# Cancer

## Summary points

- Cancer is the leading cause of early death in Bristol. On average 38% of deaths of under 75 year-olds had cancer as an underlying cause[1]
- In Bristol there were 14,030 patients with a cancer diagnosis on GP practice registers in 2020/21. The prevalence rate of 2.6% was lower than the England average of 3.2%.
- There were 412 deaths from cancer under the age of 75 in 2020 in Bristol. This is a rate of 139.8 per 100,000 population, significantly higher than England rate of 125.1.
- The lowest under 75 mortality rates from cancer have been recorded in North and West (inner) locality, while the highest rates are in the South locality.
- Screening coverage for breast and bowel cancer in Bristol is consistently significantly lower (worse) than the England average.

## Early Deaths (deaths in under 75 year olds)

In 2020 the under 75 mortality rate (described as Early Deaths) from cancer in Bristol was 139.8 per 100,000[2], significantly higher than the England rate (125.1 per 100,000). The Bristol rate is the second lowest among the core cities. Since 2001 early death rates from cancer have continued to decline nationally. Rates in Bristol have also been declining since 2001, although they have stayed consistently above England's average. There were 412 early deaths from cancer in Bristol in 2020 – a slight decrease compared to the previous year (434 in 2019).

Among men, Bristol rates for early deaths from cancer at 149.8 per 100,000 are higher than the national average for men (137.6 per 100,000), and significantly higher than the Bristol rate for women (130.0 per 100,000) – see fig 1. The rate for women is also higher than national average (113.5per 100,000). Male rates have decreased slightly in 2020.

Men tend to have higher incidence and mortality rates than females for the majority of common cancer types[3] (the rates have been adjusted for longer life expectancy - age standardised[4]). In the South West the registration rate per 100,000 population of newly diagnosed cases of malignant neoplasms (cancers as described by the World Health Organisation (WHO) International Classification of Diseases: ICD-10 codes C00 to C97 excluding C44) cancer for men was over 20% higher than for women in 2017: 1,008.5 vs 775.3 accordingly[5].

In Bristol the male under 75 mortality rate from cancer was 13.2% higher than the rate for women in 2020 – see fig. 1.

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[1] Primary Care Mortality Database via NHS Digital, average for the deaths registered in 2015-2019

[2] Public health profiles - OHID (phe.org.uk)

[3] (National Cancer Intelligence Network Cancer and equality groups: key metrics 2015 report, http://www.ncin.org.uk/cancer_type_and_topic_specific_work/topic_specific_work/equality

[4] Age standardisation is a technique used to allow statistical populations to be compared when the age profiles of the populations are quite different

[5] Cancer Registration Statistics, England, 2019, https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/previousReleases

