

Head and neck cancer



Number of cases per year (2014-2018) ¹			Number of deaths per year (2014-2018) ¹		
Male	Female	Both sexes	Male	Female	Both sexes
237	104	341	92	41	133
Five-year net survival (2009-2013)			25-year prevalence (2018)		
Male	Female	Both sexes	Male	Female	Both sexes
49.7%	51.3%	50.0%	1,569	721	2,290

Incidence

During 2014-2018:

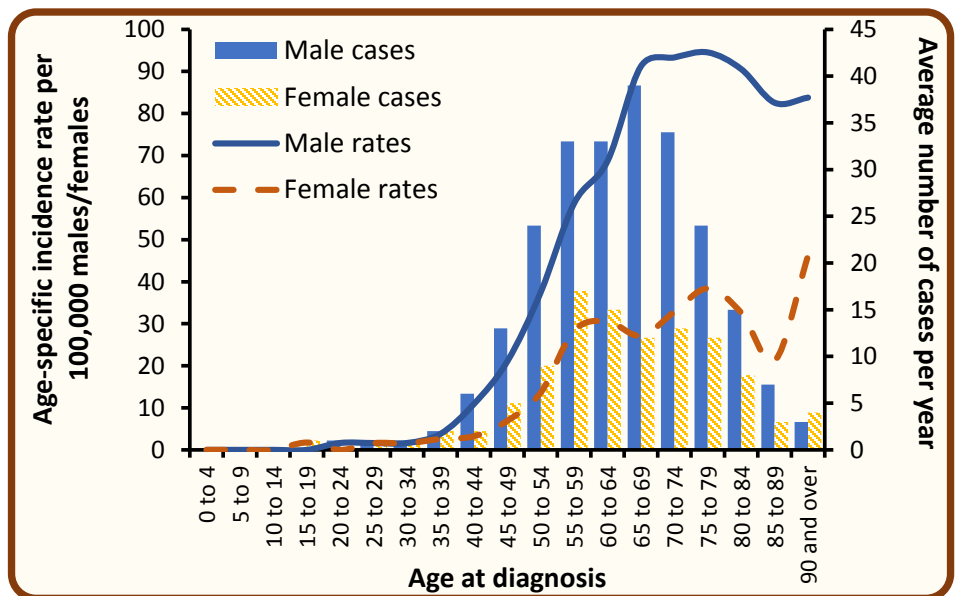
- There were 237 male and 104 female cases of head and neck cancer diagnosed each year.
- There were 26.0 male and 11.0 female cases of head and neck cancer per 100,000 males/females diagnosed each year.
- Head and neck cancer made up 4.9% of all male cancers (ex NMSC), and 2.2% of all female cancers (ex NMSC).
- The risk of developing head and neck cancer before the age of 75 was 1 in 52 for men and 1 in 134 for women.

Incidence by sex and age at diagnosis: Head and neck cancer 2014-2018¹

During 2014-2018:

- The median age at diagnosis was 65 for men and 65 for women.
- Head and neck cancer risk increased with age, with 51.3% of patients aged 65 years or more at diagnosis.
- 10.6% of cases were diagnosed among those aged under 50.

Age at diagnosis	Average cases per year		
	Male	Female	Both sexes
0 - 49	24	12	36
50 - 64	90	41	131
65 - 74	73	25	99
75 +	49	27	76
All ages	237	104	341



Incidence by sex and year of diagnosis: Head and neck cancer 2009-2018

- Among males the number of cases of head and neck cancer increased by 13.9% from an annual average of 208 cases in 2009-2013 to 237 cases in 2014-2018.
- Among females the number of cases of head and neck cancer increased by 14.3% from an annual average of 91 cases in 2009-2013 to 104 cases in 2014-2018.

