# Life & death

#### Overview



Mortality (death) statistics and life expectancy are important measures of the **overall health of a population** 



**Life expectancy**: provides a broad overview of **population health and wellbeing**, highlighting the overall lifespan of a population



Mortality: provides more detailed information about the causes and patterns of death within a population, allowing for targeted interventions to improve health outcomes



Together, these measures offer a comprehensive picture of a population's health status, revealing trends and disparities



Bolton's main causes of death1:

- 26% cancers
- 24% cardiovascular disease
- 19% respiratory infections

# Life expectancy



Life expectancy at birth is the number of years a baby born would be expected to live if they experienced today's age-specific death rates for the rest of their life.



It is **not a prediction** (these factors are unlikely to stay constant)



Bolton's life expectancy at birth is **lower** by around 2 years than England<sup>3</sup>:

- Male: Bolton 76.7; England 79.1
- Female: Bolton 81.3; England 83.1

Small area life expectancy in Bolton<sup>4</sup>:



- Male 15 years difference
  Dunscar & Egerton 85.2
  Central Bolton 70.3
- Female 10 years difference
  Dunscar & Egerton 87.0
  Breightmet North 77.1

## Mortality



Mortality reflects **a number of factors** added together over a lifetime:

- Risk factors (e.g. smoking)
- Occurrence and severity of disease
- effectiveness of interventions



**Mortality rates** are the number of people in every 10,000 who died in the time period, **adjusted** as if the different areas' **age structure** was the same



Bolton's **all cause, all age** mortality rate is **worse** than England<sup>2</sup>

- Male: 1,317/100,000 per year
- Female: 922/100,000 per year



Most deaths happen at older ages



Bolton's **all cause, under 75** mortality rate is **worse** than England<sup>2</sup>

- Male: 521.3/100,000 per year
- Female: 302.8/100,000 per year

## Healthy life expectancy



Healthy life expectancy at birth is the average number of years a baby born would be expected to live in good health, if today's situation remained the same for the rest of their life



**Good health** is **self-rated**, but is a good predictor of service usage.



If a greater part of people's lives is spent in good health, this helps them live life to the full as long as possible, and reduces the cost of intensive health and social care that's often needed for poor health right at the end of life.



Bolton's healthy life expectancy<sup>5</sup> is **lower** than England<sup>6</sup>:

• **Male**: Bolton **60.3**; England 63.1

• **Female**: Bolton **62.4**; England 64.0

# Life & death

## Global burden of disease7



Global burden of disease - a tool for comparing diseases, injuries, and risk factors between times and places



**Smoking** gives the **greatest Years of Life Lost (YLL)** in Bolton, mainly due to:

- Cancers 3,800 YLL
- Cardiovascular disease 2,000 YLL



**High blood pressure** is the second largest, mainly due to its impacts on:

• Cardiovascular disease 5,200 YLL



## The largest **environmental risks** are

Low temperature

Respiratory infections: 400 YLL Chronic respiratory disease: 400 YLL



Particulate matter pollution
 Cardiovascular disease: 700 YLL
 Chronic respiratory disease: 200 YLL

 Occupational carcinogens e.g. asbestos

Cancers: 1,300 YLL

# Avoidable mortality



Some deaths happen **earlier** than they might have. Avoidable mortality is made of:



Preventable mortality – deaths could be avoided through effective **public** health and primary prevention – the disease leading to death is prevented



**Treatable mortality** - deaths could be avoided through **effective healthcare**, e.g. secondary prevention and treatment – the disease does not lead to death.



Bolton's **under 75 preventable** mortality rate is **worse** than England<sup>2</sup>

Male: 259.9/100,000 per yearFemale: 136.0/100,000 per year



Bolton's **under 75 preventable** mortality rates are **worse** than England for<sup>8</sup>

Cancer: 61.2/100,000Liver disease: 28.5/100,000

• Respiratory disease: 27.8/100,000

#### References

Produced July 2025

[1] Global Burden of disease VizHub - GBD Compare All ages all causes 2021, level 2

[2] OHID (2024). Mortality profile. Mortality Profile - Data | Fingertips | Department of Health and Social Care 1 year rates 2023

 $[3] OHID (2025) Fingertips \ local \ authority \ health \ profiles \ \underline{Local \ Authority \ Health \ Profiles \ \underline{-Data \ | Fingertips \ | \ Department \ of \ Health \ and \ Social \ Care}}$ 

[4] OHID (2022) Local health. Local health, public health data for small geographic areas - Data | Fingertips | Department of Health and Social Care

[5] ONS Health state life expectancies, UK - Office for National Statistics 2018-2020

[6] Fingertips Fingertips | Department of Health and Social Care 2018-2020. Reduced survey response rates following Covid are currently impacting calculation of healthy life expectancy for smaller areas

[7] Global Burden of disease VizHub - GBD Compare All ages 2021, Risks by cause, Level 3

[8] OHID (2024). Mortality profile. Mortality Profile - Data | Fingertips | Department of Health and Social Care persons 3 year rate (2021-2023).

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