



UPPER GASTRO-INTESTINAL TRACT CANCER IN THE WEST MIDLANDS

The West Midlands Cancer Intelligence Unit (WMCIU) is part of an international and national network of cancer registries. The WMCIU collects and records diagnostic and treatment information for all cases of cancer occurring in residents of the West Midlands region (covering a population of 5.2 million in 2006). This fact sheet examines the incidence, mortality and survival trends for upper gastro-intestinal tract or upper GI cancers (including cancer of the oesophagus, stomach and pancreas) in the West Midlands region.

Key Points

- During the period 1981-2005 the incidences of stomach and pancreatic cancers in men and women have shown substantial decreases. In contrast, oesophageal cancer incidence has increased in men by 69%.
- Oesophageal and stomach cancer incidence rates in 2005 are over twice as high in men (14.7 and 15 per 100,000 respectively) as in women (5.7 and 6.2 per 100,000 respectively). Pancreatic cancer incidence is only slightly higher in men (10.5 per 100,000 in men and 7.7 per 100,000 in women).
- Most upper GI cancers occur in the 60+ age groups (around 84% of oesophageal, 88% of stomach and 85% of pancreatic cancer cases).
- Stomach cancer mortality rates in both sexes have decreased between 1981 and 2005. There has also been a slight decrease in pancreatic cancer deaths in men and an increase in oesophageal cancer deaths in men.
- One and five year relative survival from the three upper GI cancers have increased since 1981-1983 but are still very low. Five year survival rates for oesophageal cancer, stomach cancer and pancreatic cancer are 8.4%, 14.7% and 4.2% respectively for cases diagnosed in 1998-2000.
- Women diagnosed with one of the upper GI cancers have poorer one year survival rates than men. This is reversed at five years for oesophageal and stomach cancer.

BACKGROUND

- 20,689 upper GI cancers were diagnosed in England and Wales in 2005^{1,2}. Of these, 10.3% (n=2,131) were diagnosed in residents of the West Midlands (stomach cancer 3.7%, n=769, oesophageal cancer 3.4%, n=703 and pancreatic cancer 3.2%, n=659).
- Upper GI cancers are the fourth most commonly diagnosed cancer in men and women in the West Midlands, accounting for 9.8% (n=1,289) of male and 6.7% (n=842) of female newly diagnosed cancers in 2005.³
- There were 17,926 deaths from upper GI cancers in England and Wales in 2005.⁴ Of these, 10.5% (n=1,876) occurred in residents of the West Midlands.
- Upper GI cancers are the second and third most common cause of cancer death in men and women respectively in the West Midlands, accounting for 16% (n=1,138) of male and 11.8% (n=738) of female cancer deaths in 2005.³
- Several risk factors are associated with each type of upper GI cancer. However smoking and alcohol are common to all three cancer sites. Other factors include; for oesophageal cancer poor diet, obesity and having pre-existing conditions such as Barratt's oesophagus, tylosis or achalasia. For stomach cancer high salt diet, and infection with the *Helicobacter Pylori* (HP) bacteria. For pancreatic cancer a diet high in fat and sugar, high consumption of red or processed meat, and having pre-existing conditions such as diabetes, chronic pancreatitis or stomach ulcers.⁵

Cancer Registries in England and Wales



Source: 2001 Census, Output Area Boundaries, Crown Copyright 2003.
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Prepared by West Midlands Cancer Intelligence Unit (2005).

¹ Office for National Statistics (2007). 'Cancer Registration Statistics 2005'

² Welsh Cancer Intelligence and Surveillance Unit. Cancer Incidence in Wales 2001-2005

