PROSTATE CANCER



Number of cases per year (2009-2013)	Number of deaths per year (2009-2013)		
Male	Male		
1,039	244		
FIVE-YEAR SURVIVAL (2004-2008)	21- YEAR PREVALENCE (2013)		

INCIDENCE

In 2009-2013 there were 1,039 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; this risk was 1 in 71 up to the age of 60, and 1 in 7 up to the age of 85.

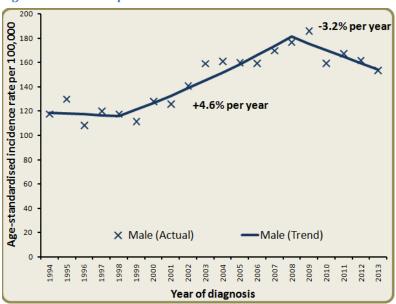
Incidence trends

Table 1: Incidence of prostate cancer and year of diagnosis: 2004-2013

			2006	2007	2008	2009	2010	2011	2012	2013
Male	832	842	879	969	1,023	1,114	958	1,053	1,052	1,018

Over a ten year period from 2004 to 2013 the number of prostate cancers cases in men has increased from 832 to 1,018. Prostate cancer incidence rates in men have increased during 1998-2008 by an average of +4.6% per year, and then have decreased by -3.2% from 2008-2013. 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 prostate cancer at an early stage but which also 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: 1993-2013



Incidence and age

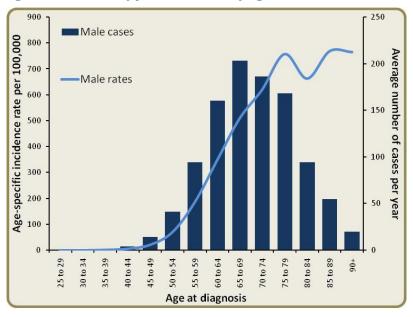
Prostate cancer risk is strongly related to age with approximately 70% of patients diagnosed over the age of 65 years and incidence rates greatest among those aged over 70.

Table 2: Average number of prostate cancers diagnosed per yr by age: 2009-2013

Age	Male
0 to 49	19
50 to 64	295
65 to 74	389
75 and over	337
All ages	1,039

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

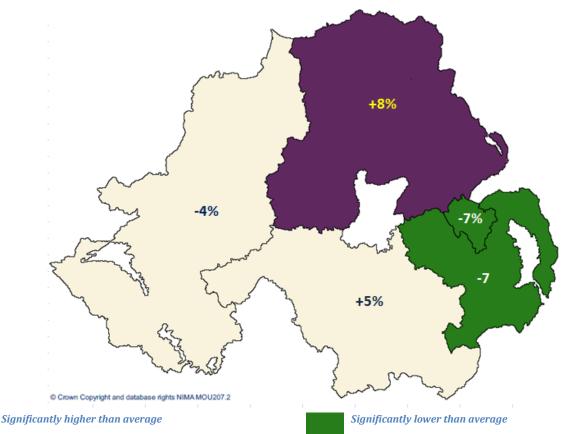
Figure 2: Incidence of prostate cancer by age: 2009-2013



Incidence by Trust area

Prostate cancer incidence rates in 2009-2013 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 7% lower incidence of prostate cancer than the Northern Ireland Average.

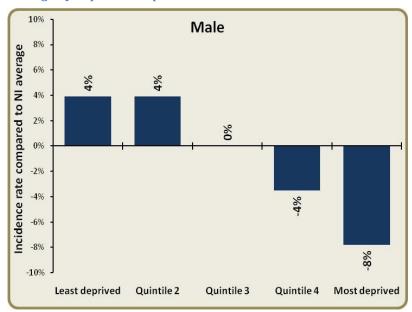
Figure 3: Prostate cancer incidence rates compared to the NI average by sex and HSC Trust of residence: 2009-2013



Incidence by deprivation

Prostate cancer incidence rates varied depending upon socio-economic deprivation. Incidence is significantly lower (-8%) 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: 2009-2013



