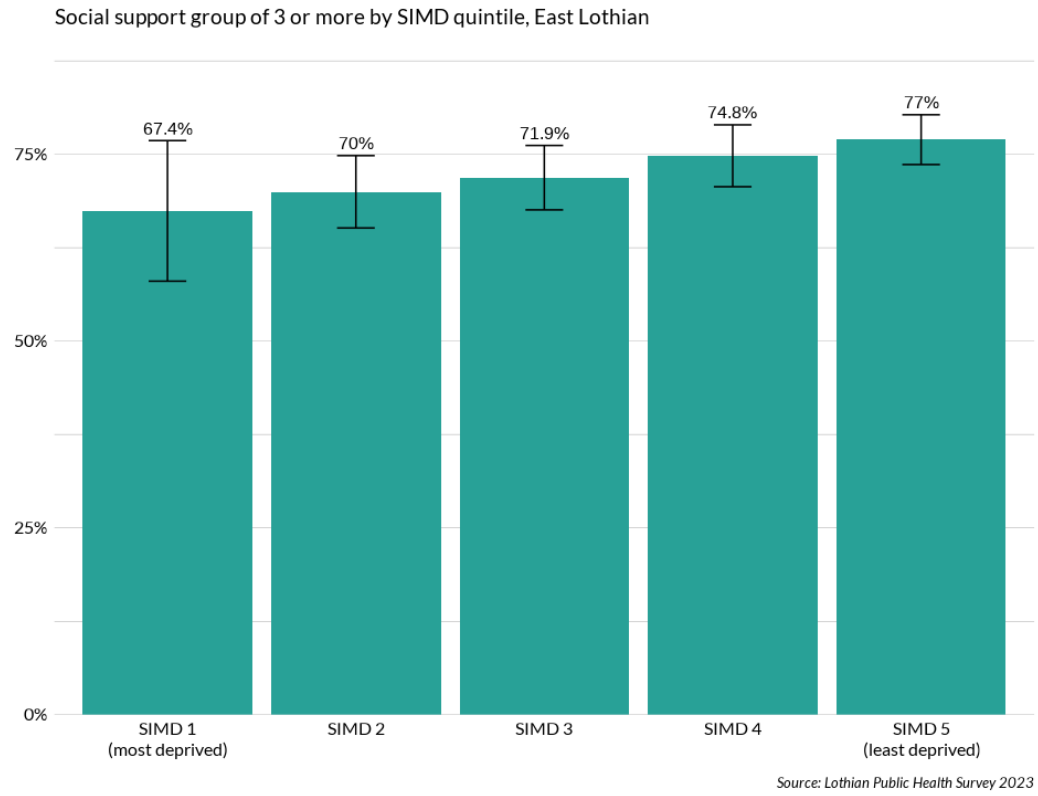
5.5 Social and Community Connections

Throughout all stages of life, we need social connection to thrive emotionally, physically, spiritually, and intellectually, meaning that the consequences of disconnection can be severe (Brown, 2010). Social isolation occurs when individuals lack contact with other people and disengage from social activity, whilst loneliness denotes feeling of disconnection or emotional distance from others that stems from their social needs not being met. These phenomena can occur separately or be experienced together, and they can have serious consequences for mental and physical health, quality of life, longevity, and mortality, with the effects comparable to those caused by other well-established risk factors, such as smoking and obesity (WHO, n.d.).

The NHS Lothian Public Health Survey (2023) found that 27.2% of East Lothian respondents reported having 2 or fewer people to turn to in a crisis (NHS Lothian, 2024). As shown in Figure 5.15, the percentage of adults with at least 3 people in their support network increased as area-based deprivation decreased, with those in the least deprived areas (SIMD 5) being 9.6% more likely to have such support compared to those in the most deprived areas (SIMD 1).

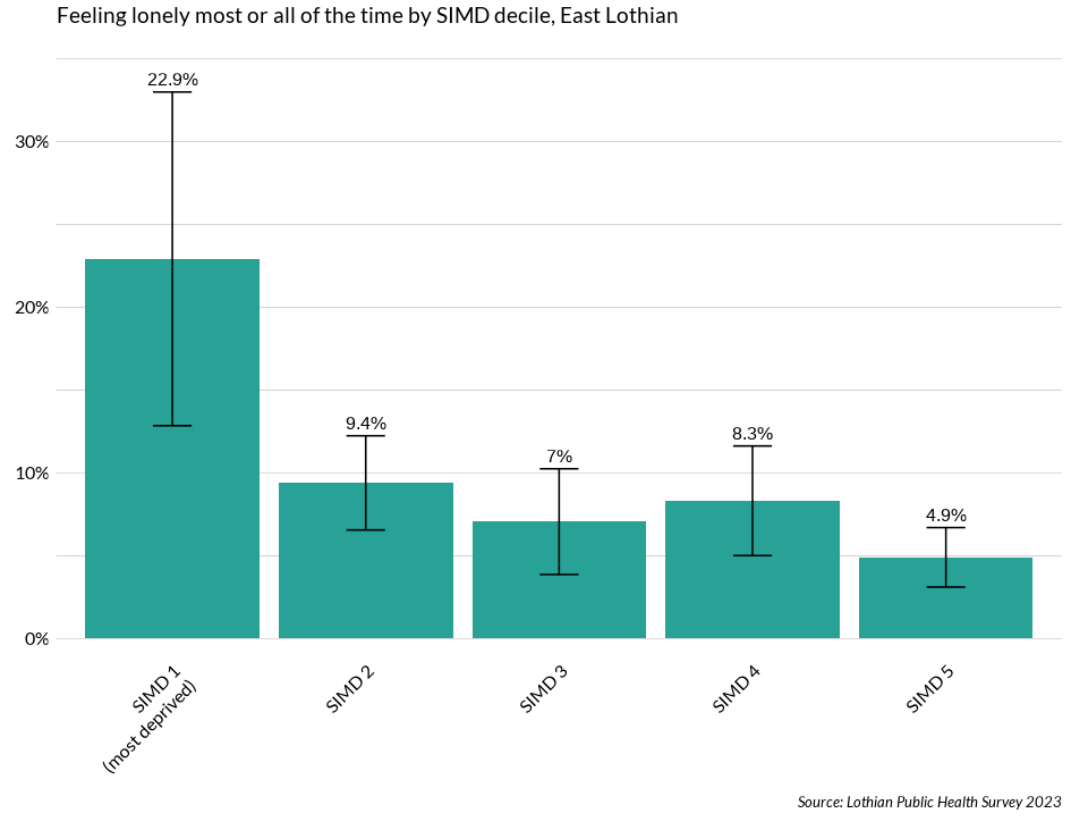
With respect to loneliness, 30% of East Lothian respondents reported feeling lonely some of the time whilst 8.7% felt lonely most/all of the time (NHS Lothian, 2024). Adults in the most deprived areas (SIMD 1) experience loneliness more frequently than any other SIMD quintile group[8], with the biggest difference being between the most deprived (22.9%) and least deprived (4.9%) (see Figure 5.16).

Figure 5.15. Social support group of 3 or more, SIMD quintile, East Lothian (NHS Lothian, 2024)



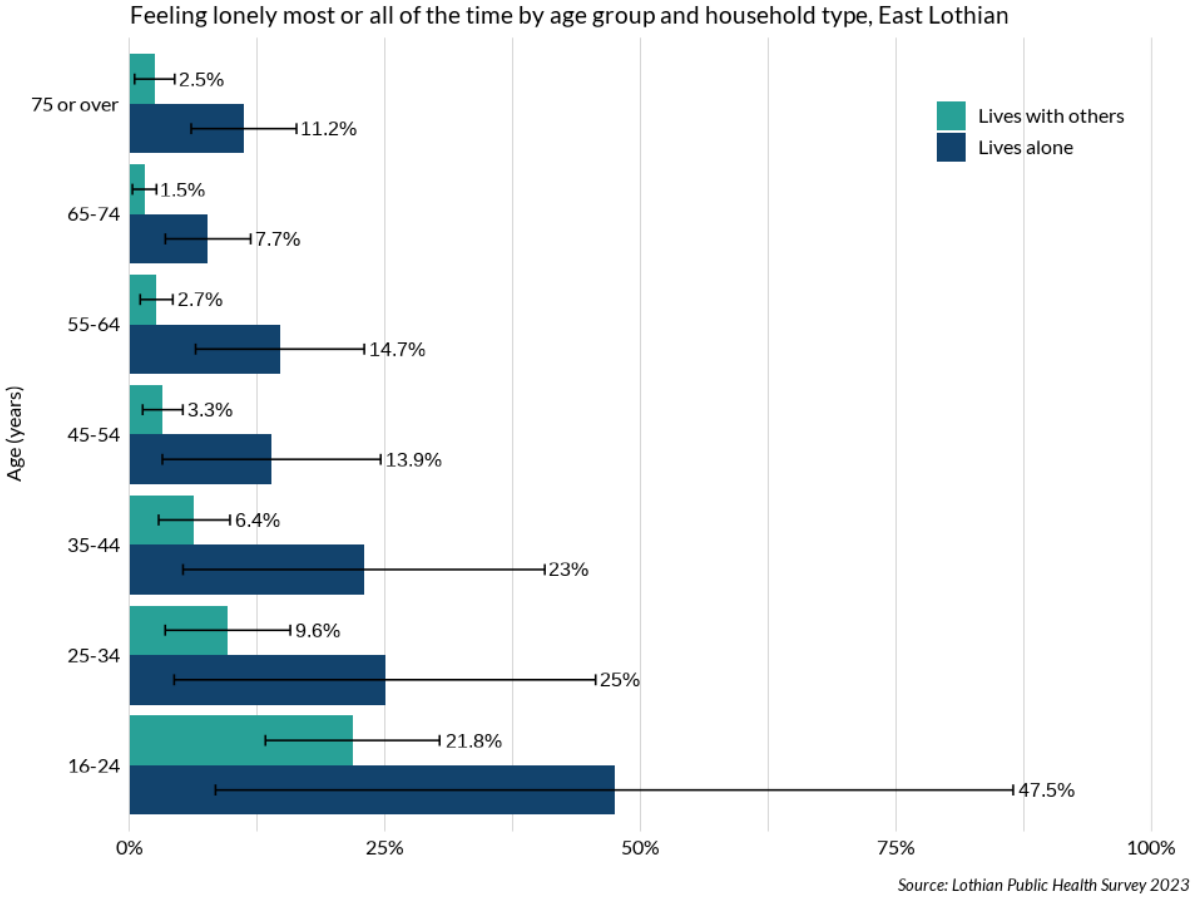
[8] These differences were statistically significant

Figure 5.16. Feeling lonely most/all of the time, SIMD quintile, East Lothian (NHS Lothian, 2024)



