JSNA Blackpool

Joint Strategic Needs Assessment

Cardiovascular Disease

Last Modified 28/11/2023 13:55:32

Introduction

Cardiovascular disease (CVD) affects more than 1 in 4 adults in England and is the second largest single risk factor for premature death and disability in the country. There have been huge gains over the past decades in terms of better treatment for CVD and improvements in lifestyle, but to ensure that there continues to be a reduction in the rate of premature mortality from CVD, there needs to be concerted action on both prevention and treatment.

Cardiovascular disease is defined as all the diseases of the heart and circulatory system, including coronary heart disease (angina and heart attack), and stroke. Around one-third of all deaths in the UK are due to these diseases.

Heart attacks and strokes are usually acute conditions and are mainly caused by a blockage that prevents blood from flowing to the heart or brain. The most common reason is a build-up of fatty deposits on the inner walls of the blood vessels. Strokes can be caused by bleeding from a blood vessel in the brain or by blood clots.

CVD becomes increasingly common in people over the age of 60 and is rare below the age of 30.

Facts and figures

Prevalence of cardiovascular diseases

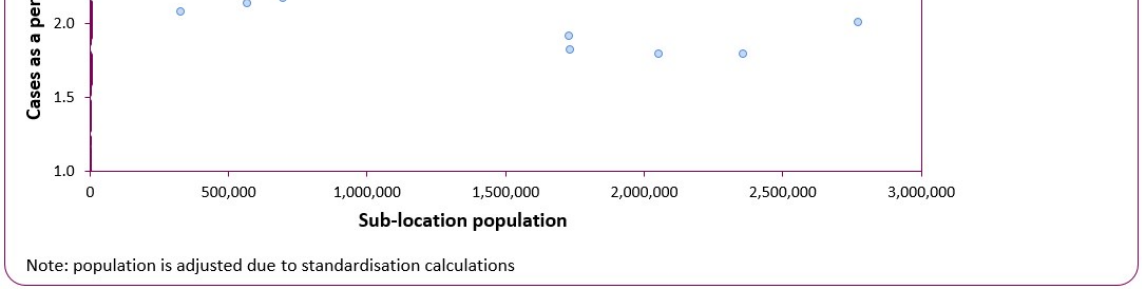
For further information regarding the source of NHS Quality and Outcomes Framework (QOF) prevalence data and its limitations please see the note on QOF Data.

Coronary heart disease is the most common type of heart disease and cause of heart attacks. The disease is caused by plaque building up along the inner walls of the arteries of the heart, which narrows the arteries and reduces blood flow to the heart.

In 2021/22, 7,797 people (all ages) in the Blackpool ICB sub-location (formerly NHS Blackpool CCG) were identified as living with coronary heart disease (CHD).[1] This equates to 4.4%, which is significantly higher than the England average (3.0%). It is estimated that this accounts for only 70% of the total population in Blackpool living with CHD and there are likely to be approximately 3,350 people with undiagnosed CHD.[2]

Blackpool's sub-location is shown as a purple marker in figure 1, with all other sub-locations across England shown in blue. Blackpool has the sixth highest rate of CHD in England.

Figure 1: CHD prevalence funnel plot analysis at CCG level (2021/22 QOF)



