

# Oesophageal cancer



Number of cases per year (2014-2018) <sup>1</sup>			Number of deaths per year (2014-2018) <sup>1</sup>		
Male	Female	Both sexes	Male	Female	Both sexes
155	65	220	136	55	191
Five-year net survival (2009-2013)			25-year prevalence (2018)		
Male	Female	Both sexes	Male	Female	Both sexes
19.0%	23.4%	20.0%	466	206	672

## Incidence

During 2014-2018:

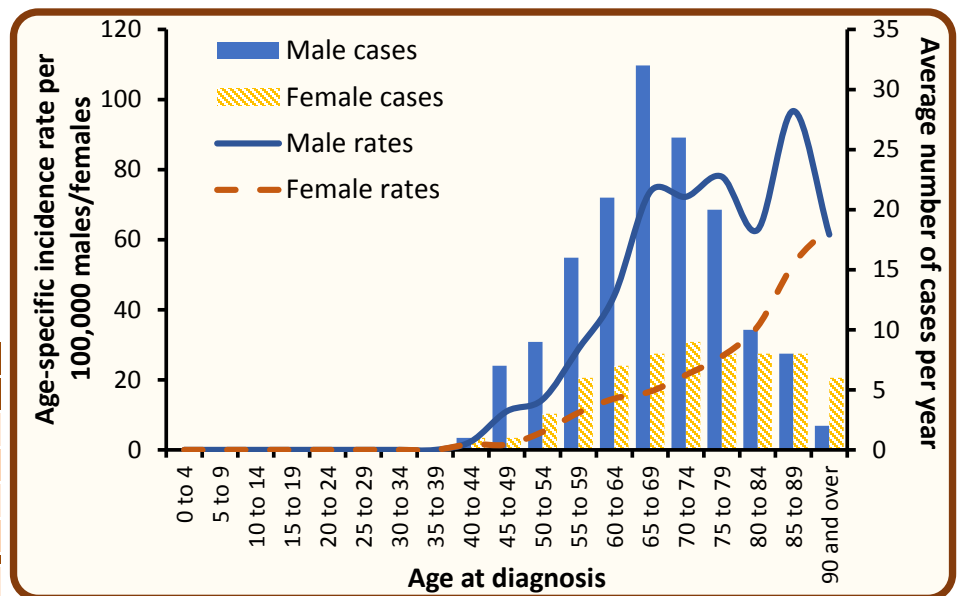
- There were 155 male and 65 female cases of oesophageal cancer diagnosed each year.
- There were 16.9 male and 6.9 female cases of oesophageal cancer per 100,000 males/females diagnosed each year.
- Oesophageal cancer made up 3.2% of all male cancers (ex NMSC), and 1.4% of all female cancers (ex NMSC).
- The risk of developing oesophageal cancer before the age of 75 was 1 in 81 for men and 1 in 280 for women.

## Incidence by sex and age at diagnosis: Oesophageal cancer 2014-2018<sup>1</sup>

During 2014-2018:

- The median age at diagnosis was 68 for men and 74 for women.
- Oesophageal cancer risk increased with age, with 63.2% of men and 72.3% of women aged 65+ at diagnosis.
- 5.0% of cases were diagnosed among those aged under 50.

Age at diagnosis	Average cases per year		
	Male	Female	Both sexes
0 - 49	8	2	11
50 - 64	46	16	65
65 - 74	58	17	74
75 +	40	30	71
<b>All ages</b>	<b>155</b>	<b>65</b>	<b>220</b>



## Incidence by sex and year of diagnosis: Oesophageal cancer 2009-2018

- Among males the number of cases of oesophageal cancer increased by 23.0% from an annual average of 126 cases in 2009-2013 to 155 cases in 2014-2018.
- Among females the number of cases of oesophageal cancer did not change between 2009-2013 and 2014-2018, with an annual average of 65 cases diagnosed in each five-year period.

