

Recent trends in lung cancer incidence, mortality and survival

NCIN Data Briefing

Background

Lung cancer is the second most common cancer after breast cancer and kills more people than any other cancer. Tobacco smoking is the main cause of lung cancer and about 80-90% of lung cancers can be attributed to it. This data briefing describes the trends in incidence, mortality and survival and is based on data on all lung cancers diagnosed in England between 1990 and 2011.

Incidence trend

Between 1990 and 2011, almost 720,000 people were diagnosed with lung cancer. During this time, the number of male lung cancer diagnoses declined, whereas the number of female lung cancer diagnoses increased. Lung cancer incidence increases sharply after middle age. More than 75% of lung cancers are diagnosed in people over the age of 65. The difference in the trends of lung cancer incidence among men and women is even more pronounced when age is taken into account. The sharp decrease in the incidence of male lung cancer over the past two decades reflects the decline in smoking prevalence among men. However, due to the rise in women who took up smoking after World War II, the incidence among women continues to increase. The difference in smoking prevalence between men and women has given rise to a dramatic change in the male to female lung cancer incidence ratio from 3:1 in 1990 to 3:2 in 2011.

KEY MESSAGE:

Male lung cancer incidence rapidly declined between 1990 and 2011, whereas the incidence of lung cancer among women increased during the same period. During the past two decades, one-year survival after a lung cancer diagnosis has increased quite dramatically and more so among women than men.

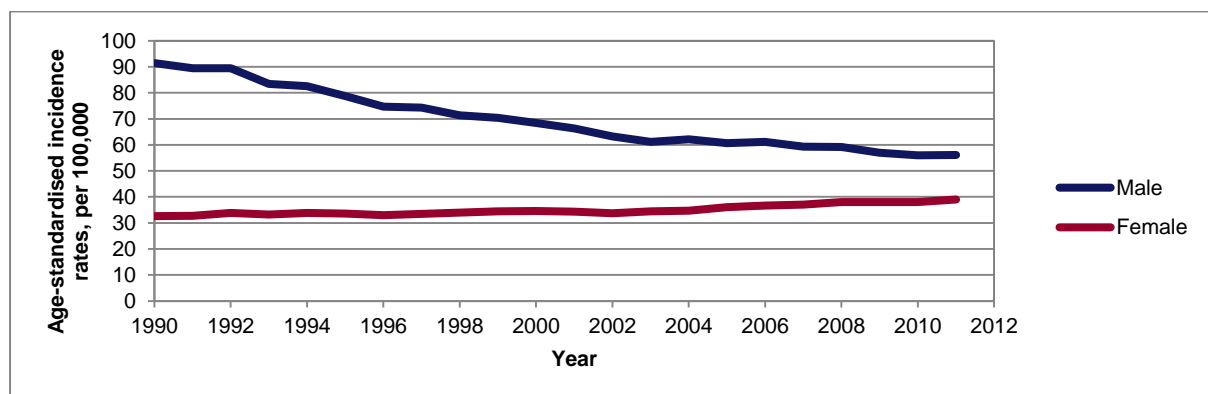


Figure 1. Age-standardised incidence rate for lung cancer in England 1990-2011

Mortality trend

In 2011, more than 28,000 people died from lung cancer in England, which is significantly less than the almost 32,000 who died from lung cancer in 1990. The sharp reduction in the incidence of lung cancer among males is also reflected in the reduction in the male lung cancer mortality rate from 85 per 100,000 in 1990 to 46 per 100,000 in 2011, whereas the mortality rate among females increased slightly from 29 to 30 per 100,000 in this period.

