

PROSTATE CANCER



NUMBER OF CASES PER YEAR (2011-2015)	NUMBER OF DEATHS PER YEAR (2011-2015)
Male	Male
1,092	254
FIVE-YEAR SURVIVAL (2005-2009)	23-YEAR PREVALENCE (2015)
Male	Male
88.5%	9,347

INCIDENCE

In 2011-2015 there were 1,092 men diagnosed with prostate cancer each year. The risk for men of developing a prostate cancer up to the age of 75 was 1 in 12.

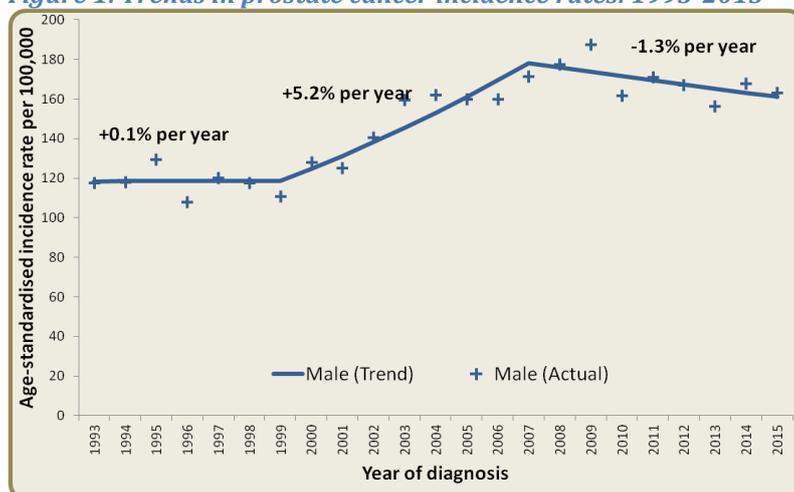
Incidence trends

Table 1: Incidence of prostate cancer and year of diagnosis: 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Male	883	976	1,027	1,121	968	1,069	1,080	1,033	1,143	1,133

Over a ten year period from 2006 to 2015 the number of prostate cancers cases in men increased from 883 to 1,133. Prostate cancer incidence rates in men increased during 1999-2007 by an average of +5.2% per year, and then decreased by -1.3% from 2007-2015. Incidence rates of prostate cancer have increased internationally. This is primarily a result of the widespread use of prostate specific antigen (PSA) testing which is a blood test that is used as a diagnostic approach to detect/monitor prostate cancer however it does not meet the criteria for a screening test. It is recognised that it detects very slowly growing cancers that would never cause any problems or symptoms in a man's lifetime.

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



Incidence and age

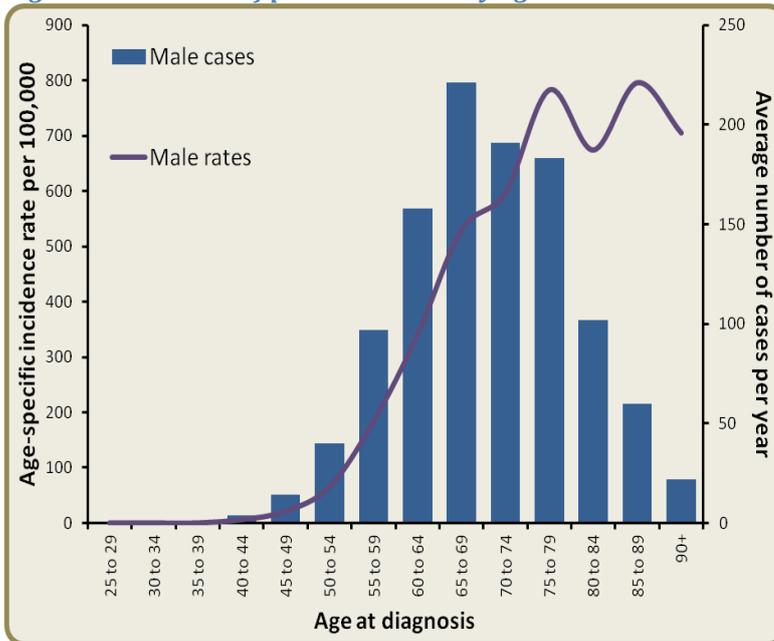
Prostate cancer risk is strongly related to age with approximately 71% of patients diagnosed over the age of 65 years and incidence rates greatest among those aged over 70.

