Local Tobacco Control Profiles

Smoking related mortality

Indicator Definitions and Supporting Information

Indicator ID	113
Date updated	04 Dec 2018
Indicator full name	Estimated deaths attributable to smoking per 100,000 population, aged 35+.
Rationale	Smoking remains the biggest single cause of preventable mortality and morbidity in the world[1]. It still accounts for 1 in 6 of all deaths in England, and there exist huge inequalities in smoking related deaths: areas with the highest death rates from smoking are about three times as high than areas with the lowest death rates attributable to smoking. Reference: (1) World Health Organization Report on the Global Tobacco Epidemic 2009 http://www.who.int/tobacco/mpower/2009/en/index.html Towards a Smokefree Generation: A Tobacco Control Plan for England[1] states that tobacco use remains one of our most significant public health challenges and that smoking is the single biggest cause of inequalities in death rates between the richest and poorest in our communities. In January 2012 the Public Health Outcomes Framework[2] was published. Smoking and smoking related death plays a key role in two of the four domains: Health Improvement and Preventing premature mortality. References: (1) Towards a Smokefree Generation: A Tobacco Control Plan for England, July 2017 https://www.gov.uk/government/publications/towards-a-smoke-free-generation-tobacco-control-plan-for-england (2) Healthy Lives, Healthy People: Improving outcomes and supporting transparency, Part 1: A public health outcomes framework for England, 2013-16 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/263658/2901502_PH(
Definition	Deaths attributable to smoking, directly age standardised rate for persons aged 35 years +. Relative risks by ICD10 code from The Information Centre for Health and Social Care, Statistics on Smoking: England 2010. A full description of the methodology is available in the APHO Health Profiles user guide.
Data source	ONS mortality file, ONS LSOA single year of age population estimates and smoking status from Integrated Household Survey/Annual Population Survey, relative risks from The Information Centre for Health and Social Care, Statistics on Smoking, England 2010.
Indicator source	Further detail on the methodology can be found at www.apho.org.uk/resource/view.aspx?RID=116454
Indicator production	PHE - Risk Factors Intelligence Team
Definition of numerator	Smoking attributable deaths are the sums over the smoking attributable fractions of all deaths. The fraction (between 0 and 1) of a death that is considered to be due to smoking is based on: relative risk (specific for underlying cause of death, smoking status, age and sex) and estimated smoking and ex-smoking prevalence (by age, sex, area). Causes of death considered to be related to smoking are: various cancers, cardiovascular and respiratory diseases, and diseases of the digestive system. For a detailed list, including ICD 10 codes, please see Health Profiles 2012 Indicator Guide p.253.

Source of numerator	ONS: Annual birth and death extracts Prevalence of current smoking, former smoking and non-smoking from Integrated Household Survey, ONS (experimental statistics). 2007-09 to 2012-14 smoking attributable mortality uses three year weighted average smoking prevalence for Local Authorities, combined with the regional age-sex breakdown of smoking prevalence for the same period. For the period 2013-15 and 2014-16 the smoking prevalence is derived from the Annual Population Survey, ONS. Relative risks from The Health and Social Care Information Centre Statistics on Smoking: England 2010
Definition of denominator	ONS mid-year population estimates
Source of denominator	ONS
Value type	Directly standardised rate
Unit	per 100,000
Standard population/values	European Standard Population 2013
Age	35+ yrs
Sex	Persons
Year type	Calendar
Frequency	Annual
Benchmarking method	Confidence intervals overlapping reference value (95.0)
Benchmarking significance level	95%
Confidence interval method	Byar's method (no small number correction)
Disclosure control	Where the observed total number of deaths is less than 10, the rates have been suppressed as there are too few deaths to calculate directly standardised rates reliably. The cut-off has been reduced from 25, following research commissioned by PHE and in preparation for publication which shows DSRs and their confidence intervals are robust whenever the count is at least 10.
Notes	All data points from 2007-09 to 2011-13 were recalculated using a three year weighted average prevalence from the Annual Population Survey (APS) to smooth out large fluctuations in smoking prevalence in some areas. Adjustments were made for ICD10 v 2010 and ICD10 v 2013 for deaths up to and including 2013. Prior to 2013-15 the smoking prevalence is calculated as an average of the 3 years. Due to the SAF's requiring smoking prevalence for different age groups, and the small numbers sampled in local authorities in the APS which can fluctuate largely between years, the regional data is used for these estimates. From 2013-15 the attributable fractions are based solely on local authority estimates from the APS, rather than the previous method. As a result, the sample size for the lower tier data is too small to get reliable estimates for the different age groups required. Data for 2013-15 and 2014-16 has been revised in December 2018. This is due to ONS publishing revised mid-year population estimates.
Profiles included in	Co-occurring substance misuse and mental health issues, Local Tobacco Control Profiles, Mortality Profile

Atlas of Variation

Cancer Services

Cardiovascular disease, diabetes and kidney disease

Child and Maternal Health

End of Life Care Profiles

Health Protection

Inhale - INteractive Health Atlas of Lung conditions in England

Learning Disability Profiles

Liver Disease Profiles

Local Alcohol Profiles for England

Local Authority Health Profiles

Local Tobacco Control Profiles

Marmot Indicators

Mental Health, Dementia and Neurology

National General Practice Profiles

NCMP and Child Obesity Profile

NHS Health Check

Older People's Health and Wellbeing

Physical Activity

Public Health Dashboard

Public Health Outcomes Framework

Segment Tool

Sexual and Reproductive Health Profiles

TB Strategy Monitoring Indicators

Technical Guidance

Wider Determinants of Health

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