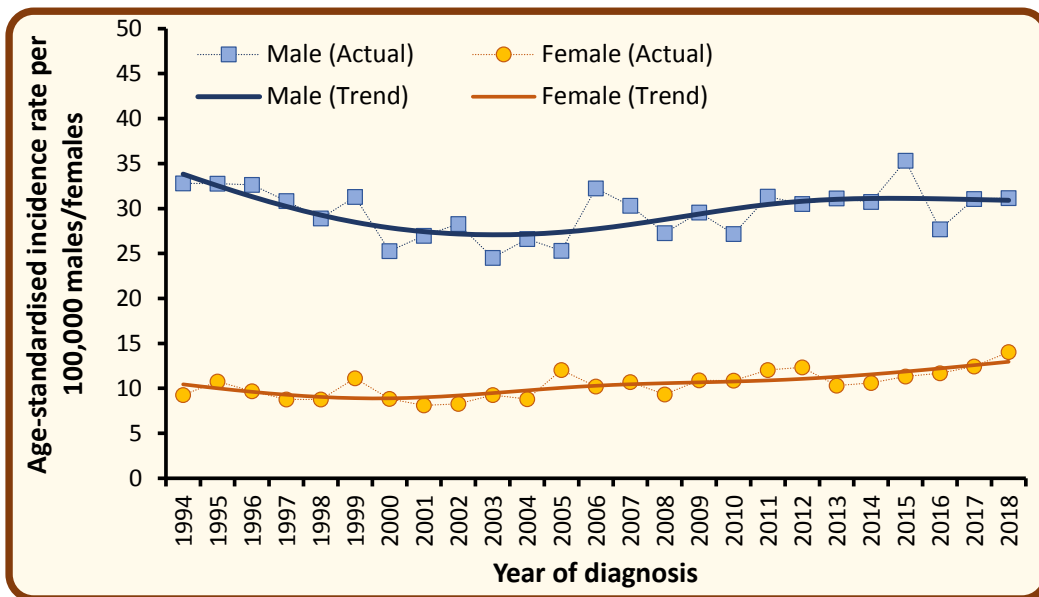
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	201	182	218	217	224	220	266	211	240	250
Female	85	87	97	100	87	88	97	101	109	125
Both sexes	286	269	315	317	311	308	363	312	349	375

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: Head and neck cancer 1994-2018

- Among males age-standardised incidence rates of head and neck cancer increased by 3.8% from 30.0 per 100,000 person years in 2009-2013 to 31.1 cases per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised incidence rates of head and neck cancer increased by 6.8% from 11.3 per 100,000 person years in 2009-2013 to 12.1 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.

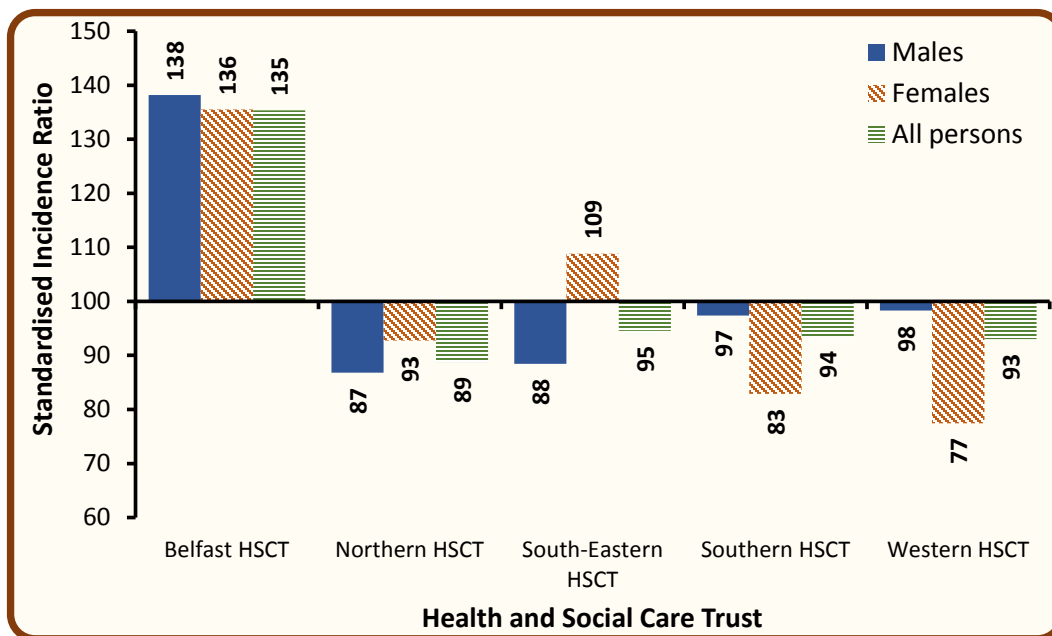
Incidence (cases and rates) by sex and Health and Social Care Trust (HSCT): Head and neck cancer 2014-2018¹