Table 2: Average number of prostate cancers diagnosed per year by age: 2011-2015

Age	Male
0 to 49	18
50 to 64	295
65 to 74	412
75 and over	367
All ages	1,092

Due to rounding of yearly averages, 'All ages' may not equal the sum of age categories in tables.

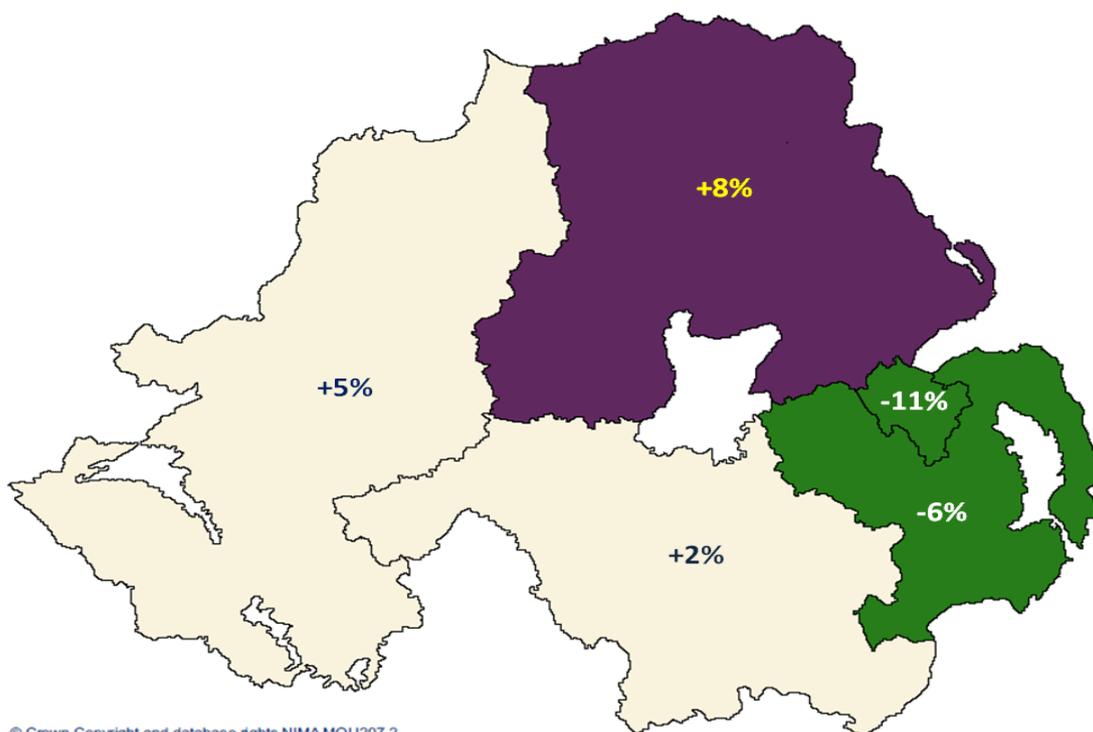
Figure 2: Incidence of prostate cancer by age: 2011-2015



Incidence by Trust area

Prostate cancer incidence rates in 2011-2015 were 8% higher among people living in the Northern Trust area than in Northern Ireland as a whole while those living in Belfast and the South-Eastern Trust areas had 11% and 6% respectively lower incidence of prostate cancer than the Northern Ireland Average.

