Avoidable deaths in Lambeth

January 2019

A total of 4,369 deaths were registered in Lambeth in the three years, 2015 to 2017

32% of all deaths in Lambeth 2015-17 were from causes considered avoidable (1,382).

23% Across England were from causes considered avoidable

Avoidable mortality is defined as deaths from a collection of diseases, such as diabetes and appendicitis, that are potentially avoidable given effective and timely health care or public health intervention.

The concept of avoidable mortality was introduced as an indicator of the contribution of health care and public health interventions to improvements in life expectancy.

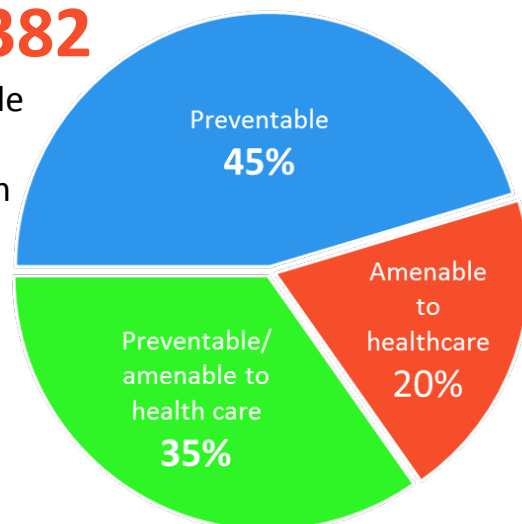Of all male deaths between 2015 and 2017 **38%** were from causes considered avoidable.

Of all female deaths between 2015 and 2017 **24%** were from causes considered avoidable.

Of **1,382** avoidable deaths between 2015 and 2017

- Preventable 45%
- Amenable to healthcare 20%
- Preventable/amenable to health care 35%

People living in the most deprived areas experience a higher rate of avoidable mortality than those living in the least deprived areas.

Cancer is the leading cause of avoidable deaths followed by heart disease

Cancer **415** deaths

Heart disease **401** deaths

Copies of this and other public health factsheets are available from the Lambeth JSNA website:

www.lambeth.gov.uk/jsna

What is avoidable mortality?

Avoidable mortality are deaths from causes that are considered avoidable in the presence of timely, effective treatment and good quality healthcare, or public health interventions such as vaccination programmes and improvements to lifestyle.

The Lambeth population experiences a higher proportion of avoidable deaths (32% of all deaths) than in England (23%). Males are more likely to die from a potentially avoidable cause than females, this is seen in both Lambeth and England.

Avoidable deaths in Lambeth, 2015-2017 and England, 2016

	Persons	**Males**	**Females**
Lambeth	32%	38%	24%
England	23%	28%	18%
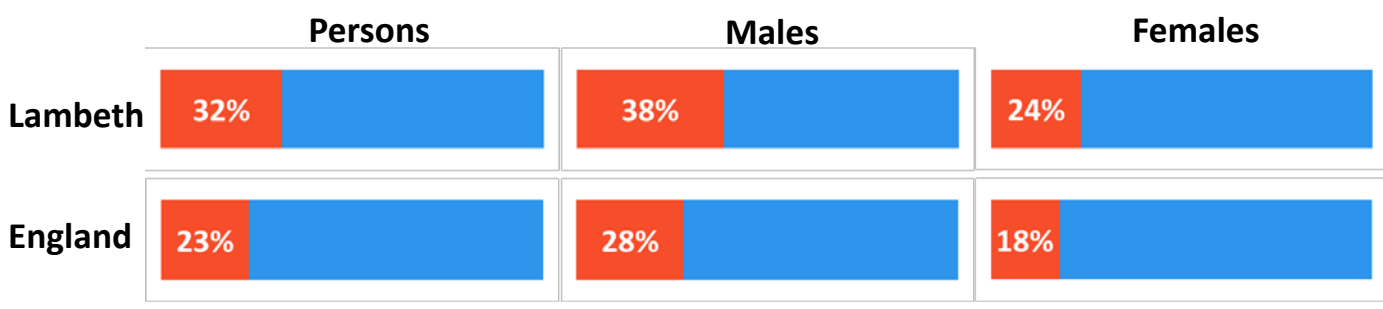
Source: PCMD, ONS

Avoidable mortality has two components. The Office for National Statistics (ONS) defines these as **Amenable** and **Preventable**:

A death is **amenable** (treatable) if, in the light of medical knowledge and technology at the time of death, all or most deaths from that cause (subject to age limits) could be **avoided through good quality healthcare.**