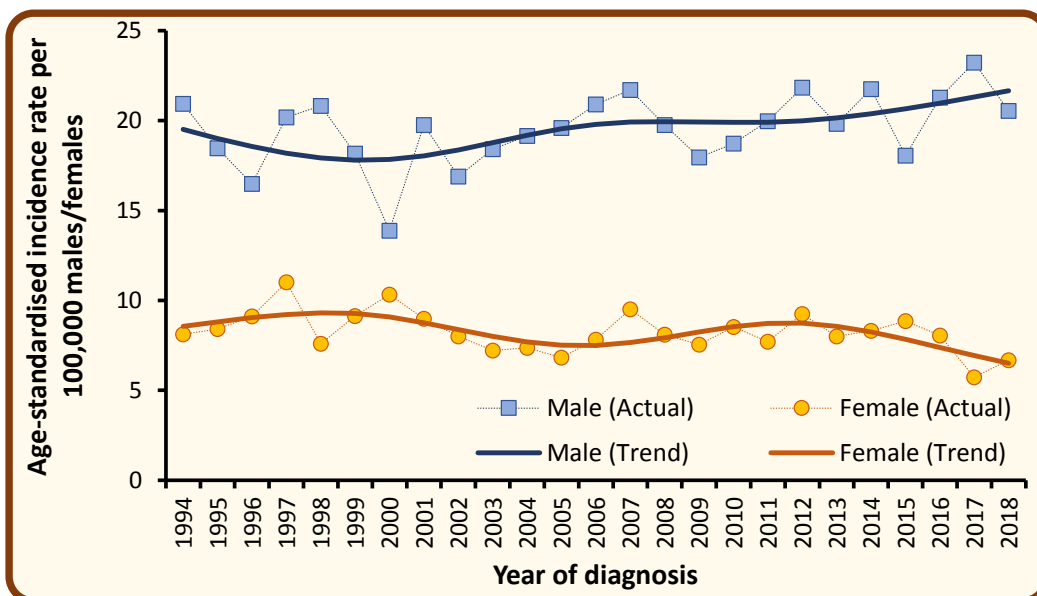
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	114	118	124	138	138	154	130	156	176	158
Female	59	66	61	74	66	69	76	70	51	60
Both sexes	173	184	185	212	204	223	206	226	227	218

1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

NMSC: Non-melanoma skin cancer

## Trends in age-standardised incidence rates by sex: Oesophageal cancer 1994-2018

- Among males age-standardised incidence rates of oesophageal cancer increased by 6.5% from 19.7 per 100,000 person years in 2009-2013 to 21.0 cases per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised incidence rates of oesophageal cancer decreased by 8.4% from 8.2 per 100,000 person years in 2009-2013 to 7.5 cases per 100,000 persons years in 2014-2018. This difference was not statistically significant.



Age-standardised incidence rates illustrate the change in the number of cases within a population of a fixed size and age structure (2013 European Standard).

They thus represent changes other than those caused by population growth and/or ageing.

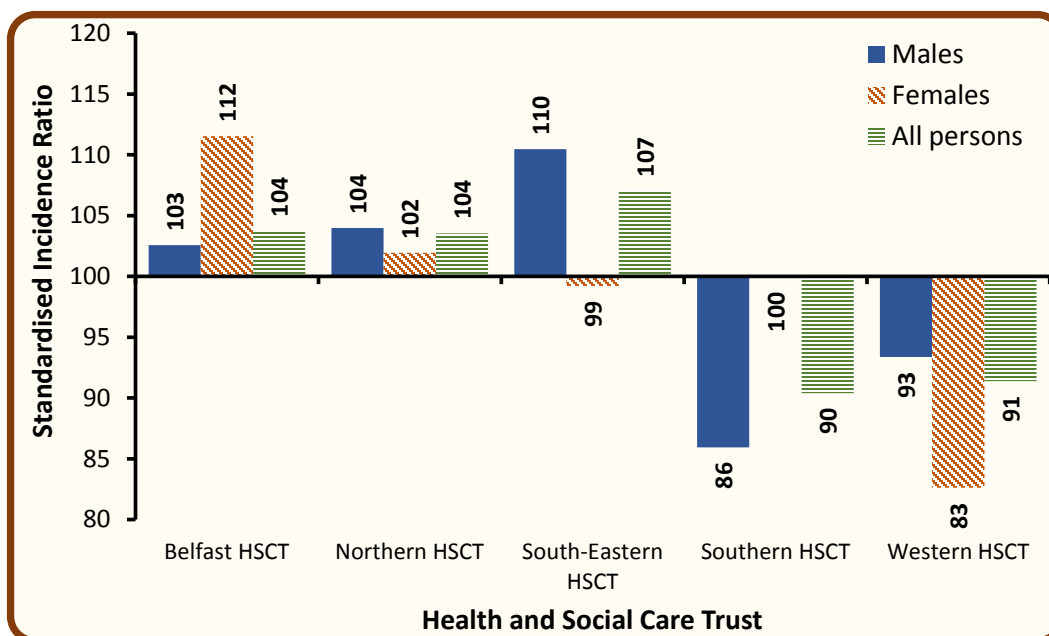
## Incidence (cases and rates) by sex and Health and Social Care Trust: Oesophageal cancer 2014-2018<sup>1</sup>

The annual number of oesophageal cancer cases in 2014-2018 varied in each HSCT due to variations in population size and age (see table).