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



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Significantly higher than average

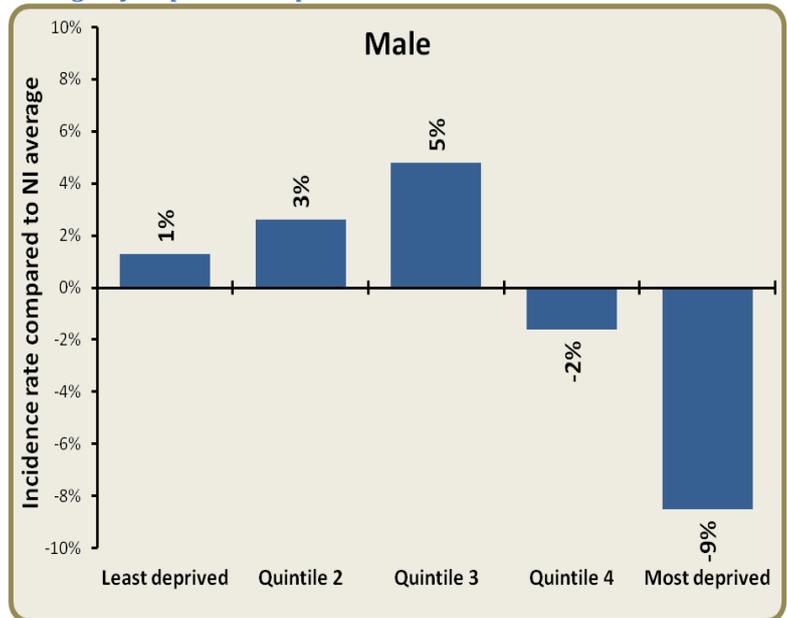


Significantly lower than average

Incidence by deprivation

Prostate cancer incidence rates varied depending upon socio-economic deprivation. Incidence is significantly lower (-9%) in the most-deprived areas in comparison to Northern Ireland as a whole. This pattern most likely reflects higher rates of PSA testing in the most-affluent communities compared to the most-deprived.

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



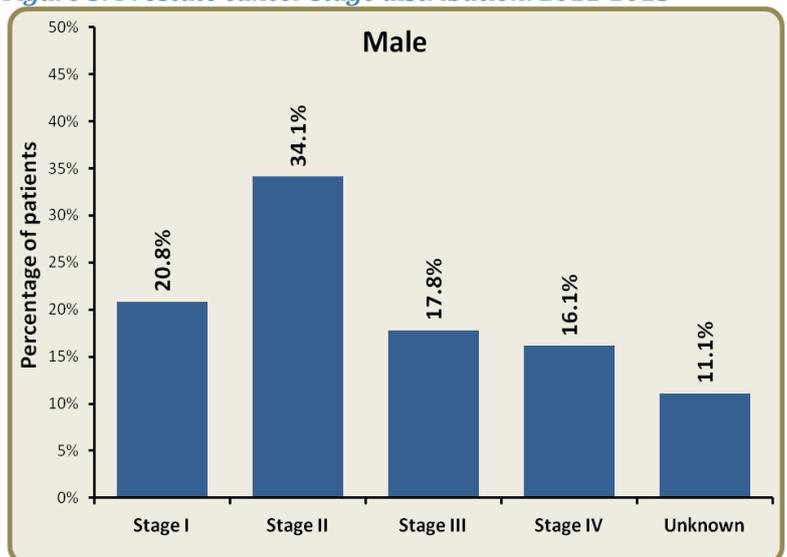
Incidence by stage

Cancer stage is a way of describing the size of a cancer and how far it has grown and spread. This information is important in helping decide what treatments are needed and stage of disease at diagnosis is strongly associated with cancer survival.

From 2011 to 2015 89% of prostate cancer patients in Northern Ireland were assigned a stage at diagnosis.

The majority of prostate cancer patients were diagnosed at early stage (20.8% at stage I and 34.1% at Stage II) and 16.1% diagnosed at late stage (stage IV).

Figure 5: Prostate cancer stage distribution: 2011-2015



SURVIVAL

The net survival was 96.5% at one year, and 88.5% at five years for prostate cancer patients diagnosed in 2005 to 2009.

Table 3: Five-year prostate cancer survival by survival time: patients diagnosed 2005-2009

Time since diagnosis	Diagnosed 2005-2009
	Male
6 months	97.6%
1 year	96.5%
5 years	88.5%

Survival Trends

Five-year survival for prostate cancer in men has improved from 60.1% in the 1993-1999 diagnosis period to 88.5% in the 2005-2009 diagnosis period. Improvements are largely due to increased detection of slow growing prostate cancer and increasing diagnosis in younger men because of PSA testing. Consequently, epidemiologists consider mortality rates as a better indicator of cancer outcome than survival.

