

## 5.2 Main causes of death

### Why is this issue important?

We need to know how many people are born and die each year – and the main causes of their deaths – in order to have well-functioning health systems.<sup>1</sup>

### Key outcomes

- **Mortality rate from all cardiovascular disease (including heart disease and stroke) in persons less than 75 years of age (Public Health Outcomes Framework, NHS Outcomes Framework)**
- **Mortality rate from cancer in persons less than 75 years of age (Public Health Outcomes Framework, NHS Outcomes Framework)**
- **Mortality rate from Liver Disease in persons less than 75 years of age (Public Health Outcomes Framework, NHS Outcomes Framework)**
- **Mortality rate from respiratory disease in persons less than 75 years of age (Public Health Outcomes Framework, NHS Outcomes Framework)**

- **Excess under 75 mortality rate in adults with serious mental illness (Public Health Outcomes Framework)**

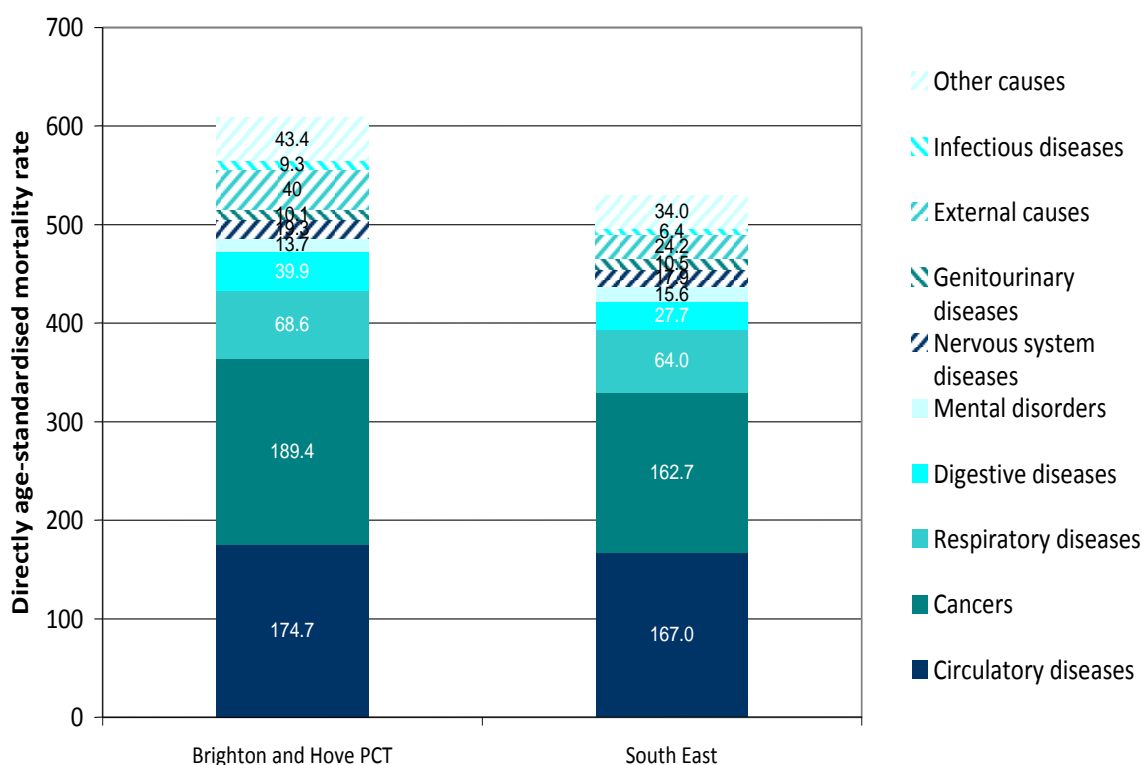
### Impact in Brighton & Hove

The commonest causes of death within the city are cancers, circulatory diseases, respiratory diseases and digestive diseases (including liver diseases).

In 2013 there were a total of 2,065 deaths of Brighton & Hove residents. The main causes of death were cancer (29%), followed by circulatory conditions (27%) and respiratory conditions (13%). However just over one in twenty deaths in the city (6%) are not caused by disease – these are predominantly accidents or suicide (See figures at end of section).

