

# COLORECTAL CANCER



NUMBER OF CASES PER YEAR (2011-2015)			NUMBER OF DEATHS PER YEAR (2011-2015)		
Male	Female	Both sexes	Male	Female	Both sexes
680	534	1,214	223	196	419
FIVE-YEAR SURVIVAL (2005-2009)			23-YEAR PREVALENCE (2015)		
Male	Female	Both sexes	Male	Female	Both sexes
55.5%	57.3%	56.3%	4,425	3,736	8,161

## INCIDENCE

In 2011-2015 there were 680 male and 534 female patients diagnosed with colorectal cancer each year. The lifetime risk of developing a colorectal cancer was 1 in 20 for men and 1 in 32 for women.

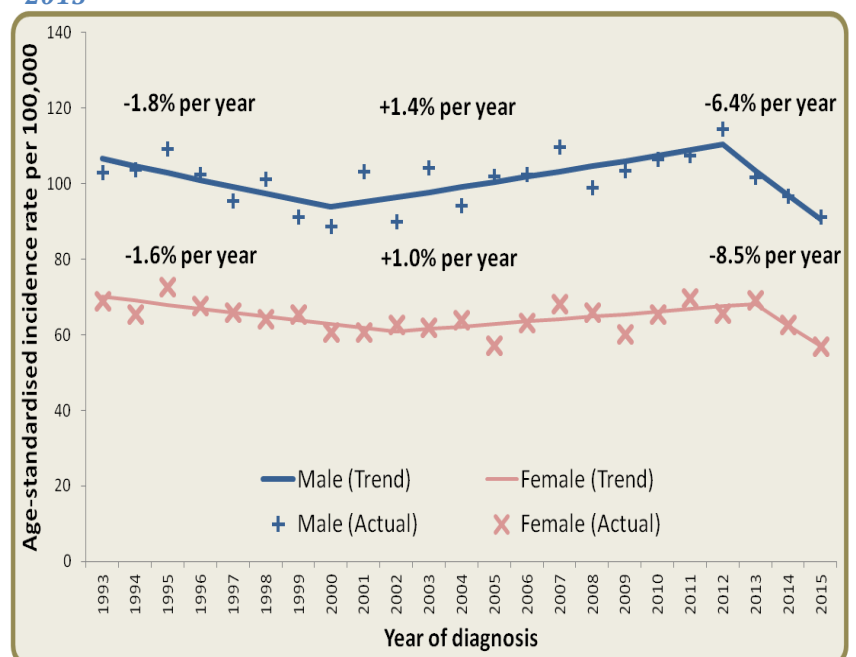
### Incidence trends

Table 1: Incidence of colorectal cancer by sex and year of diagnosis: 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Male	567	633	589	604	654	682	741	677	663	637
Female	465	513	503	464	511	551	532	575	526	484
Both sexes	1,032	1,146	1,092	1,068	1,165	1,233	1,273	1,252	1,189	1,121

The number of colorectal cancer cases increased by 12% in men from 567 to 637 and 4% among women from 465 to 484 between 2006 and 2015. This represented an overall 8.6% increase in colorectal incidence over the ten year period. After accounting for the increasing number of older people in the NI population, colorectal cancer incidence rates among males increased significantly between 2000 and 2012 before declining again until 2015. In females there was a significant decrease in rates from 1993 to 2002.

Figure 1: Trends in colorectal cancer incidence rates by sex: 1993-2015



### Incidence and age

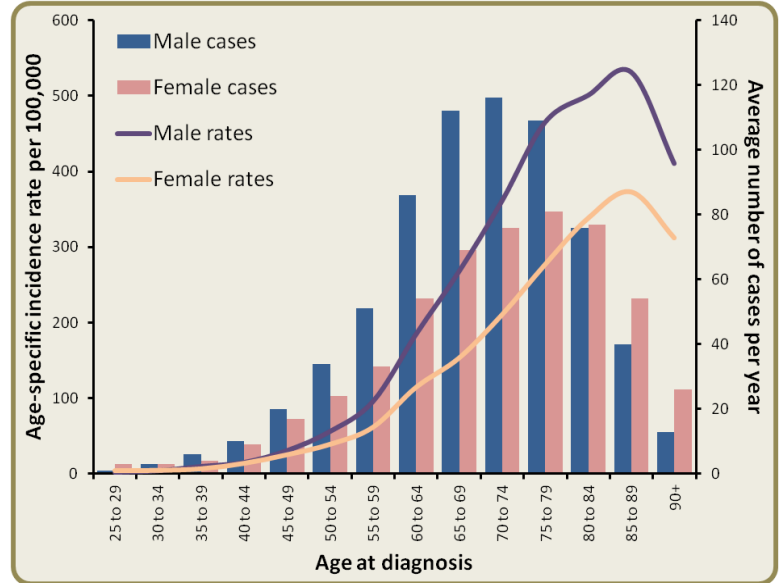
Colorectal cancer risk is strongly related to age with 70% of patients diagnosed over the age of 65 years. Incidence rates are highest among men and women aged 85-89.

