



Office for Health  
Improvement  
& Disparities

# Atlas of health variation in head and neck cancer in England

## Summary

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Head and neck cancer incidence and mortality rates are increasing in England.

Prior to the pandemic, annual new cases in England had reached 10,735 in 2019. Data for 2021 suggests the trend has continued with over 11,000 new cases recorded.<sup>3</sup>

This increase is largely driven by an increase in oropharyngeal cancer, with 3,834 new cases in 2019, a 47% increase since 2013.

The highest incidence rates were in people aged 70 years and over, with an incidence rate over three and half times higher than for those aged under 70 years.

Males have more than double the incidence rate of head and neck cancers than females.

People living in the most deprived areas have almost double the incidence rate of head and neck cancer compared to those living in the least deprived areas.

In England 53% of head and neck cancers were diagnosed at a late stage. Diagnosis at late stage is associated with greater treatment complexity and poorer outcomes.

Across Integrated Care Board (ICB) areas the percentage of patients diagnosed at a late stage varied between 45.0% and 59.6%.

People living in the most deprived areas were more likely to be diagnosed with head and neck cancer at a late stage than those living in the least deprived areas. Reasons may include lower health literacy, poorer communication of healthcare needs and poorer access to dental services.

In 2020, 3,469 people died of head and neck cancers in England, an increase from 3,313 deaths in 2019. The mortality rate for head and neck cancer continued to increase in 2020 while for all cancers the mortality rate decreased.

There was significant geographic variation in mortality rates across England. The ICB with the highest mortality rate was double the rate of the ICB with the lowest rate and people living in the most deprived areas have more than double the mortality rate of those living in the least deprived areas.

# Interpreting the data

This atlas presents data from 2013 to 2020 which is the most recent time period for which trend data is available. Whilst more recent data is available, 2021 rates would not be comparable to the 2013 to 2020 rates presented in this atlas as they have been calculated using new population estimates based on the 2021 census. Throughout the atlas we have commented on trends up to 2019 as the 2020 data is likely to have been impacted by the COVID-19 pandemic.

Where a rate has been calculated, this refers to a directly age standardised rate (DSR). DSR rates are calculated using a method which adjusts for different age-structures of the target population. This gives the overall rate that would have occurred in the target population if they all had the standard age-profile and so allows comparison between areas whilst taking account of differences in age profiles. More details on DSRs can be found in the ['Introduction to the data and methods'](#) supporting document.

In some local areas, case numbers are small, so there is some statistical variation in the numbers and rates from one year to the next. Despite this volatility, patterns at sub-national geographies remain relatively consistent over time. Due to low numbers in certain indicators, years have been combined to ensure the largest cohort possible to enable meaningful analysis and comparisons. This includes the COVID-19 impacted year of 2020. Where this occurs, the years are marked using the term 'pooled'.

The information contained within this atlas is a starting point for Integrated Care Boards (ICBs) and is intended to be used in conjunction with other local data sources and knowledge. It is important users consider both counts and trends when reviewing and interpreting their own data. Users of the atlas are advised to not base judgements entirely on the most recent data point but to consider patterns over the whole time period presented.

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