The main causes of death in the city are similar to the South East but in Brighton & Hove mortality rates are higher for all disease groupings with the exception of mental disorders and genitourinary diseases (Figure 1).<sup>2</sup>

Figure 1: Cause-specific mortality profiles for Brighton & Hove and the South East, 2005-2009 (directly age standardised rate per 100,000)



Source: South East Public Health Observatory

<sup>1</sup> World Health Organisation. Civil registration: why counting births and deaths is important. Fact sheet N°324; 2007.

<sup>2</sup> South East Public Health Observatory. Health Inequalities Gap Measurement Tool. Available at [http://www.sepho.nhs.uk/gap/gap\\_national.html](http://www.sepho.nhs.uk/gap/gap_national.html) [Accessed on 21/08/2014]

**Cancer:** Mortality from all cancers in under 75 year olds is higher in Brighton & Hove than England and significantly higher than across the South East. Mortality rates for cancer in this age group in the city had been increasing since 2002-04 but in 2008-10 were around the 2002-04 level, and have continued to fall. Cancer is explored in more detail in the cancer section.

**Heart disease and stroke:** Between 2010 and 2012 in Brighton & Hove the mortality rate among the under 75s due to heart disease & stroke was 80 per 100,000 population, compared with 81 in England and 69 in the South East. This is explored in more detail in the relevant section of the report.

**Respiratory diseases:** The mortality rate in the city for respiratory diseases for those aged under 75 years is similar to the England rate, but for mortality from respiratory disease considered preventable it is significantly higher (2010-2012).

**Liver disease & chronic liver disease:** Mortality rates in those aged under 75 years are significantly higher in Brighton & Hove than in England (2010-12). This is also the case for liver disease considered preventable.

**Excess under 75 mortality rate in adults with serious mental illness:** Excess premature mortality in adults with serious mental illness is high, both nationally and in Brighton & Hove with mortality rates in the city for those in contact with Secondary Mental Health Services almost three times higher than those not in contact with these services (2011/12). Across England this excess is over three times higher but we do not do significantly better than England.

### Where we are doing well

The recent trend in circulatory disease deaths and cancer deaths for those aged under 75 years in Brighton & Hove has been downwards, with premature cardiovascular mortality almost halving since 2001-2003 and premature cancer mortality at its lowest rate for the last decade.

The mortality rate for communicable diseases is significantly lower in Brighton & Hove than England and continues to fall.

### Local inequalities

**Age:** The breakdown of cause of death is very different for children, adults and older people. Since there are a small number of deaths in children in the city each year it has not been possible to produce charts showing the main causes of death. In 2013 there were 11 deaths of children aged under one year, with an additional five deaths of children aged 1-14 years.

In 2013 there were 712 deaths of people aged under 75 years (see figures at end of section). Here, the main cause of death is cancer (40%) followed by circulatory disease (17%). Death not caused by disease is the third most common causes of death in this age group and comprises over one in 10 deaths (13%).

For those aged 75 years or over (see figures at end of section), the most common causes are circulatory diseases (31%), cancer (23%) and respiratory diseases (16%). In 2013 there were 1,353 deaths in this age group.<sup>3</sup>

**Gender:** The main causes of death (for all ages) are similar for males and females. The main difference is the higher proportion of deaths in males to external causes (mainly accidents, suicide and drug or alcohol poisoning). The proportion of deaths to circulatory diseases and cancer are similar for both males and females.

**Ethnicity:** In England information on death certificates is restricted to the deceased person's country of birth which is traditionally used as a proxy for ethnic origin. However, the value of this has diminished over time as subsequent generations have been born in England. In 2012, Scotland became the first UK country to record ethnic origin on death certificates.

In Brighton & Hove 90% of deaths registered were of individuals born in the UK. This picture has remained fairly constant since 1999 when 91% were. This picture is very different to that seen in births where the proportions born outside the UK are considerably higher but this is because births are more responsive to recent changes in immigration due to the younger age of people migrating to the UK.

<sup>3</sup> Office for National Statistics. Vital Statistics Tables. 2012

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Table 1 shows the top ten countries of birth (outside of the UK) of registered deaths in 1999, 2003, 2007 and 2011. There has been little change over the 13 year period, with Ireland, India, Poland and Germany the commonest countries of birth across most years shown.

