

# BLADDER CANCER



| NUMBER OF CASES PER YEAR<br>(2010-2014) |        |            | NUMBER OF DEATHS PER YEAR<br>(2010-2014) |        |            |
|---|--------|------------|--|--------|------------|
| Male                                    | Female | Both sexes | Male                                     | Female | Both sexes |
| 143                                     | 58     | 201        | 80                                       | 37     | 117        |
| FIVE-YEAR SURVIVAL<br>(2005-2009)       |        |            | 22-YEAR PREVALENCE<br>(2014)             |        |            |
| Male                                    | Female | Both sexes | Male                                     | Female | Both sexes |
| 59.1%                                   | 48.5%  | 56.2%      | 1,030                                    | 330    | 1,360      |

## INCIDENCE

Between 2010 and 2014 there were an average of 143 males and 58 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 108 whilst the probability that a female will develop bladder cancer before the age of 75 is 1 in 394.

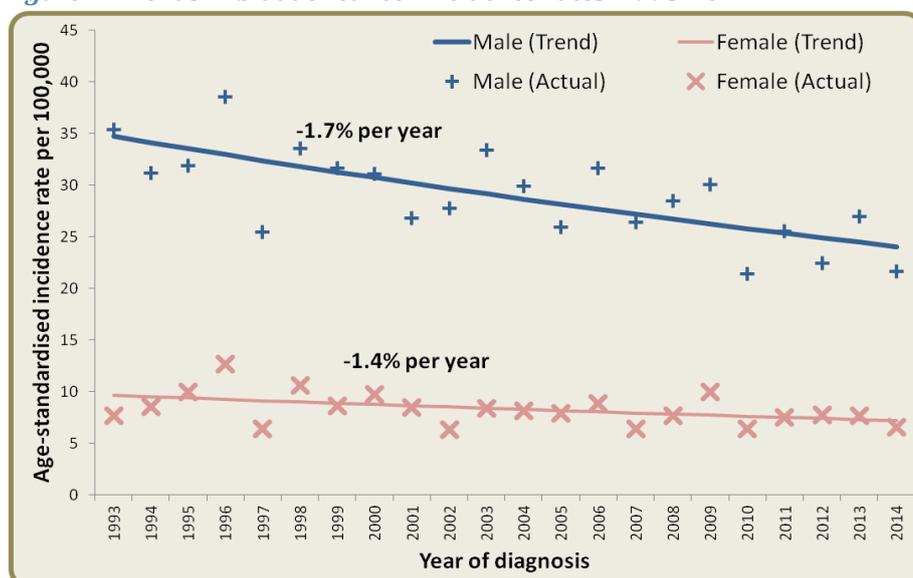
### Incidence trends

Table 1: Incidence of bladder cancer by gender and year of diagnosis: 2005-2014

|         | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------|------|------|------|------|------|------|------|------|------|------|
| Males   | 135  | 159  | 145  | 156  | 177  | 131  | 146  | 137  | 161  | 142  |
| Females | 57   | 66   | 47   | 58   | 76   | 50   | 58   | 64   | 62   | 56   |
| Both    | 192  | 225  | 192  | 214  | 253  | 181  | 204  | 201  | 223  | 198  |

Over a ten-year period the number of bladder cancer cases has increased in males and females from 192 in 2005 to 198 in 2014. After accounting for our ageing population, there has been a 1.7% decrease in yearly incidence of bladder cancer in males and a 1.4% yearly decrease in incidence of bladder cancer in females.