Source: Cardiovascular Disease - OHID

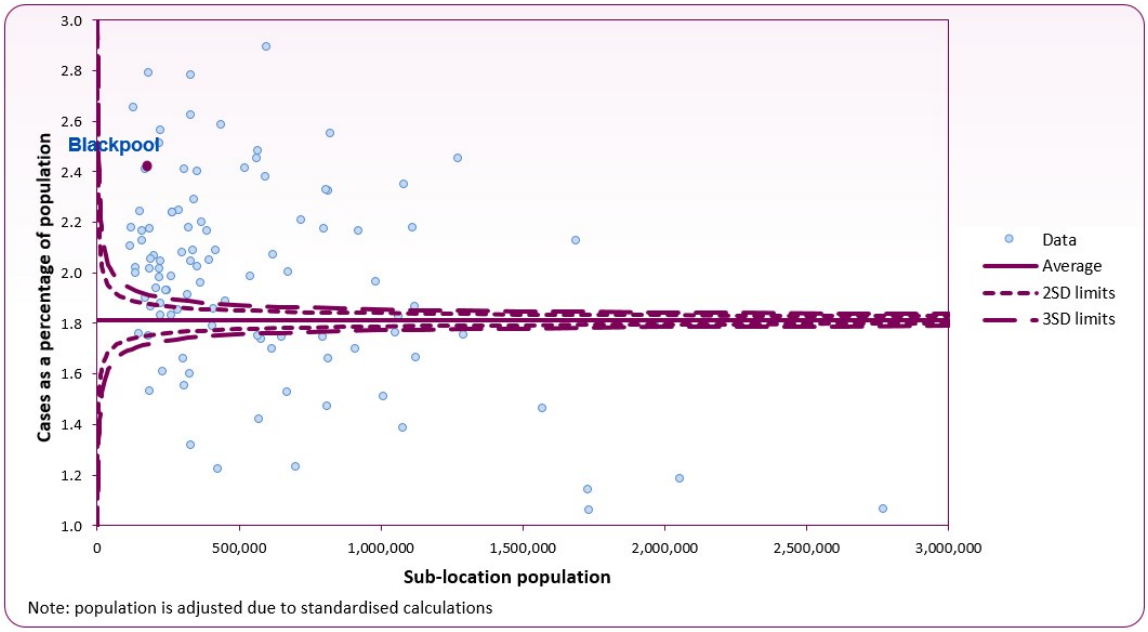
Stroke is the loss of brain function due to a disturbance in the blood supply to the brain. Risk factors for stroke include old age, high blood pressure, previous stroke or transient ischemic attack (TIA), diabetes, high cholesterol, tobacco smoking and atrial fibrillation. High blood pressure is the most important modifiable risk factor of stroke. There is evidence that appropriate diagnosis and management can improve outcomes.

In 2021/22, 4,274 people (all ages) in the Blackpool ICB sub-location (formerly NHS Blackpool CCG) were identified as having previously experienced a stroke or ischaemic attack.[1] This equates to 2.4%, which is significantly higher than the England average (1.8%).

Blackpool's sub-location is shown as a purple marker in **figure 2**, with all other sub-location shown in blue. **Figure 2** shows that Blackpool has one of the highest rates of stroke in England, ranking 13th.

For further summary data about stroke prevalence in Blackpool please see the Office for Health Improvement and Disparities' OHID Stroke Profile.

Figure 2: stroke and ischaemic attack prevalence funnel plot analysis at sub-location level (2021/22 QOF)