After accounting for these factors, incidence rates (see figure):

- in Belfast HSCT did not vary significantly from the NI average.
- in Northern HSCT did not vary significantly from the NI average.
- in South-Eastern HSCT did not vary significantly from the NI average.
- in Southern HSCT did not vary significantly from the NI average.
- in Western HSCT did not vary significantly from the NI average.

Health and Social Care Trust	Average cases per year		
	Male	Female	Both sexes
Belfast HSCT	28	14	42
Northern HSCT	43	18	61
South-Eastern HSCT	36	14	50
Southern HSCT	25	12	37
Western HSCT	23	8	31
<b>Northern Ireland</b>	<b>155</b>	<b>65</b>	<b>220</b>



Standardised incidence ratios compare incidence rates in each HSC Trust with the Northern Ireland incidence rate.

A value above 100 means that incidence rates in that HSC Trust are greater than the Northern Ireland average.

This measure takes account of population size and age structure. Differences are thus not a result of these factors.

1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

HSCT: Health and Social Care Trust

## Incidence (cases and rates) by sex and deprivation quintile: Oesophageal cancer 2014-2018<sup>1</sup>

The annual number of oesophageal cancer cases during 2014-2018 varied in each deprivation quintile due to variations in population size and age (see table).

After accounting for these factors, incidence rates (see figure):

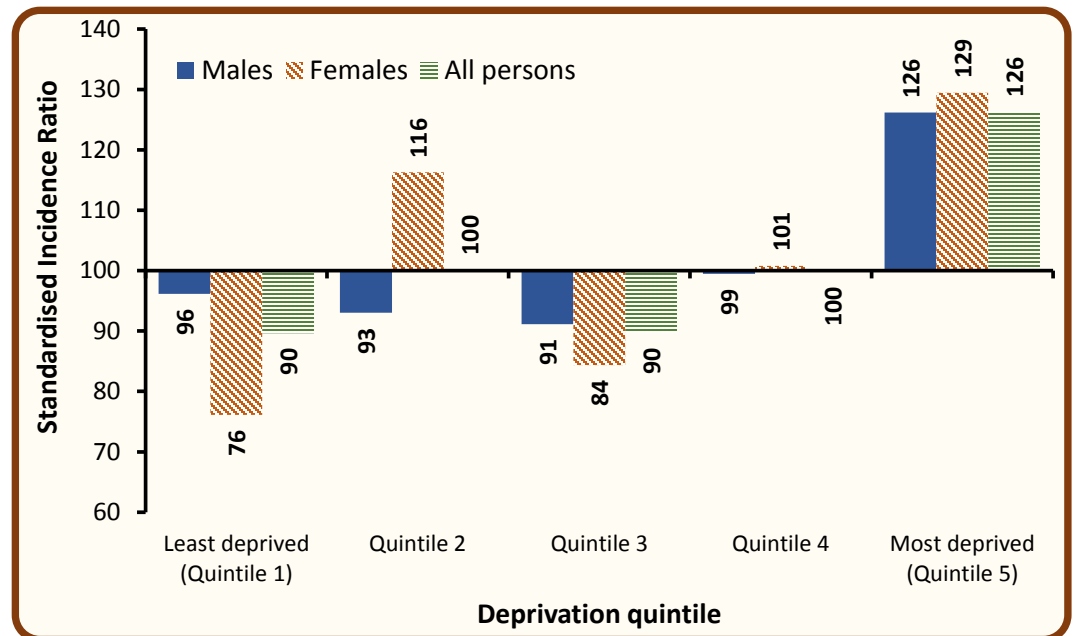
- in the most socio-economically deprived areas were 26.4% higher than the NI average.
- in the least socio-economically deprived areas did not vary significantly from the NI average.

