

Both ICD-O-2 and ICD-10 describe four major sites: colon, rectosigmoid, rectum and anus. As all of these sites are contiguous, discrimination between borderline sites is sometimes difficult. This is particularly true for cancers of the sigmoid, rectosigmoid and rectum. As cancers at all of these sites are aetiologically and morphologically similar, it is useful to present colorectal cancers as a single entity, as well as under the separate site headings (Chapters 8 and 9).

Data are presented in this chapter on all large bowel sites combined. More detailed information on colon and anorectal cancer is given separately in the subsequent chapters.

## 7.1. INTRODUCTION AND SUMMARY

Colorectal cancer was the commonest non-skin cancer diagnosed in Ireland (Table 7.1). It makes up about 10% of all new cancers diagnosed, and is commoner in men than in women. Roughly one in every twenty men and one in thirty women will develop this cancer before age 75, and half will die of it. There is at present no overall time trend in colorectal cancer incidence.

**Table 7.1. Summary of incidence and mortality statistics: colorectal cancer**

	INCIDENT CASES			DEATHS		
	males	females	both sexes	males	females	both sexes
<b>All cancers (invasive, in situ and uncertain) (ICD-O-2 C18 to C21)</b>						
1997 cases	1069	839	1908	529	443	972
% of all cancers	10.1%	7.7%	8.9%	13.2%	12.5%	12.9%
<i>Incidence and mortality rates (per 100,000 persons per year)</i>						
crude rate	59.1	45.7	52.3	29.2	24.1	26.7
World age-standardised rate	45.6	29.9		21.7	14.0	
European age-standardised rate	68.1	43.8		33.7	21.4	
cumulative risk (0-74)	5.3%	3.4%		2.5%	1.6%	
mortality/incidence ratio	0.495	0.528	0.509			
<b>Time trends (all cancers)</b>						
1994 cases	1034	826	1860	509	415	924
1995 cases	989	793	1782	550	425	975
1996 cases	1042	750	1792	493	403	896
1997 cases	1069	839	1908	527	443	970
1994-1997 average	1034	802	1836	520	422	941
annual % change 1994-97	+1.4%	-1.1%	-1.4%	-1.0%	+0.2%	-0.5%
95% confidence limits of trend	(-1.1%; 4.1%)	(-6.9%; 5.1%)	(-2.9%; 0.1%)	(-5.2%; 3.4%)	(-5.9%; 6.8%)	(-5.0%; 4.2%)
<b>Invasive cancers only (ICD-10 C18 to C21)</b>						
1997 cases	1009	775	1784	527	443	970
% of all invasive cancers	10.3%	4.2%	9.6%	13.3%	12.7%	13.0%
<i>Incidence and mortality rates (per 100,000 persons per year)</i>						
crude rate	55.8	42.2	48.9	29.1	24.1	26.6
World age-standardised rate	43.0	27.2		21.6	14.0	
European age-standardised rate	64.4	40.6		33.6	21.4	
cumulative risk (0-74)	5.0%	3.1%		2.5%	1.6%	
mortality/incidence ratio	0.522	0.572	0.544			

## 7.2. AGE AND SEX PROFILE

*Table 7.2. Annual average number of cases, age-specific incidence rate and relative age-specific rate for colorectal cancers, 1994 to 1997*

	MALES			FEMALES		
	cases	cases per 100,000	relative rate	cases	cases per 100,000	relative rate
0-4	0	0	0.0	0	0	0.0
5-9	0	0	0.0	0	0	0.2
10-14	1	1	0.6	3	2	1.8
15-19	1	1	0.3	7	4	2.1
20-24	1	1	0.2	4	3	0.4
25-29	2	2	0.3	3	2	0.1
30-34	4	3	0.4	7	5	0.3
35-39	9	7	0.7	8	6	0.3
40-44	17	14	0.8	19	16	0.5
45-49	39	35	1.2	30	27	0.7
50-54	58	62	1.0	40	44	0.7
55-59	89	115	1.1	66	88	1.1
60-64	133	194	1.1	73	105	1.0
65-69	181	299	1.2	109	163	1.2
70-74	184	368	1.0	132	212	1.2
75-79	164	464	1.0	131	267	1.3
80-84	99	475	0.9	105	307	1.3
>85	52	502	0.8	66	278	1.1
<b>all ages</b>	<b>1034</b>	<b>58</b>	<b>1.0</b>	<b>802</b>	<b>44</b>	<b>1.0</b>

Colorectal cancers were most frequently found in patients aged 70-74. The highest rate relative to all cancers was found in men aged 45 to 49 and, apart from a small number of cases in the 10 to 19 year age group, in women aged 75 to 79 (Table 7.2). The cancers in the younger age group are predominantly carcinoids of the appendix.

### 7.3. GEOGRAPHICAL VARIATION

#### **INTERNATIONAL**

Colorectal cancer was more frequent for men than women in all countries shown (Table 7.3). Male incidence in Ireland was fourth highest, while female incidence was ninth highest. The incidence in Northern Ireland was one of the highest in Europe for both males and females; incidence in Scotland was also higher than that in Ireland, while that in England was much lower.