The annual number of head and neck 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 were significantly higher than the NI average.
- in Northern HSCT were significantly lower than 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	57	27	84
Northern HSCT	55	25	80
South-Eastern HSCT	44	24	67
Southern HSCT	44	16	60
Western HSCT	38	12	50
Northern Ireland	237	104	341



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.

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HSCT: Health and Social Care Trust

Incidence (cases and rates) by sex and deprivation quintile: Head and neck cancer 2014-2018¹

The annual number of head and neck 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):

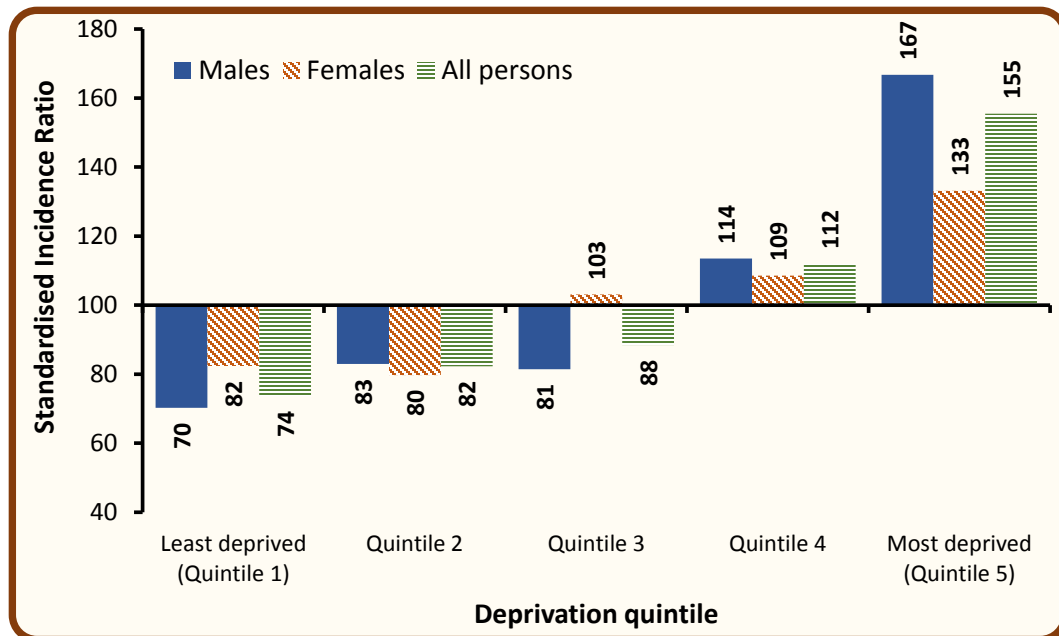
- in the most socio-economically deprived areas were 55.4% higher than the NI average.
- in the least socio-economically deprived areas were 26.4% lower than the NI average.