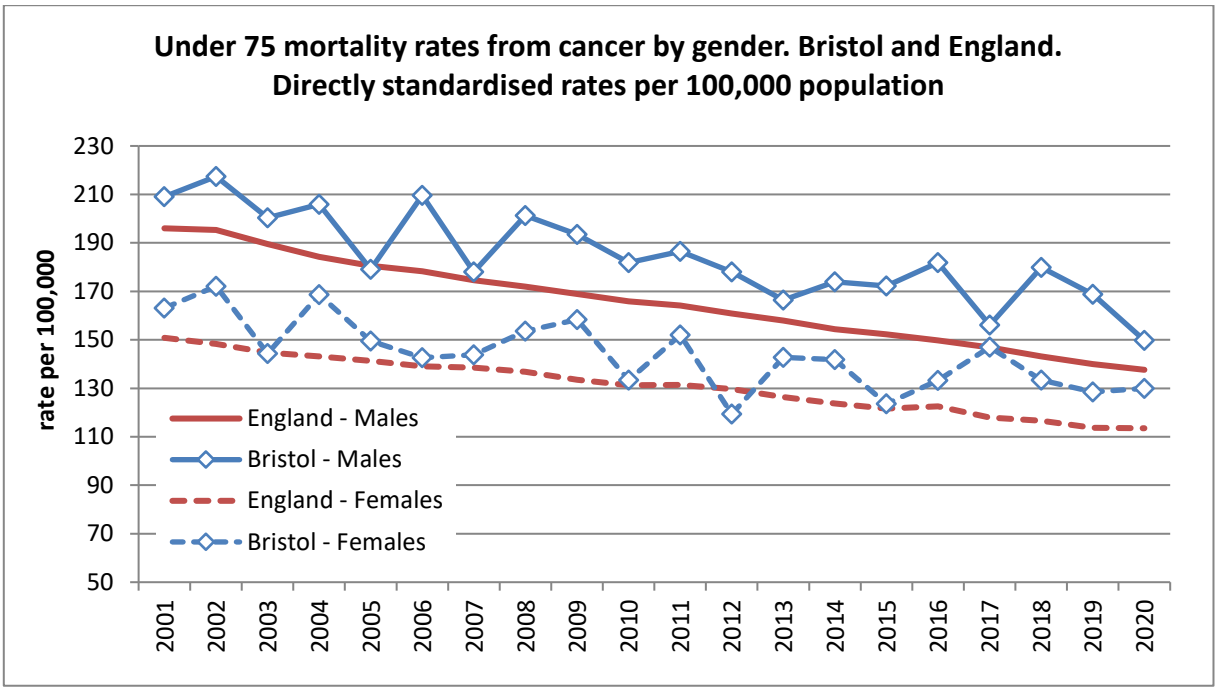
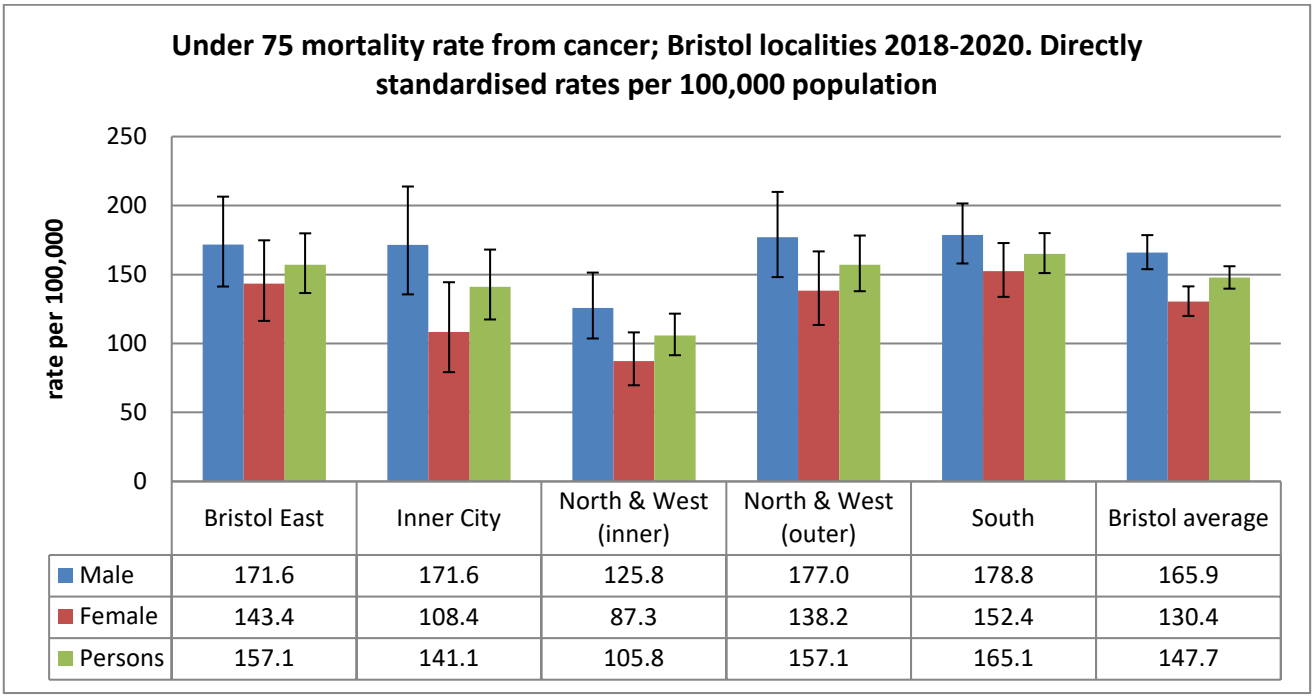