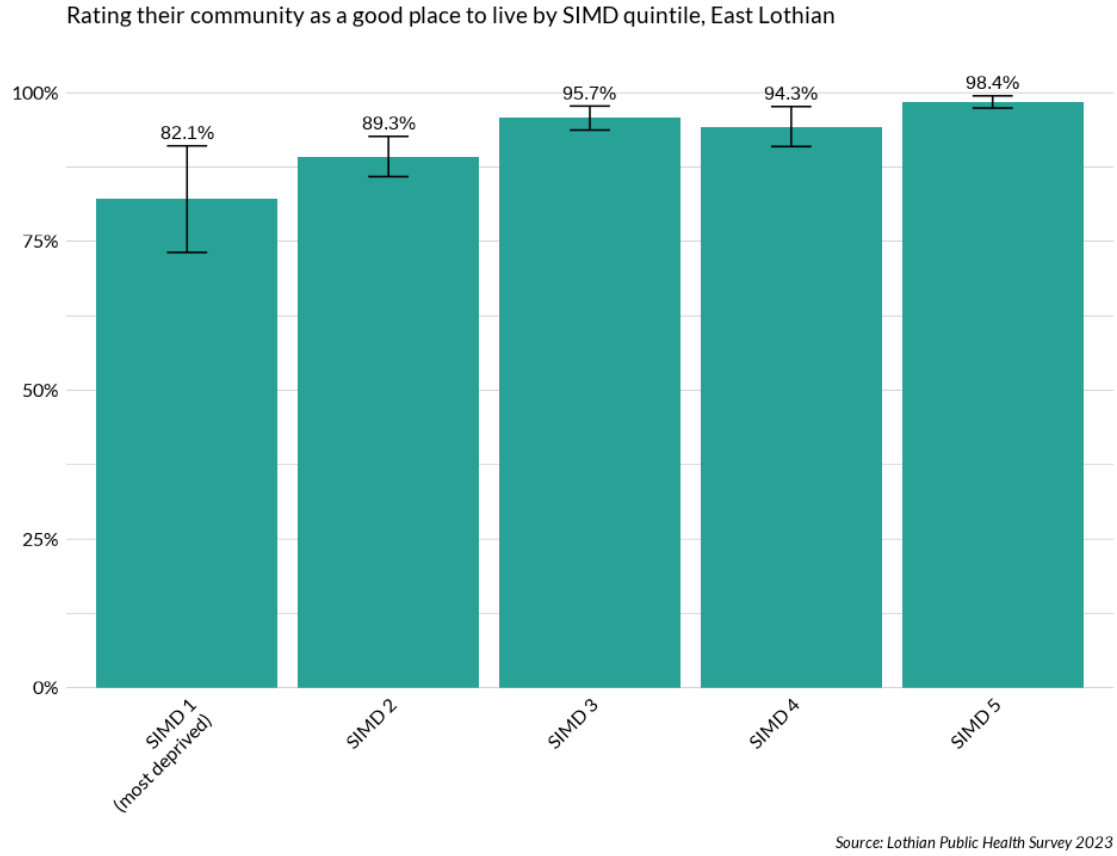
Young people aged 16-24 are more likely to experience loneliness, with 38.6% feeling lonely some of the time and 24.1% feeling lonely most/all of the time (NHS Lothian, 2024). Loneliness generally decreases with age, though it rises slightly for those aged 75+. Living alone also contributes to loneliness, with those living alone more likely to report high levels of loneliness (see Figure 5.17).

Figure 5.17. Feeling lonely most or all of the time by age group and household type, East Lothian



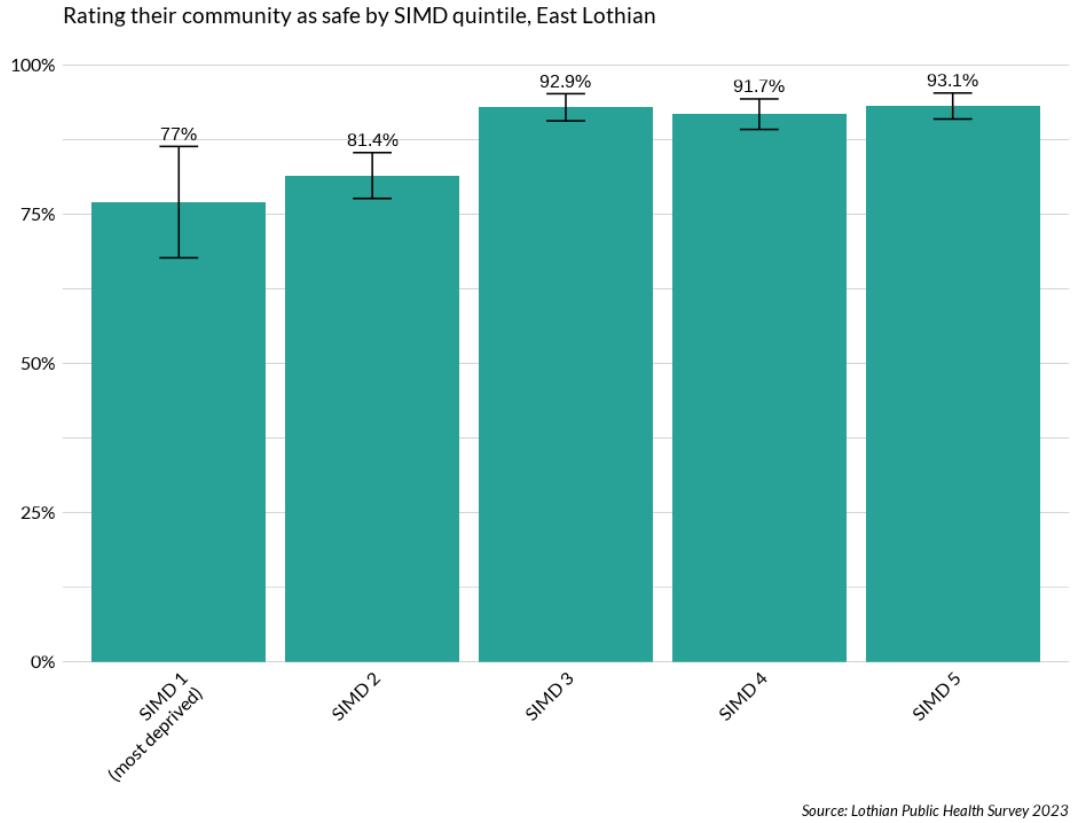
Our sense of connection is shaped by our social environments. The 2023 NHS Lothian Public Health Survey and 2024 East Lothian Resident's Survey found 93% of residents rate their community as a good place to live (ELC, 2024c; NHS Lothian 2024). However, as shown in Figure 5.18, those in deprived areas (SIMD 1) are 18% less likely to rate their community positively compared to those in the least deprived areas (NHS Lothian, 2024).

Figure 5.18. Rating community as a good place to live by SIMD quintile, East Lothian (NHS Lothian, 2024)



Perceived community safety varies by level of deprivation, sex, and ethnicity. While 88.7% of East Lothians feel safe, only 77% in SIMD 1 and 81.4% in SIMD 2 feel safe, compared to over 90% in SIMD 3-5 (see Figure 5.19). Additionally, fewer females (37.3%) feel very safe compared to males (62.1%), and Asian residents (20.5%) feel less safe than White residents (49.1%). We are unable to draw conclusions about other ethnic groups as part of the Public Health Survey due to insufficient data. Data on transgender individuals or those with disabilities are limited, but national data suggests they feel less safe in their communities (Scottish Government, 2023; Scottish Trans, 2024).

Figure 5.19. Rating their community as safe by SIMD quintile, East Lothian (NHS Lothian, 2024)



5.6 Climate and the Environment

The environment plays a significant role in shaping the health and wellbeing of communities across East Lothian. The county's abundant green and blues spaces, including parks, woodlands, and coastal areas, offer numerous benefits, such as promoting physical activity, reducing stress, and improving mental health. Access to nature is associated with lower rates of anxiety, depression, and overall better quality of life (Mental Health Foundation, 2022; Twohig-Bennett and Jones, 2018; WHO, 2016). However, climate change poses a growing threat to population health in East Lothian, with rising temperatures, more extreme weather events, worsening air quality and coastal flooding potentially increasing the risk of respiratory problems, heat-related illnesses, and injuries (Romanello et al, 2023; WHO, 2024). Agricultural and coastal communities are also vulnerable, with changing weather impacting food security and livelihoods (IPCC, 2022). In recognition of these risks, East Lothian Council declared a climate emergency in

2019 followed by a nature emergency in 2023. Climate change is and will continue to disrupt the building blocks of health, and this will put tremendous pressure on our health and social care systems (Romanello et al, 2023).

The effects of climate change are not felt equally across the population and not everyone has the means to adapt to these impacts. Climate change acts as a threat multiplier, exacerbating existing social and health inequities and placing additional pressure on already vulnerable populations (United Nations, n.d.). For example, low-income communities, the elderly, and those with pre-existing health conditions are more affected, often living in areas more susceptible to flooding and facing greater challenges in coping with extreme weather due to poor housing quality or fuel poverty (UK Health Security Agency, 2024). Addressing these inequities is crucial in building resilience and ensuring that all communities can adapt to the evolving climate crisis.

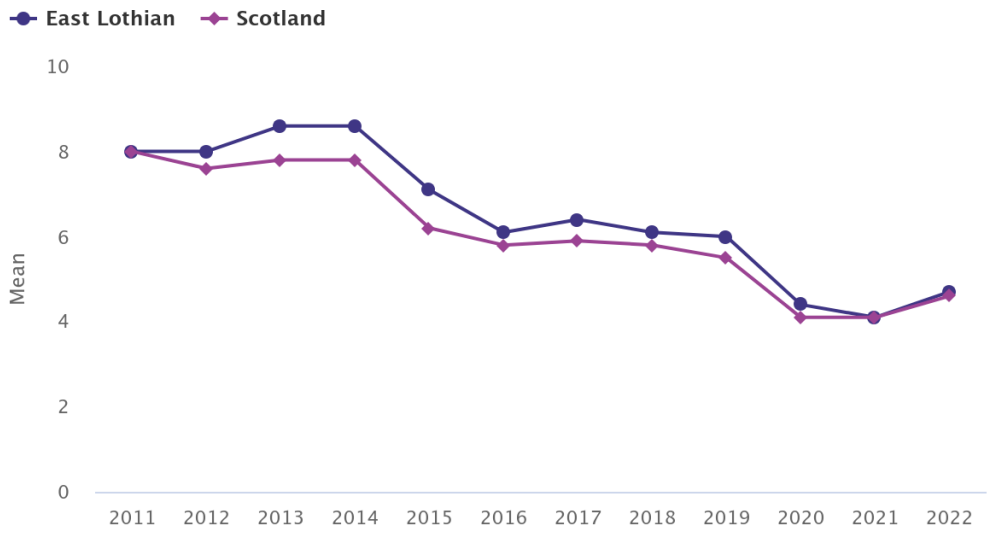
Collecting and analysing climate data at a local level is complex. Localised data on specific climate variables—like temperature, precipitation, or wind patterns—often need to be collected over several decades to establish trends, and climate change manifests differently across the county due to factors like geography, topography, and local weather patterns. As such, we have limited environmental data that could be utilised in this JSNA.

5.6.1 Some Local Climate Measures

All public bodies, including East Lothian Council (2025a) and NHS Lothian (2025a), are required to report annually on their greenhouse gas emissions. However, these reports reflect only organisational emissions and do not capture the full scope of emissions across the county.

Air pollution and climate change are closely linked, as many pollutants that harm air quality—such as carbon dioxide (CO_2) and methane (CH_4)—also drive climate change (Romanello et al., 2023). Encouragingly, air quality in East Lothian, measured by fine particulate matter (µg m^{-3}), has generally improved between 2011 to 2022, with a slight decline between 2021 and 2022 (see Figure 5.20) (ScotPHO, 2024a).

Figure 5.20. Air quality in East Lothian, 2011 – 22 (ScotPHO, 2024a)



In response to the growing impacts of climate change, local initiatives are working to document and address these challenges. Climate Ready South East Scotland, supported by the East Lothian Climate Hub, is collecting and digitally mapping residents' 'climate stories' to illustrate how climate change is affecting daily life (Climate Ready South East Scotland, n.d.). These stories are available on their website: https://climatereadyses.commonplace.is/en-GB/map/climate-ready-south-east-scotland-story-map

A range of strategic resources further outline East Lothian's approach to climate resilience and environmental sustainability. These include the 2025–2030 East Lothian Council Climate Strategy (ELC, 2025b), the NHS Lothian Sustainable

Development Framework (2020), the NHS Lothian Biodiversity Action Plan (2025b), and the East Lothian Climate Hub website: https://eastlothianclimatehub.org/.