Deprivation quintile	Average cases per year		
	Male	Female	Both sexes
Least deprived (Quintile 1)	35	18	53
Quintile 2	42	17	60
Quintile 3	41	22	63
Quintile 4	54	23	77
Most deprived (Quintile 5)	66	24	89
Northern Ireland	237	104	341

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

- 76.9% of patients were alive one year and 47.6% were alive five years from a head and neck cancer diagnosis in 2009-2013. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 77.1% one year and 50.0% five years from a head and neck cancer diagnosis in 2009-2013.
- Five-year survival (ASNS) for patients diagnosed in 2009-2013 was 49.7% among men and 51.3% among women.
- Estimates for survival (ASNS) of patients diagnosed during 2012-2016 are 76.5% one year, and 50.1% five years from diagnosis.

Period of diagnosis ²	Gender	Observed survival		Age-standardised net survival	
		One-year	Five-years	One-year	Five-years
2009-2013	Male	76.4%	46.9%	75.8%	49.7%
	Female	78.1%	49.1%	79.3%	51.3%
	Both sexes	76.9%	47.6%	77.1%	50.0%
2012-2016 estimates	Male	75.8%	46.3%	75.8%	50.2%
	Female	77.8%	47.2%	78.4%	50.5%
	Both sexes	76.4%	46.5%	76.5%	50.1%

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.

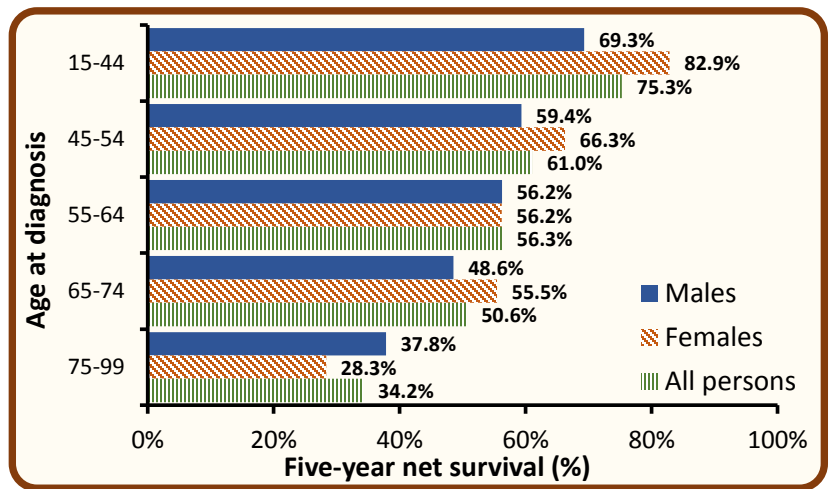
1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

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

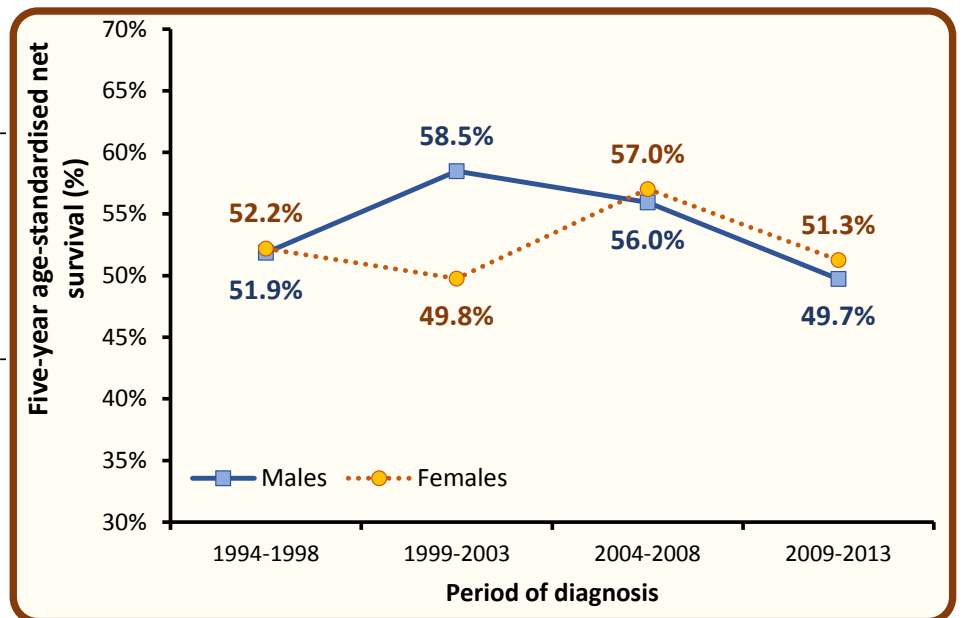
Survival by sex and age at diagnosis: Head and neck cancer 2009-2013

