

5. All Cancers

ICD-9 140 - 208

KEY FACTS

- On average over 8,500 cancers were registered per year, (6,288 excluding non-melanoma skin cancers).
- Males had higher overall rates than females.
- Belfast, Newry & Mourne and Derry had higher than expected numbers of cancers in males.
- Limavady and Derry had higher than expected numbers in females.
- One in three chance of developing cancer by the age of 75.

On average, over the period 1993-95, around 8,500 cancers per year were registered by the Registry. Figures 3 and 4 indicate the most commonly diagnosed cancers in males and females. Lung, prostate and colorectal cancers were the most common cancers in males, while for females breast, colon and lung cancers were the most common after non-melanoma skin cancers.

Most Common Cancers in Northern Ireland

Figure 3 - Most Common Male Cancers

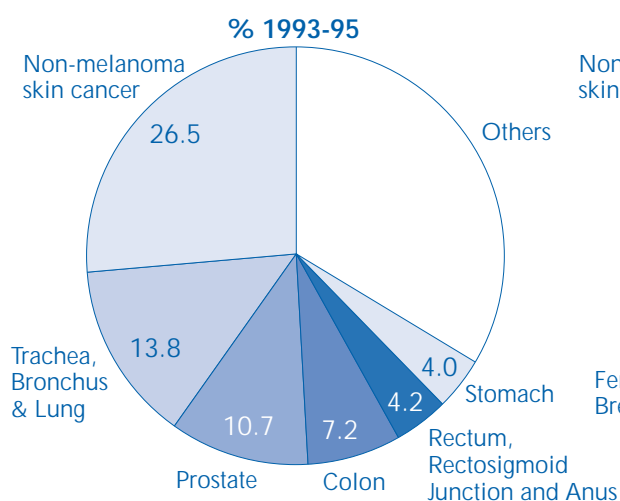
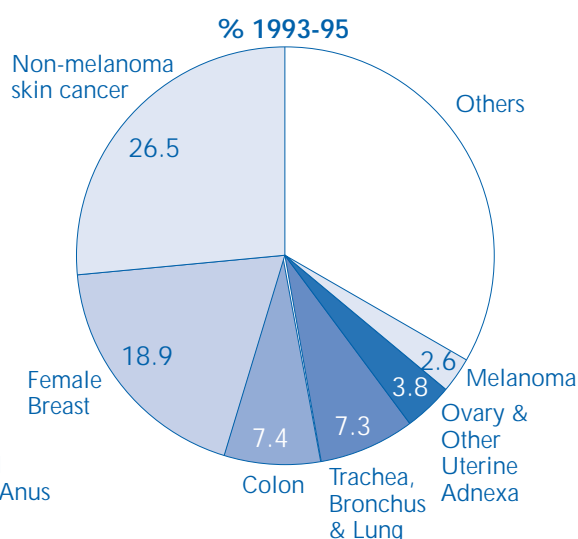


Figure 4 - Most Common Female Cancers



Non-melanoma skin cancers (NMS) accounted for over a quarter of all cancers diagnosed (2,260 cases per year). These cancers are readily treatable and rarely cause death (average deaths: 10 per year). Many cancer registries do not collect data on NMS and it is reasonable therefore, for purposes of analysis, to consider all cancers excluding NMS. This permits the burden of more serious cancers to be assessed more meaningfully.

Excluding NMS there were 6,288 cancers diagnosed annually over the period. Over half of these (51%) were diagnosed in females. However, the rates of cancer, adjusting for the effects of differentials in age distribution, are lower in females. Males also suffer from higher mortality rates than females - males have a 1 in 6 chance of dying from cancer, females a 1 in 8 chance before the age of 75. Irrespective of gender, there is about a 1 in 4 chance of developing some form of cancer (excluding NMS) before age 75. This increases to about 1 in 3 if NMS is included in the calculation.