6 Risk Factors

KEY MESSAGES:

- Tobacco smoking, harmful alcohol use, poor diet, physical inactivity and obesity are leading risk factors driving East Lothian's high burden of preventable ill health and premature mortality. All are socioeconomically patterned and contribute significantly to widening health inequalities.
- Population-level interventions that are less reliant on individual agency/behaviour change but instead aim to alter the environments in which people live should form the basis of strategies to address key risk factors in East Lothian.
- To effectively reduce exposure to risk factors and tackle inequalities, it is important to deploy multiple policy approaches that address the complex system of influences that shape people's behaviour.

Risk factors are characteristics, variables, or exposures that increase the likelihood of a negative outcome, like the development of a disease or disorder. Risk factors can be categorised in a variety of ways including (ScotPHO, 2023a):

- Behavioural risk factors such as tobacco use, alcohol consumption, diet and nutrition, substance misuse, gambling, physical activity etc
- Clinical risk factors like high blood pressure, high cholesterol and obesity have physiological attributes which at certain levels may be associated with an increased risk of certain diseases or death
- Environmental risk factors which encompass various hazards such as pollution, radiation, and climate change.

It is important to note that many risk factors are both interlinked and people generally tend to have multiple risk factors present at any one time. As mentioned earlier, these risk factors must also be contextualised within the wider determinants of health.

Whilst there are a wide range of risk factors that affect our East Lothian population, it is nonetheless important to take a more focused approach. This is because evidence strongly indicates that tobacco use, harmful alcohol use, poor diet, physical inactivity and obesity are the leading risk factors driving the UK's high burden of preventable ill health and premature mortality – all of which are socioeconomically patterned and contribute significantly to widening health inequalities (Everest et al., 2022).

6.1 Tobacco Use

Smoking is the leading cause of preventable ill health and death in Scotland (ScotPHO, 2025a). For example, in 2022, smoking accounted for an estimated 8,942 deaths (271 deaths per 100,000 population) in those aged 35 and over in Scotland (2025a). Smoking is a significant contributor to inequalities in health (including life expectancy) and puts people at high risk of developing conditions like cancer, cardiovascular and respiratory diseases.

As shown in the graphs below, smoking attributable hospital admissions (Figure) and deaths (Figure) in East Lothian have tended to be consistently lower than the Lothian and Scottish average. Both indicators have now continued a downward trend after showing increasing trends from 2015-2018.

Figure 6.1. Smoking attributable hospital admissions in East Lothian, NHS Lothian & Scotland, 2012-13 to 2020-21 (ScotPHO, 2024a)

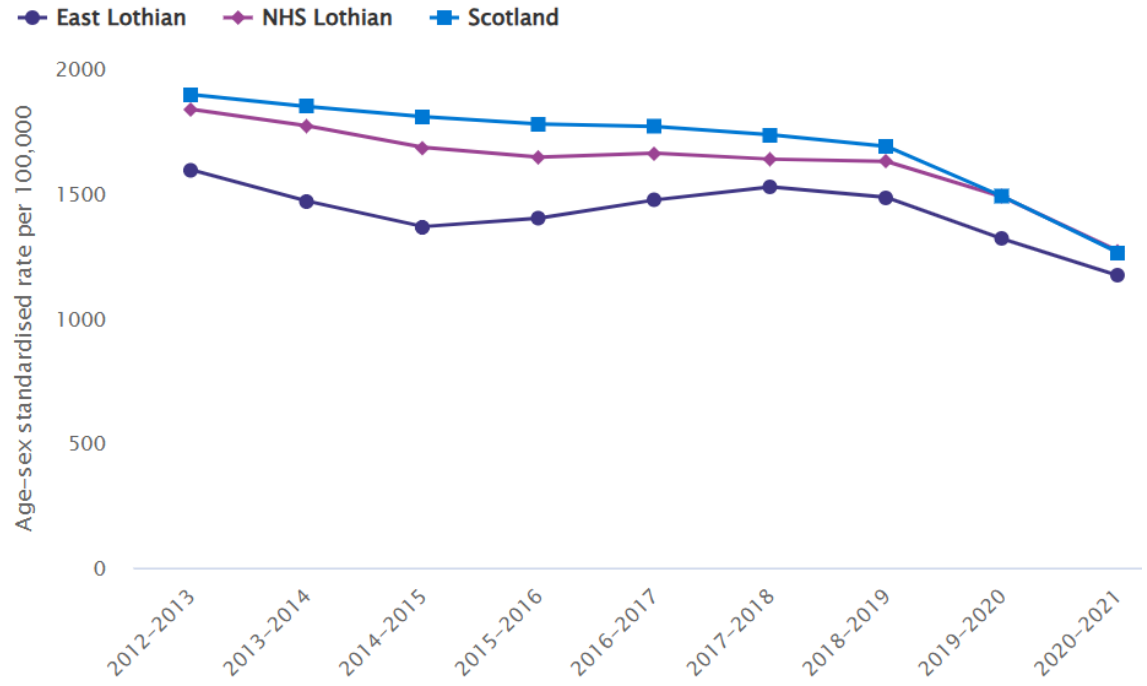
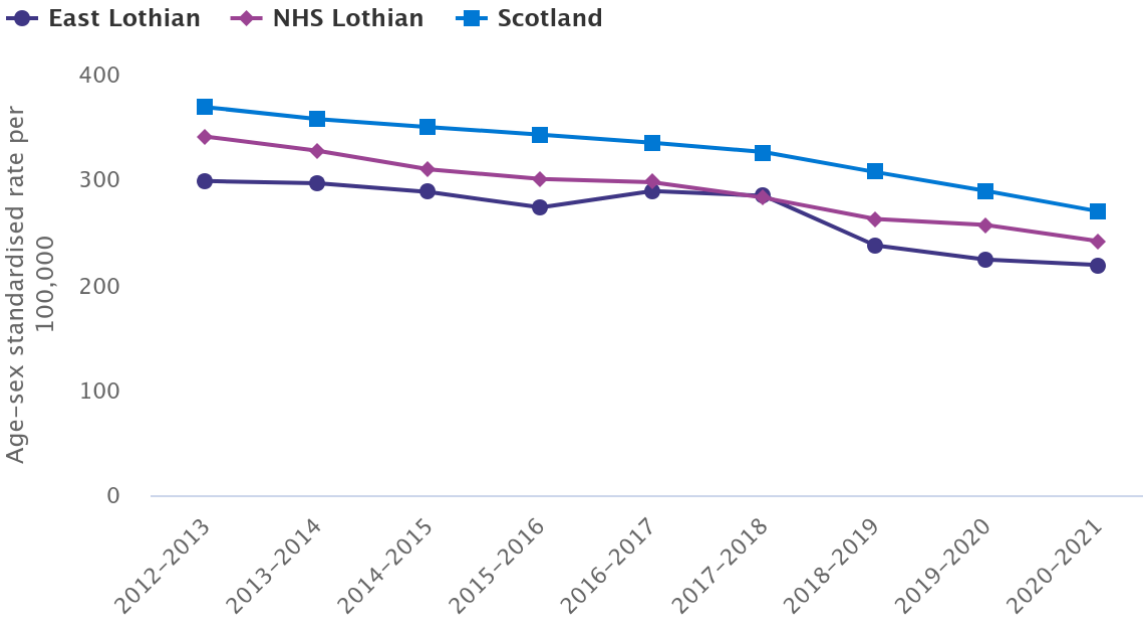


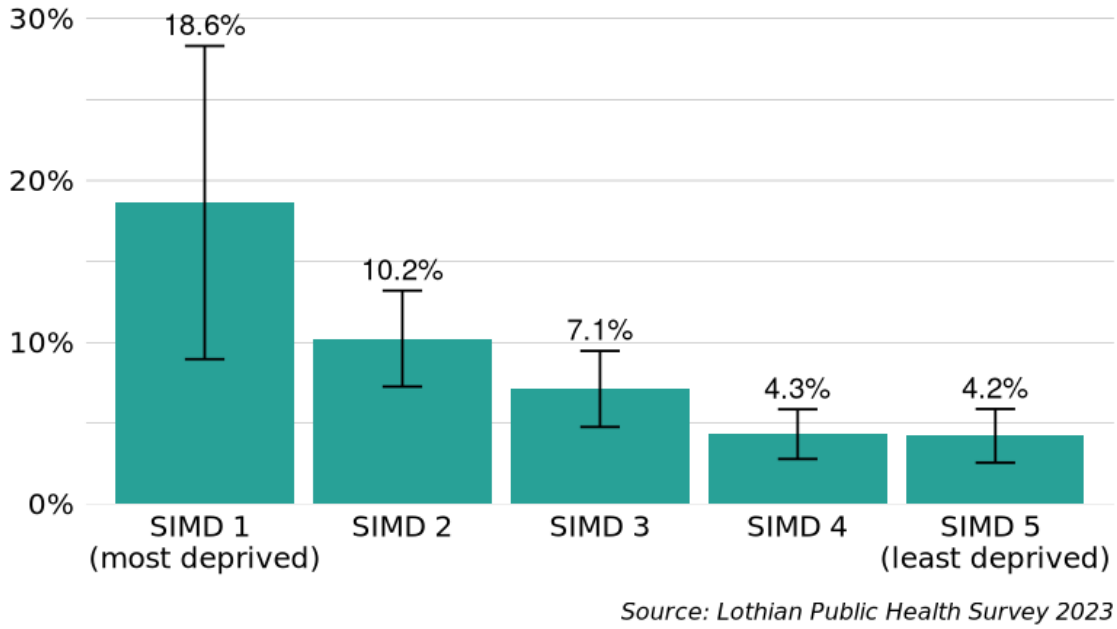
Figure 6.2. Smoking attributable deaths in East Lothian, NHS Lothian & Scotland, 2012-13 to 2020-21 (ScotPHO, 2024a)



Evidence from the Lothian Public Health Survey 2023 found that self-reported prevalence of tobacco smoking reduced with decreasing levels of deprivation, with the those living in the most deprived areas having the highest prevalence

(see Figure) (NHS Lothian, 2024). This socioeconomic trend in smoking is consistent with the literature (Everest et al., 2022).

Figure 6.3. Tobacco smoking by SIMD quintile, East Lothian, 2022 (NHS Lothian, 2024)



6.2 Alcohol Misuse

Alcohol misuse is a major public health concern in Scotland. In the short-term, alcohol intoxication can lead to risk of injury and is associated with violence and social disorder. Long-term, excessive alcohol consumption can cause irreversible damage and is recognised as a contributory factor in many diseases (including cancer, stroke and heart disease) and mental health conditions.