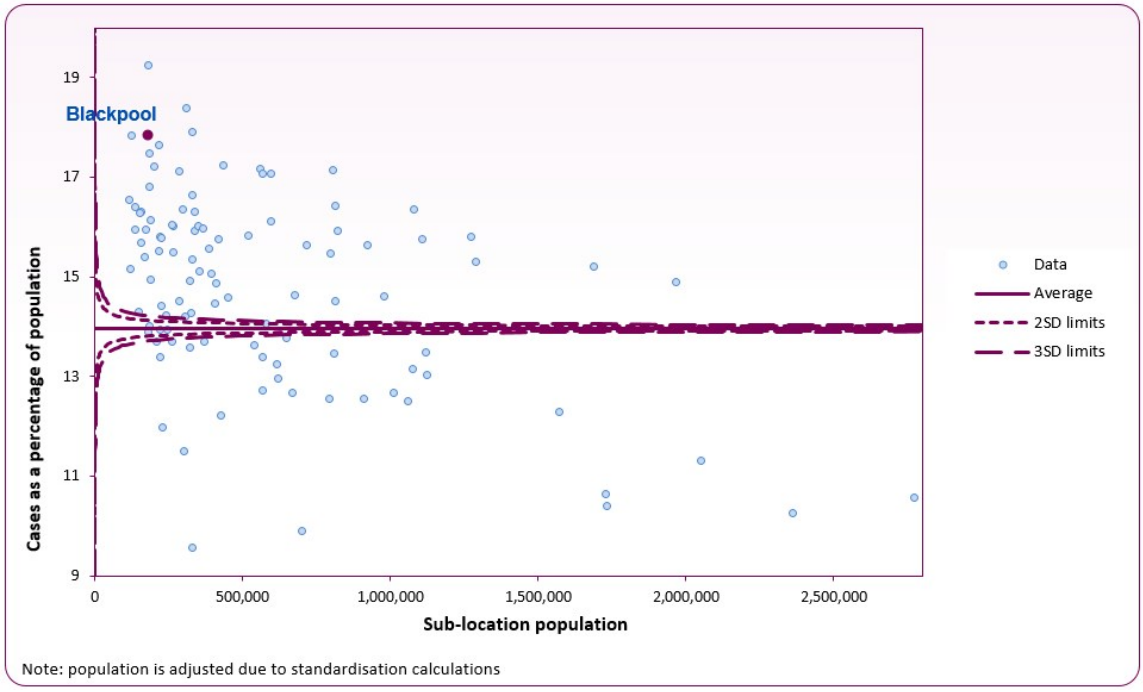
Source: Cardiovascular Disease - OHID

Hypertension is a chronic medical condition in which the blood pressure in the arteries is elevated. It affects approximately 22% of the population. Hypertension puts a strain on the heart, leading to hypertensive heart disease and coronary artery disease if not treated. Hypertension is also a major risk factor for stroke, aneurysms of the arteries (e.g. aortic aneurysm), and peripheral arterial disease and is a cause of chronic kidney disease. A moderately high arterial blood pressure is associated with a shortened life expectancy while mild elevation is not. Dietary and lifestyle changes can improve blood pressure control and decrease the risk of health complications, although drug treatment is still often necessary in people for whom lifestyle changes are not enough or not effective.

In 2021/22, 31,492 people (all ages) in the Blackpool ICB sub-location (formerly NHS Blackpool CCG) were identified as having hypertension.[1] This equates to 17.9%, which is significantly higher than the England average (14.0%). Blackpool's sub-location is shown as a purple marker in **figure 3**, with all other sub-location shown in blue. **Figure 3** shows Blackpool has one of the highest rates of hypertension across England.

The Office for Health Improvement and Disparities (OHID) estimated that in 2019/20 the 31,823 people with hypertension identified by GP practices made up 76.3% of the overall number of those living with hypertension in Blackpool. This means that between approximately 9,900 people are estimated to be living with undiagnosed hypertension in Blackpool.[2]

Figure 3: hypertension prevalence funnel plot analysis at sub-location level (2021/22 QOF)

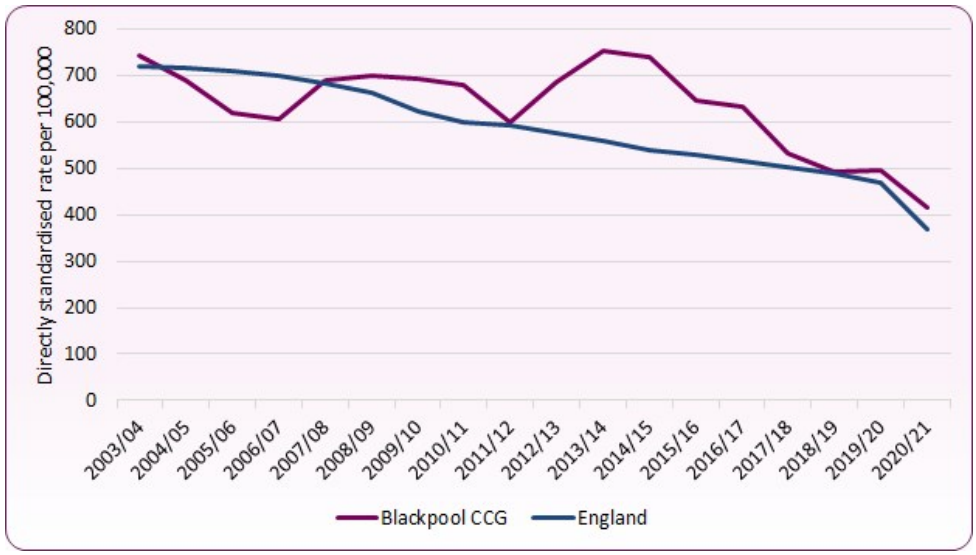


Source: Cardiovascular Disease - OHID

Hospital admissions

In 2020/21, the Blackpool rate of admissions for a primary diagnosis of coronary heart disease was 414.1 per 100,000 population (all ages), significantly higher compared to 367.6 per 100,000 across England. The rate of hospital admissions for CHD has decreased nationally since 2003/4. In Blackpool the rate has declined since 2013/14, when it was 752.1 per 100,000 (figure 4). The chart also shows hospital admissions for CHD reducing sharply during the COVID-19 pandemic in 2020. The data are based on the old NHS Blackpool Clinical Commissioning Group.

