

7. Cancer of the Oesophagus

ICD-9 150

KEY FACTS

- On average 171 cancers were registered per year.
- More common in males than in females.
- No significant geographical variation.
- Eighth most common cancer in males, fifteenth in females.
- Median age at diagnosis, 67 in males, 73 in females.
- Increasing rates in males.

On average over the 1993-95 period 171 cancers of the oesophagus were registered each year. This represented about 2.5% of cancers in males and less than 1.5% of all cancers in females. The number of deaths represented about two thirds the number of cases. There were almost twice as many cases in males as in females (sex ratio 1.9:1).

Females accounted for 35% of the cases and 40% of the deaths perhaps reflecting the older age at diagnosis in females. The mortality incidence ratio reflects relatively poor survival. Median age at diagnosis was 67 years in males, 73 years in females - see Figures 11 and 12. It was the eighth most commonly diagnosed cancer in males, fifteenth in females.

The incidence rates over the three year period showed a year on year increase in males, although death rates did not show the same trend. The rise in age specific rates among younger males was quite marked. Males in Northern Ireland had around a 1 in 80 chance of developing oesophageal cancer before the age of 75 years, for females the risk was lower at around 1 in 230.

Table 11 Summary Statistics

Year	Males			Females		
	1993	1994	1995	1993	1994	1995
INCIDENCE						
Incident Cases	96	110	117	64	57	67
Crude Rate (per 100,000)	12.05	13.72	14.53	7.66	6.79	7.94
Cumulative Risk (0-74) (%)	1.17	1.25	1.34	0.42	0.37	0.51
WASR (per 100,000)	9.37	10.66	11.70	3.98	3.34	4.09
EASR (per 100,000)	13.65	15.74	16.69	6.11	5.17	6.29
% of All Cancers	2.29	2.58	2.88	1.45	1.32	1.56
DATA QUALITY						
Mortality : Incidence Ratio	0.79	0.79	0.62	0.80	1.03	0.66
% Death Certificate Only	3.13	2.73	1.71	0.00	10.53	2.99
% Microscopically Verified	91.67	85.45	88.89	89.06	78.95	85.07
MORTALITY						
Number of Deaths	76	87	72	50	59	48
Crude Rate (per 100,000)	9.54	10.85	8.94	5.99	7.02	5.69
Cumulative Risk (0-74) (%)	0.82	0.97	0.76	0.30	0.37	0.43
WASR (per 100,000)	7.23	8.12	6.45	2.74	3.50	3.28
EASR (per 100,000)	11.20	12.22	9.63	4.51	5.41	4.82
% of All Cancer Deaths	4.03	4.68	3.90	2.87	3.36	2.91
WASR = Rates standardised for age to the World standard population						
EASR = Rates standardised for age to the European standard population						

The number of cases and the rate of cancer of the oesophagus increased in males. This is in keeping with the previously observed increase in death rates over 25 years in Northern Ireland (ref: 1).

Age Profile

Oesophageal cancer is predominantly a cancer of old age - only 30% of cases in males and 13% of cases in females occurred before age 60 - see Figures 11 and 12. The age specific rates increased with age, the highest rates occurring in both sexes in the oldest age groups. The median age at diagnosis was 67 years for males and 73 years for females.

Figure 11 Age Distribution of New Cases 1993-95, Cancer of the Oesophagus

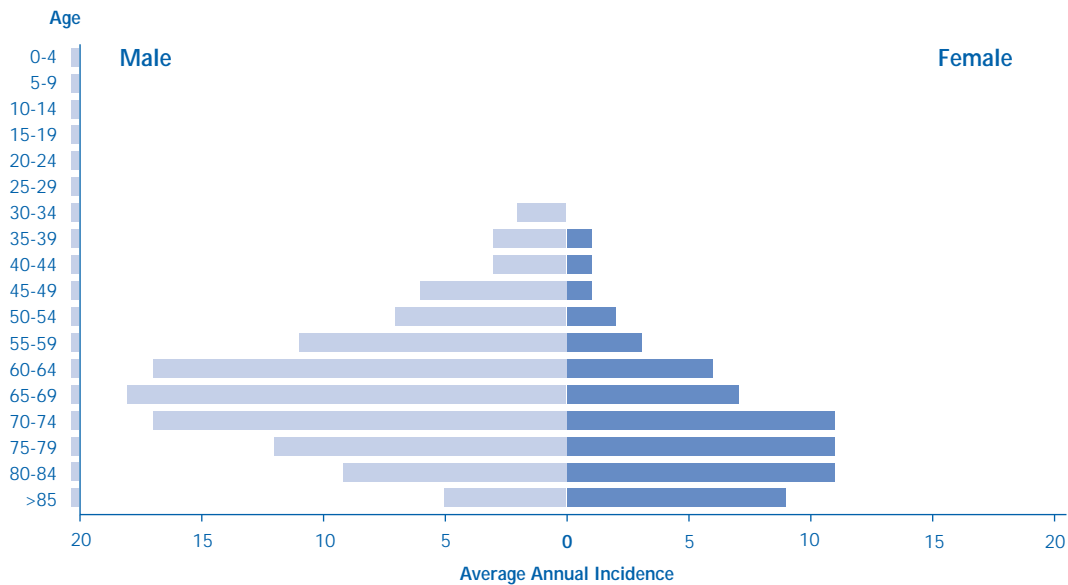
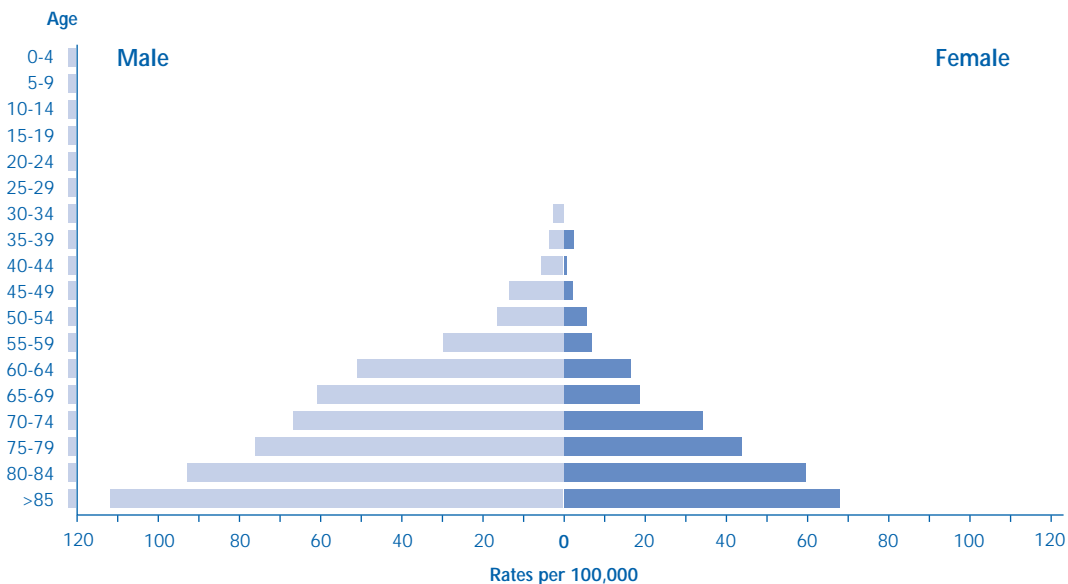