Deprivation quintile	Average cases per year		
	Male	Female	Both sexes
Least deprived (Quintile 1)	31	11	42
Quintile 2	31	16	47
Quintile 3	30	11	41
Quintile 4	31	13	44
Most deprived (Quintile 5)	32	14	46
Northern Ireland	155	65	220

Standardised incidence ratios compare incidence rates in each deprivation quintile with the Northern Ireland incidence rate.

A value above 100 means that incidence rates in that deprivation quintile are greater than the Northern Ireland average.

This measure takes account of population size and age structure. Differences are thus not a result of these factors.



## Survival

- 43.9% of patients were alive one year and 16.8% were alive five years from an oesophageal cancer diagnosis in 2009-2013. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 46.6% one year and 20.0% five years from an oesophageal cancer diagnosis in 2009-2013.
- Five-year survival (ASNS) for patients diagnosed in 2009-2013 was 19.0% among men and 23.4% among women.
- Estimates for survival (ASNS) of patients diagnosed during 2012-2016 are 48.9% one year, and 20.2% five years from diagnosis.

Period of diagnosis <sup>2</sup>	Gender	Observed survival		Age-standardised net survival	
		One-year	Five-years	One-year	Five-years
2009-2013	Male	46.7%	16.7%	47.9%	19.0%
	Female	38.3%	17.0%	44.7%	23.4%
	Both sexes	43.9%	16.8%	46.6%	20.0%
2012-2016 estimates	Male	47.5%	18.2%	49.7%	19.7%
	Female	43.2%	16.9%	47.5%	21.8%
	Both sexes	46.1%	17.7%	48.9%	20.2%

Observed survival is the proportion of patients still alive one/five years after diagnosis. However, in this measure patients may have died from causes unrelated to their cancer.

Age-standardised net survival is the proportion of patients who would survive if the patient could not die from causes unrelated to their cancer. This measure is more typically used in studies of cancer survival.

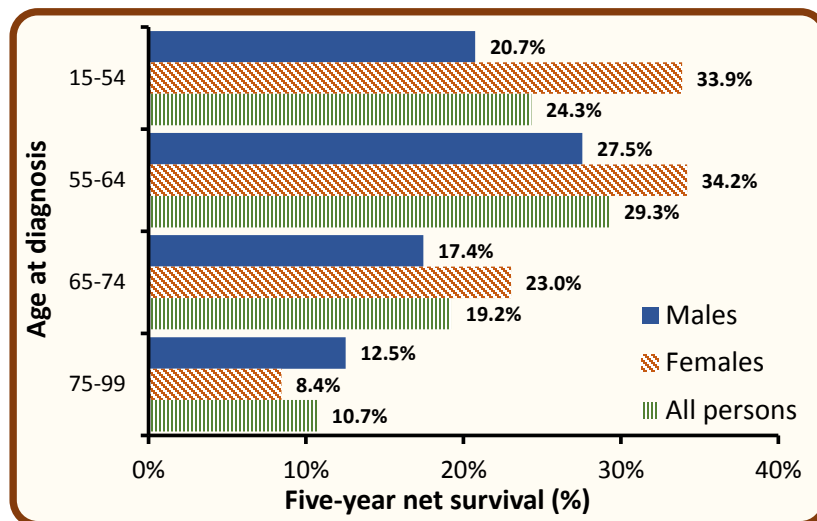
1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

