

NUMBER OF CASES PER YEAR (2012-2016) <sup>1</sup>			NUMBER OF DEATHS PER YEAR (2012-2016)		
Male	Female	Both sexes	Male	Female	Both sexes
148	64	211	88	36	124
FIVE-YEAR SURVIVAL (2006-2010)			24-YEAR PREVALENCE (2016)		
Male	Female	Both sexes	Male	Female	Both sexes
57.6%	43.4%	53.6%	1,016	350	1,366

<sup>1</sup> Mean yearly incidence data for period 2012-2016 has been rounded to nearest integer, and thus some numbers in tables will not add to give the exact total.

## INCIDENCE

Between 2012 and 2016 there were an average of 148 males and 64 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 124 whilst the probability that a female will develop bladder cancer before the age of 75 is 1 in 372.

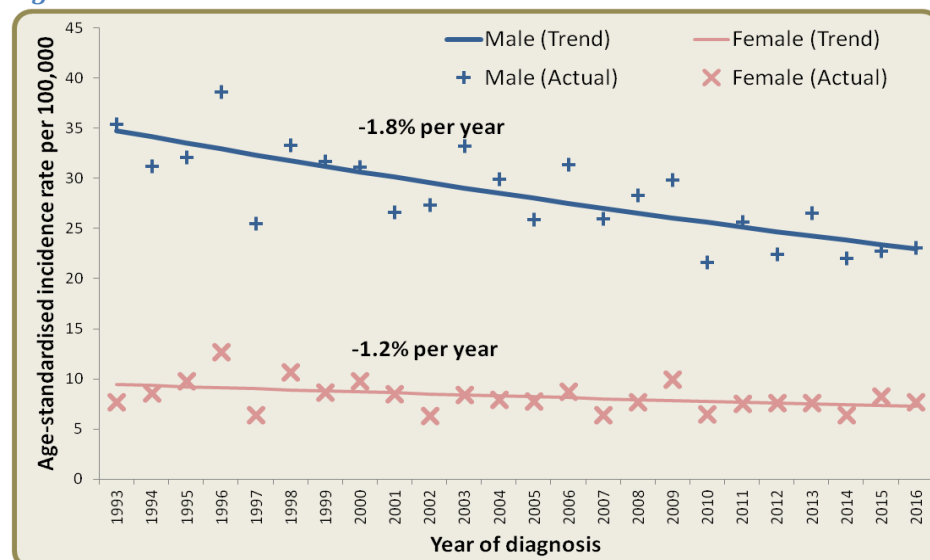
### Incidence trends

*Table 1: Incidence of bladder cancer by gender and year of diagnosis: 2007-2016*

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Males</b>	143	155	176	132	147	137	158	143	146	154
<b>Females</b>	47	58	76	51	58	63	62	55	71	67
<b>Both</b>	190	213	252	183	205	200	220	198	217	221

Over a ten-year period the number of bladder cancer cases has increased in males and females from 190 in 2007 to 221 in 2016. 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: 1993-2016*