Amenable to health care

Preventable: e.g. through public health intervention
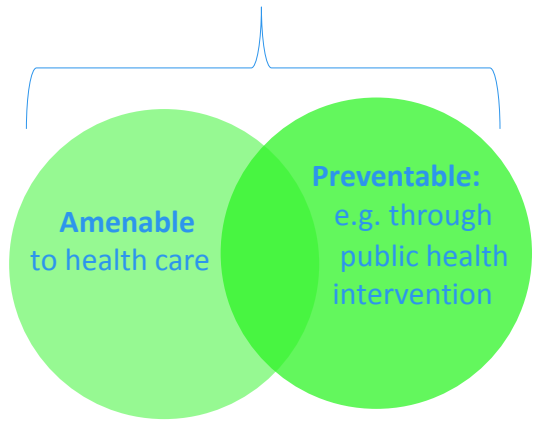
A death is **preventable** if, in the light of understanding of the determinants of health at the time of death, all or most deaths from that cause (subject to age limits) could be **avoided by public health interventions.**
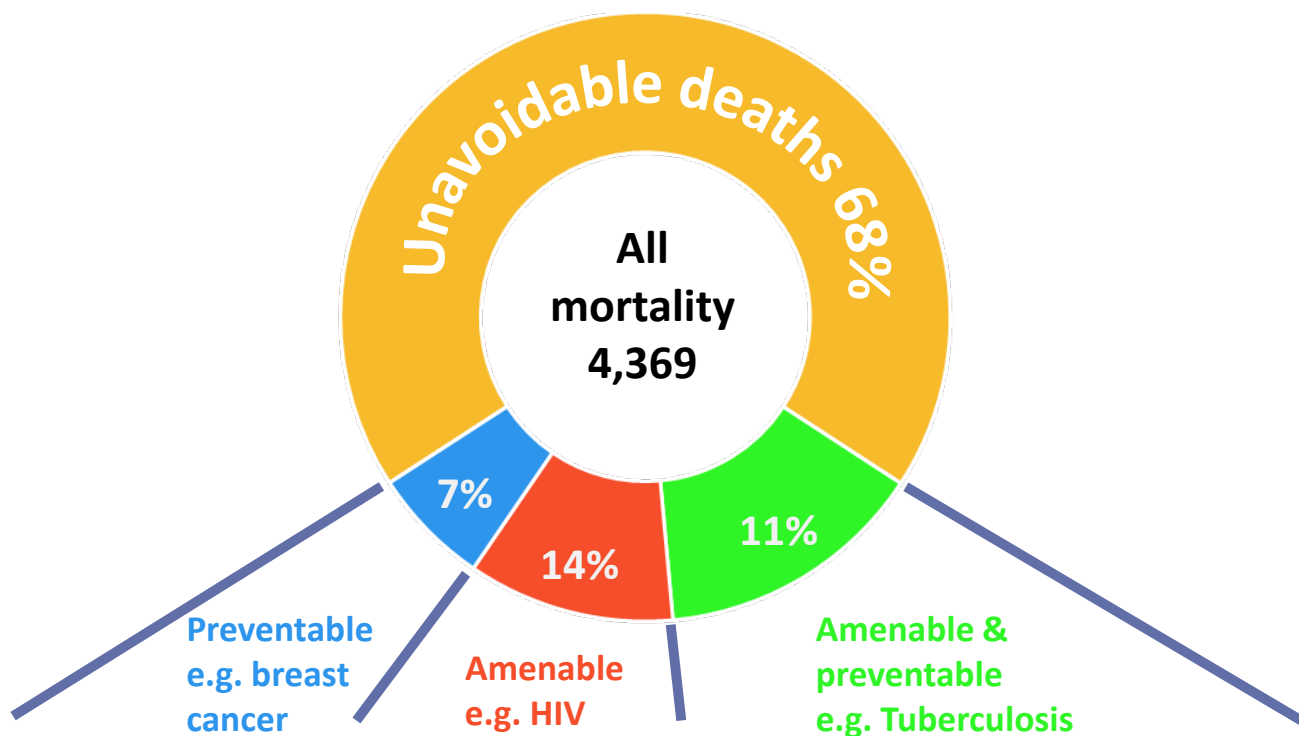
Avoidable deaths are all those defined as preventable, amenable or both, where each death is counted only once; where a cause of death is both preventable and amenable, all deaths from that cause are counted in both categories when they are presented separately.

Avoidable mortality in Lambeth

For the purpose of this factsheet, deaths from causes that are amenable, preventable and both amenable and preventable are presented as discrete categories so that the sum of all of these deaths is equal to the total number of avoidable deaths.

Appendix 1 contains the avoidable mortality cause list and associated age breakdowns as defined by the Office for National Statistics.