2. Five-year survival for 2012-2016 are estimates as not all patients have five years worth of follow up.

ASNS: Age-standardised net survival

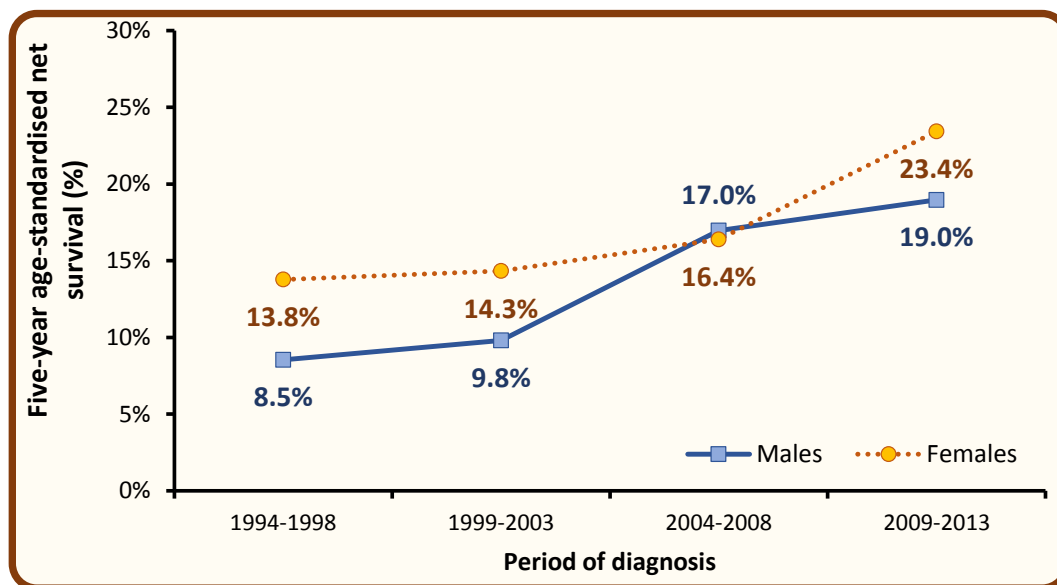
## Survival by sex and age at diagnosis: Oesophageal cancer 2009-2013

- Survival from oesophageal cancer varies by age at diagnosis with poorer five-year survival among the oldest patients.
- Five-year net survival ranged from 29.3% among patients aged 55-64 at diagnosis to 10.7% among those aged 75 and over.
- Five-year net survival among oesophageal cancer patients aged 75 and over was 12.5% for men and 8.4% for women.



## Trends in age-standardised net survival by sex: Oesophageal cancer 1994-2013

- Among men five-year survival (ASNS) from oesophageal cancer increased from 8.5% for those diagnosed in 1994-1998 to 19.0% for those diagnosed in 2009-2013. This difference was statistically significant.
- Among women five-year survival (ASNS) from oesophageal cancer increased from 13.8% for those diagnosed in 1994-1998 to 23.4% for those diagnosed in 2009-2013. This difference was not statistically significant.



## Prevalence

- At the end of 2018, there were 672 people (Males: 466; Females: 206) living with oesophageal cancer who had been diagnosed with the disease during 1994-2018.
- Of these, 69.3% were male, 55.8% were aged 70 and over, and 23.7% had been diagnosed in the previous year.

25-year prevalence refers to the number of cancer survivors who were alive at the end of 2018, and had been diagnosed with their cancer in the previous 25 years (i.e. 1994-2018).

Time since diagnosis	25-year prevalence								
	Aged 0-69			Aged 70+			All ages		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
0-1 year	61	19	80	54	25	79	115	44	159
1-5 years	101	32	133	78	33	111	179	65	244
5-10 years	40	19	59	46	31	77	86	50	136
10-25 years	18	7	25	68	40	108	86	47	133
0-25 years	220	77	297	246	129	375	466	206	672

