

BLADDER CANCER



NUMBER OF CASES PER YEAR (2011-2015)			NUMBER OF DEATHS PER YEAR (2011-2015)		
Male	Female	Both sexes	Male	Female	Both sexes
147	62	209	83	37	120
FIVE-YEAR SURVIVAL (2005-2009)			23-YEAR PREVALENCE (2015)		
Male	Female	Both sexes	Male	Female	Both sexes
58.9%	47.4%	55.8%	1,032	342	1,375

INCIDENCE

Between 2011 and 2015 there were an average of 147 males and 62 females diagnosed with bladder cancer each year in Northern Ireland. The probability that a male will develop bladder cancer before the age of 75 is approximately 1 in 115 whilst the probability that a female will develop bladder cancer before the age of 75 is 1 in 382.

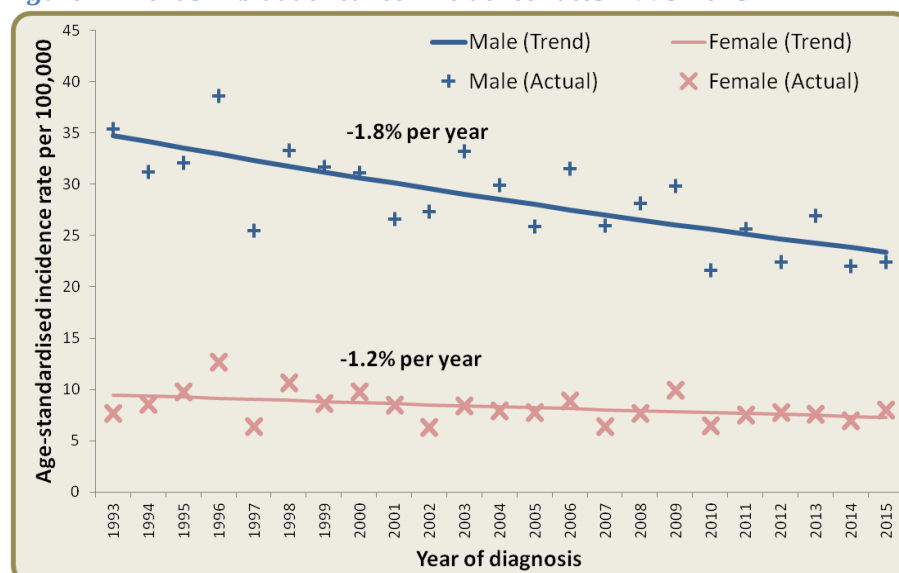
Incidence trends

Table 1: Incidence of bladder cancer by gender and year of diagnosis: 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Males	158	143	154	176	132	147	137	161	144	144
Females	66	47	58	76	51	58	64	62	59	69
Both	224	190	212	252	183	205	201	223	203	213

Over a ten-year period the number of bladder cancer cases has decreased in males and females from 224 in 2006 to 213 in 2015. After accounting for our ageing population, there has been a 1.8% decrease in yearly incidence of bladder cancer in males and a 1.2% yearly decrease in incidence of bladder cancer in females.