Fig 1: Under 75 mortality rates from cancer, Bristol and England by gender. Public Health Outcomes Framework, December 2021

Early cancer deaths by sub-locality show rates have been the highest in the South (165.1 per 100,000) and North and West Outer and Bristol East (both at 157.1 per 100,000) - fig 2. The rates were lowest in the North & West (inner) area (105.2 per 100,000). Apart from the lowest rates in North and West (inner) locality, the variation across the city is not statistically significant.




| | Bristol East | Inner City | North & West (inner) | North & West (outer) | South | Bristol average |
|---|---|---|---|---|---|---|
| Male | 171.6 | 171.6 | 125.8 | 177.0 | 178.8 | 165.9 |
| Female | 143.4 | 108.4 | 87.3 | 138.2 | 152.4 | 130.4 |
| Persons | 157.1 | 141.1 | 105.8 | 157.1 | 165.1 | 147.7 |

Fig 2: Under 75 mortality rates from cancer, Bristol localities 2018-2020. Primary Care Mortality Database via NHS Digital

Both the incidence and mortality rates of cancer are significantly higher in more deprived areas compared with more affluent ones. This may be partially linked to lifestyle factors like higher

smoking rates and unhealthy weight, or later diagnosis among people living in more deprived areas[6].

In Bristol the under 75 mortality rate from cancer was significantly higher than average among people living in the most deprived quintile of the city and twice as high as the rate in the least deprived quintile – fig 3.

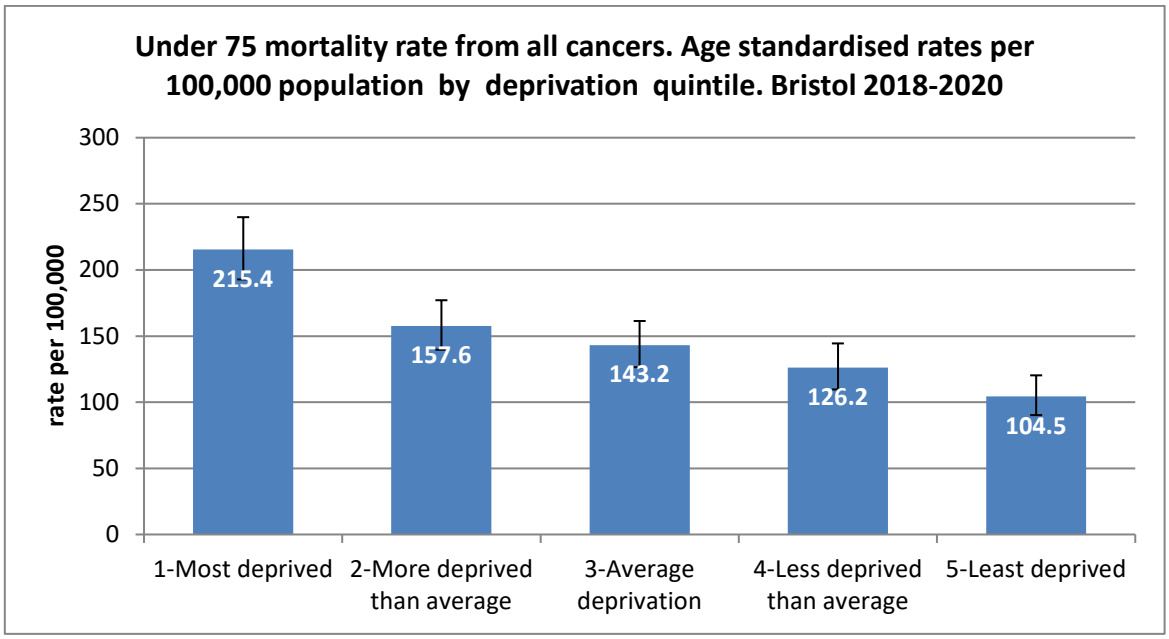



Fig 3: Under 75 mortality rates from cancer, Bristol 2018-2020 by deprivation quintile. Primary Care Mortality Database via NHS Digital