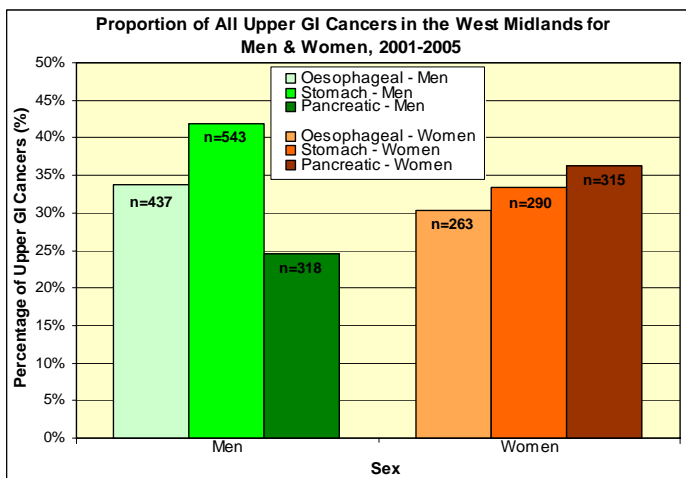
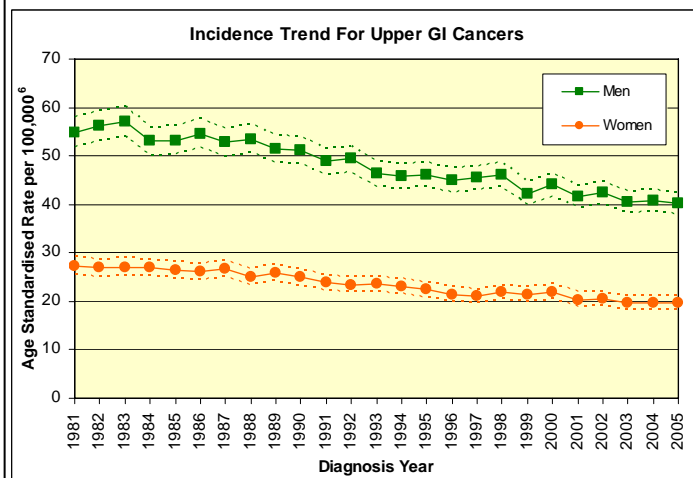
³ West Midlands Cancer Intelligence Unit (2007). Cancer Information Service

⁴ Office for National Statistics (2006). 'Mortality Statistics - Cause' Series DH2, No.32

⁵ Cancer Research UK website (2007). Patient Information Specific Cancers – Oesophagus, Stomach & Pancreas'

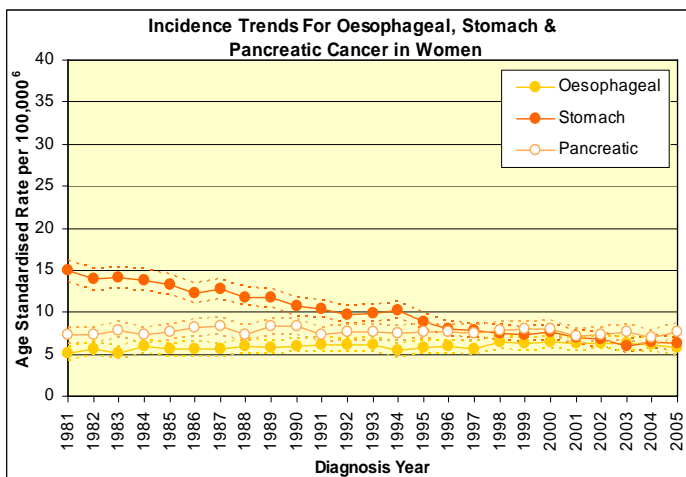
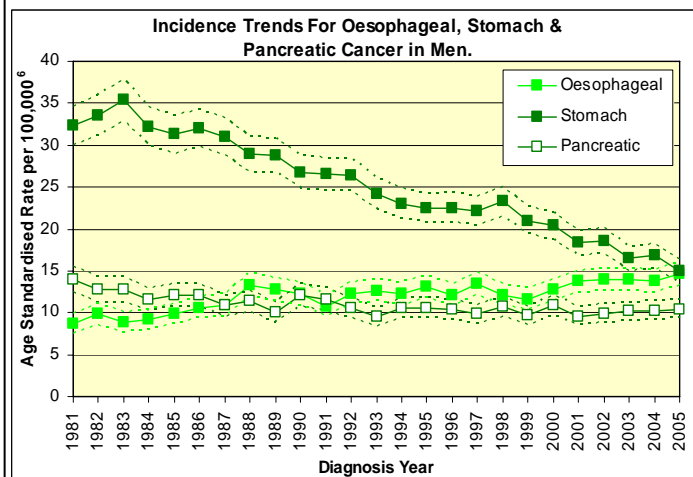


AN OVERVIEW OF UPPER GI CANCERS IN THE WEST MIDLANDS



- Overall upper GI cancer incidence rates have decreased over the 25 year period studied. In men upper GI cancer incidence decreased by 27% from 54.9 per 100,000 in 1981 to 40.1 per 100,000 in 2005 and in women it decreased by 28% from 27.4 per 100,000 in 1981 to 19.7 per 100,000 in 2005.
- Stomach cancer accounts for 42% of upper GI cancers in men but only 33% of upper GI cancers in women. Pancreatic cancer accounts for 36% of upper GI cancer in women compared to 24% in men. Oesophageal cancer constitutes 34% of male upper GI cancers and 30% in women.