Figure 6.4. East Lothian Alcohol Profile (Adopted from Alcohol Focused Scotland)

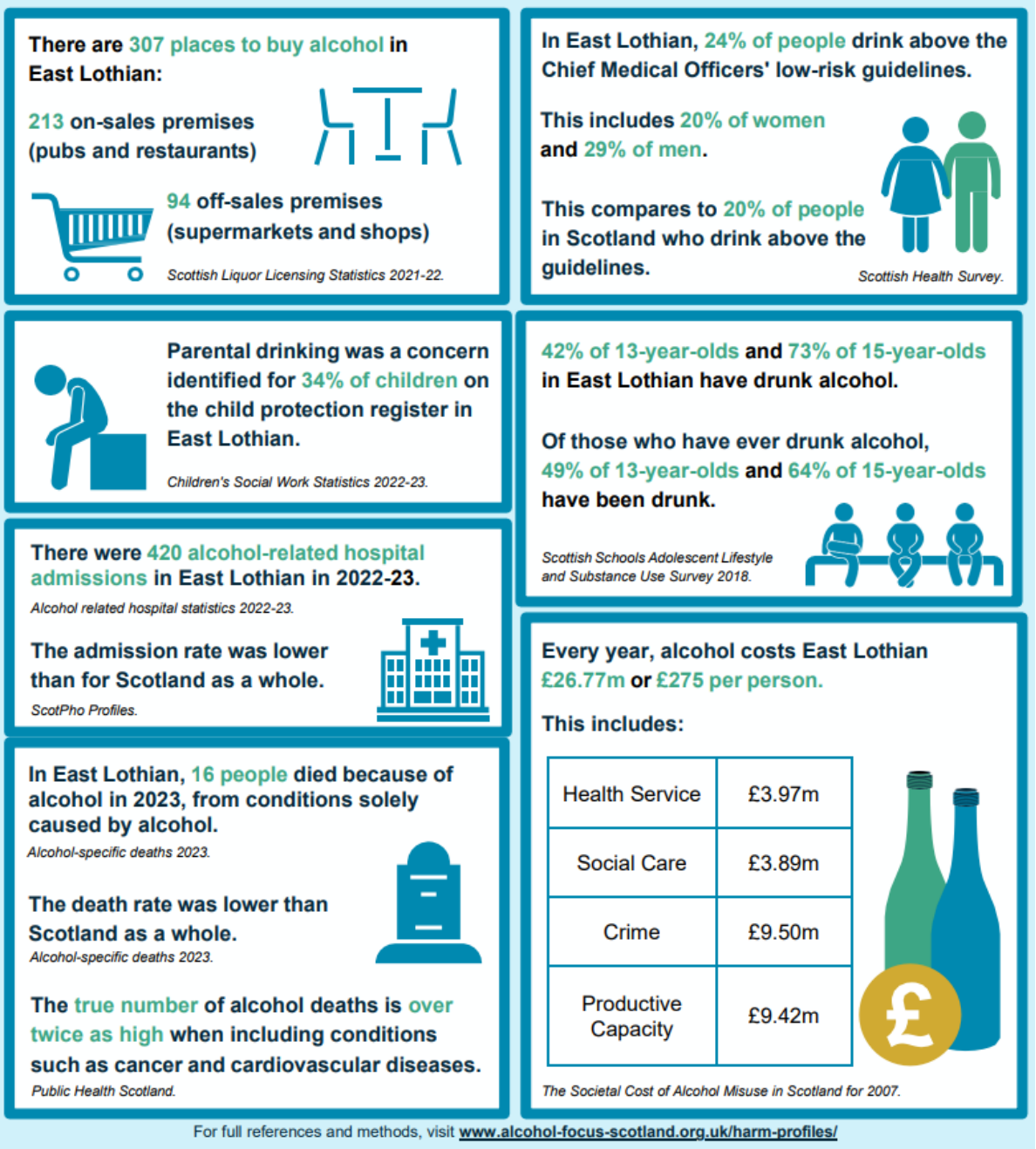
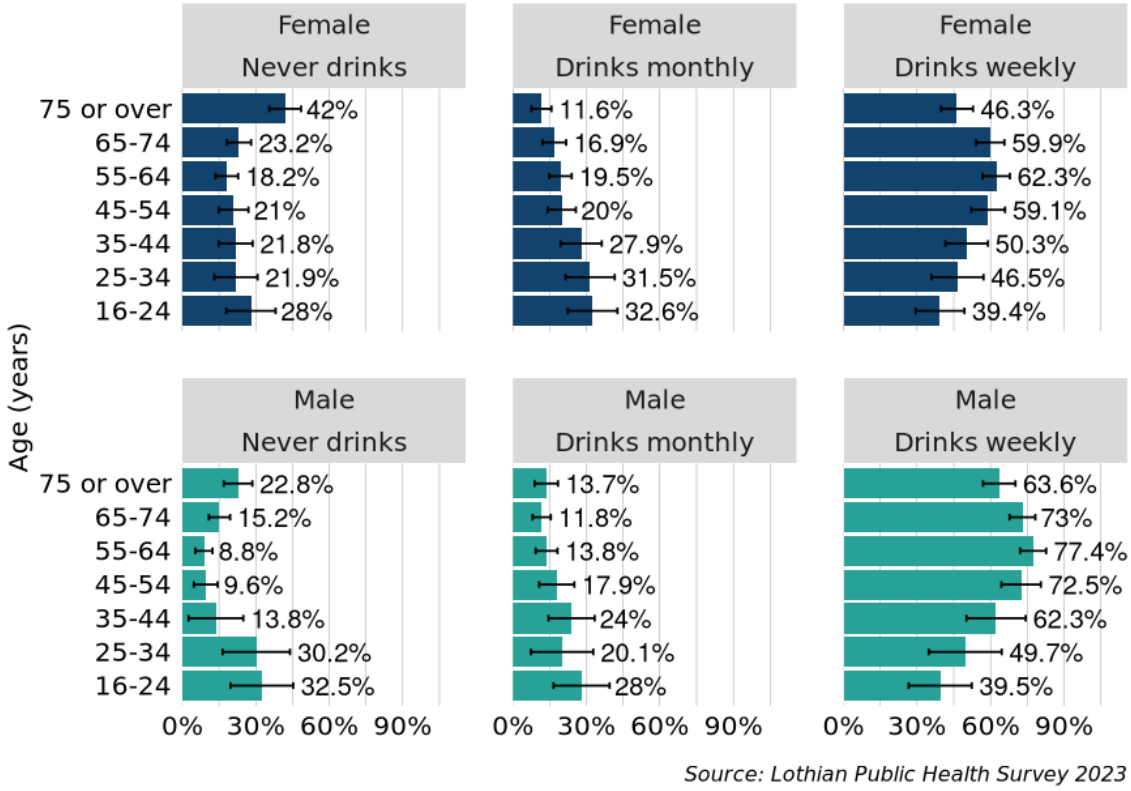


Figure provides a useful infographic outlining the harm caused by alcohol East Lothian. Recent data from the ScotPHO alcohol profiles illustrate that alcohol hospital-related admissions and alcohol specific death rates in East Lothian show a long-term decline and are both lower than the Lothian and Scottish average (ScotPHO, 2024a), with national legislation for minimum unit pricing contributing to these declines (PHS, 2023b).

Evidence from the Lothian Public Health Survey 2023 (Figure) found that, across all age groups, males reported drinking alcohol more frequently than females. Younger age groups reported being less likely to drink alcohol compared to older age groups, although it is still concerning that almost 40% of 16–24-year-old females and males drank alcohol on a weekly basis.

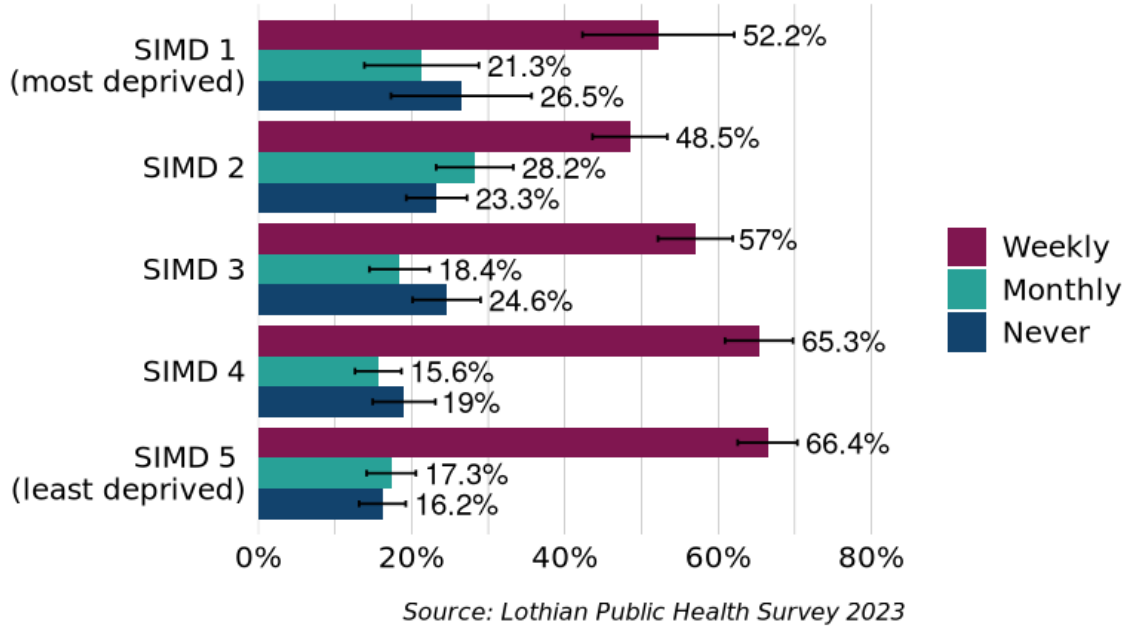
Figure 6.5. Alcohol consumption (last 12 months) by age group and sex, East Lothian, 2022 (NHS Lothian, 2024)



Source: Lothian Public Health Survey 2023

In addition, the survey also found that people living in more deprived areas drank alcohol less frequently when compared to those in more affluent areas and were more likely to respond that they never drank alcohol compared to people in more affluent areas.

Figure 6.6. Alcohol consumption (last 12 months) by SIMD, East Lothian, 2022 (NHS Lothian, 2024)



Yet a contrasting socioeconomic gradient is found when looking at alcohol harms, with both alcohol hospital-related admissions and alcohol specific deaths increasing with rising deprivation. This alcohol paradox has been found elsewhere (Everest et al., 2022; Bellis et al., 2016), with possible explanations including the presence of multiple risk factors and more high-risk drinking behaviours like binge drinking (Bellis et al., 2016).

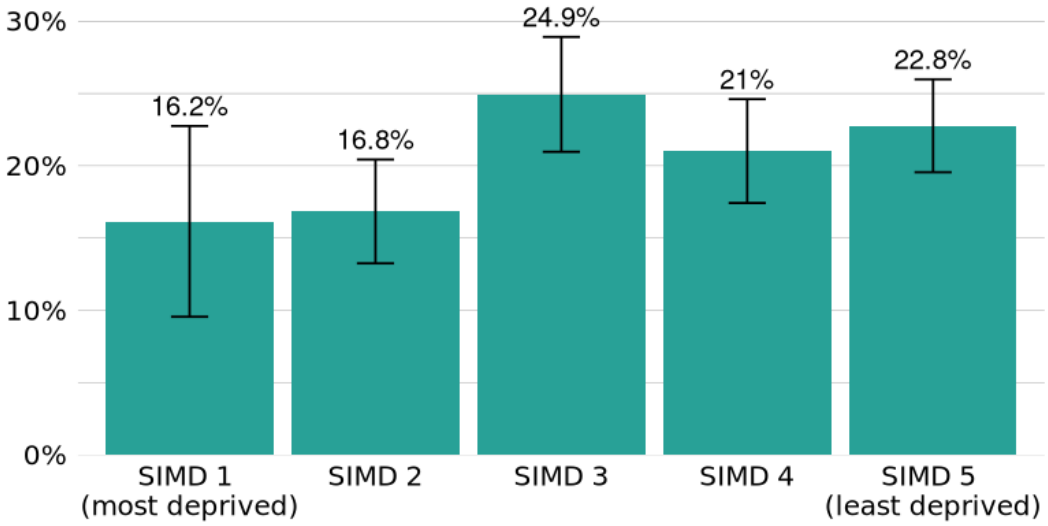
6.3 Diet, Physical Activity and Obesity

Though poor diet and nutrition, physical inactivity and obesity are important risk factors in their own right, they are grouped here because they are highly interlinked in leading to conditions like heart disease, cardiovascular disease, cancer, type 2 diabetes, hypertension, depression etc.