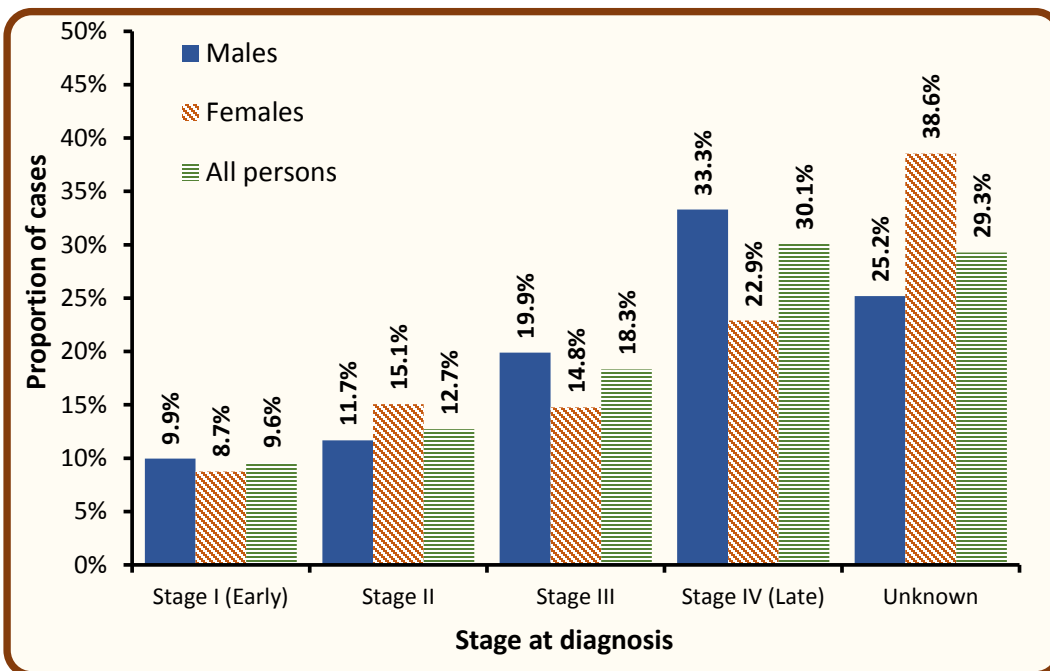
## Cancer stage

### Incidence by sex and stage at diagnosis: Oesophageal cancer 2013-2017<sup>1</sup>

During 2013-2017:

- 70.7% of cases diagnosed had a stage assigned.
- 9.6% of cases were diagnosed at stage I. (13.5% of staged cases)
- 30.1% of cases were diagnosed at stage IV. (42.6% of staged cases)
- Among cases which were staged, 44.5% of male cases were diagnosed at stage IV, compared to 37.3% of female cases.

Stage at diagnosis	Average cases per year		
	Male	Female	Both sexes
Stage I (Early)	15	6	21
Stage II	18	10	28
Stage III	30	10	40
Stage IV (Late)	50	15	65
Unknown	38	26	64
<b>All stages</b>	<b>151</b>	<b>66</b>	<b>217</b>



Cancer stage describes the size of a cancer and how far it has grown and spread.

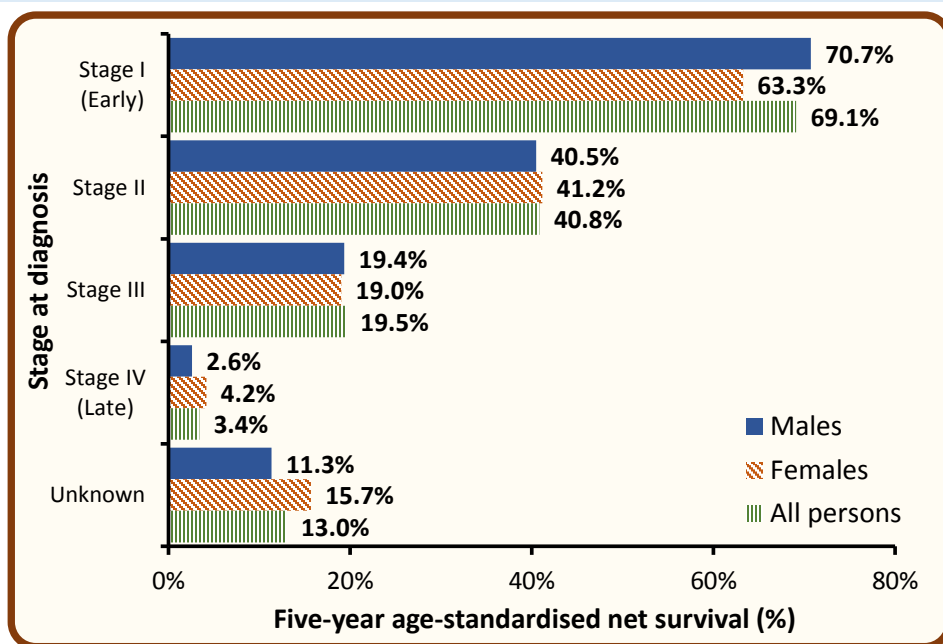
This information is used to help decide what treatments are needed.

The classification used here to stage cancer is the TNM (version 7) classification.

Data on cancer stage in 2018, classified using TNM (version 8), is available online at [www.qub.ac.uk/nicr](http://www.qub.ac.uk/nicr)

### Survival by sex and stage at diagnosis: Oesophageal cancer 2009-2013

- Stage at diagnosis is one of the most important factors in oesophageal cancer survival with five-year survival decreasing as stage increases.
- Five-year survival (ASNS) ranged from 69.1% for early stage (stage I) disease to 3.4% for late stage (stage IV) disease.
- Five-year survival (ASNS) for unstaged oesophageal cancer was 13.0%.
- Five-year survival (ASNS) for stage IV oesophageal cancer was 2.6% for men, compared to 4.2% for women.