INCIDENCE OF UPPER GI CANCER IN THE WEST MIDLANDS

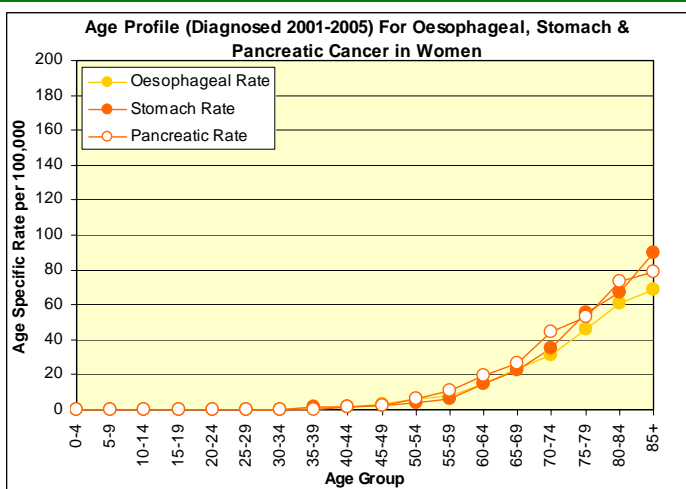
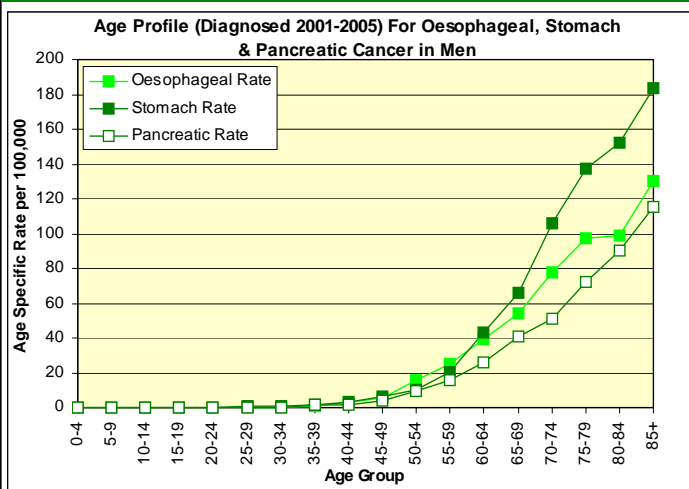


- Oesophageal cancer incidence rates in men have increased by 69% over the last 25 years; from 8.7 per 100,000 in 1981 to 14.7 per 100,000 in 2005. In contrast, oesophageal cancer incidence in women has remained stable at around 5.9 per 100,000.
- Stomach cancer incidence rates in men and women have decreased dramatically over the last 25 years; with the age standardised incidence rates in men decreasing by 54% from 32.3 per 100,000 in 1981 to 15 per 100,000 in 2005 and in women have decreased by 59% from 15 per 100,000 in 1981 to 6.2 per 100,000 in 2005.
- Pancreatic cancer incidence rates have also fallen in men over the last 25 years; decreasing by 25% from 13.9 per 100,000 in 1981 to 10.5 per 100,000 in 2005. In contrast, pancreatic cancer incidence in women has remained stable at around 7.6 per 100,000.

⁶ Directly age standardised rates are calculated using the European Standard Population and population denominators from the Office for National Statistics. Dashed lines indicate 95% confidence intervals.

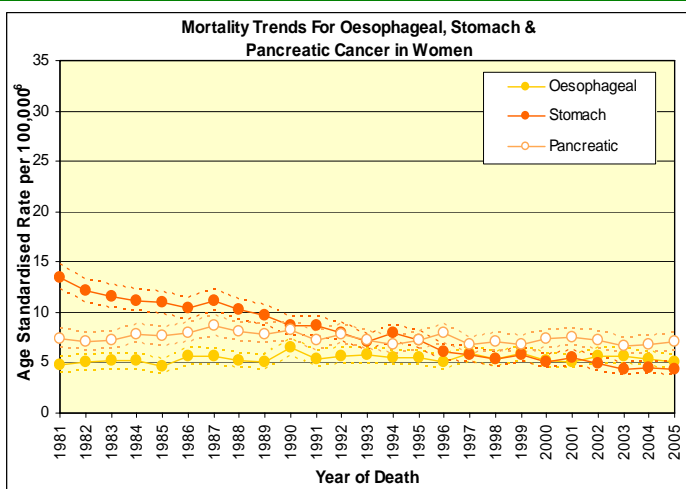
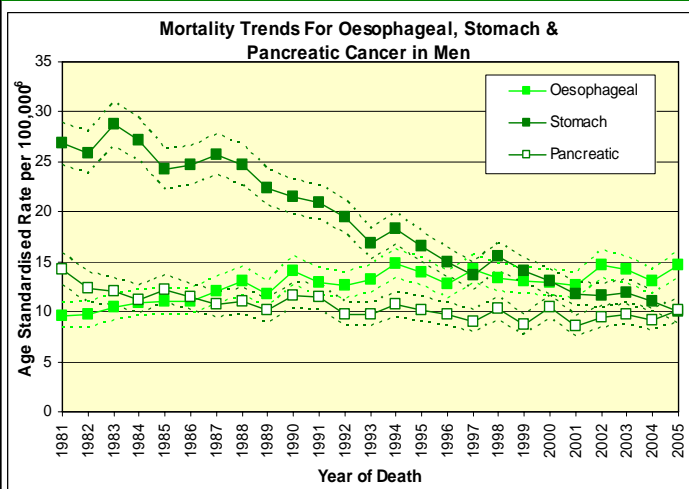