Figure 1: Trends in bladder cancer incidence rates: 1993-2015

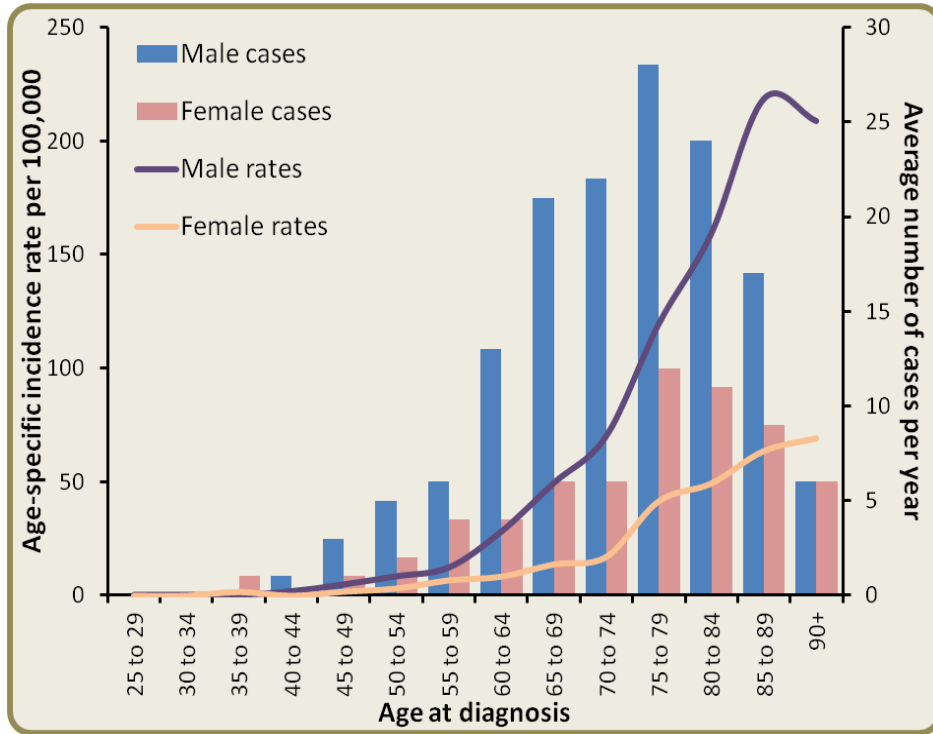


These observed decreases in incidence are possibly due to a reduction in exposure to bladder cancer risk factors such as smoking or toxin exposure.

Incidence and age

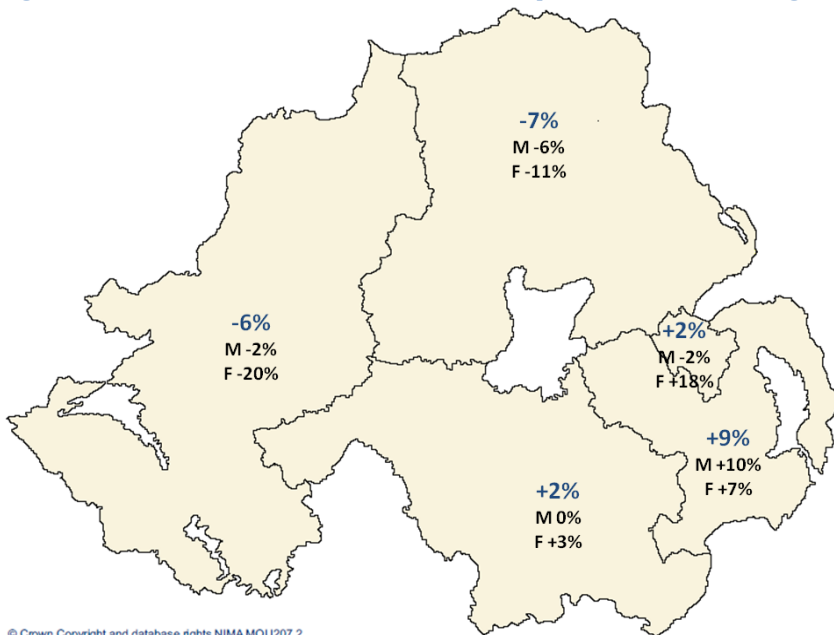
Bladder cancer incidence is associated with increasing age. More than 90% of patients diagnosed between 2011 and 2015 were over the age of 55. Incidence rates are highest among males aged 85-89 and highest among female’s aged over 90. There is an increase in the incidence of bladder cancer in men after the age of 50 whereas women experience a steady increase in incidence of bladder cancer, as they grow older.

Figure 2: Incidence of bladder cancer by age and gender: 2011-2015



Incidence by Trust area

Figure 3: Bladder cancer incidence rates compared to the NI average by sex and HSC trust of residence 2011-2015



No statistically significant differences in incidence of bladder cancer were observed for either males or females across the five Health and Social Care Trusts (HSCT) between 2011-2015.

Non-significantly lower incidence rates were observed in the Northern HSCT while non-significantly higher incidence rates were observed in South Eastern HSCT.