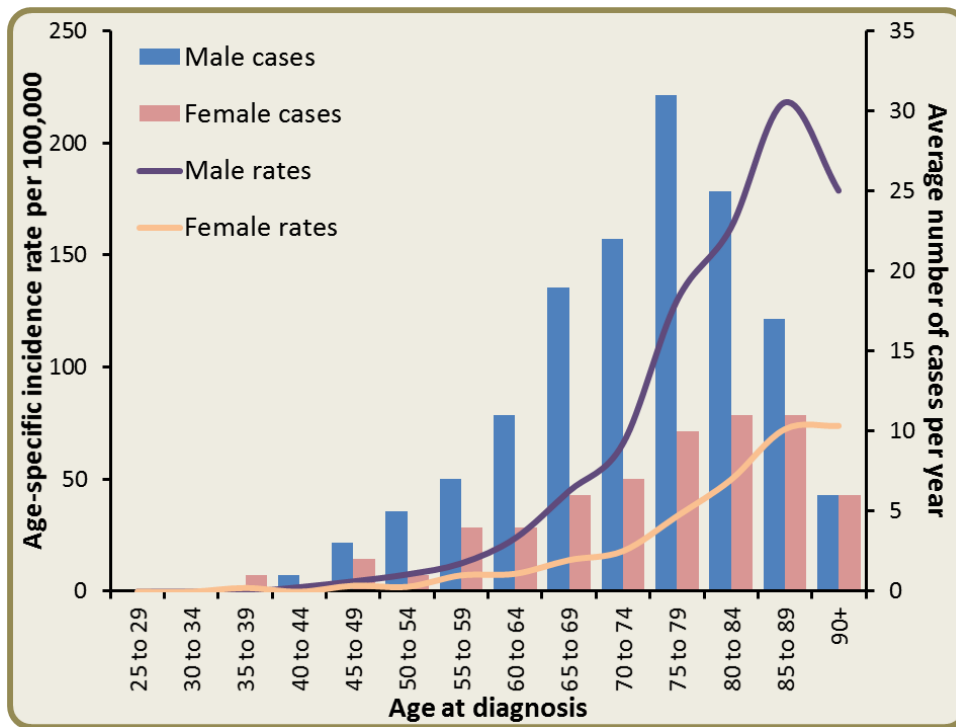


These observed decreases in incidence are possibly due to a reduction in exposure to bladder cancer risk factors such as smoking or toxin exposure.

### Incidence and age

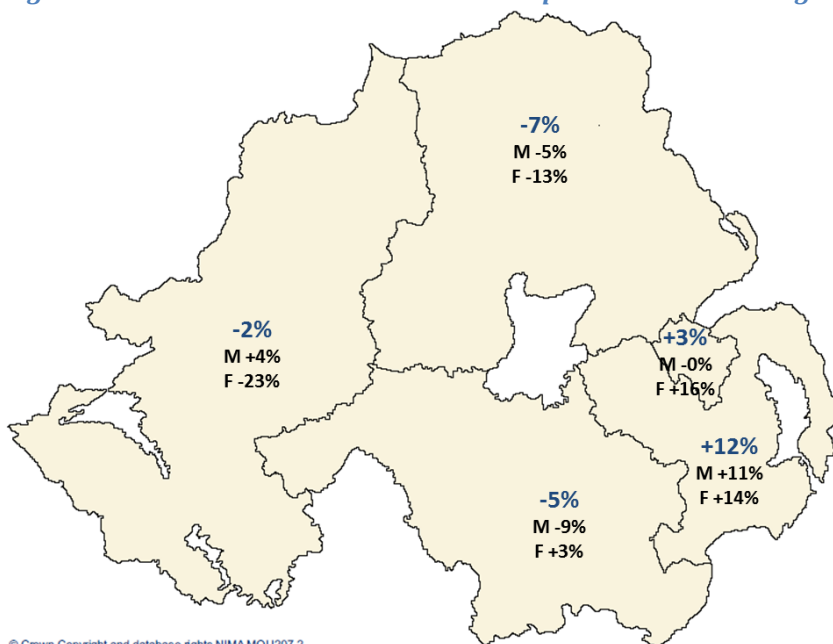
Bladder cancer incidence is associated with increasing age. More than 90% of patients diagnosed between 2012 and 2016 were over the age of 55. Incidence rates are highest among males aged 85-89 and highest among female’s aged over 90. There is an increase in the incidence of bladder cancer in men after 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: 2012-2016



### Incidence by Trust area

Figure 3: Bladder cancer incidence rates compared to the NI average by sex and HSC trust of residence 2012-2016



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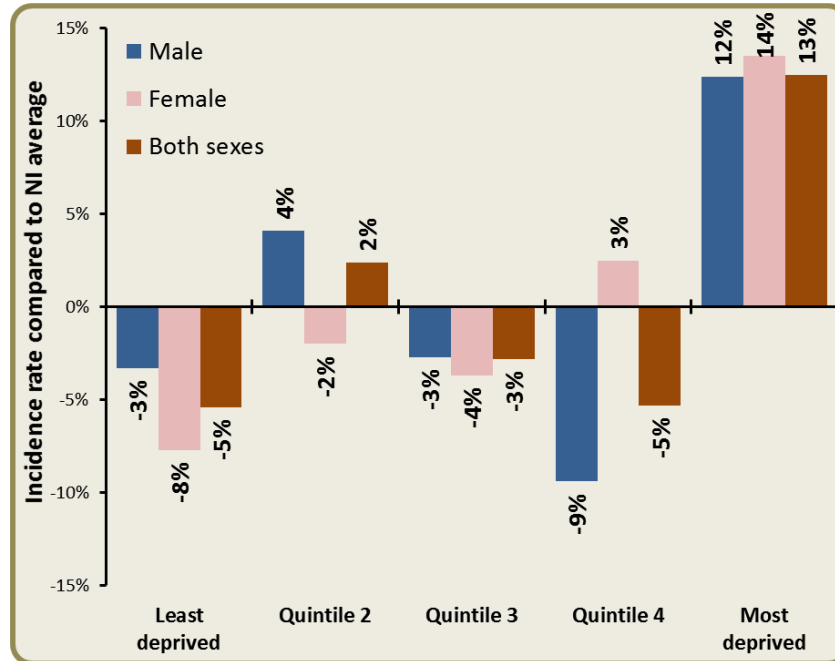
Significantly higher than average