Figure 1: Trends in bladder cancer incidence rates: 1993-2014

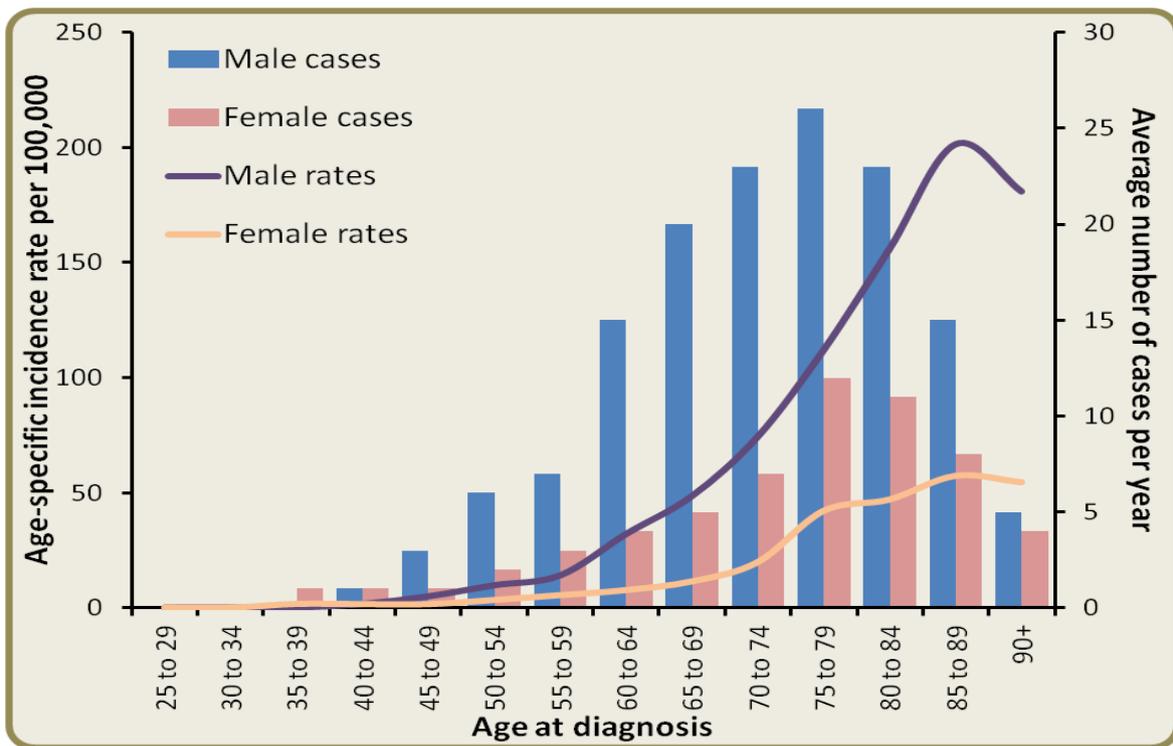


These observed decreases in incidence are possibly due to a reduction in exposure to bladder cancer risk factors such as smoking or toxin exposure.

### Incidence and age

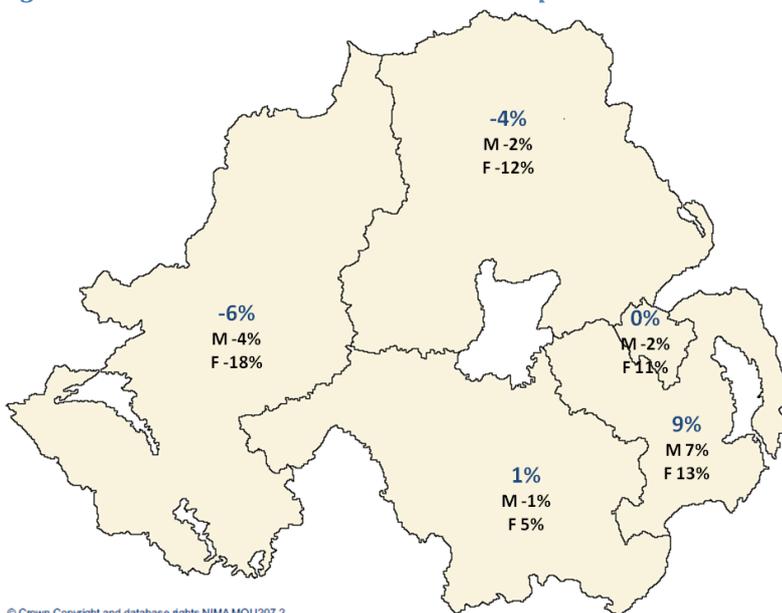
Bladder cancer incidence is associated with increasing age. More than 90% of patients diagnosed between 2010 and 2014 were over the age of 55. Incidence rates are highest among males aged 85-89 and also among female’s aged 85-89. There is an increase in the incidence of bladder cancer in men after the 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: 2010-2014



### Incidence by Trust area

Figure 3: Bladder cancer incidence rates compared to the NI average by sex and HSC trust of residence 2010-2014



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 2010-2014.