Table 2: Average annual number of colorectal cancers diagnosed by sex and age: 2011-2015

Age	Male	Female	Total
0 to 49	43	40	83
50 to 64	171	111	282
65 to 74	228	145	373
75 and over	238	238	476
All ages	680	534	1,214

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

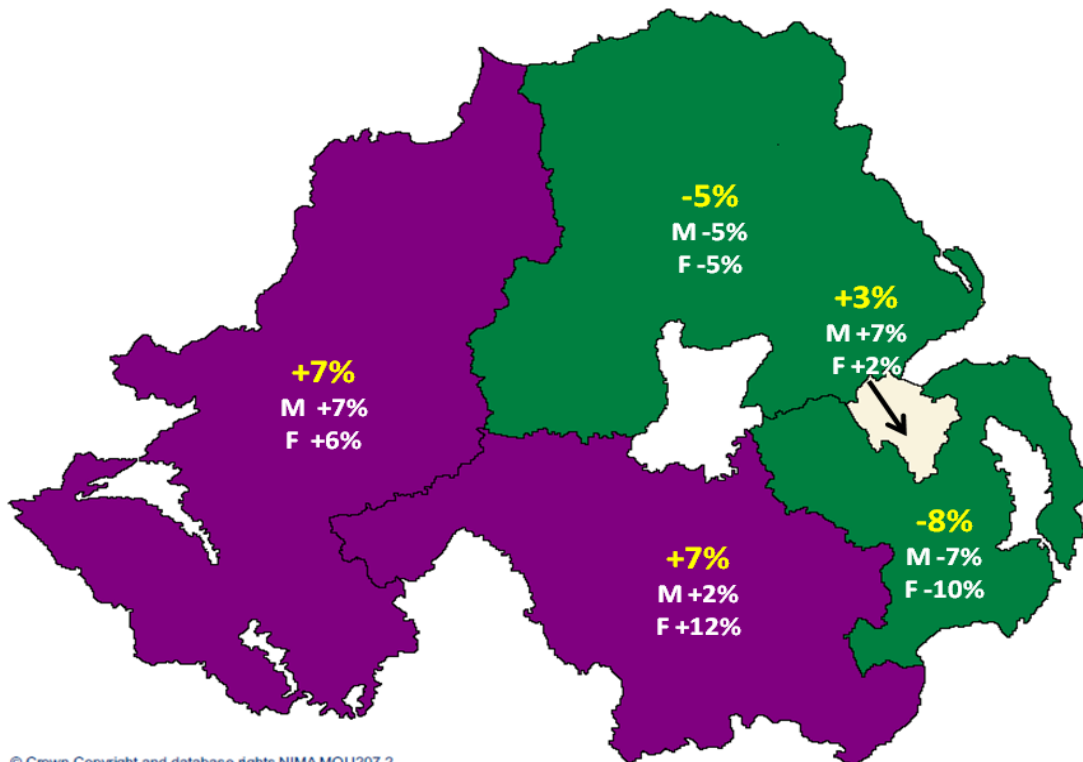
Figure 2: Incidence of colorectal cancer by age and sex: 2011-2015



### Incidence by Trust area

Colorectal cancer incidence rates in 2011-2015 were higher than the NI average among people living within the Southern and Western HSC Trust areas. Incidence rates were lower than the NI average in the Northern and South-Eastern Trust areas.

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



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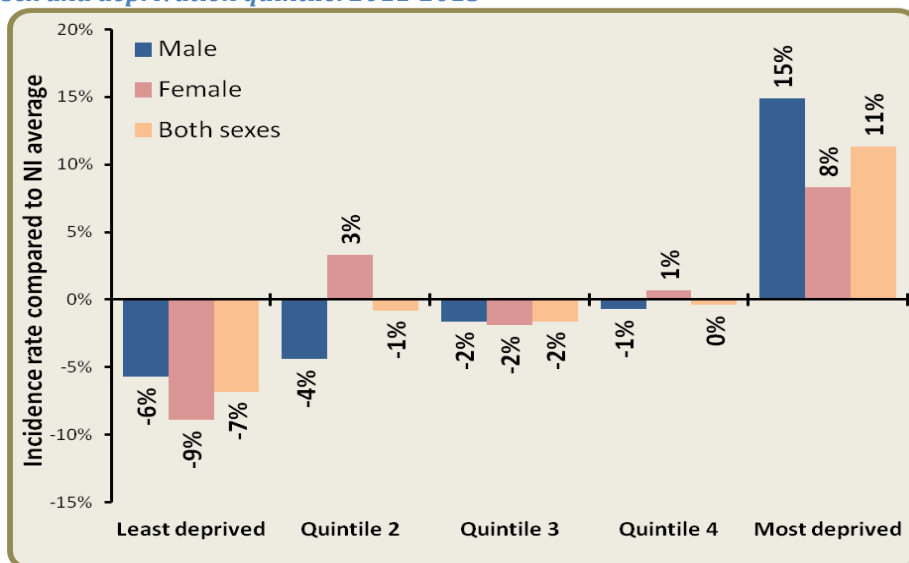
Significantly higher than average