1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

ASNS: Age-standardised net survival

## Mortality

During 2014-2018:

- There were 136 male and 55 female deaths from oesophageal cancer each year.
- Oesophageal cancer deaths made up 5.9% of male cancer deaths (ex NMSC), and 2.6% of female cancer deaths (ex NMSC).

### Deaths by sex and age at death: Oesophageal cancer 2014-2018<sup>1</sup>

During 2014-2018:

- The median age at death was 70 for men and 77 for women.
- Risk of death from oesophageal cancer was strongly related to age, with 69.1% of men and 76.4% of women aged 65 years or more at time of death.
- 3.7% of oesophageal cancer deaths occurred among those aged under 50.

Age at death	Average deaths per year		
	Male	Female	Both sexes
0 - 49	6	1	7
50 - 64	35	10	45
65 - 74	49	11	61
75 +	45	31	78
<b>All ages</b>	<b>136</b>	<b>55</b>	<b>191</b>

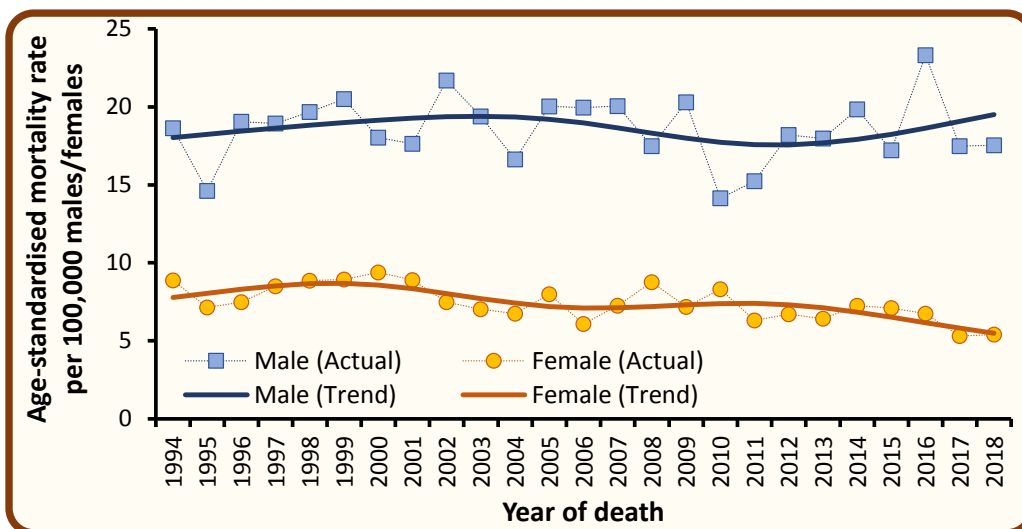
### Deaths by sex and year of death: Oesophageal cancer 2009-2018

- Among males the number of deaths from oesophageal cancer increased by 25.9% from an annual average of 108 deaths in 2009-2013 to 136 deaths in 2014-2018.
- Among females the number of deaths from oesophageal cancer decreased by 1.8% from an annual average of 56 deaths in 2009-2013 to 55 deaths in 2014-2018.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Male</b>	123	93	99	108	119	132	121	165	129	133
<b>Female</b>	56	66	50	54	53	61	61	58	47	49
<b>Both sexes</b>	179	159	149	162	172	193	182	223	176	182

### Trends in age-standardised mortality rates by sex: Oesophageal cancer 1994-2018

- Among males age-standardised mortality rates from oesophageal cancer increased by 10.7% from 17.2 per 100,000 person years in 2009-2013 to 19.0 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised mortality rates from oesophageal cancer decreased by 8.9% from 7.0 per 100,000 person years in 2009-2013 to 6.3 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.



Mortality data are provided by the Northern Ireland General Registrar Office via the Department of Health.

Counts of the number of deaths are based upon the year that death occurred, and upon the primary cause of death only.

Age-standardised mortality rates remove changes over time caused by population growth and/or ageing.

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NMSC: Non-melanoma skin cancer

## Further Information

Further data is available from the NI Cancer Registry web site: [www.qub.ac.uk/nicr](http://www.qub.ac.uk/nicr)  
Phone: +44 (0)28 9097 6028  
e-mail: [nicr@qub.ac.uk](mailto:nicr@qub.ac.uk)



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