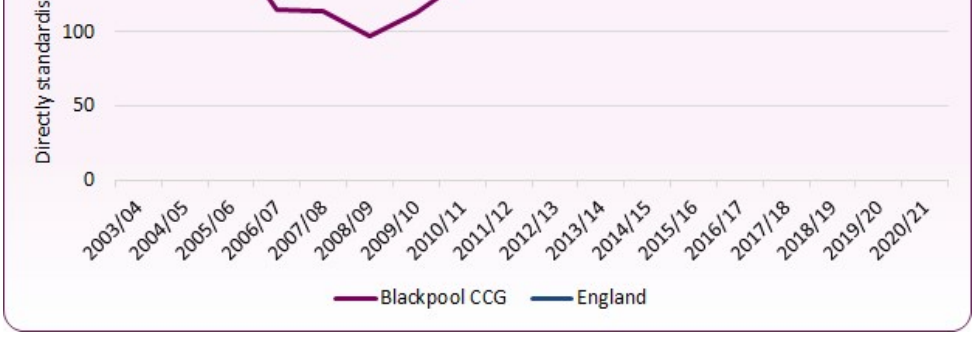
Figure 4: hospital admissions for coronary heart disease (all ages), Blackpool and England, 2003/4 to 2020/21



Source: Cardiovascular Disease - OHID

The 2020/21 admission rate for a primary diagnosis of stroke across Blackpool (based on CCG data) was 213.9 per 100,000 population (all ages), significantly higher compared to 161.8 per 100,000 across England. The national rate of hospital admissions for stroke slowly declined between 2012/13 and 2018/19. Blackpool's rate followed this trend until 2018/19 when the rate rose above the national average for the first time (figure 5). During the COVID-19 pandemic, the chart shows the rate continued to increase.

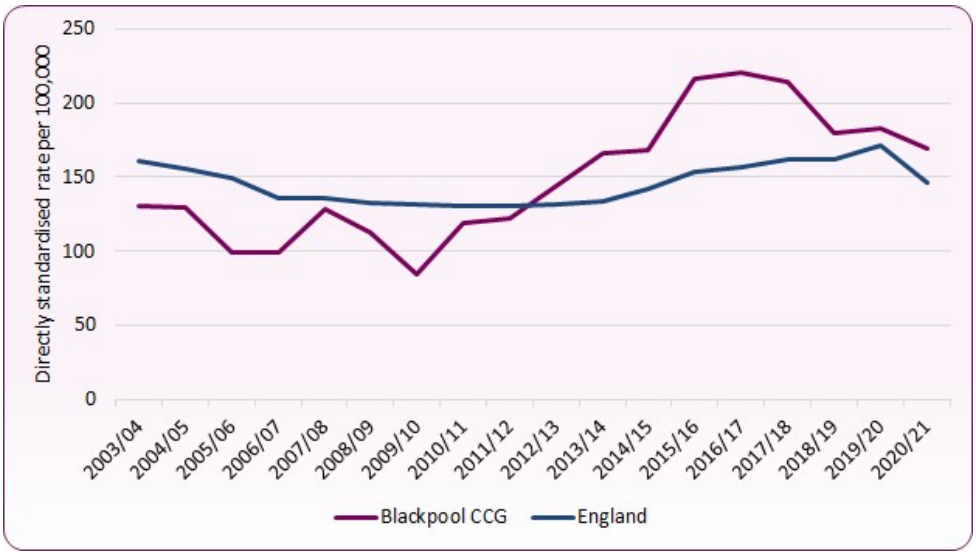
Figure 5: hospital admissions for stroke (all ages), Blackpool and England, 2003/4 to 2020/21



Source: Cardiovascular Disease - OHID

The 2020/21 hospital admission rate across Blackpool (based on CCG data) for heart failure was 169.8 per 100,000 population (all ages), significantly higher than the England rate of 146.7 per 100,000. Blackpool's admission rate increased more steeply than the national level between 2009/10 and 2016/17 but has since fallen (figure 6). The chart shows there was a slight decrease during the COVID-19 pandemic.

