COLORECTAL CANCER



Number of cases per year (2012-2016) ¹			Number of deaths per year (2012-2016)			
Male	Female	Both sexes	Male	Female	Both sexes	
671	528	1,200	222	205	427	
FIVE-YEAR SURVIVAL (2006-2010)						
Fr		VAL	24	-YEAR PREVALI (2016)	ENCE	
Fr Male		Both sexes	Male		ENCE Both sexes	

¹ 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

In 2012-2016 there were 671 male and 528 female patients diagnosed with colorectal cancer each year. The lifetime risk of developing a colorectal cancer was 1 in 21 for men and 1 in 33 for women.

Incidence trends

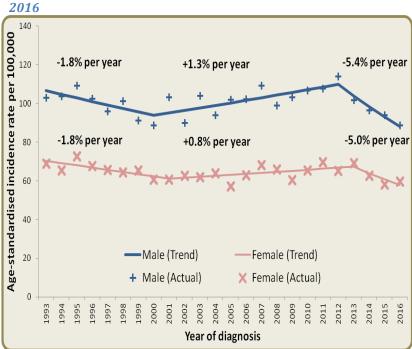
Table 1: Incidence of colorectal cancer by sex and year of diagnosis: 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Male	631	589	604	655	684	738	677	662	655	624
Female	512	503	466	511	551	528	574	528	496	516
Both sexes	1,143	1,092	1,070	1,166	1,235	1,266	1,251	1,190	1,151	1,140

Over a ten year period the numbers of colorectal cancer cases in men and in woman varied little. Among men the numbers decreased from 631 in 2007 to 624 in 2016. Among women there was an increase from 512 in 2007 to 516 in 2016.

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 significantly again until 2016. In females there was a significant decrease in rates from 1993 to 2001. After 2001 any increases or decreases in female rates were non-significant.

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



Incidence and age

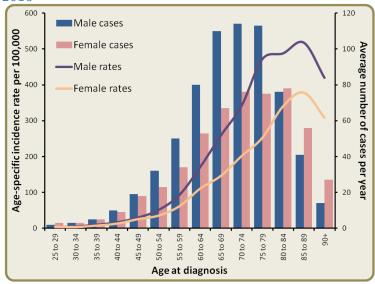
Colorectal cancer risk is strongly related to age with 70% of patients diagnosed over the age of 65 years. Incidence rates are highest among men and women aged 85-89.

Table 2: Average annual number of colorectal cancers diagnosed by sex and age: 2012-2016

Age	Male	Female	Total
0 to 49	42	41	83
50 to 64	162	110	272
65 to 74	224	143	367
75 and over	244	236	480
All ages	671	528	1,200

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

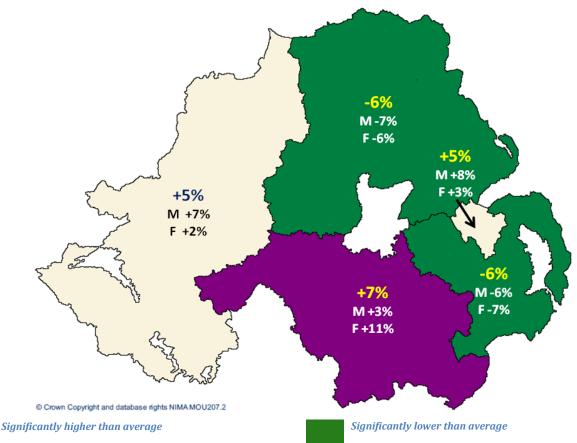
Figure 2: Incidence of colorectal cancer by age and sex: 2011-2016



Incidence by Trust area

Colorectal cancer incidence rates in 2012-2016 were higher than the NI average among people living within the Southern HSCT area. Incidence rates were lower than the NI average in the Northern and South-Eastern Trust areas.

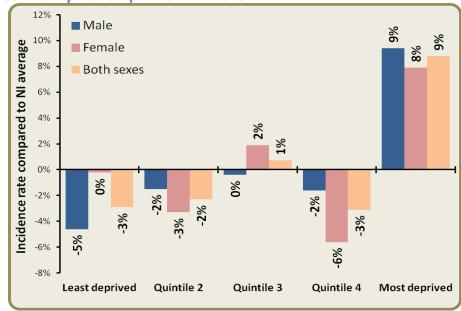
Figure 3: Colorectal cancer incidence rates compared to the NI average by sex and HSC Trust of residence: 2012-2016



Incidence by deprivation

cancer incidence Colorectal 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 9% higher in the most deprived communities than the NI average and 5% lower in the least deprived areas compared to NI as a whole.