Significantly lower than average

### Incidence by deprivation

Colorectal cancer incidence rates are associated with socio-economic deprivation with incidence rates increasing with levels of deprivation. This pattern is particularly marked for male colorectal cancer with incidence 15% higher in the most deprived communities when compared with the the NI average.

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

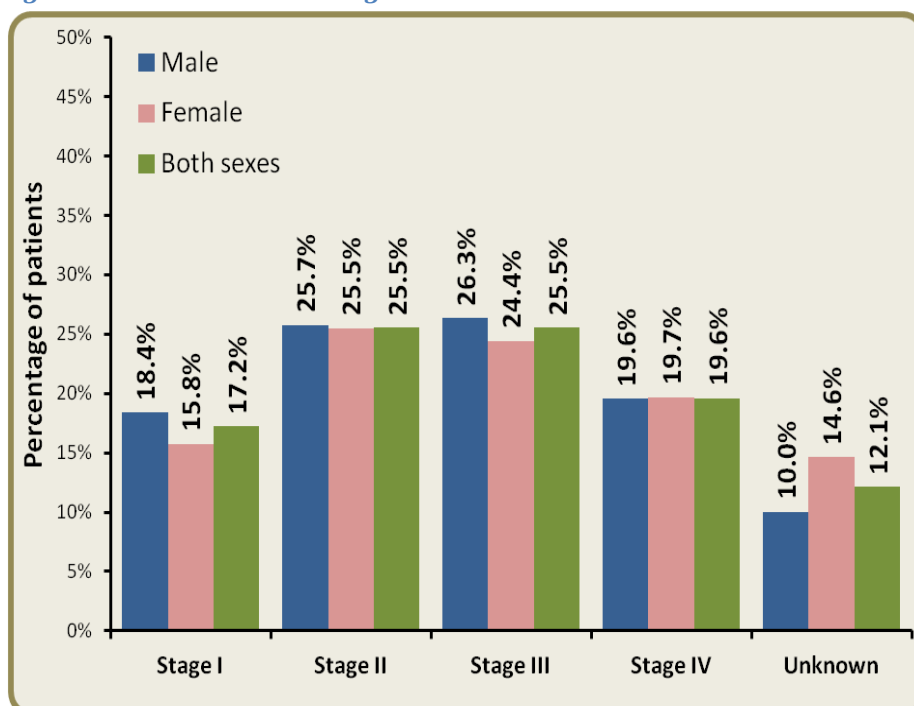


### Incidence by stage

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.

In 2011-2015 over four fifths (87.9%) of colorectal cancer patients in Northern Ireland were assigned a stage at diagnosis.

Figure 5: Colorectal cancer stage distribution: 2011-2015



A significant proportion of colorectal cancer patients were diagnosed at a later stages with 25.5% at stage III and 19.6% at stage IV, compared to 17.2% at stage I.

## SURVIVAL

The net survival was 77.0% at one year, and 56.3% at five years for colorectal cancer patients diagnosed in 2005 to 2009.

*Table 3: Five-year colorectal cancer net survival by survival time and sex: patients diagnosed 2005-2009*

Time since diagnosis	Diagnosed 2005-2009		
	Male	Female	Both sexes
6 months	84.5%	82.4%	83.6%
1 year	78.3%	75.3%	77.0%
5 years	55.5%	57.3%	56.3%

### Survival Trends

Five-year net survival for colorectal cancer has improved from the 1993-1999 diagnosis period to the 2005-2009 diagnosis period; increasing from 49.1% to 56.3%.