INCIDENCE OF UPPER GI CANCER IN THE WEST MIDLANDS AGE PROFILE



- Upper GI cancer incidence rates increase with age in both sexes, reaching peaks in men and women in the 85+ age group of 130.2 and 68.5 per 100,000 for oesophageal cancer, 183.9 and 89.8 per 100,000 for stomach cancer and 115.5 and 79.3 per 100,000 for pancreatic cancer respectively. In 2001-2005 84% of oesophageal, 88% of stomach and 85% of pancreatic cancers were diagnosed in men and women aged 60 and over. 61% of oesophageal, 67% of stomach and 63% of pancreatic cancers were diagnosed in men and women aged over the age of 70 in 2001-2005.

MORTALITY⁷ FROM UPPER GI CANCER IN THE WEST MIDLANDS



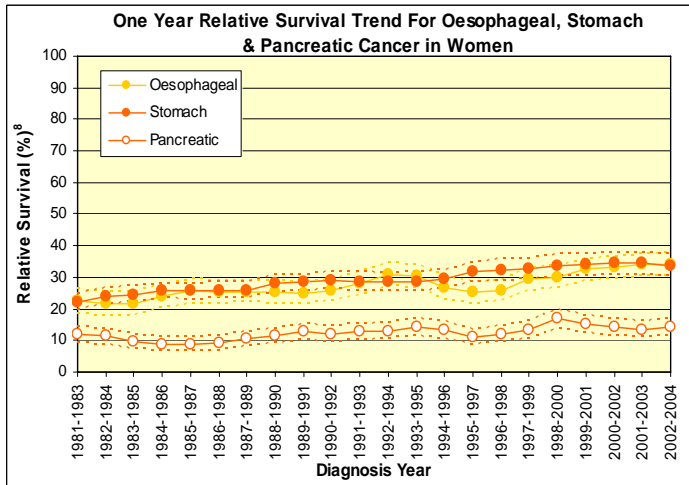
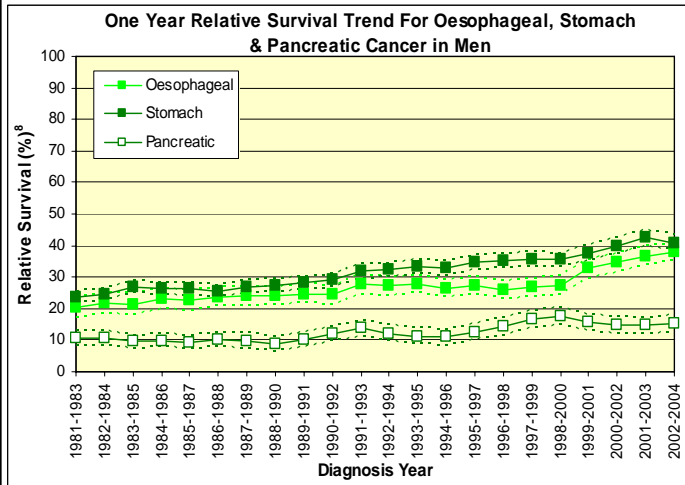
- Upper GI cancer mortality rates have fallen substantially over the 25 year period from 1981 to 2005; decreasing by 31.1% in men from 50.6 per 100,000 in 1981 to 34.9 per 100,000 in 2005 and decreasing by 36.1% in women from 25.8 per 100,000 in 1981 to 16.4 in 2005. However, as with incidence, when split into the three cancer sites, a different picture emerges.
- In men, oesophageal cancer mortality rates have risen substantially over the 25 year period studied; increasing by 53% from 9.6 per 100,000 in 1981 to 14.7 per 100,000 in 2005. In contrast, the mortality rate for women has remained stable at around 5.4 per 100,000.
- Stomach cancer mortality rates have fallen dramatically in men and women over the 25 year period studied; decreasing by 63% in men from 26.8 per 100,000 in 1981 to 10 per 100,000 in 2005 and by 68% in women from 13.5 per 100,000 in 1981 to 4.3 per 100,000 in 2005.
- In men, pancreatic cancer mortality rates have fallen slightly over the 25 year period studied; decreasing by 28% from 14.2 per 100,000 in 1981 to 10.2 per 100,000 in 2005. In contrast, the mortality rate for women has remained stable at around 7.4 per 100,000.
- Mortality rates for the upper GI cancers are strongly related to age for men and women; with around 85% of oesophageal, 91% of stomach and 86% of pancreatic cancer deaths occurring in those aged over 60, while 65% of oesophageal, 74% of stomach and 63% of pancreatic cancers occurred in those over 70 years old.