Significantly lower than average

## Incidence by deprivation

Bladder cancer incidence rates are 13% higher than NI average in the most deprived communities and 5% 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.

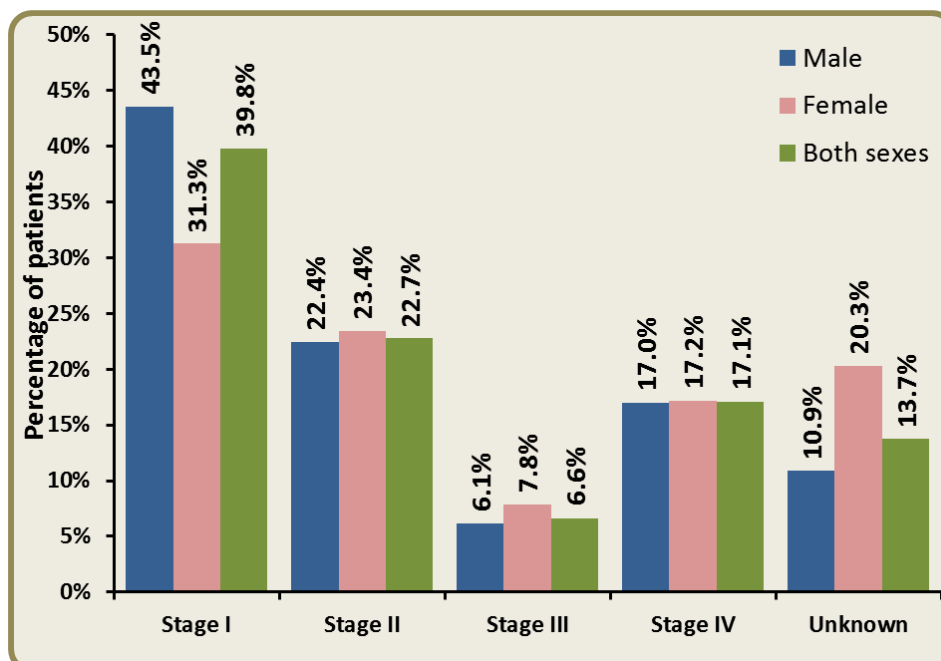
Figure 4: Bladder cancer incidence rates compared to the NI average by deprivation quintile: 2012-2016



## Incidence by stage

More than 86% 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: 2012-2016



## SURVIVAL

The age-standardised net survival for men diagnosed with bladder cancer between 2006-2010 was 57.6% at five years. The net survival for women during the same time period was 43.4%.

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

Time since diagnosis	Diagnosed 2006-2010		
	Male	Female	Both sexes
6 months	86.8%	77.0%	83.9%
1 year	78.8%	64.0%	74.5%
5 years	57.6%	43.4%	53.6%

