# Pancreatic cancer



Nu	Number of cases per year			Number of deaths per year				
(2014-2018) <sup>1</sup>			(2014-2018) <sup>1</sup>					
Male	Female	Both sexes	Male	Female	<b>Both sexes</b>			
139	123	262	123	117	240			
F	Five-year net survival			25-year prevalence				
	(2009-2013)			(2018)				
Male	Female	Both sexes	Male	Female	Both sexes			
4.7%	7.5%	6.0%	162	127	289			

## Incidence

## During 2014-2018:

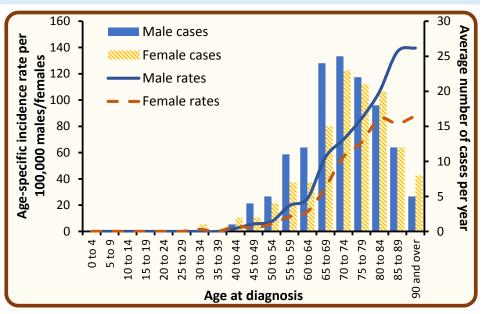
- There were 139 male and 123 female cases of pancreatic cancer diagnosed each year.
- There were 15.2 male and 13.0 female cases of pancreatic cancer per 100,000 males/females diagnosed each year.
- Pancreatic cancer made up 2.9% of all male cancers (ex NMSC), and 2.5% of all female cancers (ex NMSC).
- The risk of developing pancreatic cancer before the age of 75 was 1 in 107 for men and 1 in 153 for women.

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

During 2014-2018:

- The median age at diagnosis was 72 for men and 74 for women.
- Pancreatic cancer risk increased with age, with 76.3% of men and 80.5% of women aged 65+ at diagnosis.
- 4.2% of cases were diagnosed among those aged under 50.

Age at	Average cases per year									
diagnosis	Male	Female	Both sexes							
0 - 49	5	5	11							
50 - 64	28	18	47							
65 - 74	49	38	88							
75 +	57	61	118							
All ages	139	123	262							



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

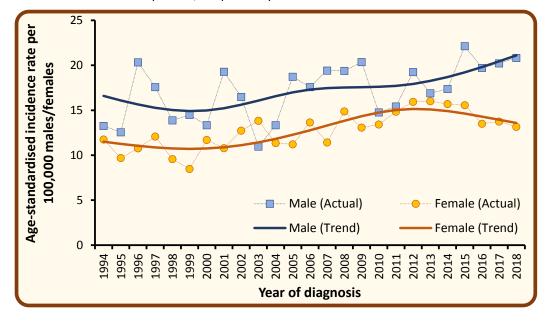
- Among males the number of cases of pancreatic cancer increased by 29.9% from an annual average of 107 cases in 2009-2013 to 139 cases in 2014-2018.
- Among females the number of cases of pancreatic cancer increased by 6.0% from an annual average of 116 cases in 2009-2013 to 123 cases in 2014-2018.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	112	89	96	125	111	115	150	138	145	149
Female	100	105	118	130	129	129	132	115	121	117
Both sexes	212	194	214	255	240	244	282	253	266	266

<sup>1.</sup> 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: Pancreatic cancer 1994-2018

- Among males age-standardised incidence rates of pancreatic cancer increased by 16.3% from 17.3 per 100,000 person years in 2009-2013 to 20.1 cases per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised incidence rates of pancreatic cancer decreased by 2.6% from 14.7 per 100,000 person years in 2009-2013 to 14.3 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.