Poor diet is a key determinant of people's health. In addition to causing overweight and obesity, diets that are low in nutritious wholefoods and high in

sugar and ultra-processed foods are independently associated with a range of poor health impacts. Data from the Scottish Health Survey indicates that less than one quarter of adults and children met the fruit and vegetable recommendations of five or more portions per day, with people living in the most deprived areas of Scotland being less likely to meet this this recommendation compared with those in the least deprived areas (Scottish Government, 2024). This pattern was reflected in evidence from the Lothian Public Health Survey, though it did not follow a socioeconomic gradient with residents living SIMD quintile 3 having the highest percentage of those who reported meeting the daily recommendation (24.9%) (see Figure) (NHS Lothian, 2024).

Figure 6.7. Percentage of respondents who met daily fruit & vegetable recommendations by SIMD Quintile, East Lothian, 2022 (NHS Lothian, 2024)



Source: Lothian Public Health Survey 2023

Food insecurity is another cause of poor health outcomes related to diet that can impact on both physical and mental health. As mentioned earlier, the proportion of people accessing food banks in East Lothian is rising which is consistent with the national picture (Scottish Government, 2024).

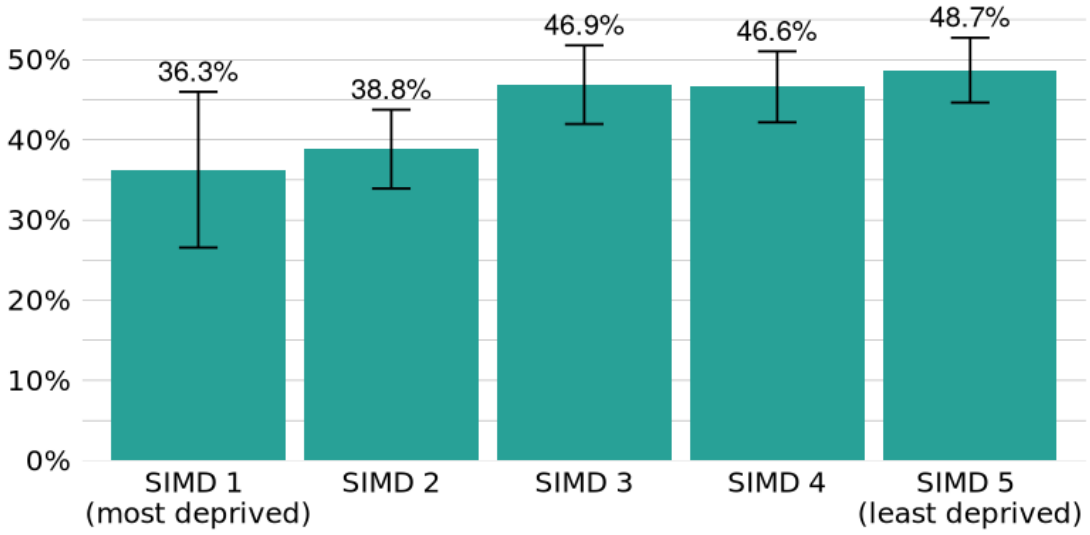
Physical activity has been found to be highly beneficial for maintaining a healthy weight, improving physical and mental health (including maintaining cognitive

ability), childhood educational attainment and overall wellbeing. In contrast, physical inactivity can lead to poor health outcomes which explains why it is listed by the World Health Organisation as one of the five key modifiable health-related behaviours which increase the risk of non-communicable diseases (WHO, 2022).

The UK Chief Medical Officers' Physical Activity Guidelines recommend that adults aged 19-64 should accumulate at least 150 minutes of moderate intensity activity (MPA); or 75 minutes of vigorous intensity activity (VPA); or even shorter durations of very vigorous intensity activity; or a combination of moderate, vigorous and very vigorous intensity activity (Department of Health and Social Care, 2019). These guidelines also recommend that children should engage in an average of at least 60 minutes per day of moderate-to-vigorous physical activity (MVPA) and minimise sedentary time. Moreover, the Scottish Government's Active Scotland Outcomes Framework sets out the Government's ambitions for sport and physical activity (Active Scotland, n.d.).

As illustrated in Figure , evidence from the Lothian Public Health Survey shows that meeting weekly physical activity increased with decreasing deprivation, with the biggest gap being between the least (49%) and most (36%) deprived (NHS Lothian, 2024).

Figure 6.8. Percentage of respondents who met weekly physical activity recommendations by SIMD, East Lothian, 2022 (NHS Lothian, 2024)

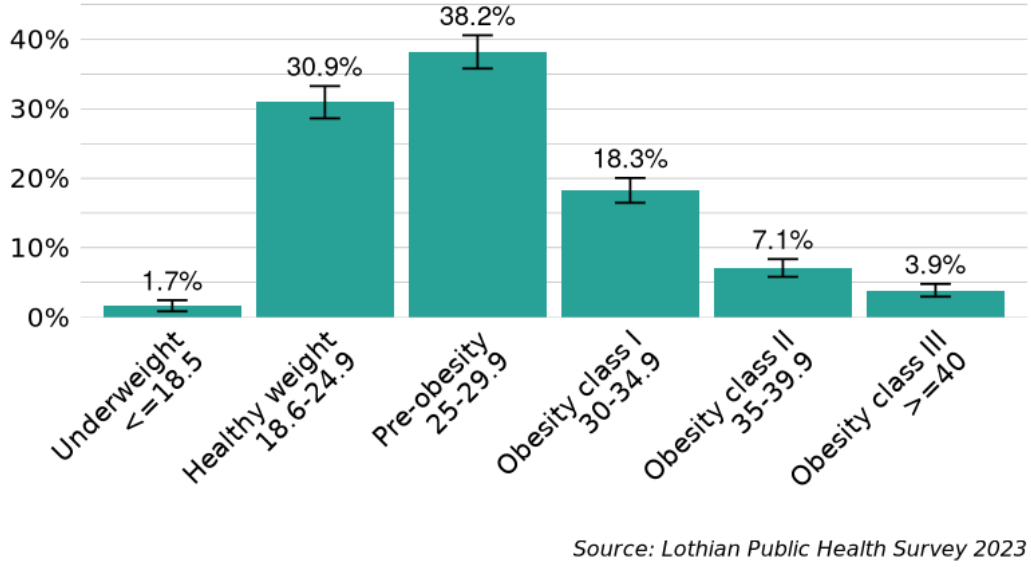


Source: Lothian Public Health Survey 2023

Obesity is recognised as both a complex disease and as a risk factor for other non-communicable diseases. Rates of obesity among adults and children have increased over the past two decades in Scotland and the country's prevalence rates for males and females remain amongst the highest of the OECD countries (ScotPHO, 2023b). In 2020, almost two thirds of the Scottish adult population (16 years +) were categorised as overweight or obese (Scottish Government, 2024). Unsurprisingly, obesity risk follows a socioeconomic gradient with people living in more deprived areas being at increased risk of being overweight and obese.

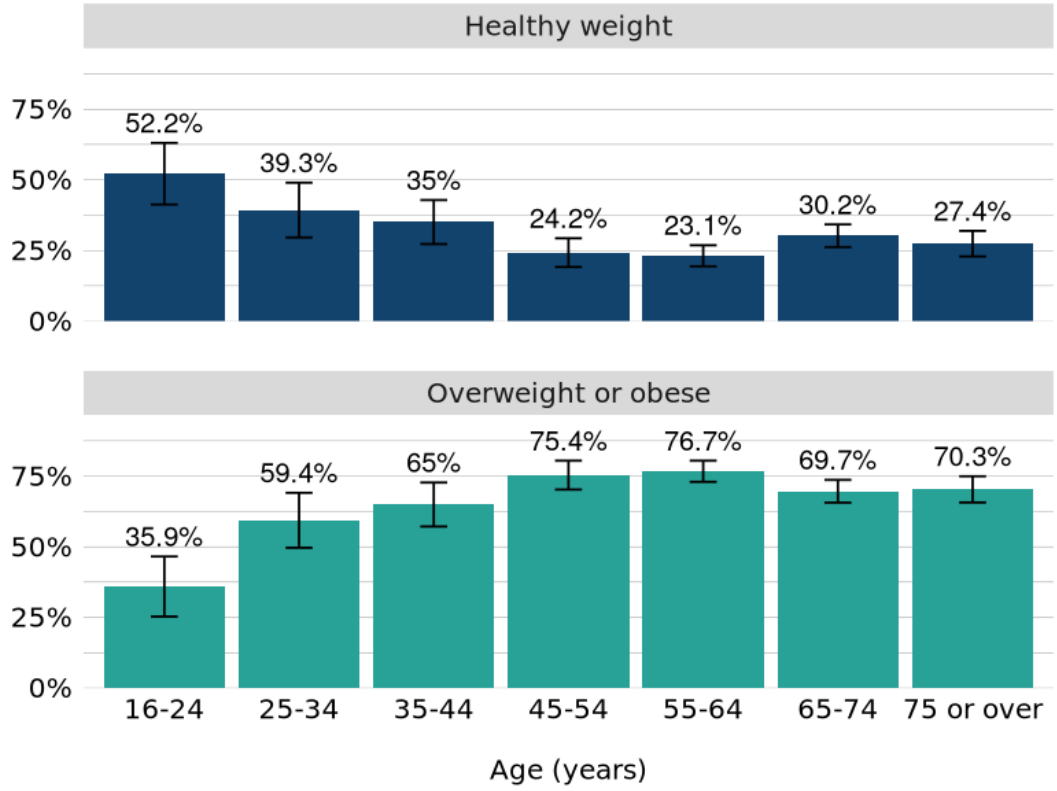
Evidence from the Lothian Public Health Survey is in line with these findings. That is, most respondents (67.5%) were categorised as overweight or obese (see Figure) and middle to older age groups made up the majority of respondents who self-reported as being overweight or obese (see Figure).

Figure 6.9. Percentage of respondents in each BMI category, East Lothian, 2022 (NHS Lothian, 2024)



Source: Lothian Public Health Survey 2023

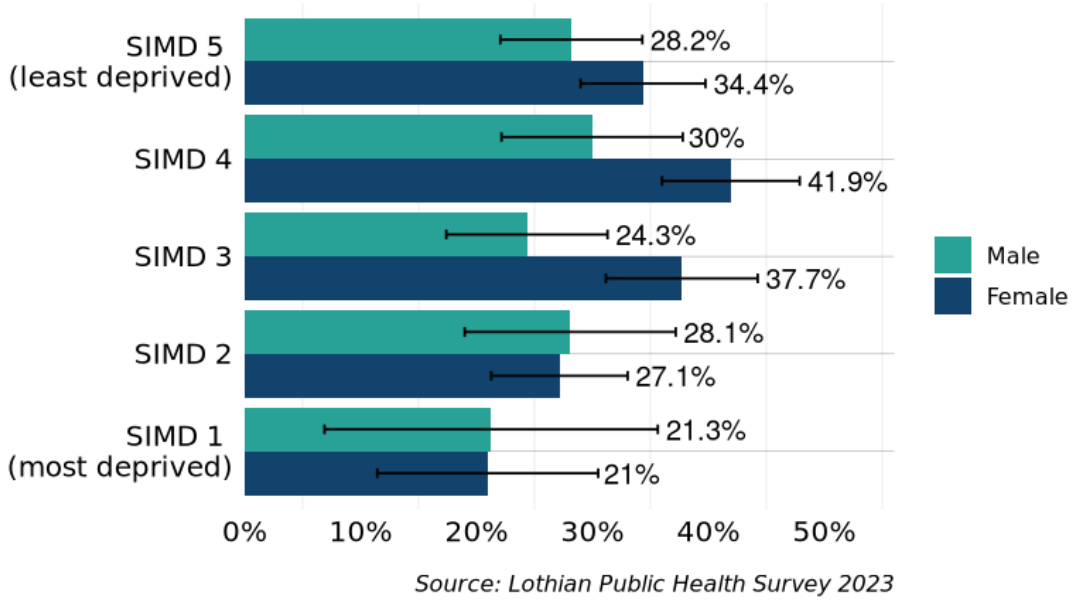
Figure 6.10. Percentage of respondents in healthy vs overweight & obese BMI categories by age, East Lothian, 2022 (NHS Lothian, 2024)



Source: Lothian Public Health Survey 2023

Though a mixed picture is observed when the data is split by SIMD and sex, respondents in the most deprived quintile (SIMD 1) were nonetheless least likely to report being of a health weight in both males and females.