A total of 4,369 deaths were registered in Lambeth in the three years, 2015 to 2017
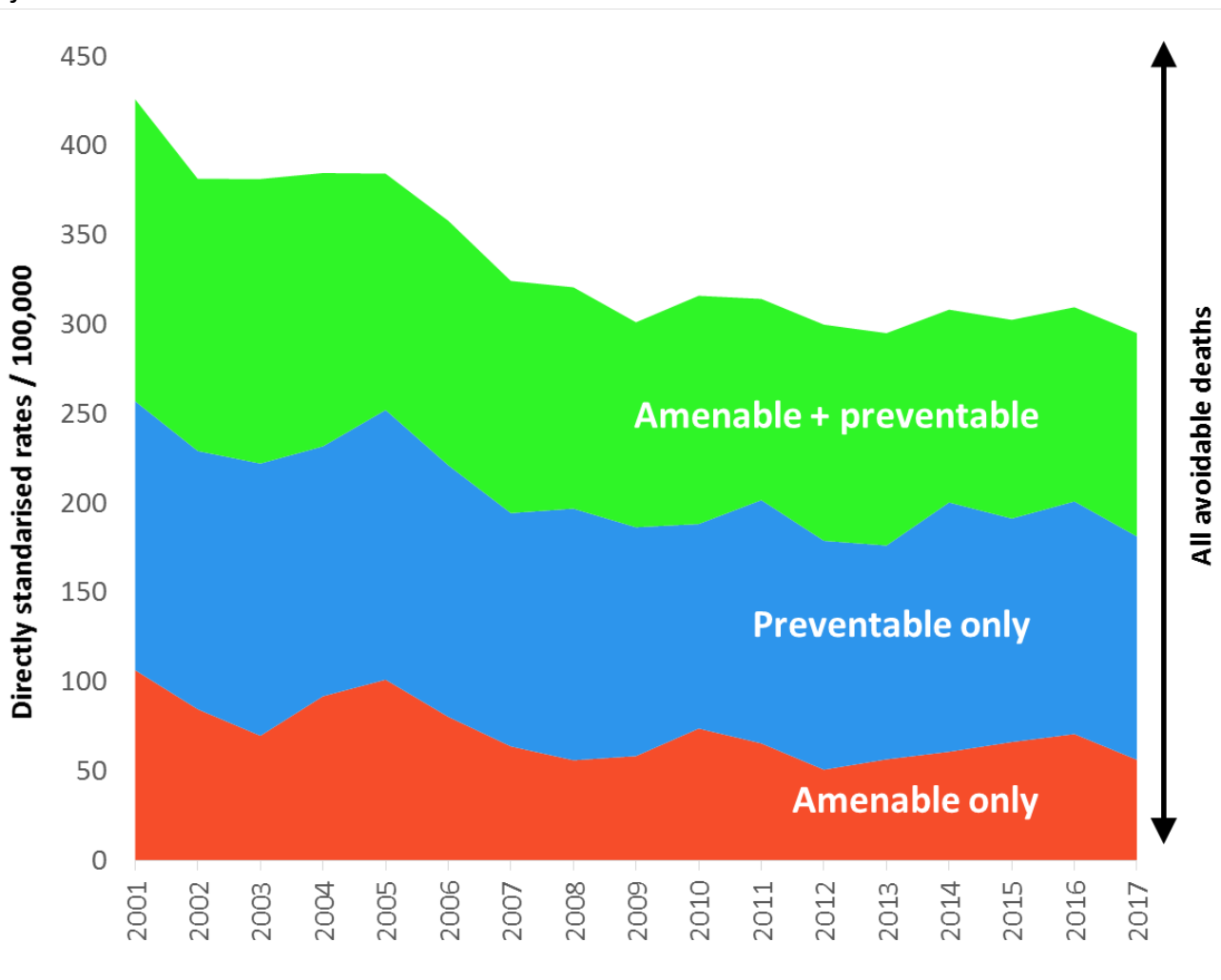
Unavoidable deaths 68%

All mortality 4,369

7%

14%

11%

Preventable e.g. breast cancer

Amenable e.g. HIV

Amenable & preventable e.g. Tuberculosis

Avoidable deaths 32%

Of the **4,369** deaths registered, **1,382** were from causes considered avoidable.
The proportion of avoidable deaths in Lambeth has **remained steady** since 2006 at around **30%**.
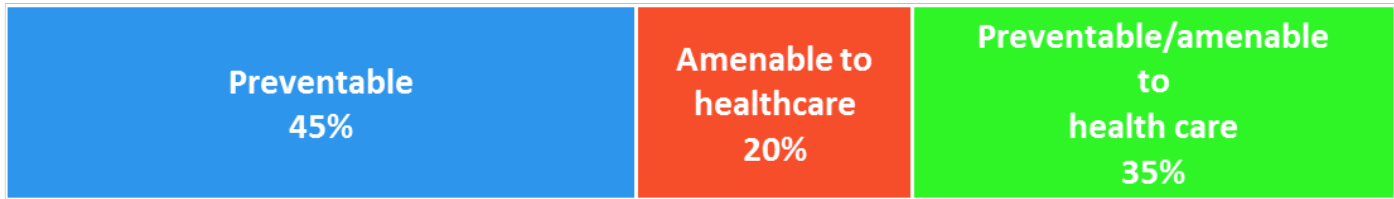
Avoidable mortality – amenable and preventable

Directly age-standardised rates (DSRs) have been calculated per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations which may contain different proportions of people of different ages.

The chart displays trend data for avoidable mortality based on the definition revised in 2016, but applicable to deaths from 2014 forward. Applying this revised definition to deaths occurring prior to 2014, as we do here, may result in an over-estimation of avoidable deaths prior to this point. Additionally, there was a change to the software used for categorising deaths in 2010 and 2014 which has caused statistically significant changes to the numbers of deaths in 12 of the ICD-10 chapters. The figures presented are unadjusted.

Although there has been a general downward trend over the ten year analysis period the annual decreases have are not significant because of wide confidence intervals around the figures overlap.

2015-17 avoidable deaths

Preventable 45%	Amenable to healthcare 20%	Preventable/amenable to health care 35%

In 2015-2017, of all avoidable deaths **(1,382)**, **45%** were considered preventable, **21%** amenable to health care, and a further **34%** were preventable, as well as amenable.

Avoidable mortality in men and women

Avoidable deaths in men and women in Lambeth, 2015-17
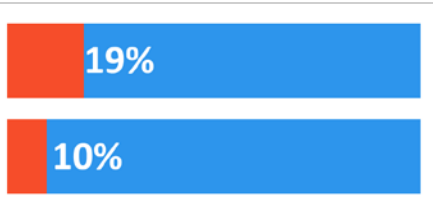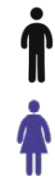
38%

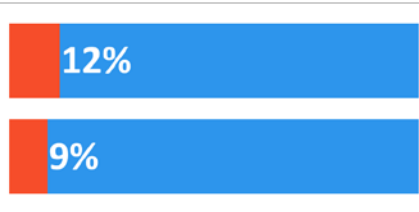38% of all male deaths considered avoidable

24%

24% of all female deaths considered avoidable

Males are **more likely** to die from a potentially avoidable cause than females. Between 2015 and 2017, at least **65%** of avoidable deaths were among men.