Table 5 Summary Statistics

Year	Males			Females		
	1993	1994	1995	1993	1994	1995
INCIDENCE						
Incident Cases	3143	3090	2953	3223	3132	3162
Crude Rate (per 100,000)	395.00	385.90	367.85	387.38	374.43	375.95
Cumulative Risk (0-74) (%)	29.22	28.85	26.78	24.34	23.75	24.50
WASR (per 100,000)	299.90	292.92	276.31	253.56	246.18	247.04
EASR (per 100,000)	444.09	432.87	410.70	353.41	343.68	346.34
% of All Cancers	74.96	72.44	72.96	73.26	73.11	73.90
DATA QUALITY						
Mortality : Incidence Ratio	0.60	0.60	0.62	0.54	0.56	0.52
% Death Certificate Only	4.51	2.13	2.53	4.64	2.73	3.03
% Microscopically Verified	77.28	79.02	76.94	79.75	79.78	80.61
MORTALITY						
Number of Deaths	1884	1858	1846	1744	1757	1650
Crude Rate (per 100,000)	236.10	230.49	229.32	207.88	208.94	194.32
Cumulative Risk (0-74) (%)	17.80	20.07	17.20	13.02	12.44	11.94
WASR (per 100,000)	173.63	180.27	169.87	120.84	118.27	110.95
EASR (per 100,000)	266.94	256.96	254.89	177.52	174.94	164.20
% of All Cancer Deaths	99.84	99.46	99.84	99.59	99.94	99.76
WASR = Rates standardised for age to the World standard population						
EASR = Rates standardised for age to the European standard population						

Age Profile

Including skin cancers the age profile for the diagnosis of cancer is almost the same in males and females. Excluding NMS, cancers are more common in younger females than males. Conversely, male cancers occurred predominantly in old age — over two thirds in those aged over 65 - see Table 6 and Figure 5.

Table 6

Average numbers of new cancers and % of total (excluding Non-Melanoma Skin Cancer) 1993-95 by age and sex.

Age	Males	% Males	Females	% Females
0-44	230	8	345	11
45-64	826	27	1047	33
65+	2006	65	1780	56
Totals	3062	100	3172	100

Sex specific cancers were largely responsible for this differing pattern in age distribution between the sexes. Age specific rates (Figure 6) were highest in the oldest age group (85+ years). Female rates were higher in the 20-60 year age group again reflecting the influence of sex specific cancers (especially breast and cervix). The median age at diagnosis was 69 years for males, 67 for females.

Figure 5 Age Distribution of New Cases 1993-95, All Cancers (excluding NMS)