© Crown Copyright and database rights NIMA/MOU207.2

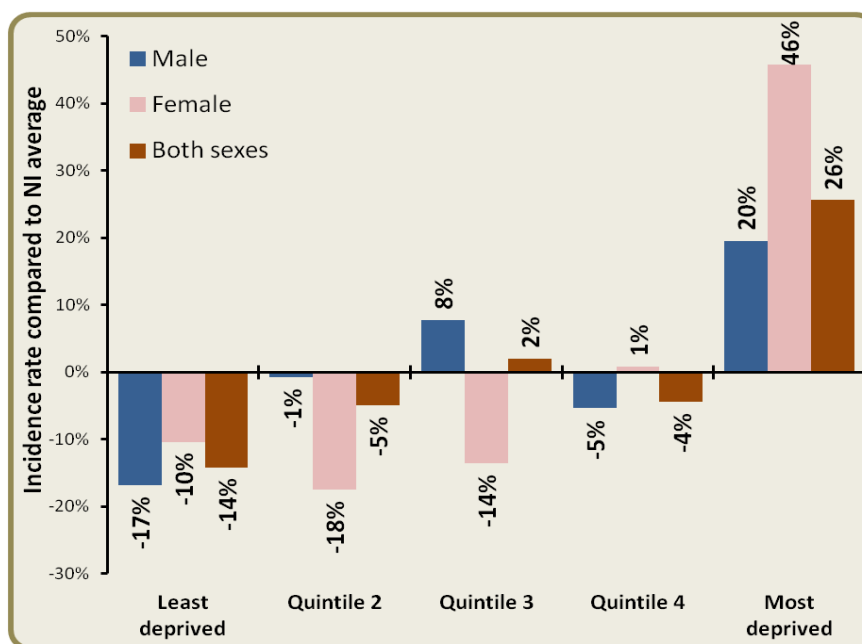
Significantly higher than average

Significantly lower than average

Incidence by deprivation

Bladder cancer incidence rates are 26% higher than NI average in the most deprived communities and 14% lower than the NI average in the least deprived communities. This may be due to historical differences in bladder cancer risk factor exposure such as higher smoking prevalence in these areas.

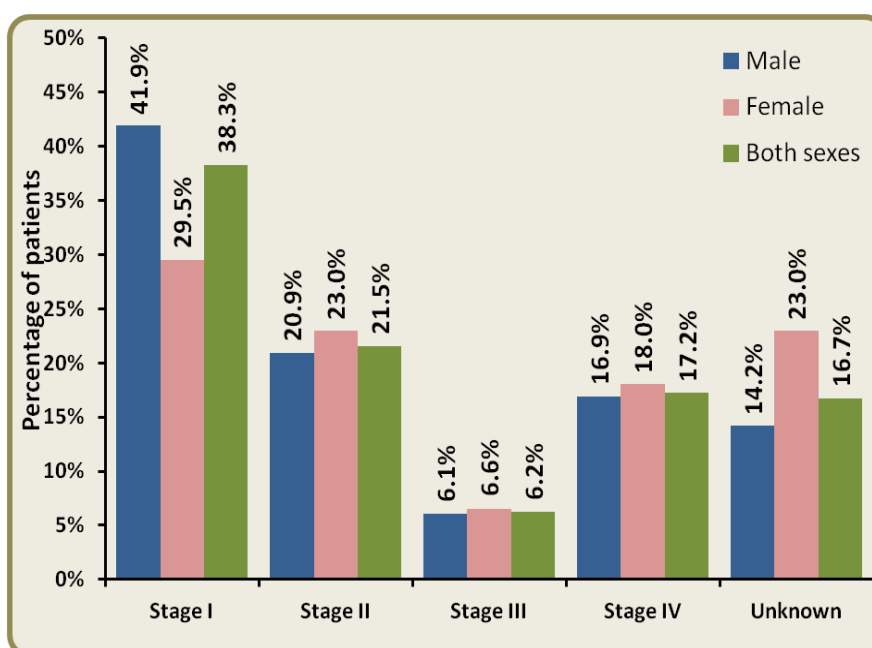
Figure 4: Bladder cancer incidence rates compared to the NI average by deprivation quintile: 2011-2015



Incidence by stage

More than 80% of patients were assigned a stage. The majority of patients were diagnosed with stage I bladder cancer (46% of staged cases) whilst the second most common stage to receive a diagnosis was at stage II (26% of staged cases). Over one in six patients (17%) were diagnosed at stage IV.

Figure 5: Bladder cancer stage distribution: 2011-2015



SURVIVAL

The age-standardised net survival for men diagnosed with bladder cancer between 2005-2009 was 58.9% at five years. The net survival for women during the same time period was 47.4%.

Table 2: Five-year bladder cancer survival by survival time and gender

Time since diagnosis	Diagnosed 2005-2009		
	Male	Female	Both sexes
6 months	87.7%	77.5%	84.8%
1 year	79.4%	64.8%	75.3%
5 years	58.9%	47.4%	55.8%