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

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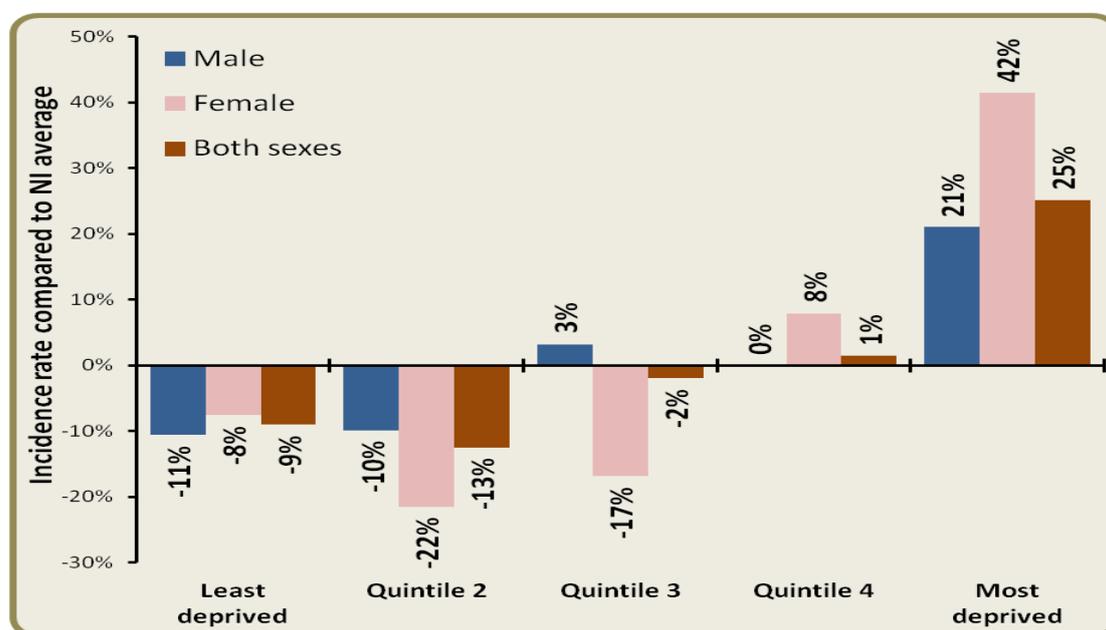
Significantly higher than average

Significantly lower than average

## Incidence by deprivation

Bladder cancer incidence rates are 25% higher than NI average in the most deprived communities and 9% 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.

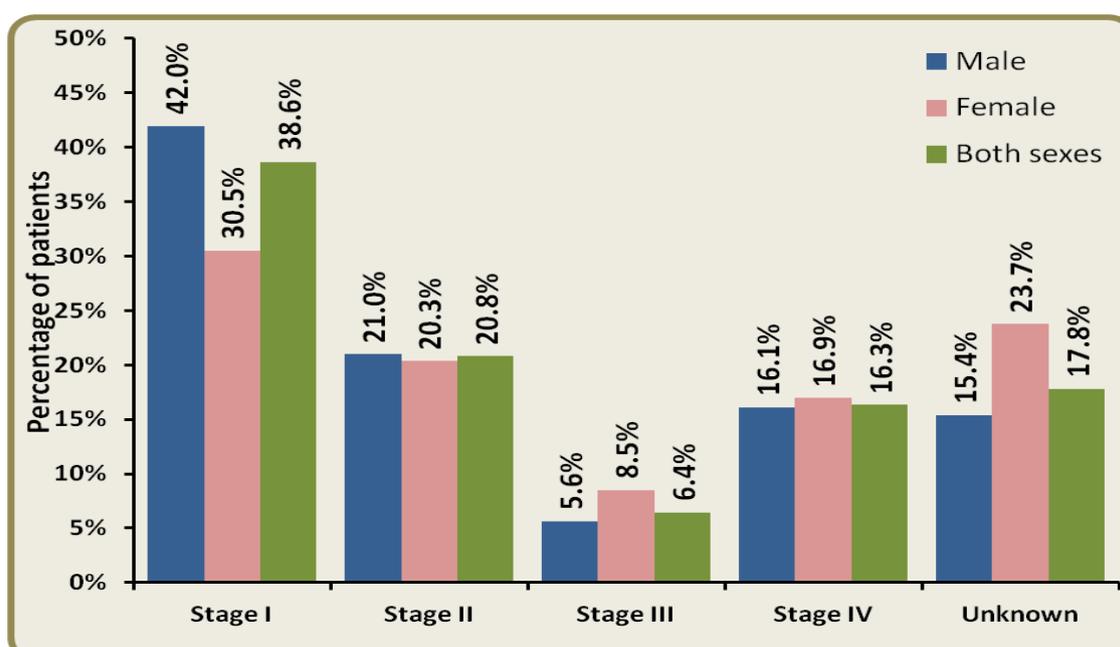
Figure 4: Bladder cancer incidence rates compared to the NI average by deprivation quintile: 2010-2014