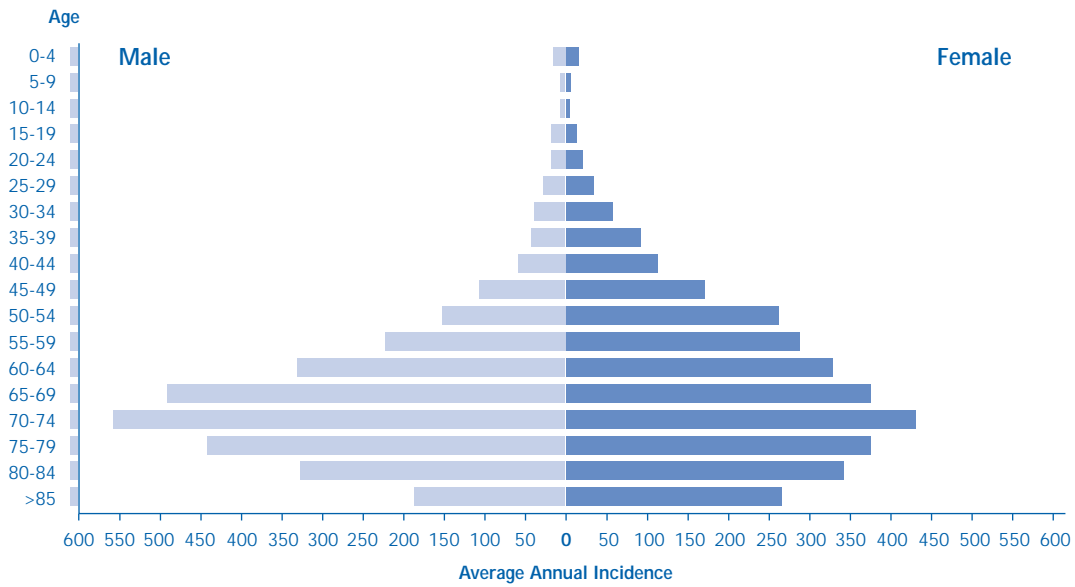
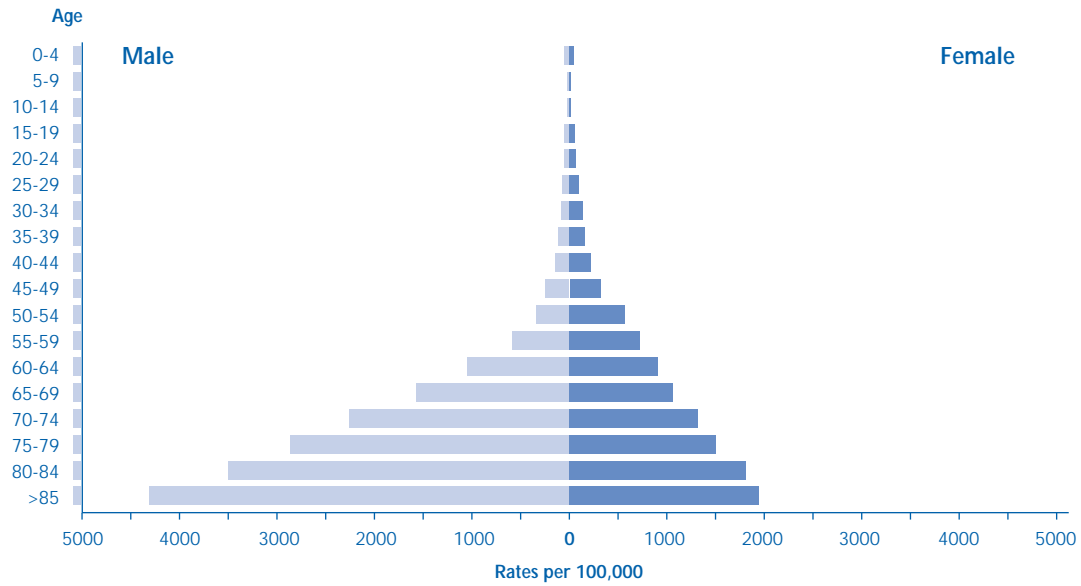


Figure 6 Average Annual Age Specific Rates (per 100,000) 1993-95, All Cancers (excluding NMS)



Geographical Distribution

Variation across Health Boards/District Councils in the observed number of cases due to differences in the age structure of the underlying population has been accounted for by using Standardised Incidence Ratios (SIRs) - see Appendix ii. Values above or below 100 indicate an excess/deficit respectively over what would be expected if that area experienced the same level of incidence as Northern Ireland as a whole.

Analysis at Board level did not reveal any Board with higher or lower than expected numbers of cases.