## Diagnoses & admissions

The number of recorded diagnoses of cancer has increased across the city: there were 14,030 patients with a cancer diagnosis on GP practice registers in 2020/21[7] - an increase from 13,433 in 2019/20. The cancer prevalence (percentage of patients with cancer on GP registers) at 2.6% was lower than England average of 3.2% in 2020/21.

The prevalence figures by sub-locality show increases in rates in every area of Bristol since 2018/19. The South, North & West (outer) and North and West (inner) localities remain higher than the Bristol average. Prevalence in the Inner City remains the lowest, at almost a third that in the North and West (inner) – fig 4. Note these data are not age standardised, and this may be related to the higher proportion of younger people living in Inner City than in other localities.

[6] Reducing cancer inequality: evidence, progress and making it happen. A report by the National Cancer Equality Initiative;https://webarchive.nationalarchives.gov.uk/20130123201515/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_114353

[7] Quality Outcomes Framework 2020/21 via NHS Digital

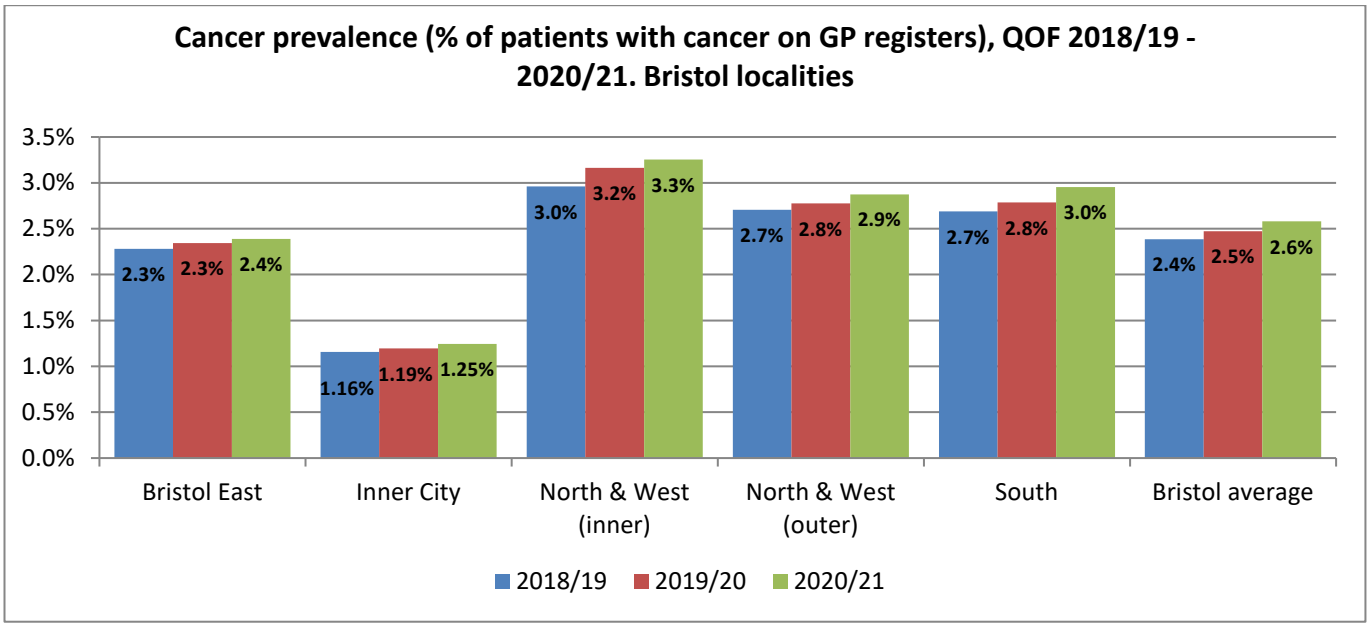



Fig 4: Cancer prevalence: percentage of patients with cancer on GP register, Bristol localities 2018/19-2020/21. Quality Outcomes Framework via NHS Digital

Overall, the 2020/21 rate of emergency admissions to hospital for patients with cancer in Bristol was 404 per 100,000[8] population. It remains lower than it is nationally: 456 per 100,000[9]. However, the Bristol rate is higher than in previous year (387.6 per 100,000).