Figure 6.11. Percentage of respondents of a healthy weight by sex and SIMD quintile, East Lothian, 2022 (NHS Lothian, 2024)



However, it is important to note that weight is not a universal measure of health. Body Mass Index (BMI), while widely used to *estimate* body fat and categorise people's weight, is an imperfect measure that does not account for differences in muscle mass, fat distribution and type, body composition, or metabolic health (Pray & Riskin, 2023; Tomiyama et al., 2016). Research shows that individuals with the same BMI can have very different health profiles, and some people classified as overweight or obese by BMI may still be metabolically healthy (2016). Conversely, having a low BMI does not necessarily indicate good health, as individuals with a lower BMI can still experience poor metabolic health (Tomiyama et al., 2016; Wildman et al., 2008). Furthermore, BMI was originally developed using data from predominantly white, European men aged 18–60, and later validated on similarly narrow population groups, meaning it may not accurately reflect body composition or health risks for people of different races, ethnicities, sexes, or ages (Blackburn & Jacobs, 2014; Pray & Riskin, 2023). Therefore, while monitoring weight trends is useful at a population level, it should not be the sole indicator of individual health.

6.4 Designing Effective Population-Level Interventions

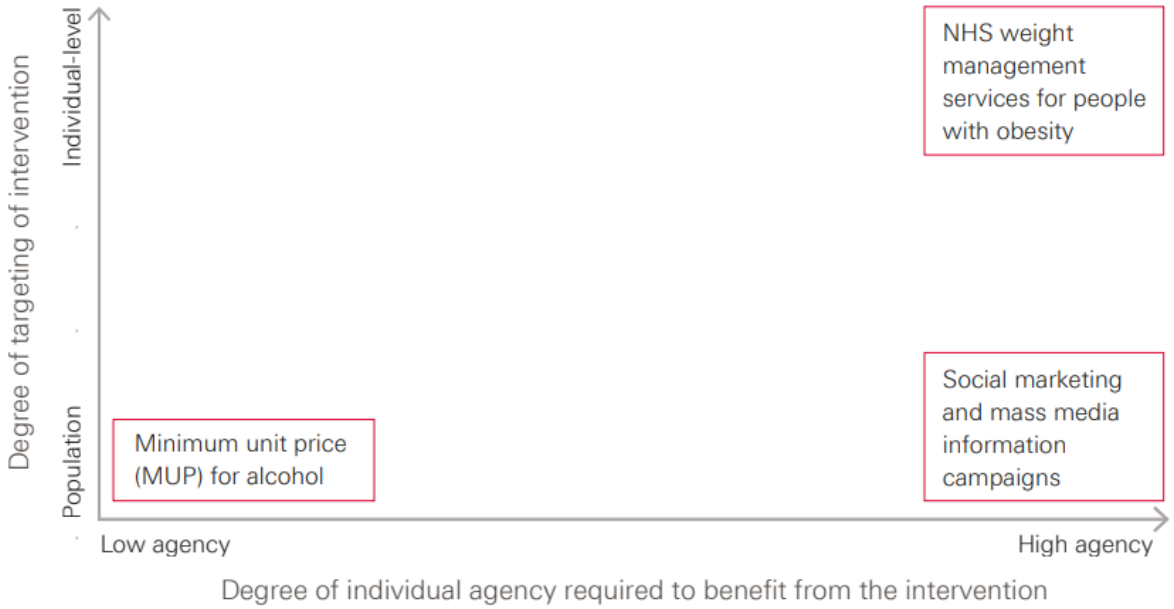
The challenge with trying to address many common risk factors is that there can be a temptation in thinking that these can be reversed if people simply "changed their behaviours" from health harming to health promoting/protective. This often leads to individuals being blamed for what are perceived as "poor lifestyle" decisions. However, this view ignores the complexity and wider context within which decisions are made. For instance, recent analysis carried out by the Food Foundation (2025) shows that the most deprived fifth of the population would need to spend 45% of their disposable income on food to afford the government-recommended[9] healthy diet (rising to 70% for households with children). This compares to just 11% for the least deprived fifth. Moreover, exposure to health harming products also greatly influences the choices that people make. It is well established that people living in more deprived areas are more likely to be exposed to a greater density of tobacco, alcohol, fast food and gambling outlets which can result in negative health outcomes (Macdonald et al., 2018).

Everest and colleagues (2022) argue that public health interventions should thus be viewed along two continuums: extent to which interventions are targeted and level of personal 'agency[10]' needed for individuals to benefit from interventions (see Figure).

[9] Although this evidence is based on data from England, we would still expect similar trends in Scotland.

[10] Exercise of individual control and autonomy in decision-making and actions

Figure 6.12. Public Health Approaches (Adopted from report by Everest et., 2022)



Evidence shows that interventions which rely on high levels of individual agency (e.g. providing information on healthy eating, referral to exercise or weight management classes) tend to have limited impact when implemented in isolation and may even widen inequalities because more affluent individuals are more likely to have the required personal resources required to benefit (Everest et al., 2022). In contrast, population-level interventions that rely on non-conscious processes and impact everyone (e.g. fiscal measures, marketing restrictions on unhealthy products, and legislative actions like smoking ban and minimum unit pricing) tend to be both more effective and equitable.

The Health Foundation has provided some useful briefings on how local governments can be supported to implement population level interventions that address the leading risk factors for ill health (Dun-Campbell et al., 2024; McGeoch et al., 2023).

7 Population Health Outcomes

KEY MESSAGES:

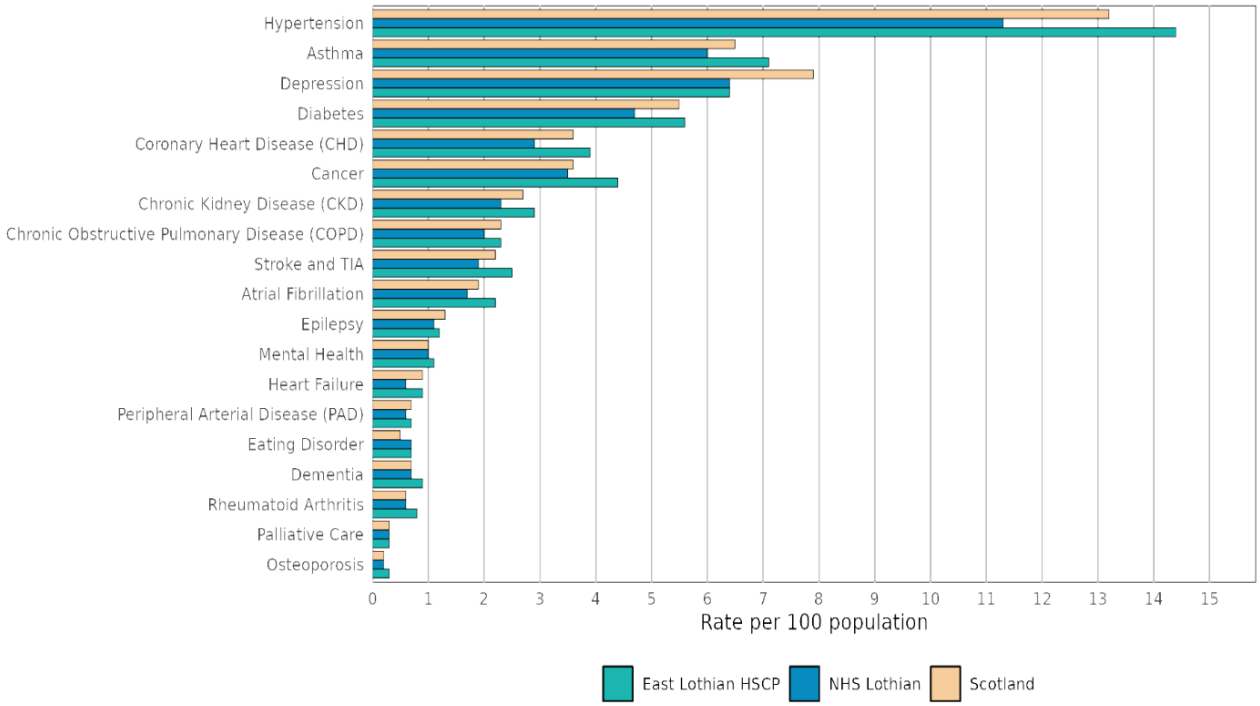
- Cancers, cardiovascular diseases and neurological disorders are the three leading grouped causes of ill-health and early death in East Lothian, accounting for approximately 47% of the total burden of health loss in the locality.
- Overall, the rate of health loss in East Lothian is 13% lower than the Scottish rate, where it is estimated that the total burden in 2019 has decreased 0.6% compared to the burden in 2016.
- The rise in the proportion of people living with multiple long-term conditions is one of the most significant challenges facing health services, both currently and in the coming decades. The proportion of people with MLTCs increases as people get older and with higher levels of deprivation.

7.1 Assessing the burden of disease in East Lothian

Figure provides recent primary care[11] prevalence data available for the locality. The graph illustrates that hypertension, asthma and depression were the top three most prevalent long-term conditions amongst residents in East Lothian.

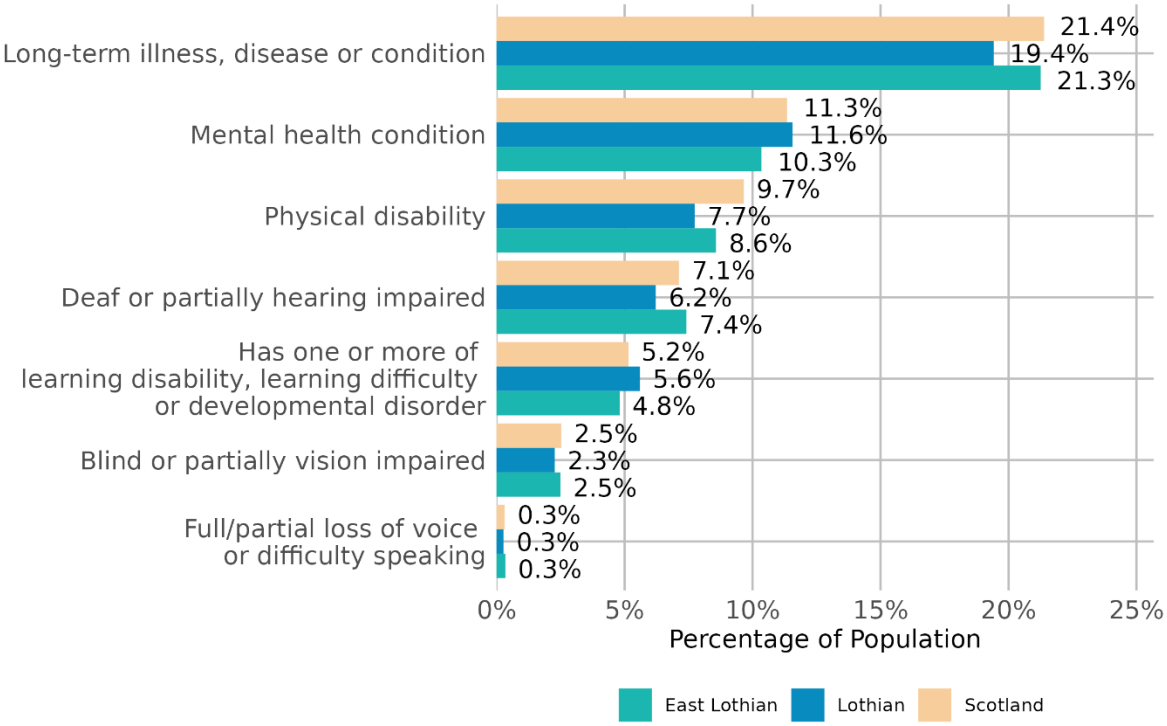
[11] Please note that this prevalence data has several key limitations in that it only includes those who have accessed care in primary care settings.

