# KIDNEY CANCER



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	
180	115	295	69	42	111	
FIVE-YEAR SURVIVAL (2006-2010)			24-YEAR PREVALENCE (2016)			
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Fi Male		VAL  Both sexes	Male		ENCE  Both sexes	

<sup>&</sup>lt;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 180 males and 115 females diagnosed with kidney cancer each year in Northern Ireland. The probability that a male will develop kidney cancer before the age of 75 is approximately 1 in 73 whilst the probability that a female will develop kidney cancer before the age of 75 is 1 in 128.

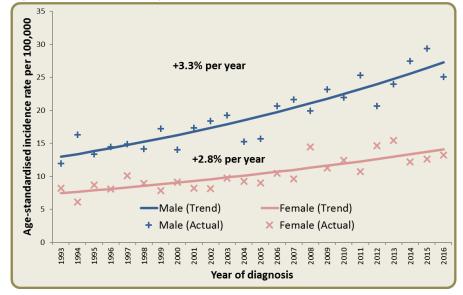
#### **Incidence trends**

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

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Males	130	124	140	142	162	142	164	191	215	187
Females	72	110	86	97	85	121	128	104	107	114
Both	202	234	226	239	247	263	292	295	322	301

Over a ten-year period the number of kidney cancer cases has increased in males and females from 202 in 2007 to 301 in 2016. After accounting for our ageing population, there has been a 3.3% increase in yearly incidence of kidney cancer in males and a 2.8% yearly increase in incidence of kidney cancer in females.

Figure 1: Trends in kidney cancer incidence rates: 1993-2016

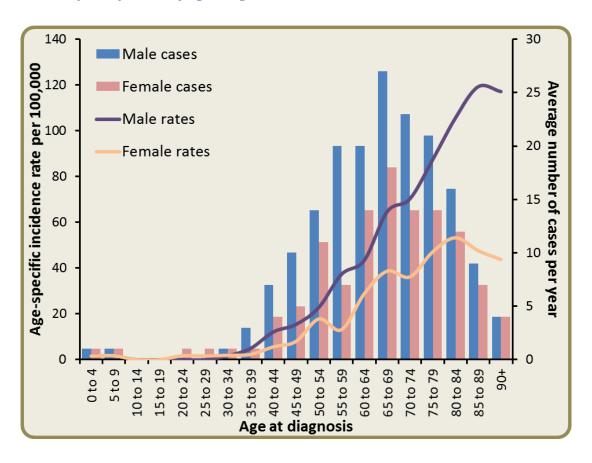


This is likely at least partly due to an increase in incidental diagnosis of early-stage disease during abdominal imaging.

### **Incidence and age**

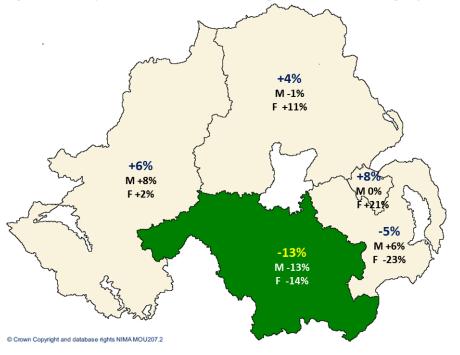
Incidence rates are highest at aged 85 to 89 among men and 80 to 84 among women. Almost 60% of patients diagnosed with kidney cancer are aged 65 years and over.

Figure 2: Incidence of kidney cancer by age and gender: 2012-2016



#### **Incidence by Trust area**

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

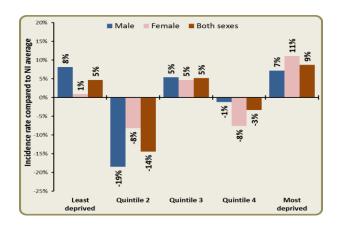


The Southern health and social trust had statistically significant lower kidney cancer incidence rates between 2012 and 2016 compared to the NI average.

Incidence of kidney cancer was statistically significantly lower in the South Eastern health and social care trust and statistically significantly higher in the Belfast Trust for females only compared to the NI average.

#### **Incidence by deprivation**

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

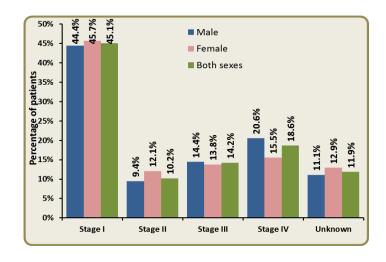


Incidence of kidney cancer is not strongly linked with socioeconomic deprivation in Northern Ireland. Cancer incidence rates are lower than NI average in those who are classified as living in quintile 2 communities and higher in the most deprived communities.

#### **Incidence by stage**

Approximately 88.1% of patients were assigned stage а diagnosis. The majority of patients staged were diagnosed with stage I kidney cancer (45%). The second most common stage to diagnosed at was stage IV (19%) suggesting that a large number of kidney cancers are diagnosed late.

Figure 5: Kidney cancer stage distribution: 2012-2016



### SURVIVAL

The age-standardised survival for men diagnosed with kidney cancer between 2006-2010 was 56.9% at five years. The age-standardised survival for women during the same time period was 54.7%.

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

Time since	Diagnosed 2006-2010				
diagnosis	Male	Female	Both sexes		
6 months	81.0%	78.8%	80.1%		
1 year	75.1%	71.7%	73.6%		
5 years	56.9%	54.7%	55.9%		

#### **Survival Trends**

Five-year survival for kidney cancer in Northern Ireland has improved from the 1993-2000 diagnosis period to the 2006-2010 diagnosis period in both males and females with men experiencing the largest improvement (see table 3).

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

Period of diagnosis	Male	Female	Both sexes
1993-2000	49.3%	51.2%	50.2%
2001-2005	45.5%	48.1%	46.2%
2006-2010	56.9%	54.7%	55.9%

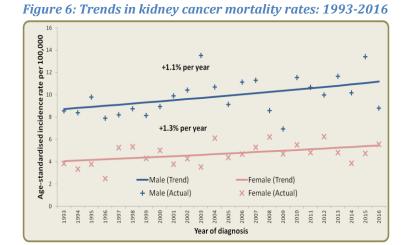
### **MORTALITY**

In 2011-2015 there were an average of 69 male and 42 female deaths from kidney cancer each year.

### **Mortality trends**

After adjusting for our ageing population, the male kidney cancer mortality rate has increased over the previous twenty four years, increasing by +1.1% per year.

**Female** mortality rates have increased by approximately +1.3% per year during the previous twenty four-year period.



## **Prevalence**

At the end of 2016 there were a total of 1,980 people living in NI with a diagnosis of kidney cancer of which 59% were male, 13% had been diagnosed in the previous year, and 47% were over the age of 70.

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

			Time since	24-year		
Sex	Age	0-1 year	1-5 years	5-10 years	10-24 years	Prevalence
Male	0-69	105	291	141	100	637
	70+	57	182	151	132	522
	All ages	162	473	292	232	1,159
Female	0-69	54	177	85	89	405
	70+	44	146	98	128	416
	All ages	98	323	183	217	821
Both	0-69	159	468	226	189	1,042
	70+	101	328	249	260	938
	All ages	260	796	475	449	1,980

### **FURTHER INFORMATION**

**ACKNOWLEDGEMENTS** 

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

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#### **NI Cancer Registry**