Survival Trends

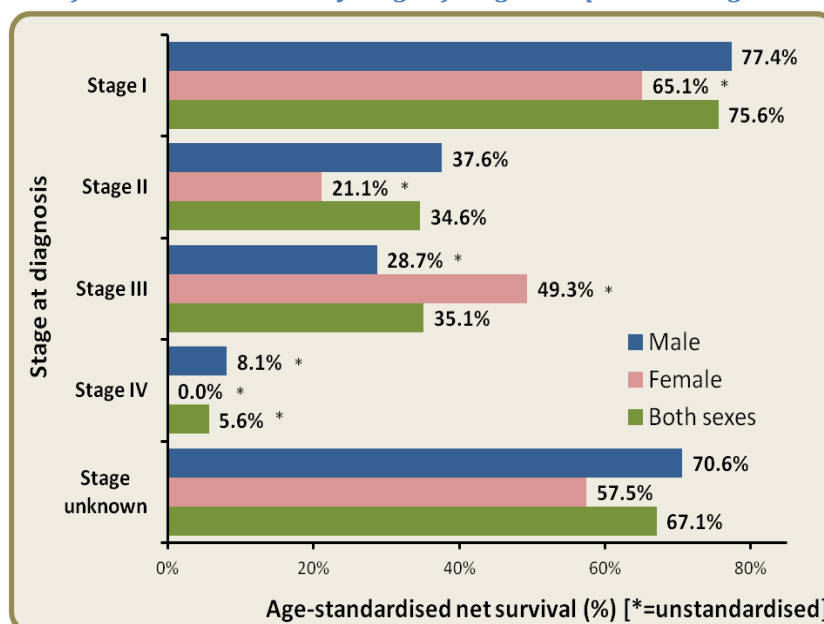
No differences in five-year survival for bladder cancer in Northern Ireland have been observed for patients who were diagnosed 1993-1999 compared to those diagnosed in 2005-2009. Five-year survival in men between 1993-1999 was 60.2% and 58.9% between 2005-2009. Five-year survival in women between 1993-1999 was 47.4% and 47.4% between 2005-2009.

Table 3: Five-year bladder cancer survival by period of diagnosis and gender

Period of diagnosis	Male	Female	Both sexes
1993-1999	60.2%	47.4%	56.6%
2000-2004	63.2%	53.5%	60.5%
2005-2009	58.9%	47.4%	55.8%

Survival and stage

Figure 6: Five-year survival from bladder cancer by stage of diagnosis: patients diagnosed 2003-2010



Stage at diagnosis is one of the most important factors associated with bladder cancer survival. Five-year survival decreases from 75.6% for patients diagnosed with stage I to 5.6% for patients diagnosed with stage IV disease. Five-year survival rates for stage IV bladder cancer were poor with only 8.1% of males and nil females surviving five years after original diagnosis.

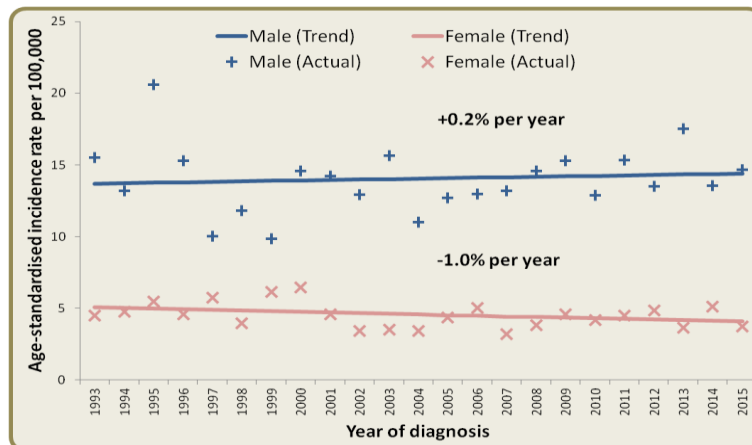
MORTALITY

In 2011-2015 there were an average of 83 male and 37 female deaths each year.

Mortality trends

When adjusted for age and population change, bladder cancer mortality rates in males and females have remained stable during the previous twenty three year period (+0.2% per year in men and -1.0% per year in women). Reasons for subtle differences in mortality rates between genders are not known.

Figure 7: Trends in bladder cancer mortality rates: 1993-2015



PREVALENCE

At the end of 2015 there were a total of 1,375 people living in NI with a diagnosis of bladder cancer of which 75% were male, 12% had been diagnosed in the previous year, and 70% were over the age of 70.

Table 4: Number of people living with bladder cancer at the end of 2015 who were diagnosed from 1993-2015 by time since diagnosis and gender

Sex	Age	Time since diagnosis				23-year Prevalence
		0-1 year	1-5 years	5-10 years	10-23 years	
Male	0-69	36	103	97	81	317
	70+	82	191	177	265	715
	All ages	118	294	274	346	1,032
Female	0-69	17	28	22	27	94
	70+	29	63	61	96	249
	All ages	46	91	83	123	343
Both	0-69	53	131	119	108	411
	70+	111	254	238	361	964
	All ages	164	385	357	469	1,375

FURTHER INFORMATION

Further data is available from the Northern Ireland Cancer Registry web site: www.qub.ac.uk/nicr

NI Cancer Registry

Phone: +44 (0)28 9097 6028
e-mail: nicr@qub.ac.uk



ACKNOWLEDGEMENTS

NICR is funded by the Public Health Agency and is hosted by Queen's University, Belfast. This work uses data provided by patients and collected by the NHS as part of their care and support.