- Survival from head and neck cancer is strongly related to age at diagnosis with five-year survival decreasing as age increases.
- Five-year net survival ranged from 75.3% among patients aged 15-44 at diagnosis to 34.2% among those aged 75 and over.
- Five-year net survival among head and neck cancer patients aged 75 and over was 37.8% for men and 28.3% for women.



Trends in age-standardised net survival by sex: Head and neck cancer 1994-2013

- Among men five-year survival (ASNS) from head and neck cancer decreased from 51.9% for those diagnosed in 1994-1998 to 49.7% for those diagnosed in 2009-2013. This difference was not statistically significant.
- Among women five-year survival (ASNS) from head and neck cancer decreased from 52.2% for those diagnosed in 1994-1998 to 51.3% for those diagnosed in 2009-2013. This difference was not statistically significant.
- Variations in head and neck cancer survival can be a result of variations in the type of head and neck cancer diagnosed (e.g. some years can have higher proportions of laryngeal cancer, which is a poorer survival cancer).



Prevalence

- At the end of 2018, there were 2,290 people (Males: 1,569; Females: 721) living with head and neck cancer who had been diagnosed with the disease during 1994-2018.
- Of these, 68.5% were male, 41.5% were aged 70 and over, and 14.0% 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	147	73	220	68	33	101	215	106	321
1-5 years	352	144	496	189	70	259	541	214	755
5-10 years	212	115	327	163	75	238	375	190	565
10-25 years	191	105	296	247	106	353	438	211	649
0-25 years	902	437	1,339	667	284	951	1,569	721	2,290