Figure 6: hopsital admissions for heart failure (all ages), Blackpool and England, 2003/4 to 2020/21

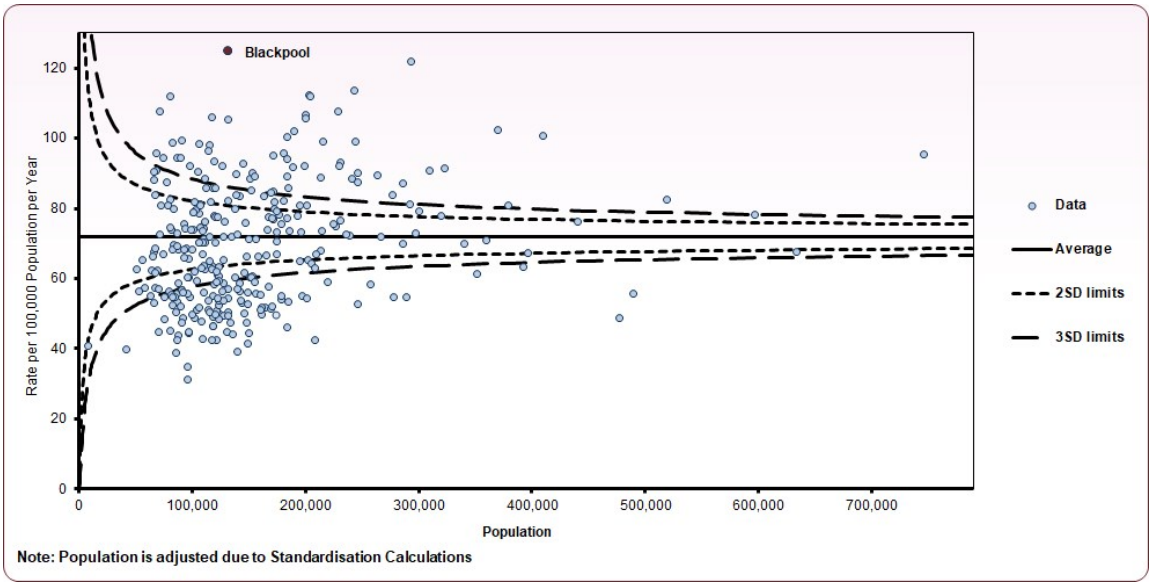


Source: Cardiovascular Disease - OHID

Mortality from cardiovascular diseases

There were around 500 deaths from CVD in people aged under-75 across Blackpool between 2018 and 2020. The directly standardised mortality rate (in this case per 100,000 population) is calculated to allow comparison between geographies of different population sizes and with different gender and age make ups. As displayed in Figure 7, Blackpool's mortality rate from CVD in those aged under-75 (124.8 per 100,000) is the highest in the country and over 40% higher than England (71.9 per 100,000). Please note, the mortality trend charts and funnel charts below cannot be updated to incorporate more recent data at present. This is due to the revised official population estimates (based on the Census 2021) not being available to recreate the mortality trends. Once these are published, the charts will be updated.