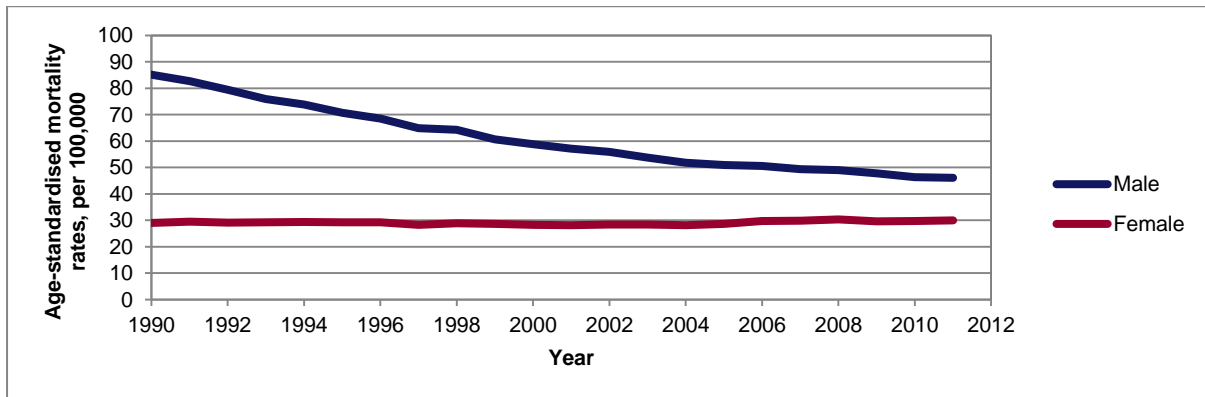


Figure 2. Age-standardised mortality rate for lung cancer in England 1985-2011

Survival trend

Lung cancer survival has improved over the past two decades and more so among women than men. Whereas 17% of male and female lung cancer patients were alive one year after diagnosis in 1990, 29% of men and 33% of women diagnosed with lung cancer in 2010 survived one year.

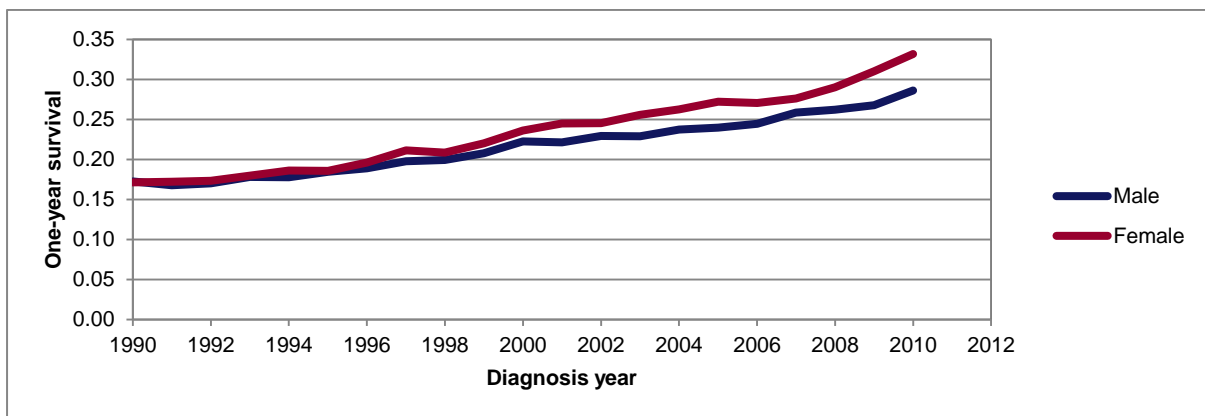


Figure 3. One-year survival for lung cancers diagnosed in England 1990-2010

FIND OUT MORE:

Public Health England

The London Knowledge and Intelligence Team is the lead for lung cancer and mesothelioma

www.gov.uk/phe

Other useful resources within the NCIN partnership:

Cancer Research UK CancerStats – Key facts and detailed statistics for health professionals

<http://info.cancerresearchuk.org/cancerstats/>

The National Cancer Intelligence Network (NCIN) is a UK-wide partnership operated by Public Health England. The NCIN coordinates and develops analysis and intelligence to drive improvements in prevention, standards of cancer care and clinical outcomes for cancer patients.