Preventable	Amenable and preventable	Amenable
19%	12%	8%
10%	9%	5%

Avoidable mortality in men and women

There has been an overall decline in avoidable mortality for women over the 17 years of analysis from 2001 to 2017

Rates of avoidable mortality are **higher** for **males** than females.
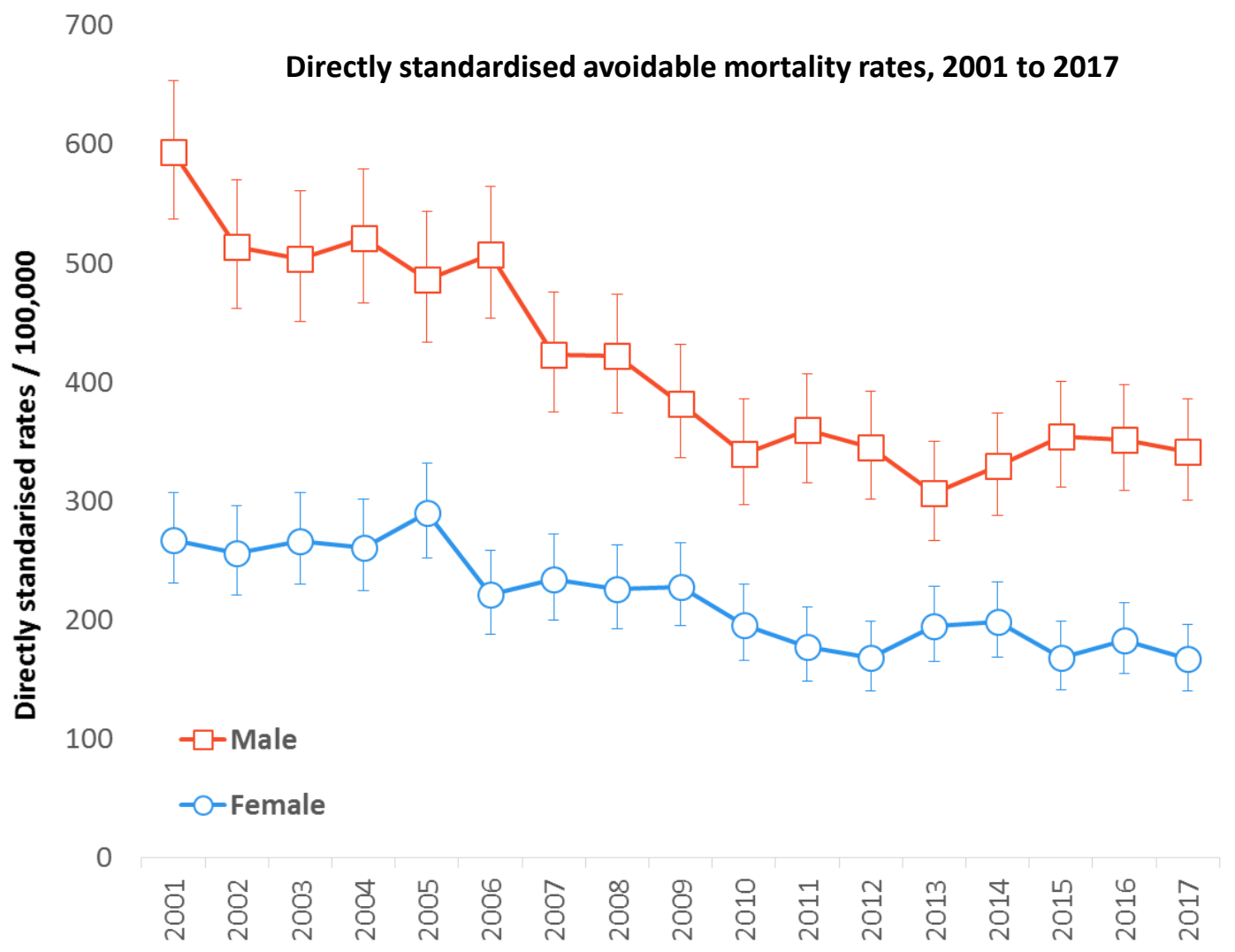
Directly standardised avoidable mortality rates, 2001 to 2017

The chart displays trend data for avoidable mortality based on the definition revised in 2016 but applicable to deaths from 2014. This chart displays mortality data unadjusted for ONS coding convention changes (2010 & 2014)

Applying this definition to deaths occurring prior to 2014 is likely to result in an over-estimation of avoidable deaths prior to this point.

Avoidable mortality – broad cause of death

Cancers cause the greatest number and highest proportion of all avoidable deaths, followed by cardiovascular diseases. This has been the case in all analysed years.