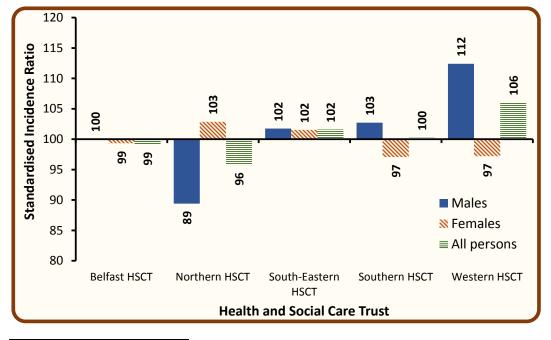
## Incidence (cases and rates) by sex and Health and Social Care Trust: Pancreatic cancer 2014-2018<sup>1</sup>

The annual number of pancreatic cancer cases during 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	Average cases per year							
Care Trust	Male	Female	Both sexes					
Belfast HSCT	25	24	48					
Northern HSCT	33	34	67					
South-Eastern HSCT	30	26	56					
Southern HSCT	27	22	48					
Western HSCT	25	18	42					
Northern Ireland	139	123	262					



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.

<sup>1.</sup> 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: Pancreatic cancer 2014-2018

The annual number of pancreatic 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):

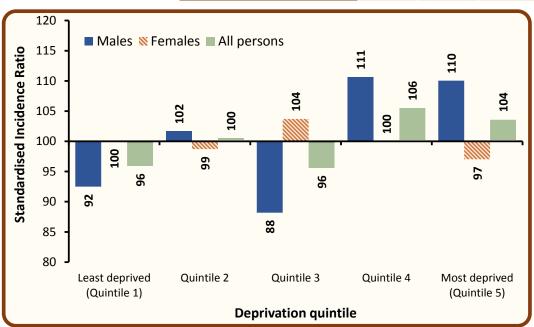
- in the most socio-economically deprived areas did not vary significantly from the NI average.
- in the least socio-economically deprived areas did not vary significantly from the NI average.

Donaination animalla	Average cases per year						
Deprivation quintile	Male	Female	Both sexes				
Least deprived (Quintile 1)	27	27	54				
Quintile 2	30	25	55				
Quintile 3	26	26	53				
Quintile 4	31	25	56				
Most deprived (Quintile 5)	25	20	45				
Northern Ireland	139	123	262				

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

- 15.8% of patients were alive one year and 3.8% were alive five years from a pancreatic cancer diagnosis in 2009-2013. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 19.3% one year and 6.0% five years from a pancreatic cancer diagnosis in 2009-2013.
- Five-year survival (ASNS) for patients diagnosed in 2009-2013 was 4.7% among men and 7.5% among women.
- Estimates for survival (ASNS) of patients diagnosed during 2012-2016 are 25.7% one year, and 6.6% five years from diagnosis.

Period of diagnosis <sup>2</sup> 2009-2013	Gender	Observe	d survival	Age-standardised net survival			
		One-year	Five-years	One-year	Five-years		
	Male	16.9%	3.3%	18.9%	4.7%		
2009-2013	Female	14.7%	4.4%	20.0%	7.5%		
	Both sexes	15.8%	3.8%	19.3%	6.0%		
	Male	23.9%	5.4%	26.6%	7.1%		
2012-2016 estimates	Female	19.4%	4.1%	25.0%	7.0%		
	Both sexes	21.7%	4.7%	25.7%	6.6%		

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.

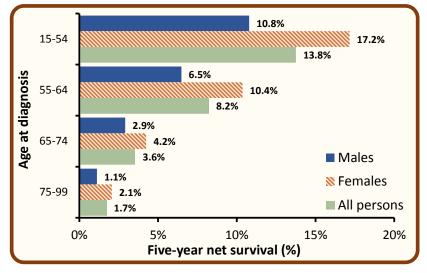
Age-standardised net survival is the proportion of patients who would survive if the patient could not die from causes unrelated to their cancer. This measure is more typically used in studies of cancer survival.

<sup>1.</sup> 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.