**Table 1: Deaths (numbers) for the ten most common countries of birth for non-UK born individuals, Brighton & Hove 1999, 2003, 2007 and 2011**

1999		2003		2007		2011	
Country	Number	Country	Number	Country	Number	Country	Number
Ireland	67	Ireland	49	Ireland	58	Ireland	54
India	25	India	21	India	22	India	18
Poland	13	Germany	19	Germany	16	Poland	10
Germany	11	France	13	Poland	13	Germany	8
Italy	10	Canada	9	Canada	9	Australia	7
Canada	8	Austria	7	South Africa	8	Italy	7
France	8	Italy	7	Egypt	6	South Africa	7
South Africa	7	Poland	7	France	6	Iran	6
Egypt	6	South Africa	7	Italy	5		
Australia	5	United States	7				
<b>All deaths</b>	<b>2,995</b>	<b>Total</b>	<b>2,792</b>	<b>Total</b>	<b>2,366</b>	<b>Total</b>	<b>2,081</b>

**Source:** Office for National Statistics, registered deaths in the given year

**Deprivation:** Figure 2 compares mortality rates for the most deprived quintile and the least deprived quintile in the city. The large difference seen in overall mortality is present for all commonest causes of death except for diseases of the nervous system or genitourinary system.

Circulatory death rates have been falling overall, for the most and least deprived quintiles in the city. However the mortality rate is higher in the more

deprived areas. Between 2008 and 2010 circulatory death rates in those aged under 75 years in the most deprived quintile of the city were three times higher than for the least deprived quintile. This difference has increased: for the period 2001-2003 the rate in the most deprived quintile was twice that in the least deprived quintile.

For cancer, under 75 deaths rates are increasing in the most deprived group. In 2001-2003 cancer mortality for the under 75s was 1.5 times higher in the most deprived quintile compared with the least deprived and by 2007-2009 this had increased to 1.9.

### Predicted future need

If current trends continue, the ONS projects that by 2016 there will be 1,900 deaths per year and deaths will remain at this level until 2030.<sup>4</sup> Without a change in current trends, inequalities in all deaths and early deaths from cancer and circulatory diseases will widen.

### What we don't know

Ethnicity is not recorded on death registration in England, nor is religion, sexual orientation or gender reassignment or caring status.

### See specific sections for recommended future local priorities

### Key links to other sections

- Coronary heart disease
- Cancer
- Respiratory disease
- Suicide

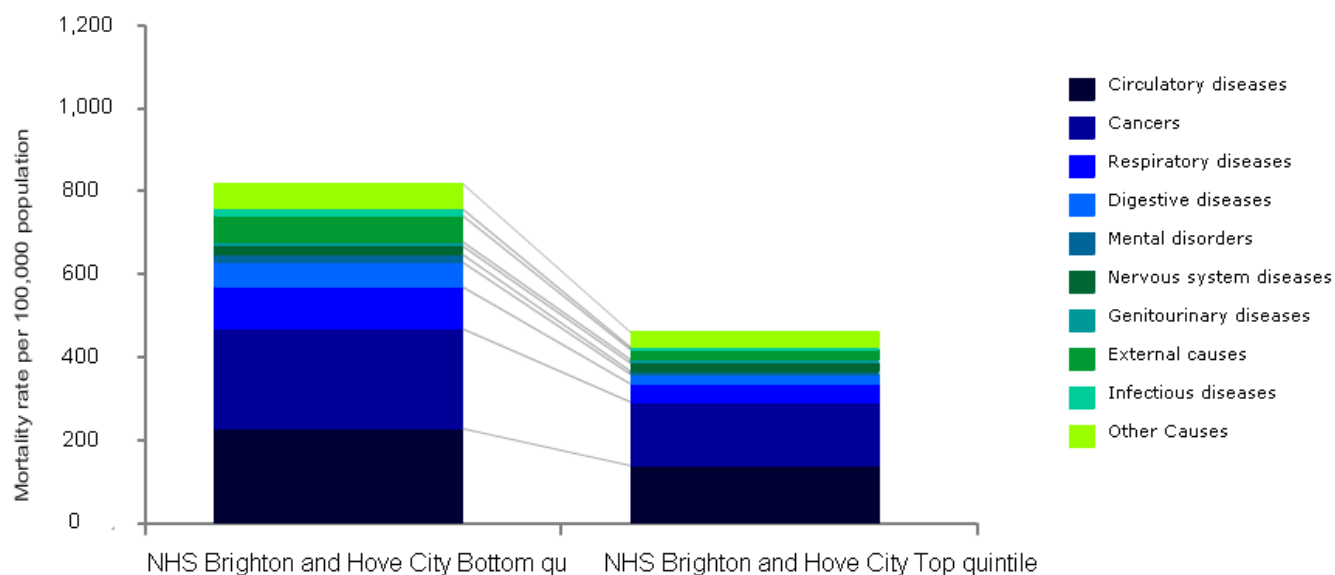
<sup>4</sup> ONS sub national population projections (2012 based). Available at: <http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Sub-national+Population+Projections#tab-data-tables> [Accessed on 27/08/2014].