Figure 12 Average Annual Age Specific Rates (per 100,000) 1993-95, Cancer of the Oesophagus



Morphology

One in 7 (14%) of oesophageal cancers in females did not have a Microscopic Verification. The figure for males was slightly higher at 17%. In males 44% were classified as adenocarcinoma compared with 25% of cases in females. Squamous cell carcinoma was diagnosed in 17% of tumours in males and 28% of tumours in females. It is suggested that adenocarcinoma may arise in Barrett's oesophagus at the lower end of the oesophagus. Variation in morphology may indicate a different aetiology for this disease in the two sexes (ref: 7).

Geographical Distribution of Disease

No significant variation at Health Board level was found for any age grouping for either sex.

Data Quality

The percentage of cases registered as Death Certificate Only (DCO) improved over time and the percentage Microscopically Verified was generally good though variable. Overall, the data quality compares favourably with other UK and European registries.

Note: Assignment of site between stomach and oesophagus pose problems for many cancer registries. It is possible therefore, that a small proportion of oesophageal cancers registered for Northern Ireland were, in reality, stomach cancers despite best efforts to screen these out.

Comparison with other Countries

Table 12 provides comparative figures for the number of cases and European Age Standardised Rates for the year 1995.

Table 12 Comparative Numbers and Rates for Britain and Ireland 1995, Cancer of the Oesophagus

Country	Males		Females	
	Cases	EASR (per 100,000)	Cases	EASR (per 100,000)
Scotland	443	16.9	339	8.6
England & Wales	3630	13.0	2480	5.9
Republic of Ireland	169	11.0	132	6.6
Northern Ireland	117	16.7	67	6.3

The levels of oesophageal cancer in males were higher than in England & Wales and the Republic of Ireland but similar to Scotland. In females the rates were lower than in the Republic of Ireland and Scotland though higher than in England & Wales.

Comment

The major known risk factors for oesophageal cancer are alcohol consumption (especially spirits) and cigarette smoking. These two risk factors exhibit a synergistic relationship i.e. if both together are used the rates increase more than would be expected from either on its own. High incidence and mortality levels in France, especially for males, and the association with raised rates of cancer of the tongue, mouth and throat fit well with the concept of this being an alcohol related disease. Most countries in Europe have shown a rising trend in deaths from oesophageal cancer over the last thirty years, especially in males. It is suggested that this follows the known changes in alcohol consumption in these countries, with a time lag of about 10 years. The rising levels in young males in Northern Ireland require further investigation and initiatives to reduce alcohol consumption.

Cancer of the oesophagus, though rarely curable, has symptoms which can be well managed to enhance quality of life. The most common symptoms are difficulty or pain when swallowing. The survival following diagnosis depends on the stage of the disease and the person's general health, but is usually poor.

A high level of fresh fruit and vegetables in the diet is protective against oesophageal cancer and may have slowed down the rise in oesophageal cancer throughout the rest of Europe. There is no population screening test available for early detection of this disease.

For Health Gain

- The population should be encouraged to stop smoking, eat a diet with a high level of fresh fruit and vegetables, moderate alcohol consumption and seek early diagnosis of symptoms.
- Participation in large clinical trials, which can advise on the best outcomes, should be promoted.
- The organisation of services should be such as to ensure that those with the disease have as good an outcome as possible.
- The full range of palliative care services should be available for those with established disease.

Recommendation

- The rising levels of oesophageal cancers in young males requires further investigation and initiatives to reduce alcohol consumption.