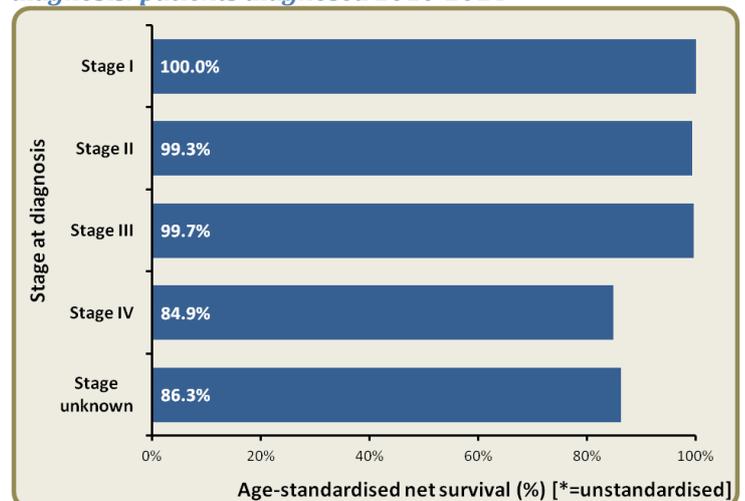
Table 4: Five-year prostate cancer survival by period of diagnosis

Period of diagnosis	Male
1993-1999	60.1%
2000-2004	81.5%
2005-2009	88.5%

Survival and stage

Stage at diagnosis is one of the most important factors in prostate cancer survival with one-year survival decreasing as stage increases. Stage at diagnosis data is available for cancer patients diagnosed since 2009. One-year survival was almost 100% for all patients except those diagnosed with late stage IV disease (84.9%).

Figure 6: One year survival from prostate cancer by stage of diagnosis: patients diagnosed 2010-2014



MORTALITY

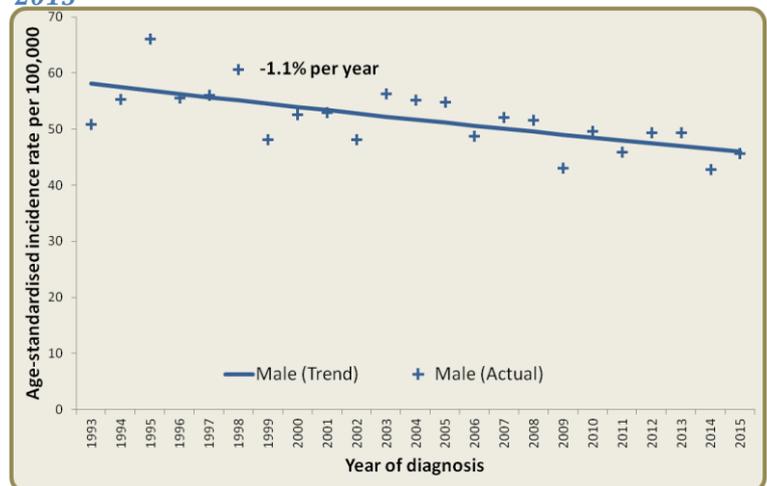
Mortality statistics are provided by the Northern Ireland General Registrar's Office. In 2011-2015 there were 254 deaths from prostate cancer each year.

Mortality trends

Over the last ten years the number of prostate cancer deaths has not changed significantly from 217 among men in 2006 to 259 among men in 2015.

When adjusted for age and population change, prostate cancer mortality rates decreased by -1.1% per year during 1993-2015.

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



PREVALENCE

At the end of 2015 there were 9,347 men living in NI who had been diagnosed with prostate cancer from 1993-2015 (Table 5). Of these, 66.3% were aged 70 and over and 11.7% had been diagnosed in the previous year.

Table 5: Number of men living with prostate cancer at the end of 2015 who were diagnosed from 1993-2015 by time since diagnosis

Sex	Age	Time since diagnosis				23-year Prevalence
		0-1 year	1-5 years	5-10 years	10-23 years	
Male	0-69	497	1,509	923	222	3,151
	70+	599	1,993	2,143	1,461	6,196
	All ages	1,096	3,502	3,066	1,683	9,347

FURTHER INFORMATION

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

NI Cancer Registry

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