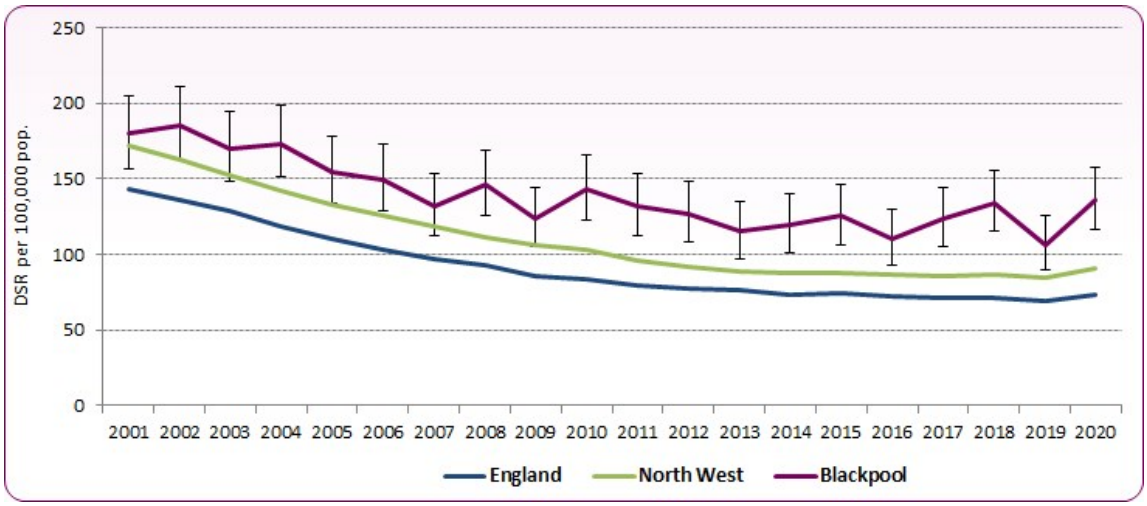
Figure 7: funnel plot of mortality from all cardiovascular diseases, under-75 years, 2018-20 - lower tier local authorities



Source: NHS Digital, Compendium: Mortality, 2022

Figure 8 shows the annual trend in mortality from cardiovascular diseases in those aged under-75, comparing Blackpool to the North West and England averages. Over the long term there has been a decrease in mortality from cardiovascular diseases both nationally and in Blackpool, although the mortality rate in Blackpool is significantly higher than both the national and regional rates. The impact of the COVID-19 period 2020 can be seen in data, with slight increases in CVD mortality rates regionally and nationally. In Blackpool there were 180 deaths from CVD in 2020 compared to 142 in the previous year and 178 in 2018. Local annual numbers and rates are often subject to variation due to relatively low numbers, and trends may only become apparent over longer time periods.

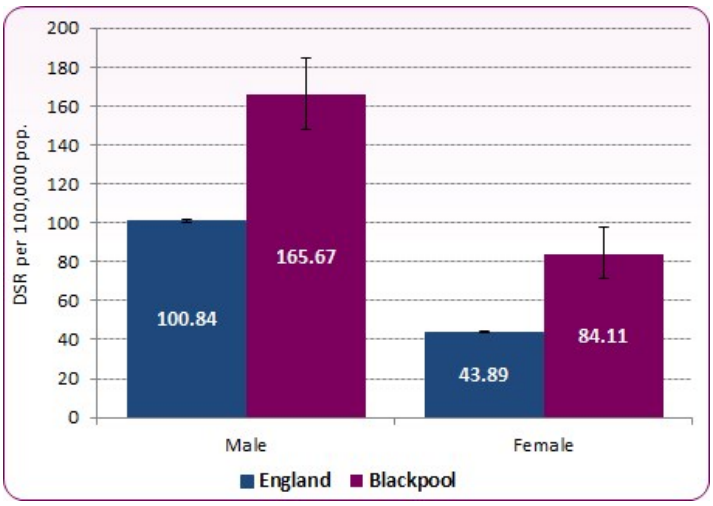
Figure 8: annual trend in CVD mortality, people under-75 - 2001 to 2020



Source: OHID, Public Health Mortality Profile / NHS Digital, Compendium: Mortality, 2022

Figure 9 shows the difference in male and female mortality for those aged under 75 years. Of the 495 deaths in 2018-20 in Blackpool, 66% were male and 34% female, which is similar to the England average split. It can clearly be seen that in Blackpool rates for both sexes are significantly higher than the national average.