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### Last updated

November 2014

**Figure 2: Mortality rate per 100,000 population for the most and least deprived quintiles of deprivation in Brighton & Hove, 2005-2009**



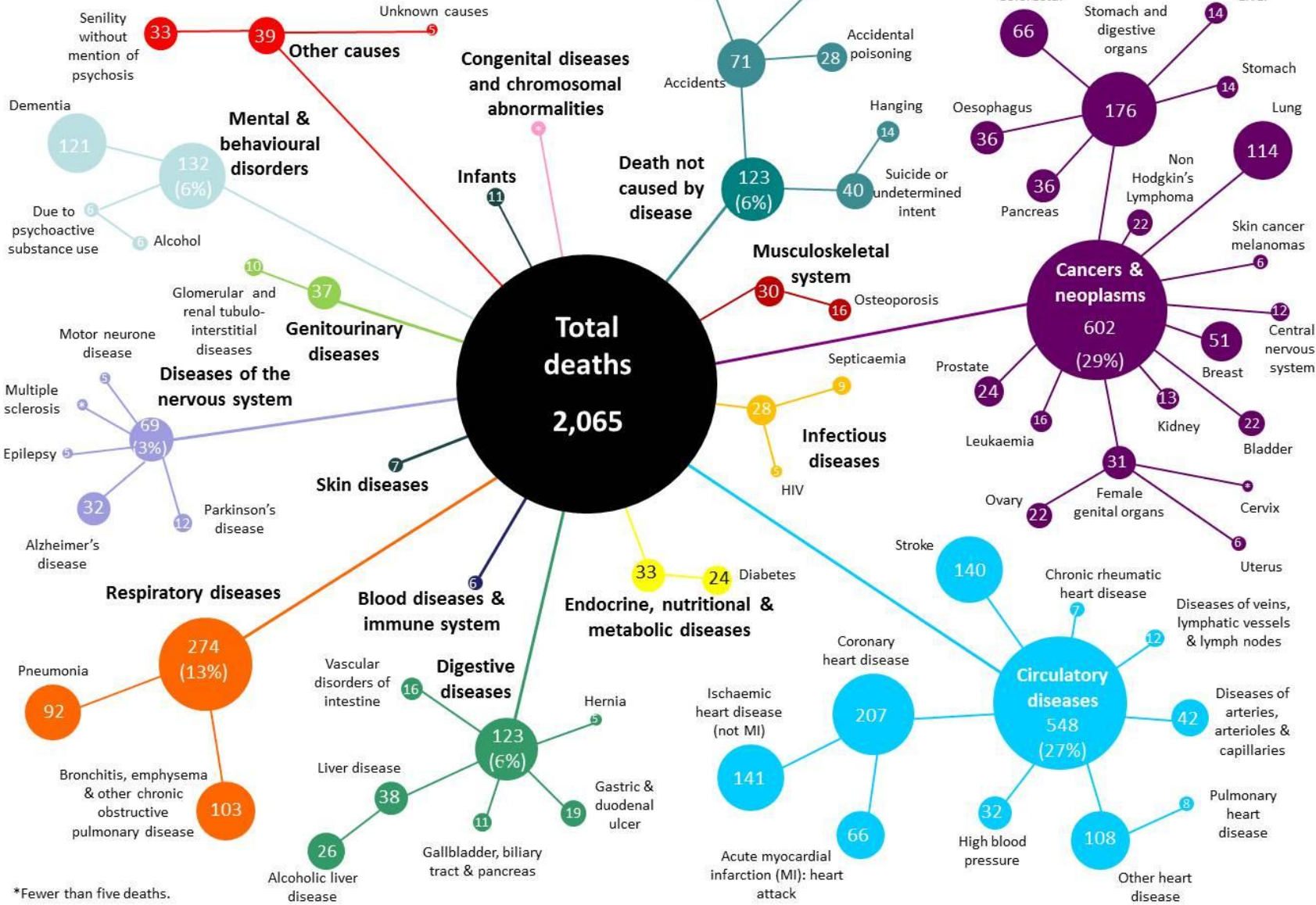
Source: South East Public Health Observatory Health Inequalities Gap Measurement Tool

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## Brighton & Hove JSNA 2014

### Main causes of death in Brighton and Hove – 2013

Source: Office for National Statistics Vital Statistics tables (VS3) and Primary Care Mortality Database



### Brighton & Hove Public Health Directorate

\*Fewer than five deaths.