Figure 7.1. Primary Care Prevalence per 100 population of Long-Term Condition Diagnoses for Financial Year 2022/23



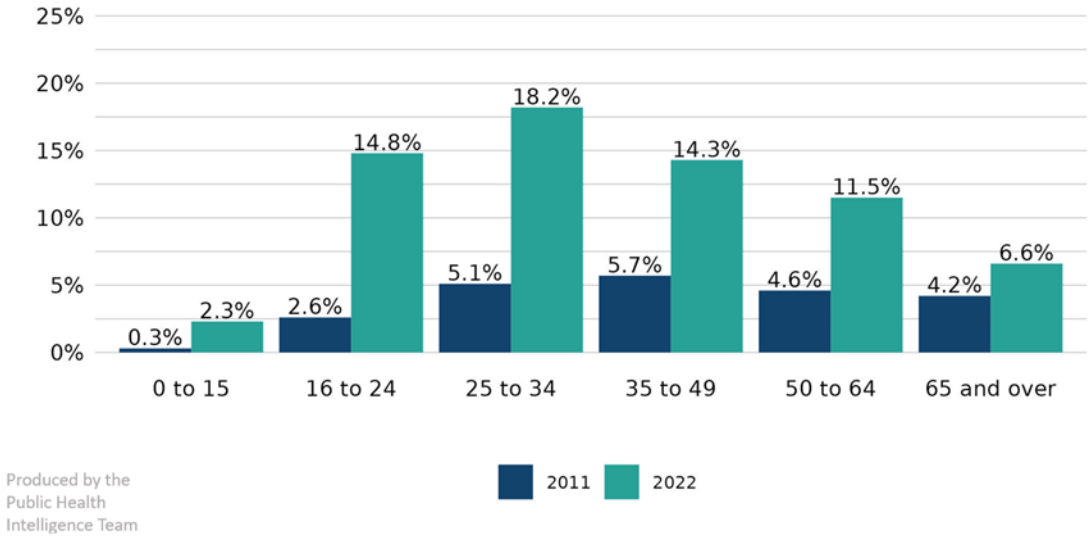
The use of self-reported health data is also valuable in understanding the health needs of a population. The Scottish census records the proportion of the population reporting a range of specific health conditions. As illustrated in Figure , the most common type of health condition reported by East Lothian residents was a 'long-term illness, disease, or condition' (21.3%) and included conditions such as arthritis, cancer, diabetes, and epilepsy. Having a mental health condition was the second most common reported and this showed the highest increase since the previous census, rising from 3.8% of people in 2011 to 10.3% in 2022.

Figure 7.2. Proportion of people who reported specific health conditions, East Lothian



Although there was a rise in the percentage of people identifying as having a mental health condition across all age groups from 2011 to 2022, the most significant increase was in the younger age groups 16-24 years (12.2%) and 25-34 years (13.1%) age groups (see Figure). Increased reporting of mental health conditions may in part reflect reduced stigma and a rise in awareness of mental health issues.

Figure 7.3. Percentage of people who reported a mental health condition by age, 2011-2022, East Lothian.

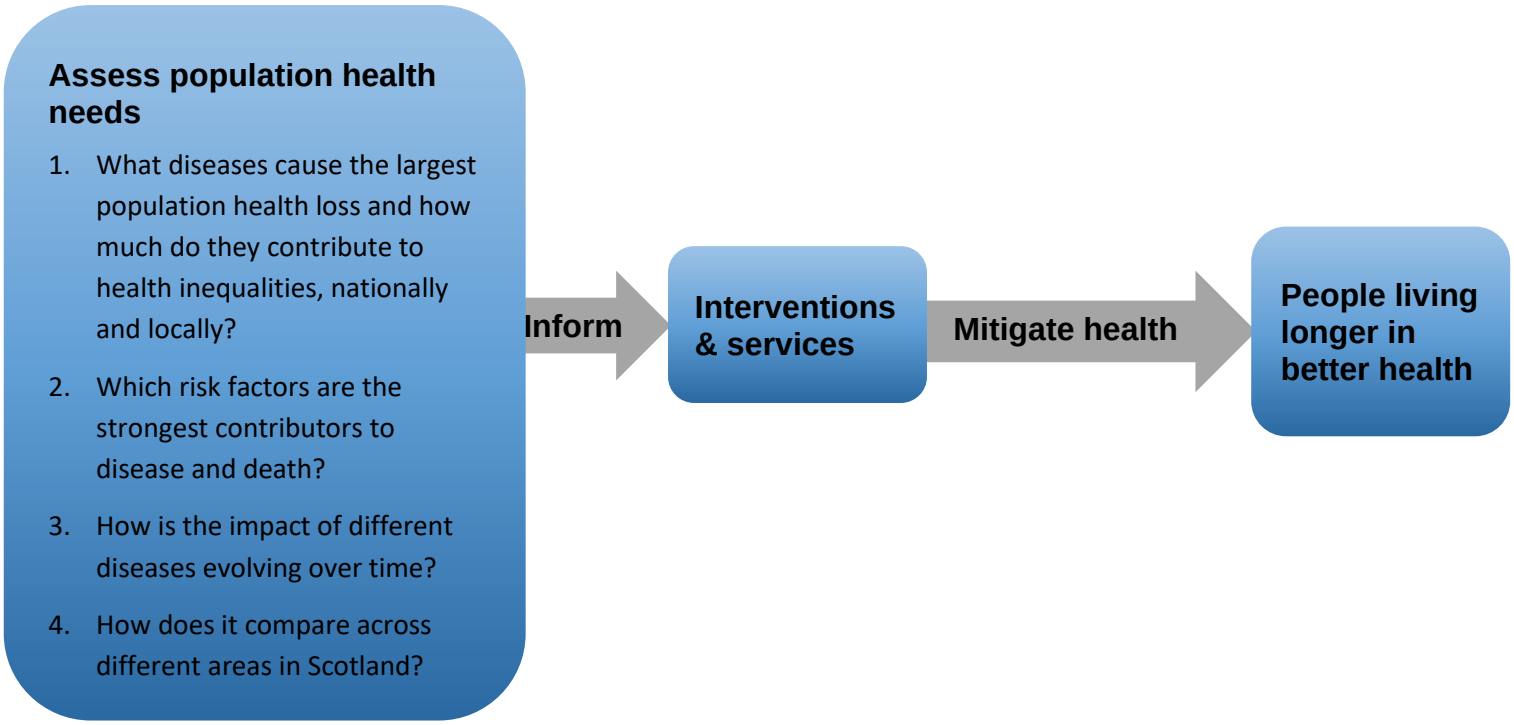


However, whilst prevalence data is useful in giving us an idea of the most common diseases, it cannot provide a complete picture on the burden of disease on its own.

Burden of disease studies are helpful in this regard because they use a single composite measure which combines the years lost because of early death (years of life lost - YLL) and years lost because people are living in less than ideal health (years lived with disability - YLD). The measure used to describe the overall burden of disease is called the disability adjusted life year (DALY) where one DALY represents the loss of one year of life lived in full health (PHS, 2022b). A key advantage of standardised measures such as DALYs is that they are useful in providing a broader understanding of the burden of disease since they allow comparisons with other causes of disease, injury and mortality to be made (ScotPHO, 2025b).

As illustrated by the simplified logic model in Figure [12], burden of disease studies provide a consistent and comprehensive framework to address some fundamental questions on how early death and ill-health affect national and local populations. Understanding which diseases and injuries pose the greatest threat to population health and wellbeing helps public health practitioners and policy-makers evaluate how to use limited resources for maximum benefit (PHS, 2022b).

Figure 7.4. Framework to improve health

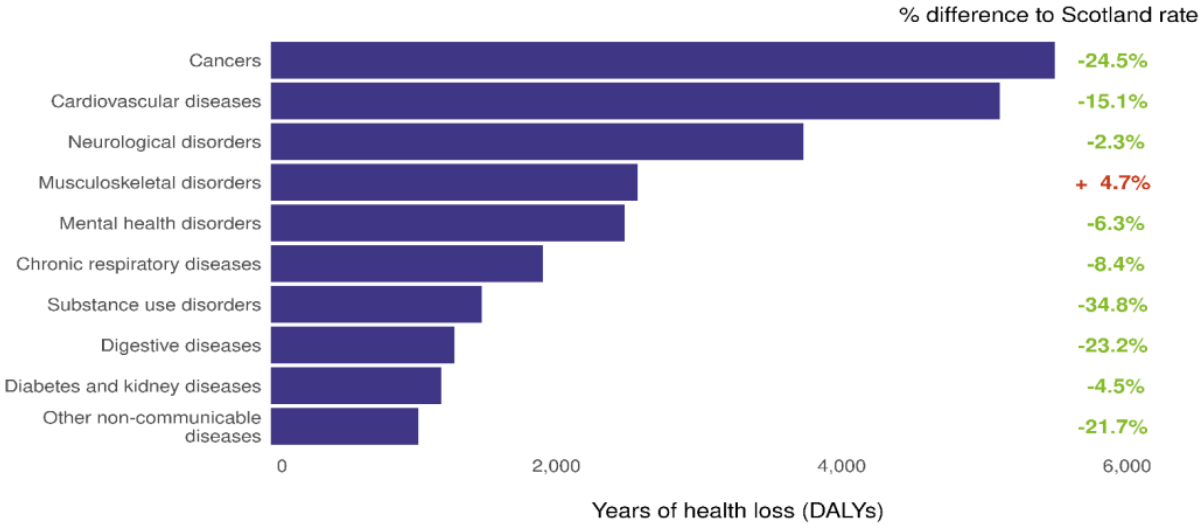


The three leading grouped causes of ill-health and early death in East Lothian are cancers, cardiovascular diseases and neurological disorders. These groups of causes account for 47% of the total burden of health loss. As can be seen in Figure , the largest differences in burden, compared to Scotland, occur due to substance use disorders, cancers and digestive diseases where East Lothian compares more

[12] Adapted from information provided in PHS, 2022b

favourably than the national average. occur due to neurological disorders, diabetes and kidney diseases and cardiovascular diseases. Overall, the rate of health loss in East Lothian is **13% lower** than the Scottish rate, where it is estimated that the total burden in 2019 has **decreased 0.6%** compared to the burden in 2016.

Figure 7.5. Leading grouped causes of ill health and early death in East Lothian, 2019



Data is also provided for the leading individual causes of ill health and early death (see Table 7.1). The leading individual causes of ill health in East Lothian are low back and neck pain, depression and headache disorders. In contrast, the leading cause of early death in East Lothian are ischaemic heart disease, Alzheimer's and other dementias and lung cancer. Whilst it is encouraging that almost all leading causes of early death are lower than the Scottish average, there is still room for improvement by targeting the top 3-5 leading causes.