### Types of cancer

In the 3 years from 2018-2020, in Bristol the highest number of early deaths from cancer were due to cancer of the digestive organs – average 134 early deaths per year (including colorectal cancer: average 43 a year), followed by lung cancer - average 99 per year, then breast cancer – average 35 a year.

Compared to England, Bristol overall has statistically significantly higher early death rates from all cancers as well as lung and breast cancers:

Mortality from cancer: directly standardised rate, persons <75 years old, 3-year pooled: 2017-2019 (95% confidence intervals in brackets).

| Type of cancer | Bristol | England |
|---|---|---|
| All cancers | 151.5 (143.4 - 159.9) | 128.1 (127.5 - 128.7) |
| Lung cancer | 35.7 (31.8 - 39.9) | 28.5 (28.2 - 28.7) |
| Colorectal cancer | 30.1 (26.8 - 33.8) | 27.1 (26.8 - 27.4) |
| Breast cancer (females) | 25.5 (21.1 - 30.6) | 19.8 (19.5 - 20.1) |

Source: NHS Compendium of indicators: Mortality https://digital.nhs.uk/data-and-information/publications/statistical/compendium-mortality/content

[8] Hospital Episodes Statistics via NHS Digital. The figure includes emergency hospital admissions of Bristol residents with a diagnosis of cancer.

[9] PHE Cancer Services Profile https://fingertips.phe.org.uk/profile/cancerservices

## Early diagnosis / Screening

Diagnosis at an early stage is associated with much improved survival chances. Public health interventions such as screening programmes and information campaigns aim to improve rates of early diagnosis.

Experimental statistics from the National Cancer Registry suggest that 56.7% of all new cases of cancer in Bristol were diagnosed at an early stage in 2019, similar to the national average (55.1%)[10].

Screening coverage for breast and bowel cancer in Bristol is consistently significantly lower (worse) than the England average. The screening coverage for cervical cancer was also lower than England average in 2021.

In Bristol in 2021 screening coverage rates were:

- 62.7% for breast cancer (England 64.1%)
- 68.4% for cervical cancer among women aged 25 to 49 (England 68.0%)
- 61.4% for bowel cancer (England 65.2%)

## Covid-19 – Impact on Diagnosis and Treatment

Cancer Research UK has published *Evidence of the Impact of Covid-19 across the Cancer Pathway: Key Facts*[11] which was updated in October 2021. It provides useful and detailed insight into the impact on cancer screening, diagnosis and treatment at a national level.

**Further data / links**:

- *Public Health Outcomes Framework,* https://fingertips.phe.org.uk/profile/public-health-outcomes-framework
- *Public Health England Cancer Services Profile, https://fingertips.phe.org.uk/profile/cancerservices*
- *Cancer Registration Statistics, England, 2017, https://www.ons.gov.uk/cancerregistrationstatisticsengland/previousReleases*
- National Cancer Intelligence Network Cancer and equality groups: key metrics 2015 report, http://www.ncin.org.uk/cancer_type_and_topic_specific_work/
- Bristol JSNA Chapter 2017-18: Cancer in Bristol 2016/17, https://www.bristol.gov.uk/documents/20182/34740/Cancer+JSNA++report+2017

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[10] Public Health Outcomes Framework, indicator C23 – Percentage of cancers diagnosed at stages 1 and 2.

[11] Cancer Research UK, Intelligence Team. 2021. Evidence of the Impact of Covid-19 across the Cancer Pathway: Key Facts. Evidence of COVID-19 impact across the cancer pathway (cancerresearchuk.org)