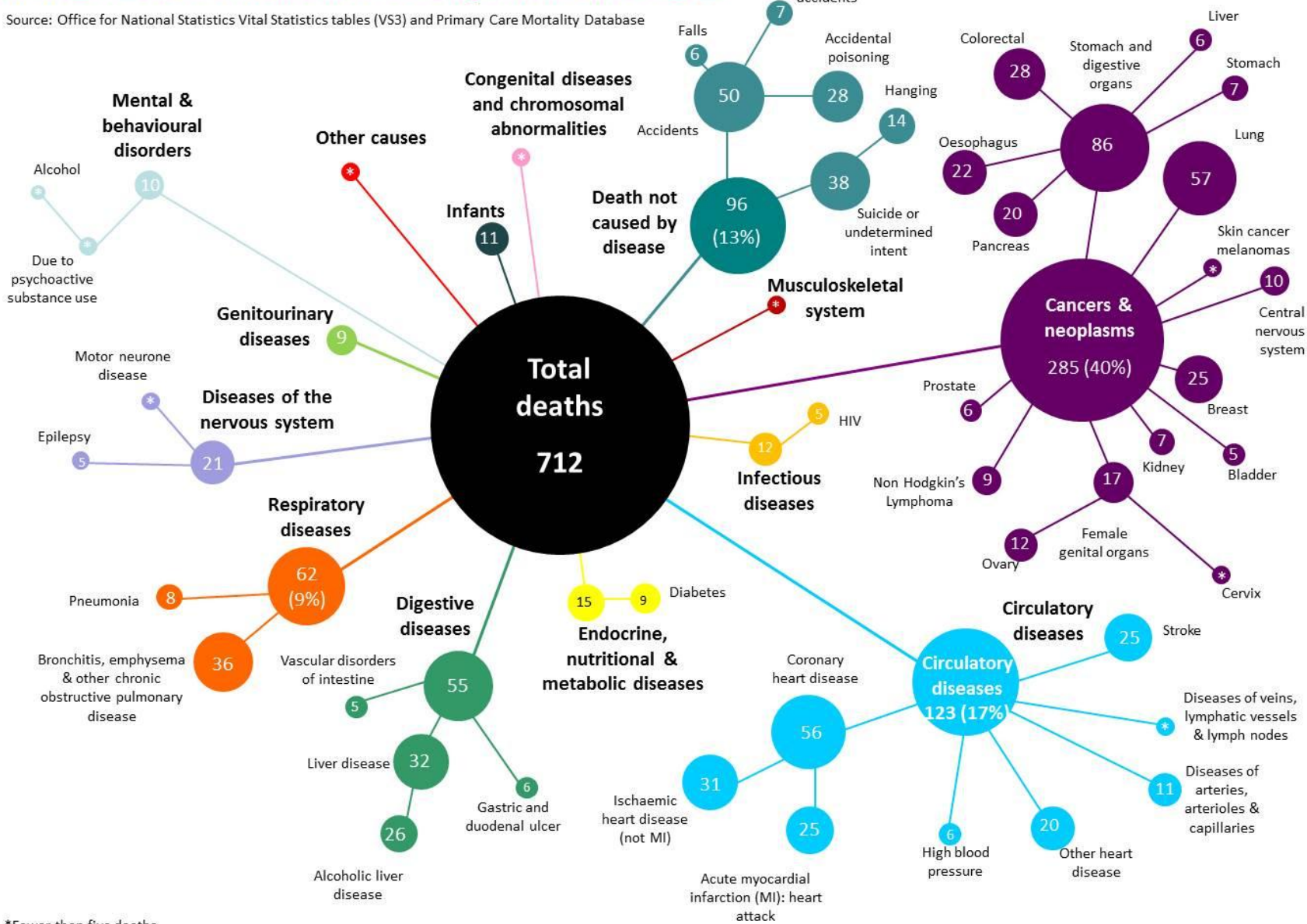
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## Brighton & Hove JSNA 2014