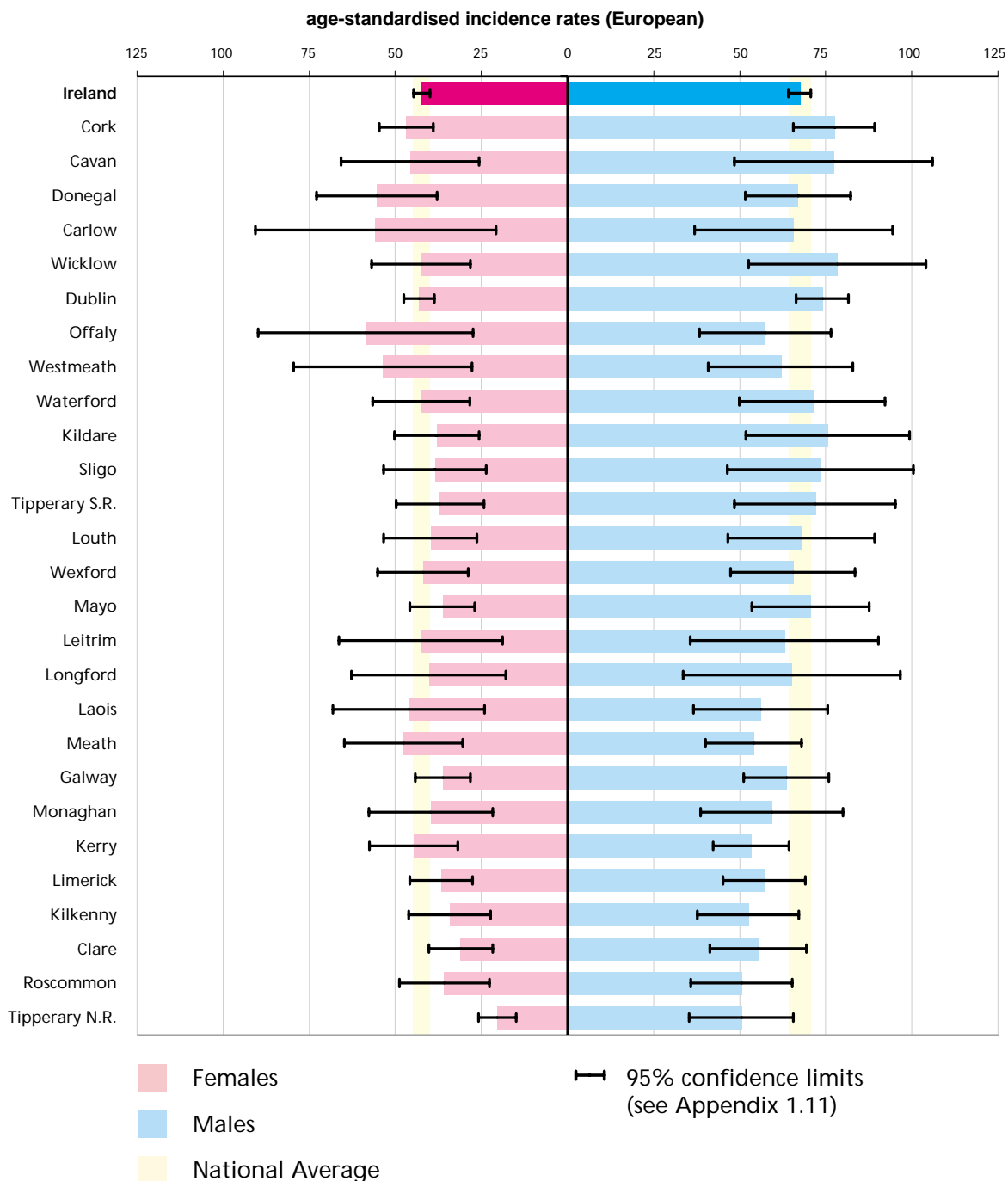
**Table 7.3. Age-adjusted annual incidence rate (European standard population) and rank of rates by country, 1995: colorectal cancer (invasive cases only)**

	MALES		FEMALES	
	age-standardised rate	rank	age-standardised rate	rank
Czech Republic	81	1	45	3
N. Ireland	66	3	48	2
Norway	62	8	51	1
Italy	67	2	41	8
Scotland	62	7	43	5
<b>Ireland (1994-1997)</b>	<b>64</b>	<b>4</b>	<b>40</b>	<b>9</b>
Austria	63	6	40	11
Netherlands	57	12	43	6
Slovakia	64	5	35	16
Spain	62	9	38	14
Germany	58	11	41	7
Denmark	54	13	44	4
France	60	10	37	15
Switzerland	52	14	38	12
Slovenia	51	15	31	18
Iceland	42	19	40	10
Sweden	45	17	34	17
Malta	38	21	38	13
Estonia	47	16	29	20
England	44	18	30	19
Finland	40	20	28	21
Bulgaria	34	22	23	22
Poland	33	23	22	23

**NATIONAL**

Incidence rates for males varied from 115% of expected in Cork to 75% in Tipperary North Riding (Figure 7.1). Rates for females varied from 139% of expected in Offaly to 48% of expected in Tipperary North. Only the low rate for women in Tipperary was statistically significant.

**Figure 7.1. Age-adjusted (European population) rates and 95% confidence limits by county, 1994 to 1997: colorectal cancer**



7.4. BASIS OF DIAGNOSIS AND HISTOLOGICAL TYPE

7.5. TREATMENT

7.6. STAGE

7.7. SURVIVAL

These are reported for colon and rectal cancers separately.