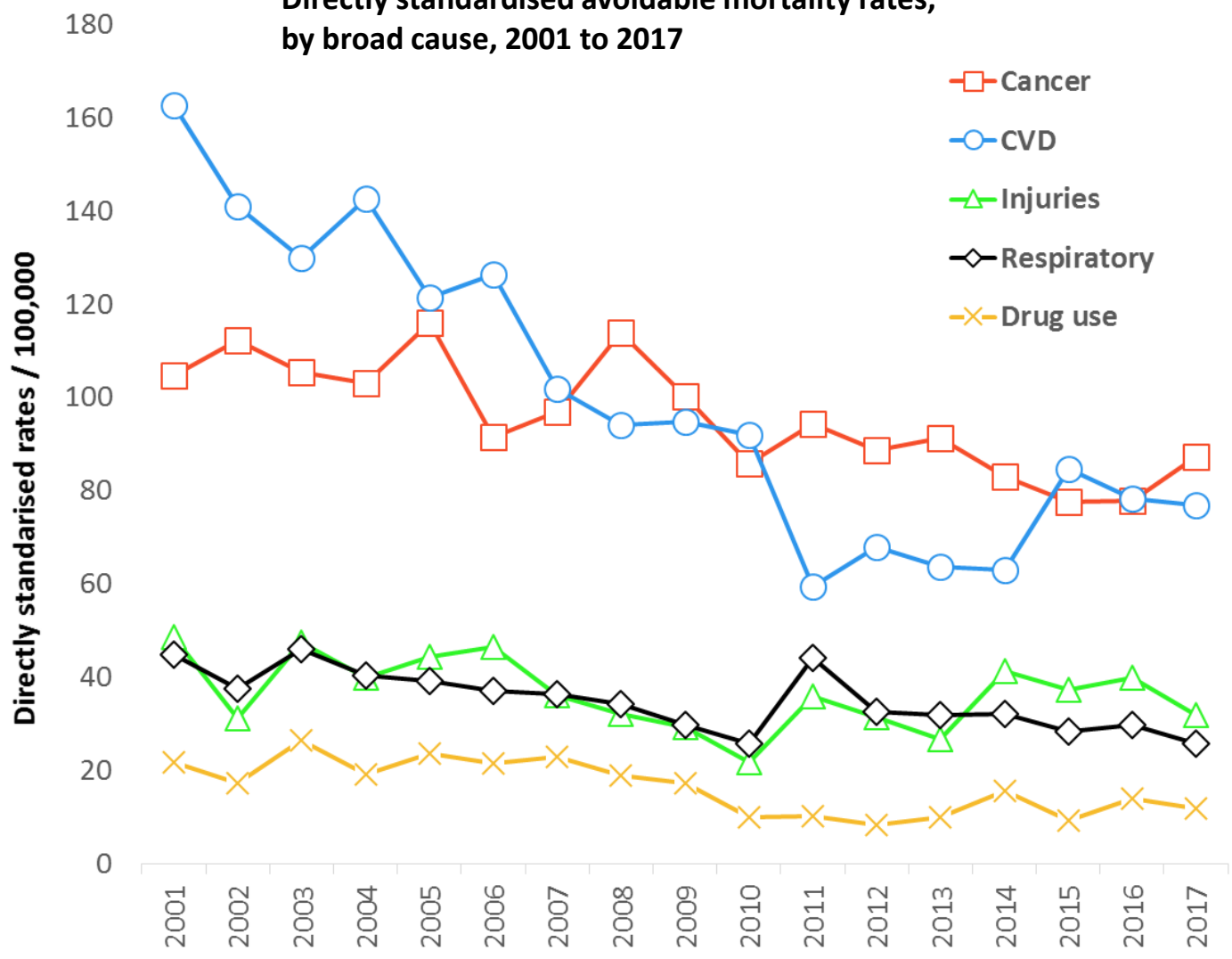**Directly standardised avoidable mortality rates, by broad cause, 2001 to 2017**

Legend:
- Cancer
- CVD
- Injuries
- Respiratory
- Drug use

The trend lines appear to show a decline in avoidable deaths from Cancers over the ten year period, and a marked decline for avoidable deaths from cardiovascular diseases to 2011-13, followed by an increase.

While these trends should be monitored, because of wide confidence intervals around the estimates, these changes are not significant.