ASNS: Age-standardised net survival

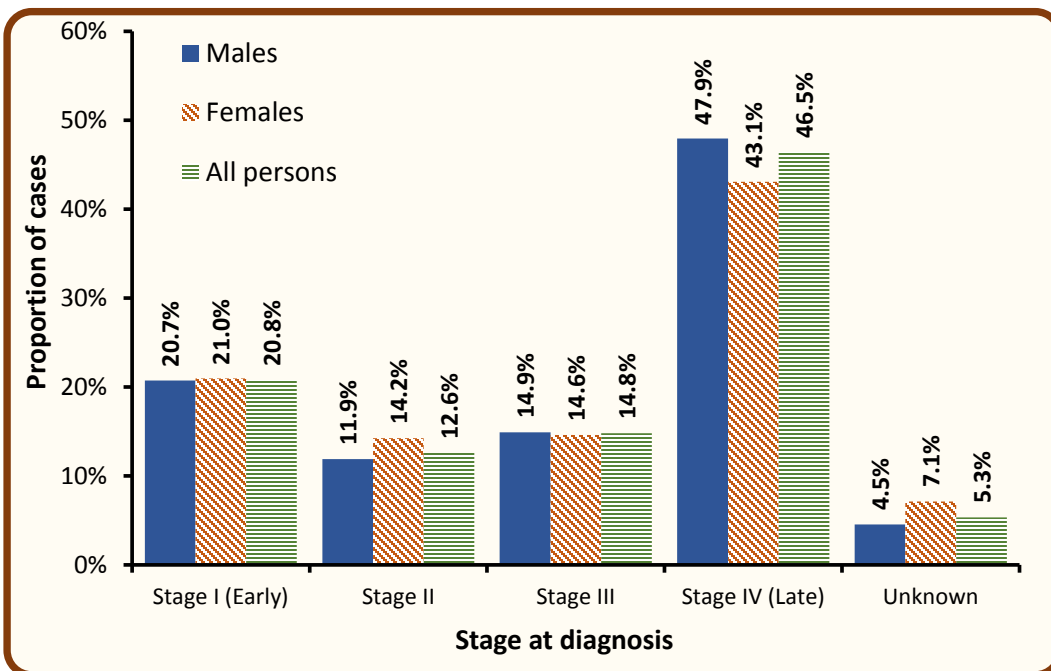
Cancer stage

Incidence by sex and stage at diagnosis: Head and neck cancer 2014-2018¹

During 2014-2018:

- 94.7% of cases diagnosed had a stage assigned.
- 20.8% of cases were diagnosed at stage I. (22.0% of staged cases)
- 46.5% of cases were diagnosed at stage IV. (49.1% of staged cases)
- Among cases which were staged, 50.2% of male cases were diagnosed at stage IV, compared to 46.4% of female cases.

Stage at diagnosis	Average cases per year		
	Male	Female	Both sexes
Stage I (Early)	49	22	71
Stage II	28	15	43
Stage III	35	15	51
Stage IV (Late)	114	45	159
Unknown	11	7	18
All stages	237	104	341



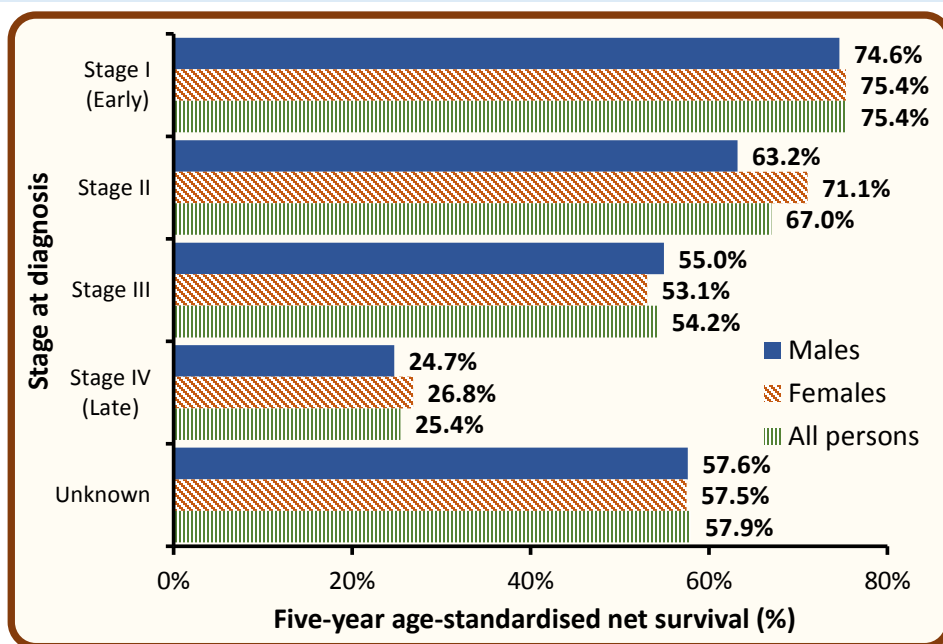
Cancer stage describes the size of a cancer and how far it has grown and spread.