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

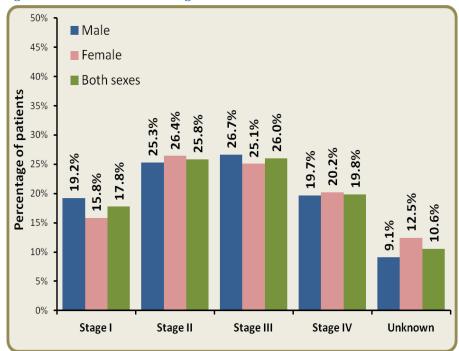


Incidence by stage

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 stage disease and of diagnosis is strongly associated with cancer survival.

In 2012-2016 almost nine out of ten (89.4%) of colorectal cancer patients in Northern Ireland were assigned a stage at diagnosis.

Figure 5: Colorectal cancer stage distribution: 2012-2016



significant proportion of

colorectal cancer patients were diagnosed at a later stage with 26.0% at stage III and 19.8% at stage IV, compared to 17.8% at stage I.

SURVIVAL

The net survival was 78.2% at one year, and 57.6% at five years for colorectal cancer patients diagnosed in 2006 to 2010.

Table 3: Five-year colorectal cancer survival by survival time and sex: patients diagnosed 2006-2010

Time since		Diagnosed 2006-2010	
diagnosis	Male	Female	Both sexes
6 months	85.2%	83.3%	84.4%
1 year	79.3%	76.7%	78.2%
5 years	56.9%	58.6%	57.6%

Survival Trends

Five-year survival for colorectal cancer has improved from the 1993-2000 diagnosis period to the 2006-2010 diagnosis period; increasing from 50.3% to 57.6%.

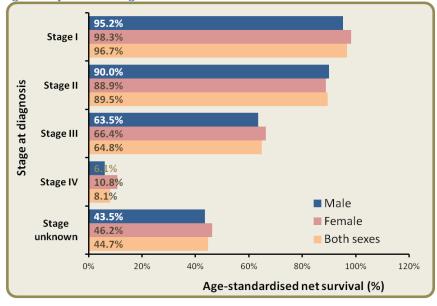
Table 4: Five-year colorectal cancer survival by period of diagnosis and sex

Period of diagnosis	Male	Female	Both sexes
1993-2000	49.6%	51.1%	50.3%
2001-2005	50.8%	54.1%	52.3%
2006-2010	56.9%	58.6%	57.6%

Survival and stage

Stage at diagnosis is one of the most important factors colorectal cancer survival with five year survival decreasing as stage increases. Five-year survival ranged from 96.7% for early (stage I) disease to 8.1% for late (stage IV) disease highlighting importance of early diagnosis.

Figure 6: Five year survival from colorectal cancer by stage of diagnosis: patients diagnosed 2007-2011



MORTALITY

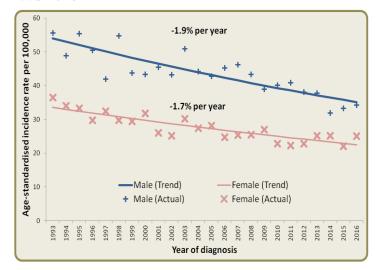
Mortality statistics are provided by the Northern Ireland General Registrar's Office. In 2012-2016 there were 222 male and 205 female deaths from colorectal cancer each year.

Mortality trends

Over the last ten years the number of colorectal cancer deaths has decreased among men from 254 in 2007 to 225 in 2016 and have increased among women from 192 in 2007 to 221 in 2016.

When adjusted for age and population change, colorectal cancer mortality rates decreased for males by -1.9% per year during 1993-2016, and decreased by -1.7% per year for females.

Figure 7: Trends in colorectal cancer mortality rates by sex: 1993-2016



Prevalence

At the end of 2016 there were 8,417 people living in NI who had been diagnosed with colorectal cancer from 1993-2016 (Table 5). Of these, 54.3% were male, 63.3% were aged 70 and over and 11.0% had been diagnosed in the previous year.

Table 5: Number of people living with colorectal cancer at the end of 2016 who were diagnosed from 1993-2016 by time since diaanosis

Sex			Time since	24-year		
	Age	0-1 year	1-5 years	5-10 years	10-24 years	Prevalence
Male	0-69	247	729	446	267	1,689
	70+	277	910	763	930	2,880
	All ages	524	1,639	1,209	1,197	4,569
Female	0-69	179	494	380	275	1,328
	70+	221	704	663	932	2,520
	All ages	400	1,198	1,043	1,207	3,848
Both sexes	0-69	426	1,223	826	542	3,017
	70+	498	1,614	1,426	1,862	5,400
	All ages	924	2,837	2,252	2,404	8,417

FURTHER INFORMATION

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

ACKNOWLEDGEMENTS

NICR is funded by the Public Health Agency and is hosted by Queen's University, Belfast. This work uses data provided by patients and collected by the NHS as part of their care and support.





NI Cancer Registry

Phone: +44 (0)28 9097 6028 e-mail: nicr@qub.ac.uk