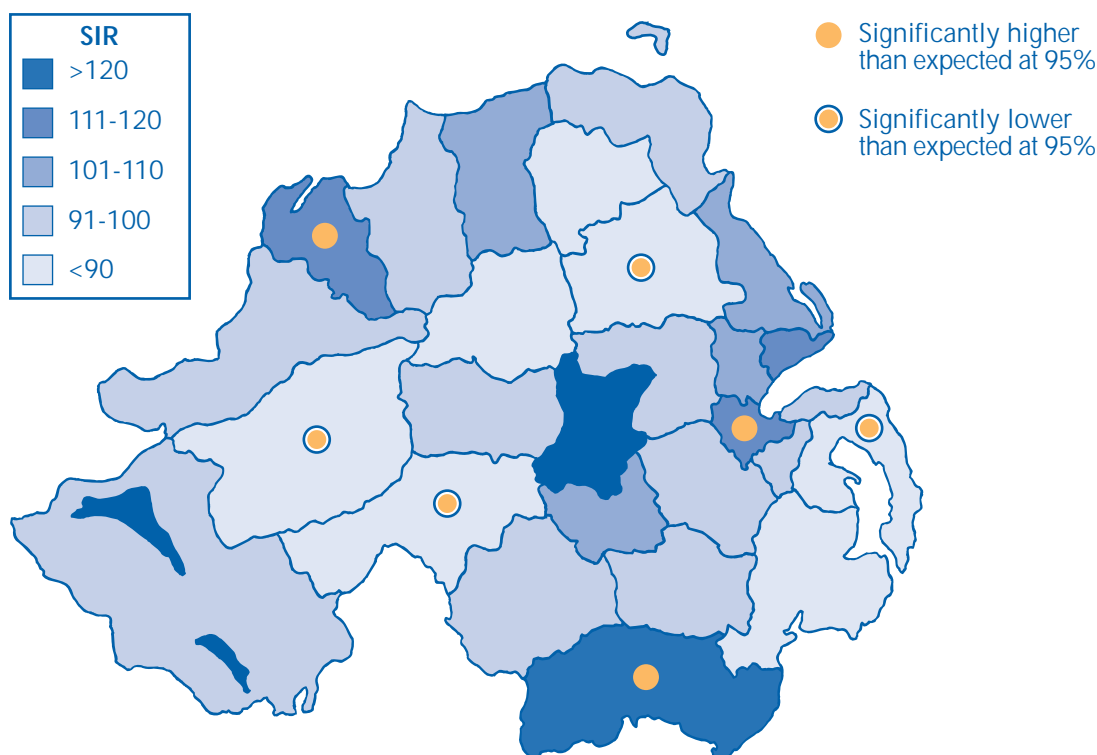
In males, higher than expected numbers for all cancers were registered for the District Council areas of Belfast, Newry & Mourne and Derry - see Map 1.

In females, higher than expected numbers of cancer were registered in the District Council areas of Limavady, Moyle and Derry - see Map 2.