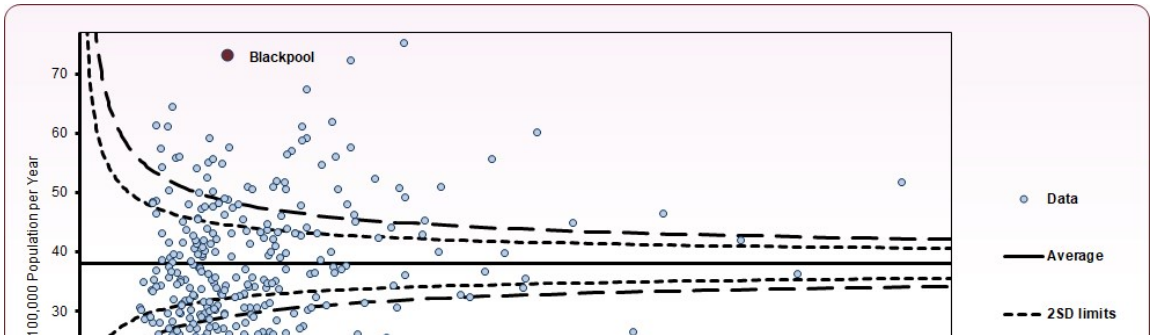
Figure 9: mortality from CVD, males and females aged under-75, 2018-20

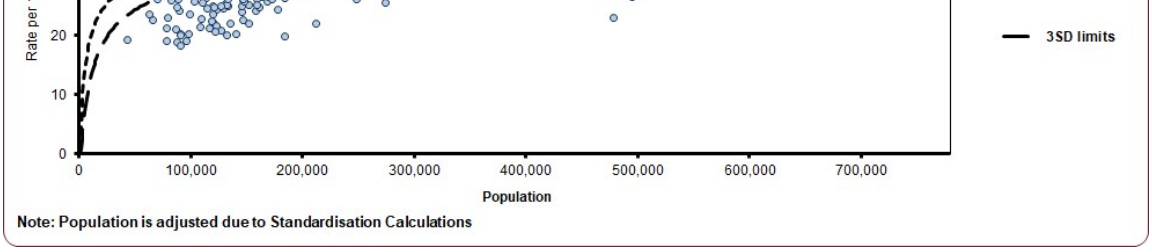


Source: NHS Digital, Compendium: Mortality, 2022

Figure 10 shows mortality from coronary heart disease in people aged under 75 years for lower tier local authorities in England[3]. There were 290 deaths in 2018-20, a Blackpool rate of 73.2 per 100,000 population, significantly higher than the England average of 37.5 per 100,000.

Figure 10: funnel plot of mortality from coronary heart diseases, under-75 years, 2018-20 - lower tier local authorities