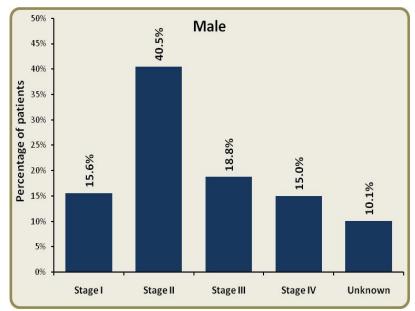
Incidence by stage

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 2009 to 2013 almost 90% of prostate cancer patients in Northern Ireland were assigned a stage at diagnosis.

The majority of prostate cancer patients were diagnosed at early stage (15.6% at stage I and 40.5% at Stage II) and 15.0% diagnosed at late stage (stage IV).

Figure 5: Prostate cancer stage distribution: 2009-2013



SURVIVAL

The net survival was 97.2% at one year, and 87.0% at five years for prostate cancer patients diagnosed in 2004 to 2008.

Table 3: Five-year prostate cancer survival by survival time: patients diagnosed 2004-2008

Time since	Diagnosed 2004-2008				
diagnosis	Male				
6 months	97.2%				
1 year	95.8%				
5 years	87.0%				

Survival by age

Prostate cancer survival varies depending upon age at diagnosis with five-year survival ranging from 93.4% for those aged 15-64 to 64.3% for those aged 85 and over.

Table 4: Survival from prostate cancer by age at diagnosis: patients diagnosed 2004-2008

Age (years)	6 months	One year	Five years
15 to 64	99.5%	98.7%	93.4%
65 to 74	98.6%	97.3%	88.1%
75 to 84	94.4%	92.3%	80.0%
85 and over	85.3%	80.5%	64.3%

Survival Trends

Five-year survival for prostate cancer in men has improved from 59.5% in the 1993-1998 diagnosis period to 87.0% in the 2004-2008 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

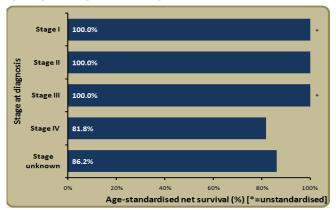
Table 5: Five-year prostate cancer survival by period of diagnosis

Period of diagnosis	Male
1993-1998	59.5%
1999-2003	79.8%
2004-2008	87.0%

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 100% for all patients except those diagnosed with late stage IV disease (81.8%).

Figure 6: One year survival from prostate cancer by stage of diagnosis: patients diagnosed 2009-2013



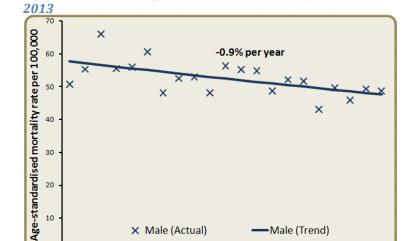
MORTALITY

Mortality statistics are provided by the Northern Ireland General Registrar's Office. In 2009-2013 there were 244 deaths from prostate cancer each year.

Mortality trends

Over the last ten years the number of prostate cancer deaths has not changed significantly from 240 among men in 2004 to 268 among men in 2013.

When adjusted for age and population change, prostate cancer mortality rates decreased by -0.9% per year during 1993-2013.



2002 2003 Year of death

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

Prevalence

At the end of 2013 there were 8,323 men living in NI who had been diagnosed with prostate cancer from 1993-2013 (Table 6). Of these, 64.6% were aged 70 and over and 11.8% had been diagnosed in the previous year.

Table 6: Number of men living with prostate cancer at the end of 2013 who were diagnosed from 1993-2013 by time since diagnosis

		Time since diagnosis				21-year	
Sex	Age	0-1 year	1-5 years		10-21 years	Prevalence	
Male	0-69	491	1,496	789	169	2,945	
	70+	489	1,864	1,936	1,089	5,378	
	All ages	980	3,360	2,725	1,258	8,323	

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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