Table 7.1. Leading individual causes of ill health * early death in East Lothian, 2019

	Ill health	% difference from Scotland
1	Low back and neck pain	2.3%
2	Depression	-6.8%
3	Headache disorders	4.9%
4	Anxiety disorders	-6.1%
5	Osteoarthritis	1.7%
6	Diabetes mellitus	-3.5%
7	Other musculoskeletal disorders	4.2%
8	Age-related and other hearing loss	4.3%
9	Cerebrovascular disease	-5.7%
10	Skin and subcutaneous diseases	4.5%

Ranking based upon the total YLD
% change based upon age-sex standardised YLD rates

	Early death	% difference from Scotland
1	Ischaemic heart disease	-18.6%
2	Alzheimer's disease and other dementias	-5.8%
3	Lung cancer	-25.8%
4	Chronic obstructive pulmonary disease	-13.5%
5	Cerebrovascular disease	-14.2%
6	Other cancers	-36.2%
7	Drug use disorders	-40.2%
8	Self-harm and interpersonal violence	0.7%
9	Lower respiratory infections	-13.9%
10	Cirrhosis and other chronic liver diseases	-10.1%

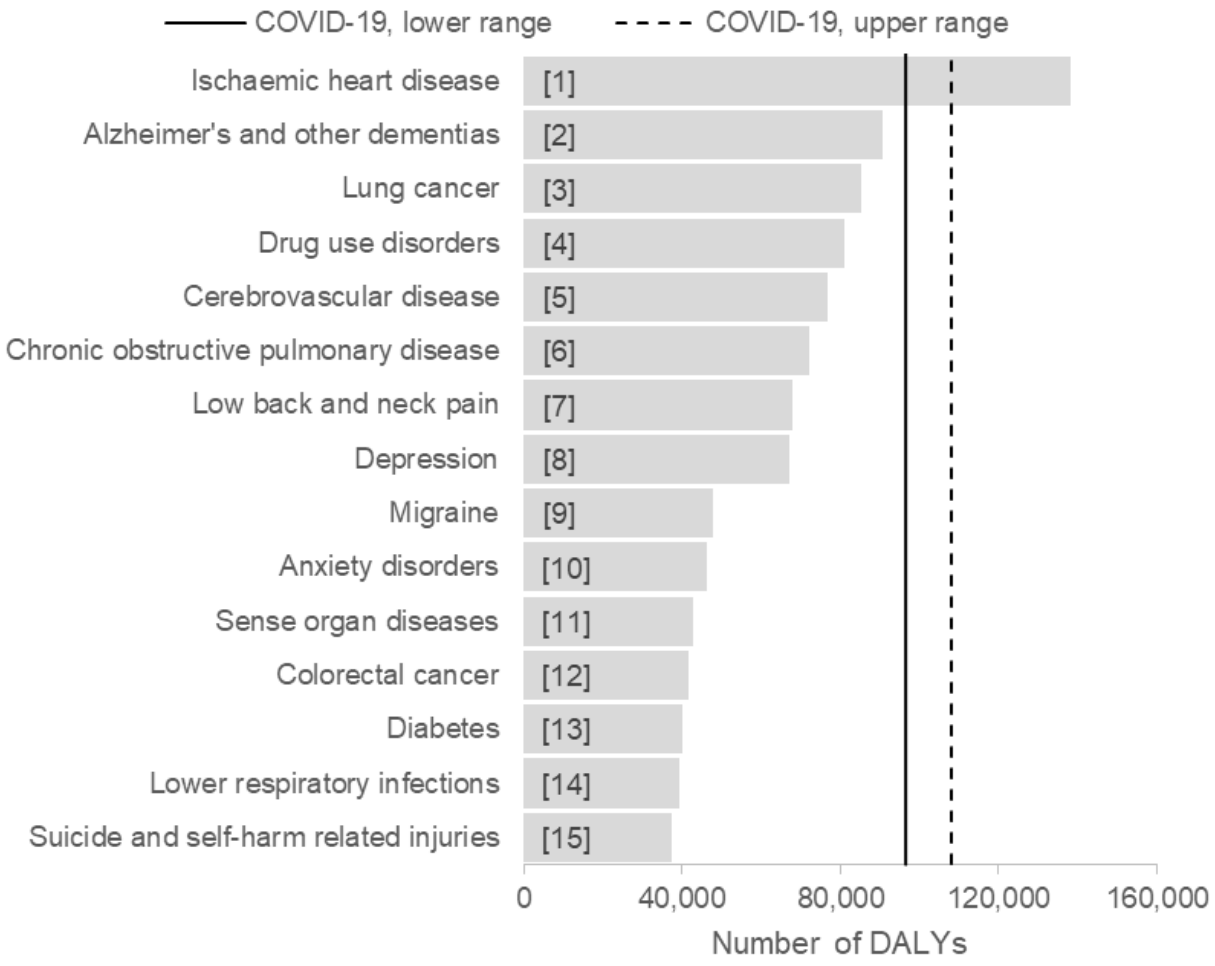
Ranking based upon the total YLL
% change based upon age-sex standardised YLL rates

Rate lower than Scotland | Rate higher than Scotland

7.1.1 National comparisons and health inequalities

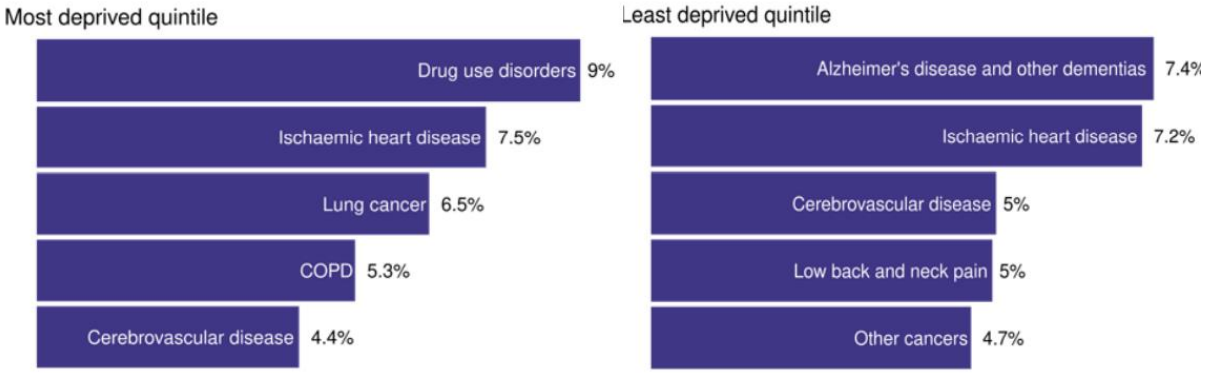
A similar picture is observed at the national level with Ischaemic heart, Alzheimer's and other dementias, and lung cancer being the leading causes of ill health and early death. However, this does not reflect the impact of COVID-19 and that is why Wyper et al's (2022) recent study provides valuable insight in this regard. As shown in Figure , COVID-19 generated enough DALYs in 2020 to represent the second leading cause of death and disability in Scotland when comparing the number of direct COVID-19 DALYs with the pre-COVID-19 leading causes of disease and injury in Scotland. The estimated lower limit of DALYs was higher than Alzheimer's disease and other dementias, whereas the estimated upper limit of DALYs was considerably less than the DALYs due to ischaemic heart disease.

Figure 7.6. Estimates of the number of DALYs for COVID-19 and the pre-pandemic (2018) 15 leading causes of disease/injury, Scotland, 2020



Estimates of the burden by deprivation level (population fifths) are available for each NHS region in Scotland (North, East and West) rather than smaller geographic areas like local authorities due to uncertainty in the data at these levels. For the East Region, the rate of health loss in the most deprived 5th of the population was 1.9 times as high as the rate in the least deprived 5th of the population (see Figure). It is estimated that 47% of the health loss in the most deprived 5th of the population in the West region could have been avoided if the population in this quintile experienced the same rate as those in the least deprived 5th of the population (PHS, 2022b).

Figure 7.7. Leading individual causes of ill health and early death by proportion in the most and least deprived quintiles, East Region



7.2 Multiple Long-Term Conditions

It is estimated that one in four of the UK adult population currently have two or more long-term conditions (LTCs) and it is projected that approximately 17% of the UK population will have four or more chronic conditions by 2035, almost double the current prevalence of 9.8% (Stafford et al., 2018). The rise in the proportion of people living with multiple long-term conditions (MLTCs), also known as multimorbidity, is considered to be one of the most significant challenges facing health services, both currently and in the coming decades (Pearson-Stuttard, Ezzati and Gregg, 2019). MLTCs are associated with several negative outcomes including premature death, lower quality of life, reduced mobility, chronic pain, poorer mental wellbeing, higher number of hospital admissions and longer hospital stays (NIHR, 2021; Chen et al., 2020; Stafford et al., 2018; Gunn, 2012). Moreover, evidence suggests that the COVID-19 pandemic is likely to have exacerbated the challenges already faced by people living with MLTCs (Smith et al., 2021). In general, the proportion of people with MLTCs increases as people get older, with those aged 75 and over more likely to have a higher number of LTCs compared to other age groups. Prevalence of MLTCs also tends to increase with higher levels of deprivation, with the most notable difference being between the opposite ends of the spectrum.

8 Conclusion

The East Lothian JSNA provides a comprehensive overview of the current and projected health and wellbeing needs of the local population, highlighting both strengths and areas requiring urgent attention. The evidence underscores that while East Lothian performs relatively well on several health indicators compared to national averages, significant challenges persist—particularly in relation to health inequities, demographic change, and the wider determinants of health.

East Lothian is the second fastest-growing local authority in Scotland, with a projected population increase of over 15% by 2043. The most substantial growth will occur in the older population, with those aged over 75 expected to almost double. This demographic trend will place considerable pressure on health and social care services, housing, and community infrastructure, necessitating proactive planning to ensure sustainable service delivery and workforce capacity.

Health outcomes in East Lothian reveal a mixed picture. Life expectancy remains higher than the Scottish average, yet progress has stalled since 2015, with signs of reversal in recent years. A clear socioeconomic gradient persists, with people in the most deprived areas experiencing significantly shorter lives and poorer health than those in the least deprived areas. These disparities are mirrored in healthy life expectancy, mental health outcomes, and the prevalence of multiple long-term conditions, which are projected to rise sharply in the coming decades.

Addressing these inequities requires a whole-system approach that goes beyond healthcare provision to also tackling the structural and social determinants of health. While East Lothian performs well in some aspects, several challenges remain. High housing costs, fuel poverty, transport barriers, and social isolation—particularly in rural areas—continue to exacerbate vulnerability and limit access

to opportunities. These issues are compounded by the cost-of-living crisis, which has driven increased demand for food banks and support services, even in traditionally affluent areas.

Lifestyle-related risk factors remain a major contributor to preventable ill health and premature mortality. Tobacco use, harmful alcohol consumption, poor diet, physical inactivity, and obesity are all socioeconomically patterned and continue to widen health inequalities. Evidence strongly supports prioritising population-level interventions that reduce reliance on individual behaviour change and instead modify the environments in which people live, work, and age. Such approaches are more effective and equitable, particularly when combined with targeted support for those most at risk.

Finally, the JSNA emphasises that improving population health and reducing inequities cannot be achieved by the health and social care system alone. It requires coordinated action across sectors, investment in prevention, and a commitment to addressing the root causes of poor health—poverty, inequality, and environmental factors. Strategic planning must therefore adopt a whole-system, place-based approach that aligns health priorities with housing, transport, education, and climate resilience strategies. By doing so, East Lothian can build a healthier, fairer, and more sustainable future for all its residents.

Appendices

Appendix 1. Membership of JSNA Working Group

East Lothian Health and Social Care Partnership

- Claire Goodwin, Performance and Improvement Manager
- Neil Munro, Project Support Manager
- Michelle Williams, Project Support Manager

NHS Lothian East Lothian Partnership and Place Team

- Dr. Kalonde Kasengele, Consultant in Public Health
- Kat Burke, Population Health Strategic Programme Manager
- Lorna Bellany, Population Health Project Manager
- Laura Chant, Population Health Project Manager

NHS Lothian Public Health Intelligence

- Dr. Ross Whitehead, Head of Public Health Intelligence
- Kristen Bowles, Senior Public Health Intelligence Analyst
- Dr. Jamie Zike, Public Health Intelligence Analyst

Public Health Scotland Local Intelligence Support Team

- Bradley Roy, Senior Information Analyst
- Andrew Duffy, Principal Information Analyst

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