Avoidable mortality – Geographical context

Directly standardised avoidable mortality rates, by ward, 2015 to 2017
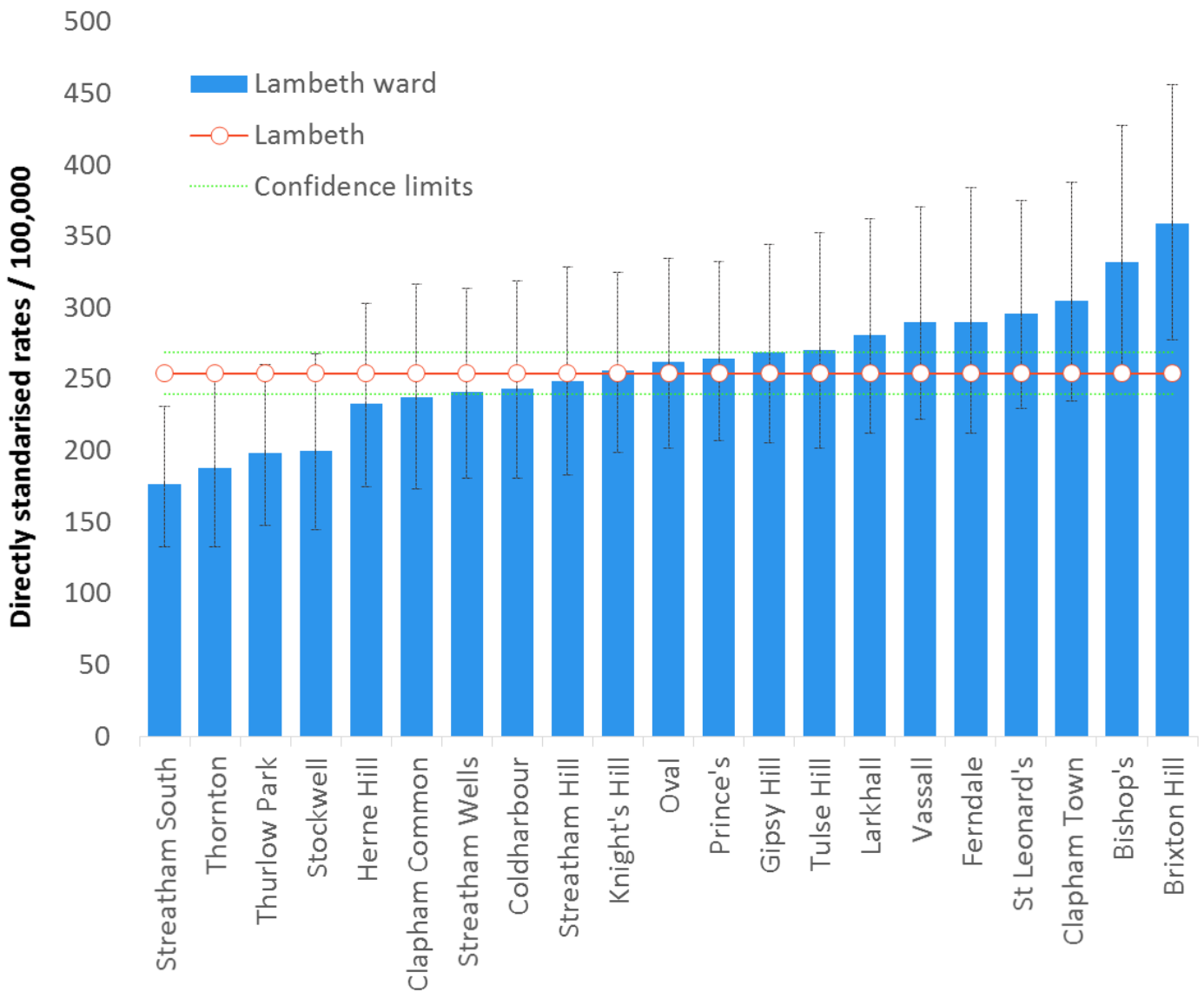
The chart shows the rate of avoidable mortality in each of Lambeth's wards for the period of 2015 to 2017.

Avoidable mortality rates differ between the wards of the borough, but due to the confidence intervals around these rates, most of the differences are not significant.

Over this period only **Streatham South** experienced a rate of avoidable mortality significantly lower than the borough rate.

Over the same period **Brixton Hill** experienced a rate significantly higher than the borough rate.

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Avoidable mortality – Slope of inequality (SII)

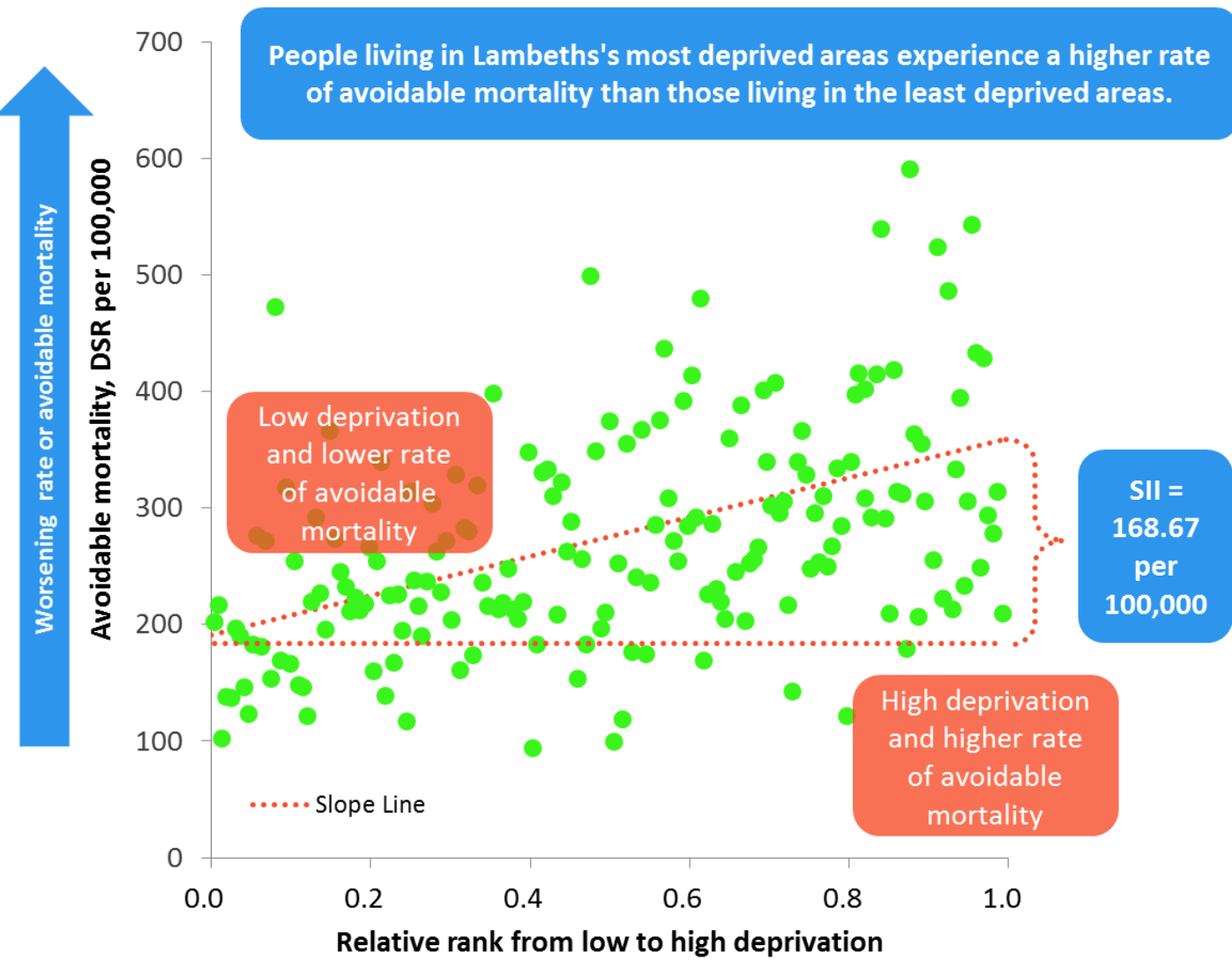People living in the most deprived areas of Lambeth are **2x** more likely to die from an avoidable cause