## Survival Trends

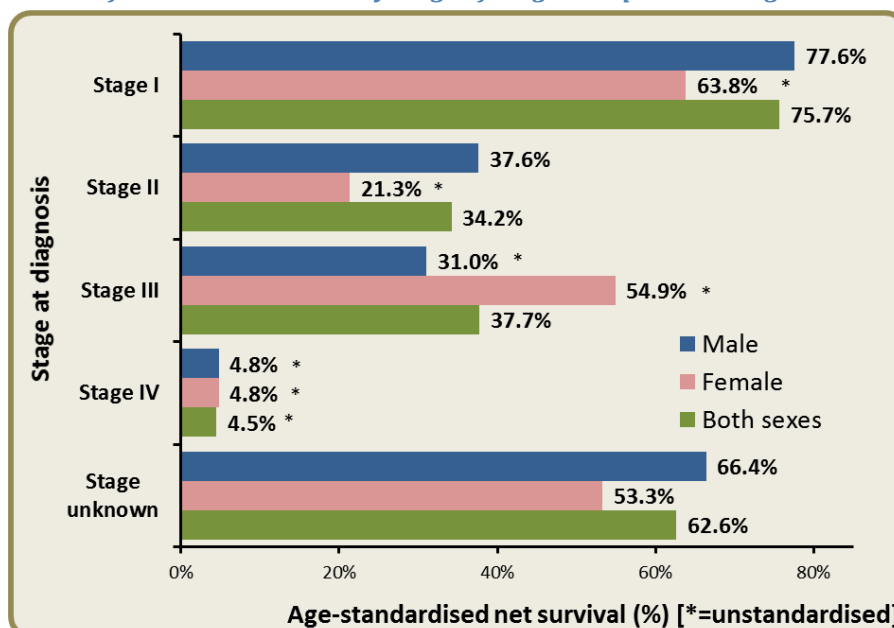
Little differences in five-year survival for bladder cancer in Northern Ireland have been observed for patients who were diagnosed 1993-2000 compared to those diagnosed in 2006-2010. Five-year survival in men between 1993-2000 was 59.9% and 57.6% between 2006-2010. Five-year survival in women between 1993-2000 was 48.5% and 43.4% between 2006-2010.

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

Period of diagnosis	Male	Female	Both sexes
1993-2000	59.9%	48.5%	56.6%
2001-2005	64.2%	53.7%	61.5%
2006-2010	57.6%	43.4%	53.6%

## Survival and stage

*Figure 6: Five-year survival from bladder cancer by stage of diagnosis: patients diagnosed 2004-2011*



Stage at diagnosis is one of the most important factors associated with bladder cancer survival. Five-year survival decreases from 75.7% for patients diagnosed with stage I to 4.5% for patients diagnosed with stage IV disease. Five-year survival rates for stage IV bladder cancer were poor with only 4.8% of males and 4.8% females surviving five years after original diagnosis.

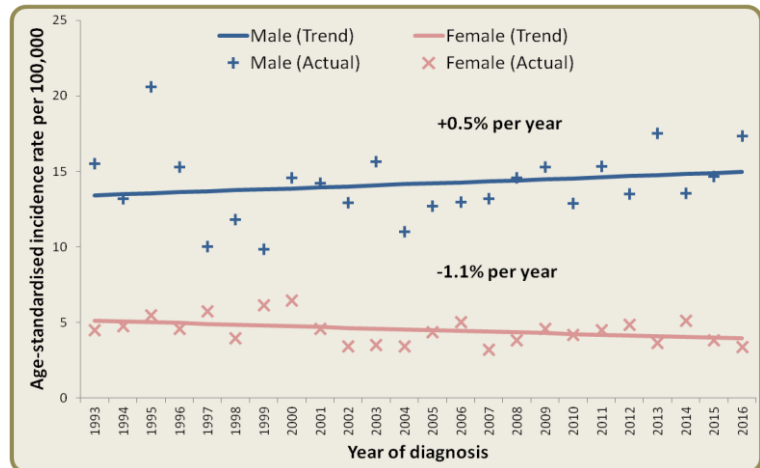
## MORTALITY

In 2012-2016 there were an average of 88 male and 36 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 four year period (+0.5% per year in men and -1.1% per year in women). Reasons for subtle differences in mortality rates between genders are not known.

Figure 7: Trends in bladder cancer mortality rates: 1993-2016



## PREVALENCE

At the end of 2016 there were a total of 1,366 people living in NI with a diagnosis of bladder cancer of which 74% were male, 13% had been diagnosed in the previous year, and 71% were over the age of 70.

Table 4: Number of people living with bladder cancer at the end of 2015 who were diagnosed from 1993-2016 by time since diagnosis and gender

Sex	Age	Time since diagnosis				24-year Prevalence
		0-1 year	1-5 years	5-10 years	10-24 years	
Male	0-69	29	98	91	78	296
	70+	95	179	171	275	720
	All ages	124	277	262	353	1,016
Female	0-69	17	31	15	33	96
	70+	36	63	62	93	254
	All ages	53	94	77	126	350
Both	0-69	46	129	106	111	392
	70+	131	242	233	368	974
	All ages	177	371	339	479	1,366

**FURTHER INFORMATION**

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

**NI Cancer Registry**

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