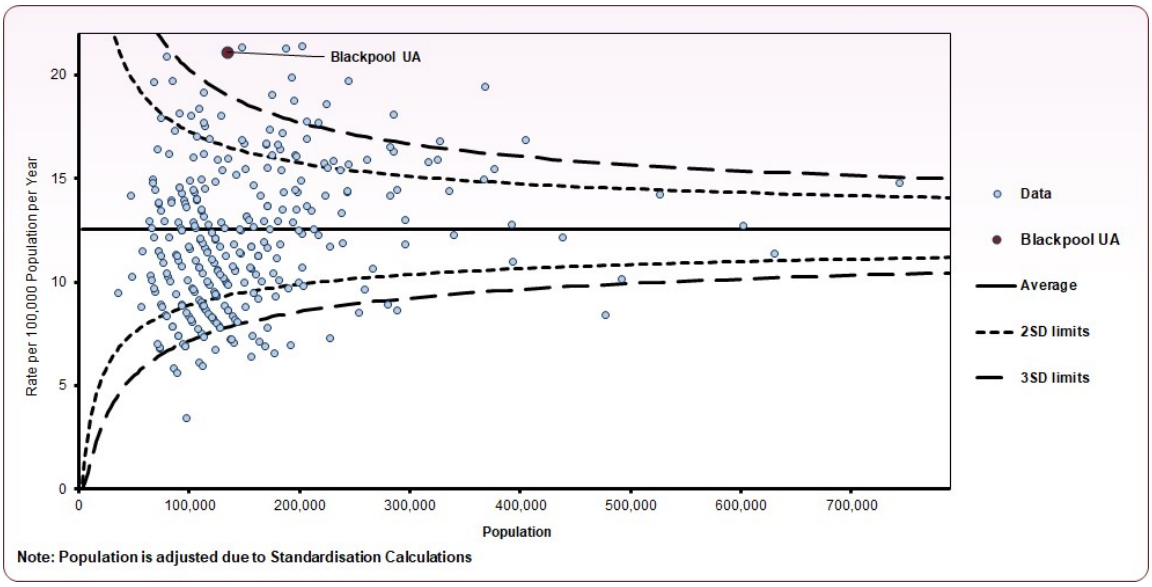




Source: NHS Digital, Compendium: Mortality, 2022

Figure 11 shows mortality from **stroke** in people aged under-75 years for lower tier local authorities between 2018 and 2020. Across Blackpool there were around 75 deaths from stroke in people aged under-75 (data is rounded so values are approximate). The mortality rate from stroke in Blackpool for those under-75 is sigificantly higher than the national average.

Figure 11: funnel plot of mortality from stroke, under-75 years, 2018-20 - lower tier local authorities



Source: NHS Digital, Compendium: Mortality, 2021

Preventable mortality

The basic concept of preventable mortality is that deaths are considered preventable if, in the light of the understanding of the determinants of health at the time of death, all or most deaths from the underlying cause (subject to age limits if appropriate) could potentially be avoided by public health interventions in the broadest sense.

- In **2017-19** in Blackpool, 40.5% (195) of deaths from cardiovascular diseases in people aged under 75 were considered preventable (compared to 39.8% nationally).
- Blackpool's preventable mortality rate for cardiovascular diseases of 49.1 per 100,000 population (DSR) was significantly higher than the national average of 28.1 per 100,000.
- In **COVID-19 affected 2020**, 38.6% (70) of deaths from cardiovascular diseases in people aged under 75 were considered preventable (39.5% nationally).
- Blackpool's preventable mortality rate for cardiovascular diseases of 52.3 per 100,000 population (DSR) was significantly higher than the national average of 29.2 per 100,000.

Services

- The Sentinel Stroke National Audit Programme (SSNAP) publishes national and local level findings on the organisation of stroke services, including acute care organisation, staffing and pathway at discharge. It reflects the organisation of stroke services as at July 2019 and gives a comprehensive picture of current services. Results for Blackpool Teaching Hospital show it meets 6 out of the 10 key indicators on stroke service organisation.

  SSNAP Acute Organisational Audit 2019 for Blackpool Teaching Hospital NHS Foundation Trust (270 KB)

- The Office for Health Improvement and Disparities summary profile for cardiovasular disease (including CHD and stroke) provide a broad understanding of how these conditions are treated and how Blackpool compares with other areas. They show the impact on the local population, identify emerging issues and aim to help improve services.

National and local strategies

- The Office for Health Improvement and Disparities (OHID) Cardiovascular disease prevention: applying All Our Health -

GOV.UK (www.gov.uk), (March 2022) promtes CVD prevention to local authority and NHS commissioners, and providers outlining actions to improve CVD outcomes.

- Cardiovascular disease data and analysis: a guide for health professionals explains how commissioners and health professionals can use data and analysis for decisions about cardiovascular services and interventions.
- UK Health Security Agency, Health matters - Action on cardiovascular disease: getting serious about prevention looks at the work being undertaken to prevent cardiovascular disease (CVD).
- NICE guideline [PH25] Cardiovascular disease prevention (June 2010) covers the main risk factors linked with cardiovascular disease: poor diet, physical inactivity, smoking and excessive alcohol consumption. It aims to reduce the high incidence of cardiovascular disease.
- NICE guideline [PH15] Cardiovascular disease: identifying and supporting people most at risk of dying early (September 2008) covers the risk of early death from heart disease and other smoking-related illnesses.
- CVD primary care intelligence packs uses GP practice data on prevention, detection and management across a range of cardiovascular conditions.

Risk factors

Risk factors for CVD include:

- high blood pressure (hypertension)
- smoking
- high blood cholesterol
- diabetes
- lack of exercise
- being overweight or obese
- family history of heart disease
- ethnic background

Many of the above risk factors are linked. This means that if you have one risk factor, you're more likely to have others.[2]

---

[1] OHID, National General Practice Profiles

[2] OHID, Hypertension Prevalence and Management, October 2020

↑ Back to top