Introduction
The routes to diagnosis (RtD) study has been updated to include all patients diagnosed between 2006 and 2013, covering 2 million newly diagnosed tumours. The methodology has remained the same as in previous RtD publications. Results have been published for 57 cancer sites in workbooks that can be found at the following link www.ncin.org.uk/publications/routes_to_diagnosis.

This briefing describes the national RtD results for lung cancer. The definition used for this briefing is ICD10 C33-C34. It includes variation in routes over time, by sex, age, deprivation and ethnicity and variation in survival by time from diagnosis, sex, age and deprivation.

Summary of RtD for lung cancer
Emergency presentation was the commonest route over the time period analysed, however, this has significantly decreased from 39% in 2006 to 35% in 2013. Two week wait (TWW) has significantly increased from 22% in 2006 to 28% in 2013.

Key messages
New data published for lung cancer.
The data shows variation by route over time, by sex, age, deprivation and ethnicity and also variation in survival.

![Graph showing routes to diagnosis for lung cancer from 2006 to 2013]
Route breakdowns for lung cancer, 2006 to 2013

Sex: females had a significantly higher proportion of cases diagnosed through emergency presentation; 38% compared to 36% for males. Compared to females, males had a significantly higher proportion of cases diagnosed through GP referral; 22% compared to 21%.

Age: emergency presentation generally increased with increasing age with a 23% difference between those aged over 85 and those aged under 50. Diagnoses through managed routes generally decreased with increasing age.
Deprivation: emergency presentation increased with increasing deprivation with a 6% difference between those living in the least deprived areas and those living in the most deprived areas. The proportions diagnosed through both TWW and GP referral were significantly lower among those living in the most deprived areas compared to those living in the least deprived areas.

Ethnicity: those of white ethnicity had a significantly higher proportion of cases diagnosed through TWW compared to those of Asian and black ethnicities. Compared to those of white ethnicity, those of Asian ethnicity had a significantly higher proportion of GP referral and those of black ethnicity had a significantly higher proportion of emergency presentation.
Survival results for lung cancer, 2006 to 2013

One year survival for patients diagnosed through emergency presentation was significantly lower than all other routes to diagnosis: ranging from 61% at one month to 4% at three years after diagnosis.

Sex: one year survival is significantly lower for males compared to females across all routes to diagnosis. For TWW the gap is 6%, while emergency presentation has the narrowest gap at 2%.
Age: one year survival significantly decreased as age increased across all routes to diagnosis. Survival for emergency presentation was significantly lower than all other routes for all age groups, falling as low as 9% for those age 85 and over.

Deprivation: one year survival was not significantly different across deprivation groups for known routes to diagnosis. The exception was for patients diagnosed through an unknown route at 34% among those living in the least deprived areas compared to 21% among those living in the least deprived areas.
Find out more:
This report forms part of a suite of publications from NCIN’s Routes to Diagnosis project: [www.ncin.org.uk/publications/routes_to_diagnosis](http://www.ncin.org.uk/publications/routes_to_diagnosis)

Other useful resources within the NCIN partnership:

What cancer statistics are available and where can I find them?

Public Health England’s National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in cancer awareness, prevention, diagnosis and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.