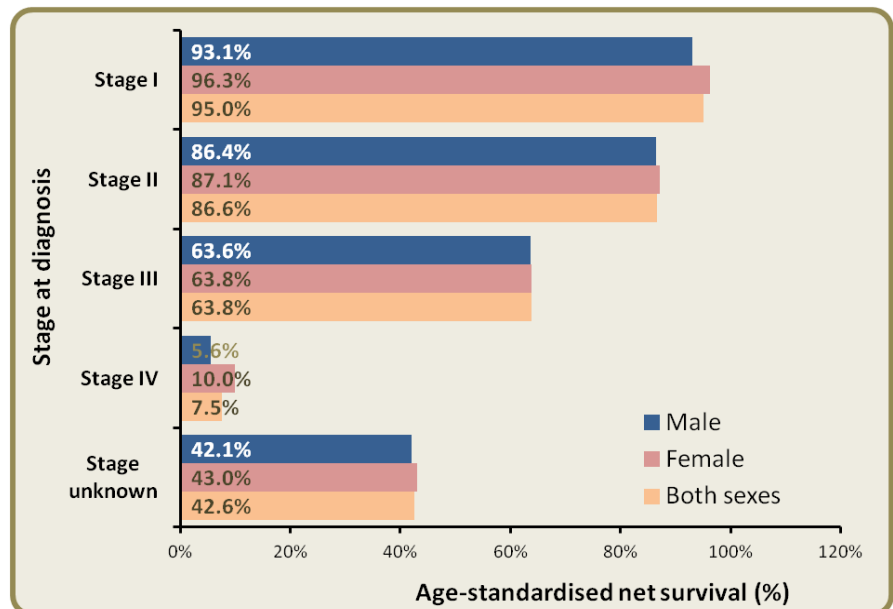
*Table 4: Five-year colorectal cancer net survival by period of diagnosis and sex*

Period of diagnosis	Male	Female	Both sexes
1993-1999	48.8%	49.6%	49.1%
2000-2004	50.0%	54.3%	52.0%
2005-2009	55.5%	57.3%	56.3%

*Figure 6: Five year survival from colorectal cancer by stage of diagnosis: patients diagnosed 2006-2010*

## Survival and stage

Stage at diagnosis is one of the most important factors in colorectal cancer survival with five year survival decreasing as stage increases. Five-year net survival ranged from 95.0% for early (stage I) disease to 7.5% for late (stage IV) disease highlighting the importance of early diagnosis.



## MORTALITY

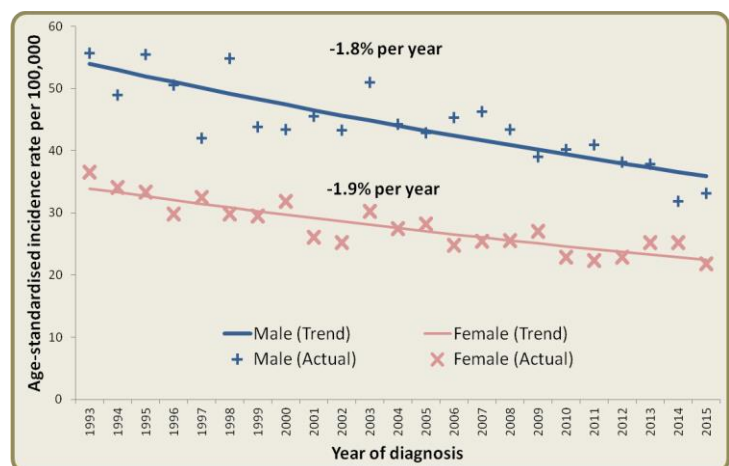
Mortality statistics are provided by the Northern Ireland General Registrar's Office. In 2011-2015 there were 223 male and 196 female deaths from colorectal cancer each year.

### Mortality trends

Over the last ten years the number of colorectal cancer deaths has decreased among men from 233 in 2006 to 214 in 2015 and have not changed among women from 185 in 2006 to 188 in 2015.

When adjusted for age and population change, colorectal cancer mortality rates decreased for males by -1.8% per year during 1993-2015, and decreased by -1.9% per year for females.

Figure 7: Trends in colorectal cancer mortality rates by sex: 1993-2015



## PREVALENCE

At the end of 2015 there were 8,161 people living in NI who had been diagnosed with colorectal cancer from 1993-2015 (Table 5). Of these, 54.2% were male, 63.9% were aged 70 and over and 11.3% had been diagnosed in the previous year.

*Table 5: Number of people living with colorectal 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	257	730	405	263	1,655
	70+	280	886	734	870	2,770
	All ages	537	1,616	1,139	1,133	4,425
Female	0-69	159	527	348	257	1,291
	70+	228	713	605	899	2,445
	All ages	387	1,240	953	1,156	3,736
Both sexes	0-69	416	1,257	753	520	2,946
	70+	508	1,599	1,339	1,769	5,215
	All ages	924	2,856	2,092	2,289	8,161

## 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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