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

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

Survival by sex and stage at diagnosis: Head and neck cancer 2009-2013

- Stage at diagnosis is one of the most important factors in head and neck cancer survival with five-year survival decreasing as stage increases.
- Five-year survival (ASNS) ranged from 75.4% for early stage (stage I) disease to 25.4% for late stage (stage IV) disease.
- Five-year survival (ASNS) for unstaged head and neck cancer was 57.9%.
- Five-year survival (ASNS) for stage IV head and neck cancer was 24.7% for men, compared to 26.8% 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 92 male and 41 female deaths from head and neck cancer each year.
- Head & neck cancer deaths made up 4.0% of male cancer deaths (ex NMSC), and 2.0% of female cancer deaths (ex NMSC).

Deaths by sex and age at death: Head and neck cancer 2014-2018¹

During 2014-2018:

- The median age at death was 69 for men and 71 for women.
- Risk of death from head and neck cancer was strongly related to age, with 65.2% of men and 68.3% of women aged 65 years or more at time of death.
- 4.5% of head and neck cancer deaths occurred among those aged under 50.

Age at death	Average deaths per year		
	Male	Female	Both sexes
0 - 49	5	2	6
50 - 64	26	11	38
65 - 74	33	12	45
75 +	27	16	42
All ages	92	41	133

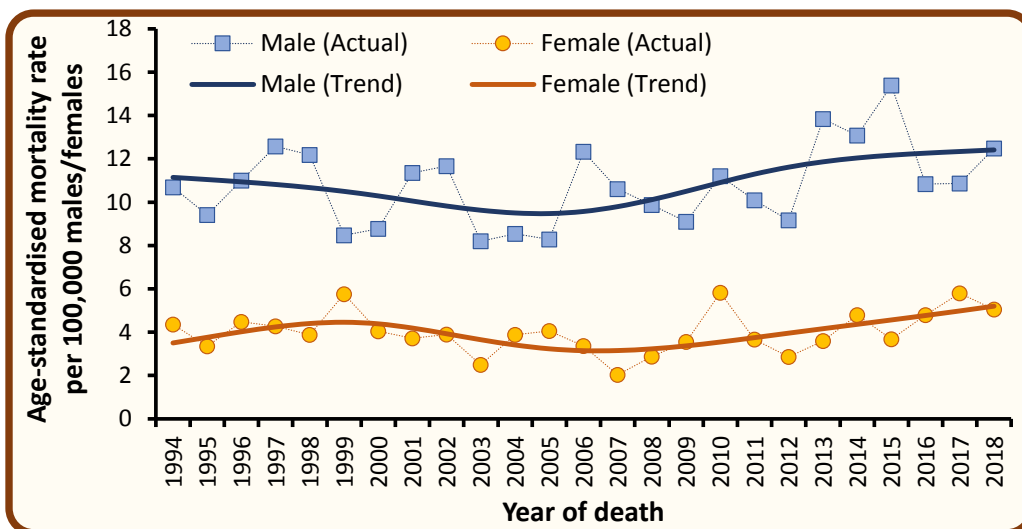
Deaths by sex and year of death: Head and neck cancer 2009-2018

- Among males the number of deaths from head and neck cancer increased by 33.3% from an annual average of 69 deaths in 2009-2013 to 92 deaths in 2014-2018.
- Among females the number of deaths from head and neck cancer increased by 32.3% from an annual average of 31 deaths in 2009-2013 to 41 deaths in 2014-2018.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	55	68	65	63	93	90	109	83	82	94
Female	27	47	30	23	30	39	31	42	50	45
Both sexes	82	115	95	86	123	129	140	125	132	139

Trends in age-standardised mortality rates by sex: Head and neck cancer 1994-2018

- Among males age-standardised mortality rates from head and neck cancer increased by 16.8% from 10.7 per 100,000 person years in 2009-2013 to 12.5 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised mortality rates from head and neck cancer increased by 24.1% from 3.9 per 100,000 person years in 2009-2013 to 4.8 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
Phone: +44 (0)28 9097 6028
e-mail: nicr@qub.ac.uk



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