Slope index of inequality for causes of death considered avoidable, 2008 to 2017. LSOAs in Lambeth. SII = 168 (95% confidence interval: 122.9 to 214.5)

People living in Lambeths's most deprived areas experience a higher rate of avoidable mortality than those living in the least deprived areas.

Worsening rate or avoidable mortality

Avoidable mortality, DSR per 100,000

Low deprivation and lower rate of avoidable mortality

High deprivation and higher rate of avoidable mortality

SII = 168.67 per 100,000

········· Slope Line

Relative rank from low to high deprivation

The chart shows the rate of avoidable mortality in the least deprived to the most deprived areas of Lambeth for the period of 2008 to 2017.

Avoidable mortality rates differ between areas of low and high deprivation, with those living in the most deprived areas experiencing a higher rate of avoidable mortality

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Actions to reduce avoidable mortality

The National Institute for Health and Clinical (NICE) Excellence recommends that local health and wellbeing partnerships take action on avoidable deaths by:

Adoption of a population-wide approach to tackling premature mortality through:

- Sustaining **effective partnerships** across all key stakeholders

- Using **local intelligence** and tools to engage with local communities

- Supporting **local communities** to adopt healthy lifestyles

- Developing **integrated population-wide programmes** that address health inequalities & improve access with robust monitoring and evaluation

- Ensuring **prevention, early detection and effective treatment** of infectious and long term conditions that lead to premature mortality

- Evaluating programmes and **share learning** on local innovations

Commissioning services to prevent premature mortality:

- Stop smoking services

- Brief interventions for smoking and alcohol

- Health Checks

Considering wider determinants by:

- Helping people **back into work**

- Working with **schools**

- **Awareness raising** e.g. community programmes to improve diet

Developing policies to prevent premature mortality through:

- Use of **procurement opportunities** to influence healthy lifestyle choices (e.g. catering contracts, licencing policies)

- Creating, protecting and managing **safe spaces for physical activity** that are accessible by foot or bicycle. Also consider active transport policies

- Ensuring leisure and other services are **affordable, culturally acceptable and accessible** to all

- Encouraging local organisations to become **exemplars of healthy lifestyles**

Source: NICE , Tackling the causes of premature mortality (early death) , February 2015

Actions to reduce avoidable mortality

Physical activity
Physical activity in the workplace

Diet
Strategy, policy and commissioning for diet

Evidence based actions for key risk factors

Obesity
Workplace interventions to prevent obesity

Smoking
- Providing workplaces with support to help people quit smoking
- NICE quality standard [QS43] Smoking: supporting people to stop

Alcohol
NICE quality standard [QS11]: Alcohol-use disorders, diagnosis and management