 $<sup>2.\</sup> Five-year\ survival\ for\ 2012-2016\ are\ estimates\ as\ not\ all\ patients\ have\ five\ years\ worth\ of\ follow\ up.$ 

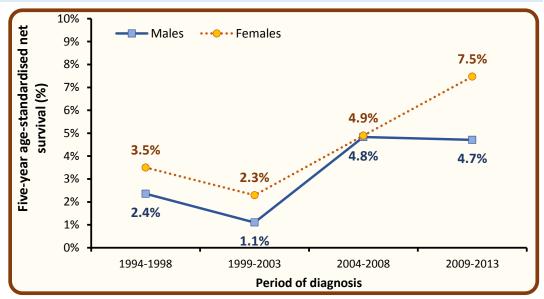
### Survival by sex and age at diagnosis: Pancreatic cancer 2009-2013

- Survival from pancreatic cancer is strongly related to age at diagnosis with five-year survival decreasing as age increases.
- Five-year net survival ranged from 13.8% among patients aged 15-54 at diagnosis to 1.7% among those aged 75 and over.
- Five-year net survival among pancreatic cancer patients aged 75 and over was 1.1% for men and 2.1% for women.



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

- Among men five-year survival (ASNS) from pancreatic cancer increased from 2.4% for those diagnosed in 1994-1998 to 4.7% for those diagnosed in 2009-2013. This difference was not statistically significant.
- Among women five-year survival (ASNS) from pancreatic cancer increased from 3.5% for those diagnosed in 1994-1998 to 7.5% for those diagnosed in 2009-2013. This difference was not statistically significant.



# **Prevalence**

- At the end of 2018, there were 289 people (Males: 162; Females: 127) living with pancreatic cancer who had been diagnosed with the disease during 1994-2018.
- Of these, 56.1% were male, 57.4% were aged 70 and over, and 43.9% 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).

	25-year prevalence									
Time since diagnosis	Aged 0-69				Aged 70+		All ages			
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	
0-1 year	33	20	53	41	33	74	74	53	127	
1-5 years	20	15	35	34	24	58	54	39	93	
5-10 years	9	12	21	7	7	14	16	19	35	
10-25 years	8	6	14	10	10	20	18	16	34	
0-25 years	70	53	123	92	74	166	162	127	289	

# **Mortality**

During 2014-2018:

- There were 123 male and 117 female deaths from pancreatic cancer each year.
- Death from pancreatic cancer made up 5.3% of male cancer deaths (ex NMSC), and 5.6% of female cancer deaths (ex NMSC).

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

During 2014-2018:

- The median age at death was 73 for men and 76 for women.
- Risk of death from pancreatic cancer was strongly related to age, with 75.6% of men and 83.8% of women aged 65 years or more at time of death.
  - 3.3% of pancreatic cancer deaths occurred among those aged under 50.

Age at	Averag	Average deaths per year								
death	Male	Female	Both sexes							
0 - 49	4	4	8							
50 - 64	25	15	41							
65 - 74	40	34	74							
75 +	53	64	117							
All ages	123	117	240							

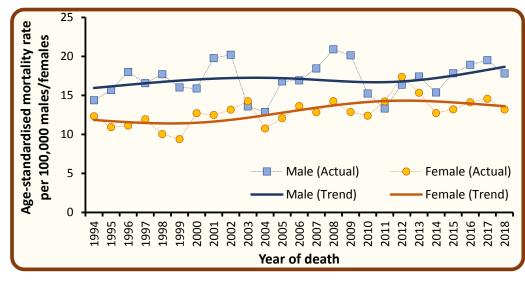
# Deaths by sex and year of death: Pancreatic cancer 2009-2018

- Among males the number of deaths from pancreatic cancer increased by 21.8% from an annual average of 101 deaths in 2009-2013 to 123 deaths in 2014-2018.
- Among females the number of deaths from pancreatic cancer increased by 1.7% from an annual average of 115 deaths in 2009-2013 to 117 deaths in 2014-2018.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	113	89	84	103	114	101	118	134	139	123
Female	99	99	113	141	123	107	112	121	127	118
Both sexes	212	188	197	244	237	208	230	255	266	241

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

- Among males age-standardised mortality rates from pancreatic cancer increased by 9.2% from 16.4 per 100,000 person years in 2009-2013 to 17.9 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised mortality rates from pancreatic cancer decreased by 6.2% from 14.5 per 100,000 person years in 2009-2013 to 13.6 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.

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

## **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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