## Incidence by stage

More than 80% of patients were assigned a stage. The majority of patients were diagnosed with stage I bladder cancer (47% of staged cases) whilst the second most common stage to receive a diagnosis was at stage II (25% of staged cases). Almost one in six patients (16%) were diagnosed at stage IV.

Figure 5: Bladder cancer stage distribution: 2010-2014



## SURVIVAL

The age-standardised net survival for men diagnosed with bladder cancer between 2005-2009 was 59.1% at five years. The net survival for women during the same time period was 48.5%.

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

| Time since diagnosis | Diagnosed 2005-2009 |        |            |
|----------------------|---------------------|--------|------------|
|                      | Male                | Female | Both sexes |
| 6 months             | 87.8%               | 77.8%  | 85.0%      |
| 1 year               | 79.5%               | 65.1%  | 75.5%      |
| 5 years              | 59.1%               | 48.5%  | 56.2%      |

### 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 60.4% and 59.1% between 2005-2009. Five-year survival in women between 1993-1999 was 48.4% and 48.5% 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           | 60.4% | 48.4%  | 56.9%      |
| 2000-2004           | 63.5% | 54.9%  | 60.9%      |
| 2005-2009           | 59.1% | 48.5%  | 56.2%      |

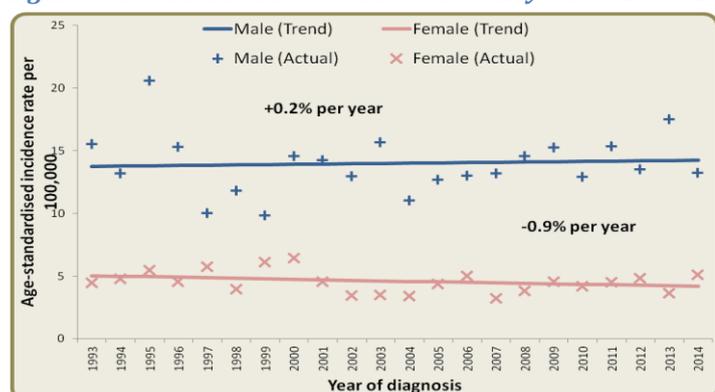
## MORTALITY

In 2010-2014 there were an average of 80 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 two year period (+0.2% per year in men and -0.9% per year in women). Reasons for subtle differences in mortality rates between genders are not known.

*Figure 7: Trends in bladder cancer mortality rates: 1993-2014*



## PREVALENCE

At the end of 2014 there were a total of 1360 people living in NI with a diagnosis of bladder cancer of which 76% were male, 11% had been diagnosed in the previous year, and 69% were over the age of 70.

*Table 4: Number of people living with bladder cancer at the end of 2014 who were diagnosed from 1993-2014 by time since diagnosis and gender*

| Sex    | Age      | Time since diagnosis |           |            |             | 22-year Prevalence |
|--------|----------|----------------------|-----------|------------|-------------|--------------------|
|        |          | 0-1 year             | 1-5 years | 5-10 years | 10-22 years |                    |
| Male   | 0-69     | 47                   | 96        | 100        | 78          | 321                |
|        | 70+      | 69                   | 198       | 189        | 253         | 709                |
|        | All ages | 116                  | 294       | 289        | 331         | 1030               |
| Female | 0-69     | 6                    | 27        | 24         | 29          | 86                 |
|        | 70+      | 29                   | 57        | 64         | 94          | 244                |
|        | All ages | 35                   | 84        | 88         | 123         | 330                |
| Both   | 0-69     | 53                   | 123       | 124        | 107         | 407                |
|        | 70+      | 98                   | 255       | 253        | 347         | 953                |
|        | All ages | 151                  | 378       | 377        | 454         | 1360               |

## 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)

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