Appendix 1 - Avoidable mortality cause list

Condition group and cause	ICD-10 codes	Age	Amenable	Preventable
Infections				
Intestinal infections	A00-A09	0-14	•	
Tuberculosis	A15-A19, B90	0-74	•	•
Selected invasive bacterial and protozoal infections	A38-A41, A46, A48.1, B50-B54, G00, G03, J02, L03	0-74	•	
Hepatitis C	B17.1, B18.2	0-74	•	•
Pertussis (whooping cough)	A37	0-14	•	•
Measles	B05	1-14	•	•
Rubella	B06	0-14		•
Other infections (Diphtheria, Tetanus, Poliomyelitis and Varicella)	A35, A36, A80, B01	0-19	•	•
HIV/AIDS	B20-B24	All	•	•
Neoplasms				
Malignant neoplasm of lip, oral cavity and pharynx	C00-C14	0-74		•
Malignant neoplasm of oesophagus	C15	0-74		•
Malignant neoplasm of stomach	C16	0-74		•
Malignant neoplasm of colon and rectum	C18-C21	0-74	•	•
Malignant neoplasm of liver	C22	0-74		•
Malignant neoplasm of trachea, bronchus and lung	C33-C34	0-74		•
Malignant melanoma of skin	C43	0-74	•	•
Mesothelioma	C45	0-74		•
Malignant neoplasm of breast	C50	0-74	•	•
Malignant neoplasm of cervix uteri	C53	0-74	•	•
Malignant neoplasm of bladder	C67	0-74	•	
Malignant neoplasm of thyroid gland	C73	0-74	•	
Hodgkin's disease	C81	0-74	•	
Leukaemia	C91, C92.0	0-44	•	
Malignant neoplasm of testis	C62	0-74	•	
Malignant neoplasm of unspecified parts of uterus and body of uterus	C54-C55	0-44	•	
Benign neoplasms	D10-D36	0-74	•	
Nutritional, endocrine and metabolic				
Diabetes mellitus	E10-E14	0-74	•	•
Diseases of the Thyroid	E00-E07	0-74	•	
Addison's disease	E27.1	0-74	•	
Drug use disorders				
Alcohol related diseases, excluding external causes	F10, G31.2, G62.1, I42.6, K29.2, K70, K73, K74 (excl. K74.3-K74.5), K86.0	0-74		•
Illicit drug use disorders	F11-F16, F18-F19	0-74		•
Neurological disorders				
Epilepsy and status epilepticus	G40-G41	0-74	•	
Cardiovascular diseases				
Rheumatic and other valvular heart disease	I01-I09	0-74	•	
Hypertensive diseases	I10-I15	0-74	•	
Ischaemic heart disease	I20-I25	0-74	•	•
DVT with pulmonary embolism	I26, I80.1-I80.3, I80.9, I82.9	0-74		•
Cerebrovascular diseases	I60-I69	0-74	•	
Aortic aneurysm and dissection	I71	0-74		•
Respiratory diseases				
Influenza (including swine flu)	J09-J11	0-74	•	•
Pneumonia	J12-J18	0-74	•	
Chronic obstructive pulmonary disorder	J40-J44	0-74	•	•
Asthma	J45-J46	0-74	•	
Selected respiratory diseases	J00-J06, J20-J22, J30-J39	1-14	•	
Digestive disorders				
Gastric and duodenal ulcer	K25-K28	0-74	•	
Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia	K35-K38, K40-K46, K80-K83, K85, K86.1-K86.9, K91.5	0-74	•	
Genitourinary disorders				
Nephritis and nephrosis	N00-N07, N17-N19, N25-N27	0-74	•	
Obstructive uropathy and prostatic hyperplasia	N13, N20-N21, N35, N40, N99.1	0-74	•	
Maternal and infant				
Complications of perinatal period	P00-P96, A33	All	•	
Congenital malformations of the circulatory system	Q20-Q28	0-74	•	
Spina Bifida	Q05	0-74		•
Unintentional injuries				
Transport Accidents	V01-V99	All		•
Accidental Injury	W00-X59	All		•
Intentional injuries				
Suicide and self inflicted injuries	X60-X84, Y10-Y34	All		•
Homicide/Assault	X85-Y09, U50.9	All		•
Misadventures to patients during surgical and medical care	Y60-Y69, Y83-Y84	All	•	•

Source: ONS Revised definition of avoidable mortality , May 2016

Definitions and data sources

Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. Calculations based on small numbers of events are often subject to random fluctuations. As a general rule, if the confidence interval around one figure overlaps with the interval around another, we cannot say with certainty that there is more than a chance difference between the two figures.

The **Age Standardised Mortality Rate** for an area is the number of deaths, usually expressed per 100,000, that would occur in that area if it had the same age structure as the standard population and the local age-specific rates of the area applied.

Directly standardised mortality rate is calculated by dividing the number of deaths by the actual local population in a particular age group multiplied by the standard population for that particular age group and summing across the relevant age groups. The rate is usually expressed per 100,000

ICD-10 is the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization (WHO). It contains codes for diseases, signs and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases.

Lower Super Output Areas (LSOAs) are a geography for the collection and publication of small area statistics, they give an improved basis for comparison across the country because the units are more similar in size of population than, for example, electoral wards. They are also intended to be stable, enabling the improved comparison and monitoring of policy over time. LSOAs have an average of 1,700 residents (minimum 1,000) or 650 households.

NICE actions to reduce avoidable mortality, links:

Risk factor	Link
Smoking	http://pathways.nice.org.uk/pathways/smoking#path=view%3A/pathways/smoking/smoking-cessation-in-the-workplace.xml http://www.nice.org.uk/guidance/QS43
Diet	http://pathways.nice.org.uk/pathways/diet#content=view-index&path=view%3A/pathways/diet/community-and-leisure-services-and-weight-management-programmes.xml
Physical activity	http://pathways.nice.org.uk/pathways/physical-activity#path=view%3A/pathways/physical-activity/physical-activity-in-the-workplace.xml&content=close http://pathways.nice.org.uk/pathways/diet#content=view-index&path=view%3A/pathways/diet/community-and-leisure-services-and-weight-management-programmes.xml
Obesity	https://pathways.nice.org.uk/pathways/obesity/#path=view%3A/pathways/obesity
Alcohol	http://www.nice.org.uk/guidance/QS11

Data Sources

Primary Care Mortality Database
Office for National Statistics
Association of Public Health Observatories Inequalities Analysis Tool
Icons sourced from www.flaticon.com

Published Reports

https://www.ons.gov.uk/file?uri=/aboutus/whatwedo/statistics/consultationsandsurveys/allconsultationsandsurveys/reviewofavoidablemortalitydefinition/reviseddefinitionofavoidablemortalityandnewdefinitionforchildrenandyoungpeople.doc

Further information and feedback:

This profile was created by Lambeth Public Health, January 2019.   **Email:** publichealth@lambeth.gov.uk

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