⁶ Directly age standardised rates are calculated using the European Standard Population and population denominators from the Office for National Statistics. Dashed lines indicate 95% confidence intervals.

⁷ Directly age standardised and age specific rates have been calculated using raw data provided by the Office for National Statistics.



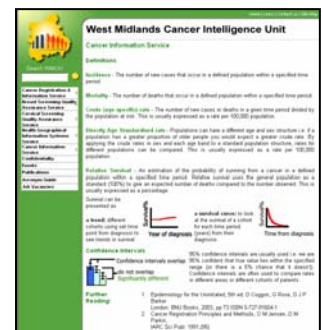
SURVIVAL FROM UPPER GI CANCER IN THE WEST MIDLANDS



- Although one and five year relative survival rates for upper GI cancers have increased since 1981-1983, they remain low.
- The percentage of oesophageal cancer patients surviving a year after diagnosis has risen over the 25 year period studied; increasing by 17.6% in men from 20.3% in 1981-1983 to 37.9% in 2002-2004 and by 11.7% in women from 22.5% in 1981-1983 to 34.1% in 2002-2004.
- Stomach cancer one year survival rates have also improved over this time; increasing by 17% in men from 23.5% in 1981-1983 to 40.9% in 2002-2004 and by 11.5% in women from 22.3% in 1981-1983 to 33.8% in 2002-2004.
- For pancreatic cancer, only a slight improvement in one year survival has occurred; with a 4.9% increase in men from 10.6% in 1981-1983 to 15.5% in 2002-2004 and a 2.4% increase in women from 11.9% in 1981-1983 to 14.3% in 2002-2004.
- One year relative survival rates decrease substantially with age for all three upper GI cancers. Oesophageal cancer survival falls from 51% and 48.5% in the 0-49 age group to 22.3% and 18.4% in the 80+ age group for men and women respectively. Stomach cancer survival decreases from 57.1% in men and 34.3% in women in the 0-49 age group to 24.3% and 20.9% in those aged 80 and over respectively. For pancreatic cancer, survival decreases from 19.4% and 16.7% in the 0-49 age group to 8.6% and 7.7% in the 80+ group for men and women.
- Average five year relative survival rates are even lower at 8.4% for oesophageal cancer, 14.7% for stomach cancer and 4.2% for pancreatic cancer for men and women in 1998-2000.
- Women generally have lower one year survival rates than men for the three upper GI cancers. In contrast, five year survival rates for women with oesophageal and stomach cancer are slightly higher than those in men (7.3% in men and 10.1% in women for oesophageal cancer, and 14.4% in men and 15.4% in women for stomach cancer).

FURTHER INFORMATION

- If you would like further information on Upper GI cancer statistics in the West Midlands, please contact the West Midlands Cancer Intelligence Unit's Information Team:
Telephone: (0121) 414 7711
Email: ciuinfo@wmcui.nhs.uk
- National cancer statistics are available from the Office for National Statistics website, and UK, Europe and worldwide cancer statistics are available from the Cancer Research UK and the Cancer e-atlas website:
www.statistics.gov.uk
www.cancerresearchuk.org/statistics
www.ncin.org.uk
www.ncin.org.uk/eatlas
- Further information relating to Upper GI cancers in general is available from the following websites:
www.nhsdirect.nhs.uk
www.cancerbackup.org.uk
www.cancerhelp.org.uk



For further information on the statistics used in this fact sheet, please see:
www.wmpho.org.uk/wmcui/RAI8.htm

⁸ Relative survival is defined as the observed survival rate divided by the expected survival rate of a similar cohort of people in the general population with respect to age, sex and year of observation. Dashed lines and error bars indicate 95% confidence intervals.