### Main causes of death in the under 75s - Brighton and Hove – 2013

Source: Office for National Statistics Vital Statistics tables (VS3) and Primary Care Mortality Database

### Brighton & Hove Public Health Directorate



\*Fewer than five deaths

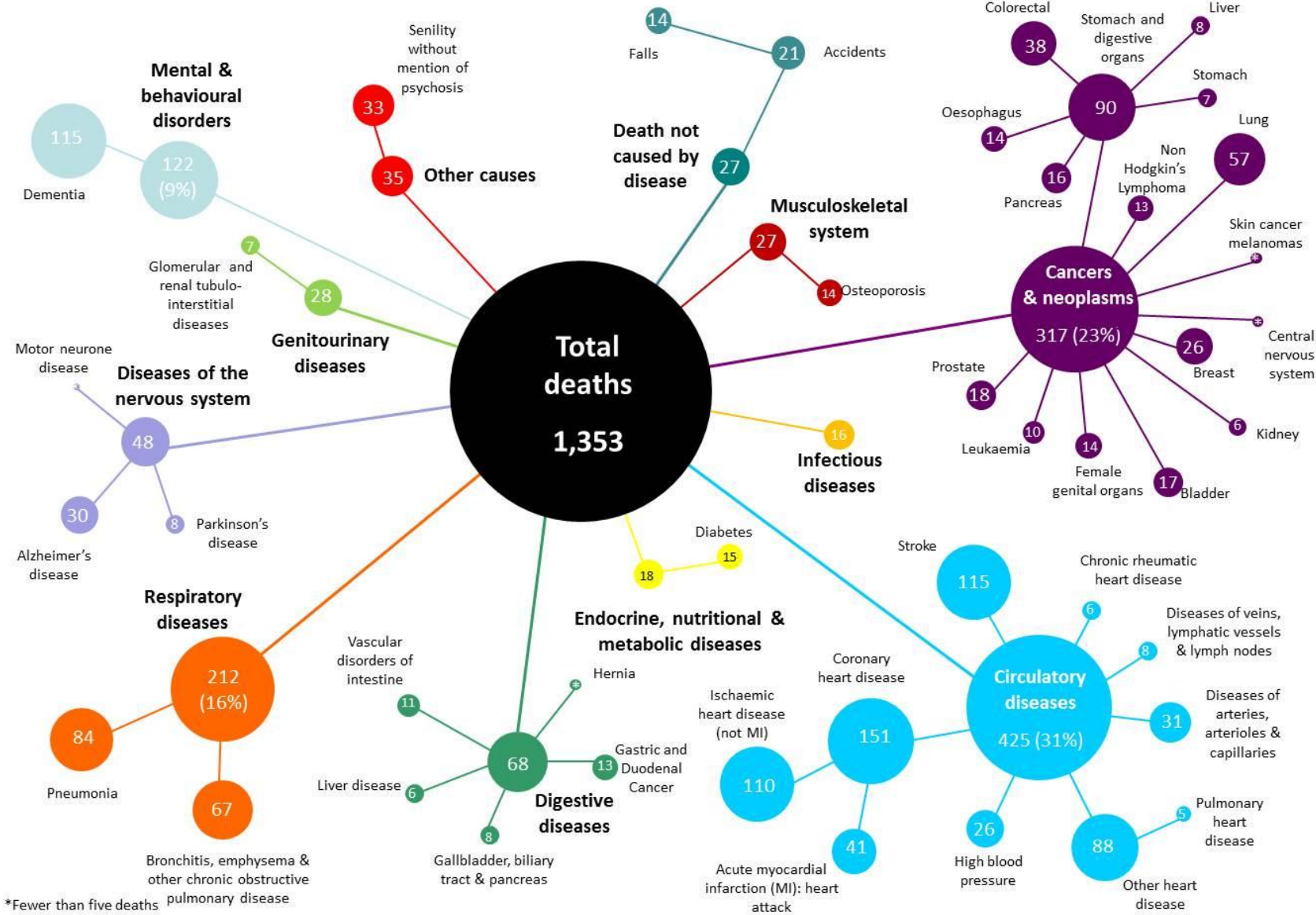
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## Brighton & Hove JSNA 2014

Brighton & Hove Public Health Directorate

### Main causes of death in 75s or over - Brighton and Hove – 2013

Source: Office for National Statistics Vital Statistics tables (VS3) and Primary Care Mortality Database



\*Fewer than five deaths