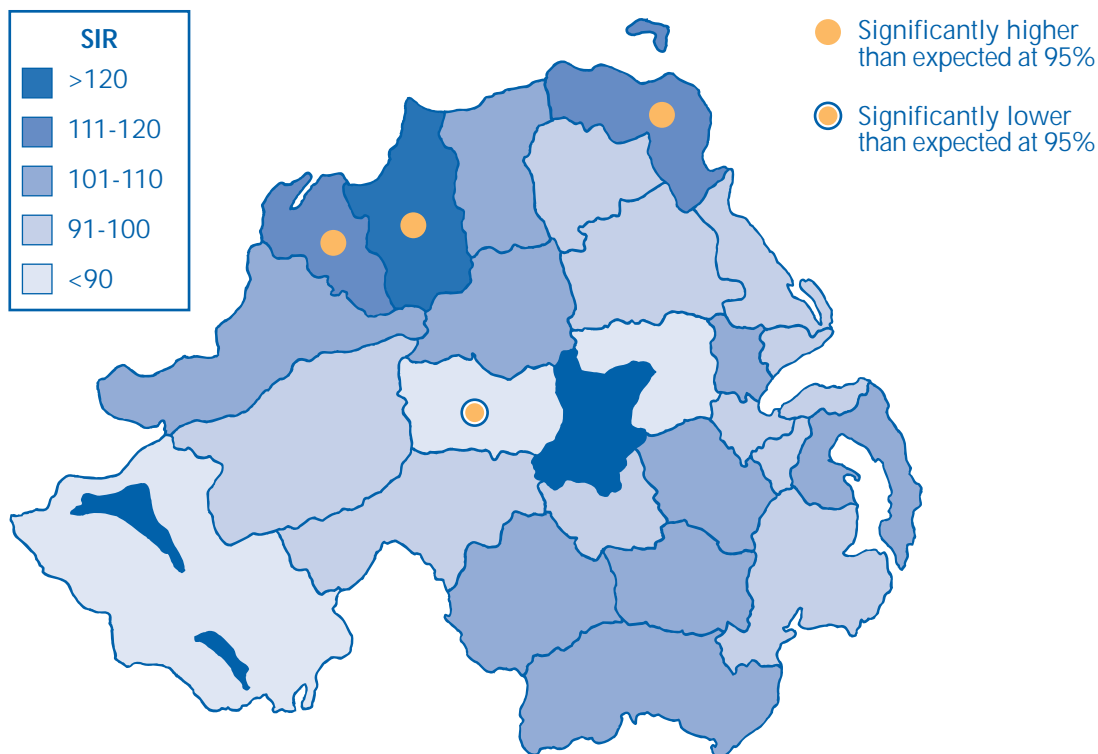
In males, lower than expected numbers for various age categories were noted in the District Council areas of Ards, Ballymena, Ballymoney (<75 years only), Cookstown (<65, <75 years), Armagh (<65 years), Banbridge (<75 years only), Dungannon and Omagh. The pattern of deaths reflect the incidence rates (ref: 1).

In females, lower than expected numbers for various age categories were noted in the District Council areas of Cookstown and Fermanagh (<75 years only).

Map 1. All Age Male Standardised Incidence Ratios (SIRs) by District Council 1993-95, All Cancers (excluding non-melanoma skin cancers)



Map 2. All Age Female Standardised Incidence Ratios (SIRs) by District Council 1993-95, All Cancers (excluding non-melanoma skin cancers)



Data Quality

For all cancers, the percentage of cases notified by Death Certificate Only (DCO) was approximately 2%. About 82% of cases had a pathological diagnosis. Comparable figures for England were 10.9% and 69% and, top of the range, 1.1% and 94% for Switzerland.

Comparison with other Countries

Table 7 Comparative Numbers and Rates for Britain and Ireland 1995 All Cancers (excluding NMS)

Country	Males		Females	
	Cases	EASR (per 100,000)	Cases	EASR (per 100,000)
Scotland	11878	455.60	12553	369.50
England & Wales	102800	363.30	104300	302.40
Republic of Ireland	6193	399.96	6705	377.06
Northern Ireland	2953	410.70	3162	346.34

In Northern Ireland the rates for all cancers (excluding NMS) were lower than Scotland but higher than England & Wales for both males and females. Northern Ireland rates were lower in females but higher in males than the Republic of Ireland.

Comment

The distribution of cases by District Council (higher in Belfast and Derry) in males is similar to that for lung cancer reflecting the impact of tobacco use in inner city areas, though other factors such as deprivation may be important.

The high rate in Limavady amongst females is mainly due to the higher than expected numbers of breast cancers registered for this area. Although statistically significant, there is no immediately plausible explanation for this observation. The Registry will continue monitoring geographical variation in incidence to assess if apparent differences are real or artefactual.

Non-melanoma skin cancers (NMS), although excluded in this analysis, account for over a quarter of all cancers diagnosed. A substantial amount of health service resources are used in its diagnosis and treatment. Although it causes, on average, only 10 deaths per year it causes pain and disfigurement. Skin cancers are largely preventable by preventing unnecessary exposure to UV light and taking care in the sun. Early diagnosis of suspicious skin lesions will improve outcomes.

Health Gain

Reducing tobacco use in Northern Ireland would significantly reduce the total burden of cancer, especially cancers with a poor prognosis such as lung, oesophagus and stomach.