



# Cancer Incidence in Northern Ireland 1993-95

## A Summary

### LOCAL FACTS

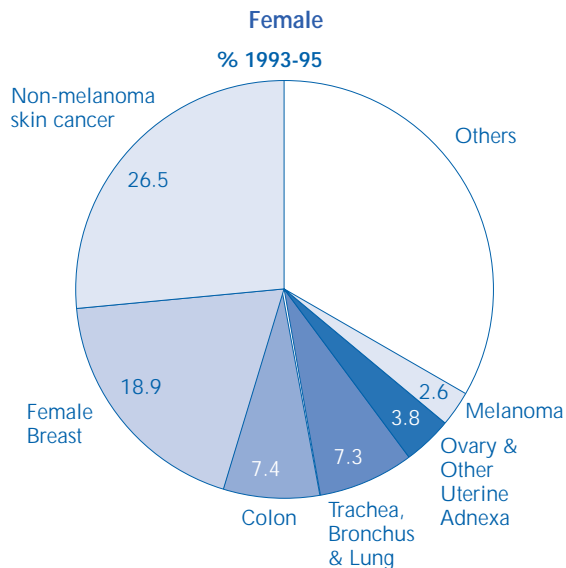
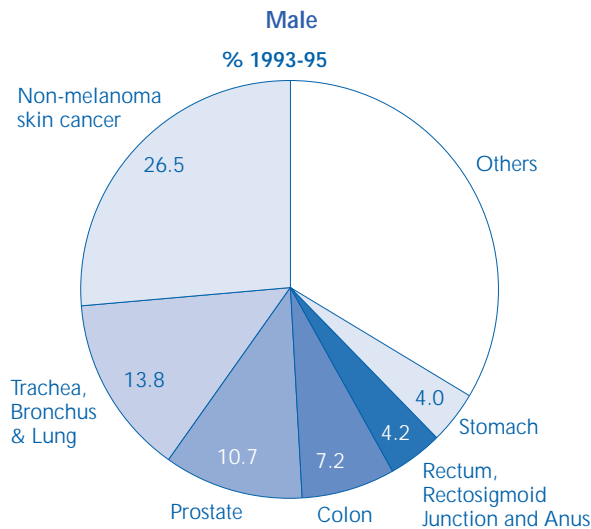
- Males have lower numbers but higher rates of cancer than females.
- Either sex have a 1 in 3 chance of developing some form of cancer, 1 in 4 if the less serious non-melanoma skin cancers are excluded.
- About 1 in 9 cancers are diagnosed before age 45 in females, 1 in 12 for males.
- Half of cancers in males occur in those aged over 69 years, 67 years in females.
- 6% of people have more than one cancer diagnosed in their lifetime.
- Cancer increases with age - most occur in those over 65 years of age.
- Males have a 1 in 6 chance of dying from cancer before age 75.
- Females have a 1 in 8 chance of dying from cancer before age 75.

Northern Ireland	Male	Female	Total
Cancer Cases Annual Average 1993-95	4,176	4,337	8,513
Cancer Deaths Annual Average 1993-95	1,863	1,717	3,580
Population (1995)	805,222	843,738	1,648,960

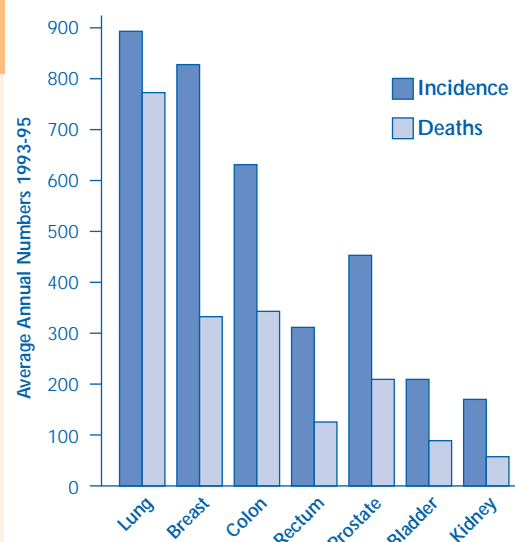
### Age of New Cases

Age	Males	% Males	Females	% Females
0-44	230	8	345	11
45-64	826	27	1047	33
65+	2005	65	1780	56
Totals	3061	100	3172	100

### COMMON CANCERS



Site	Annual Average No. of New Cases 1993-95	% Incidence 1993-95	Annual Average No. Of Deaths 1993-95	% Deaths 1993-95
All Sites	8513	100	3580	100
All Sites Exc NMS	6234	73	3570	99.7
Skin	2278	27	10	0.3
Trachea, Bronchus & Lung	895	11	783	22
Breast (Female & Male)	828	10	335	9
Colon	624	7	343	10
Prostate	450	5	203	5
Rectum	309	4	113	3
Stomach	260	3	189	5
Oesophagus	170	2	130	3
Melanoma	162	2	29	1
Ovary	164	2	94	3
Bladder	203	2	94	2
Kidney & Other Urinary	174	2	67	2
Lip & Mouth	112	1	27	1
Body of Uterus	102	1	11	0.3
Pharynx	48	0.5	20	1
Cervix Uteri	78	1	30	1
Testis	47	0.5	4	0.1



# How do we compare?

## Britain & Ireland 1995 Area with Highest Standardised Rate



Comparisons of Northern Ireland figures with England & Wales, Scotland and Republic of Ireland using European Age Standardised Rates (1995)

		Lower			Higher
All Cancers	Male	E&W	ROI	NI	S
All Cancers	Female	E&W	NI	S	ROI
Lip & Mouth	Male & Female	E&W	NI		S
Pharynx	Female	E&W	S		NI
Pharynx	Male	E&W	NI		S
Oesophagus	Male	ROI	E&W		NI / S
Oesophagus	Female	E&W	NI	ROI	S
Stomach	Male	E&W	ROI	NI	S
Stomach	Female	E&W	NI	ROI	S
Colon	Male	E&W	S / ROI		NI
Colon	Female	E&W	ROI	S	NI
Rectum	Male	E&W	ROI	S	NI
Rectum	Female	E&W	ROI	S	NI
Lung	Male	ROI	NI	E&W	S
Lung	Female	ROI	E&W	NI	S
M. Melanoma	Male & Female	E&W	NI	S	ROI
Breast	Female	ROI	E&W	NI	S
Cervix	Female	ROI	NI	E&W	S
Ovary	Female	S	E&W	NI	ROI
Prostate	Male	E&W	NI	S	ROI
Testis	Male	E&W	ROI	NI	S
Bladder	Male	NI	ROI	E&W	S
Bladder	Female	ROI	NI	E&W	S
Kidney	Male	ROI	E&W	S	NI
Kidney	Female	ROI/E&W		S	NI

E&W = England & Wales      NI = Northern Ireland  
ROI = Republic of Ireland      S = Scotland

Note: ROI do not include Death Certificate Only registrations for lung cancer so their figures may be artificially low, however they include *in situ* cases for breast cancer and malignant melanoma. This may account for the higher levels of malignant melanoma registered in the Republic of Ireland.

**Northern Ireland has the highest rate in the British Isles for cancers of the colon, rectum and kidney in both males and females.**

## Gender and Cancer

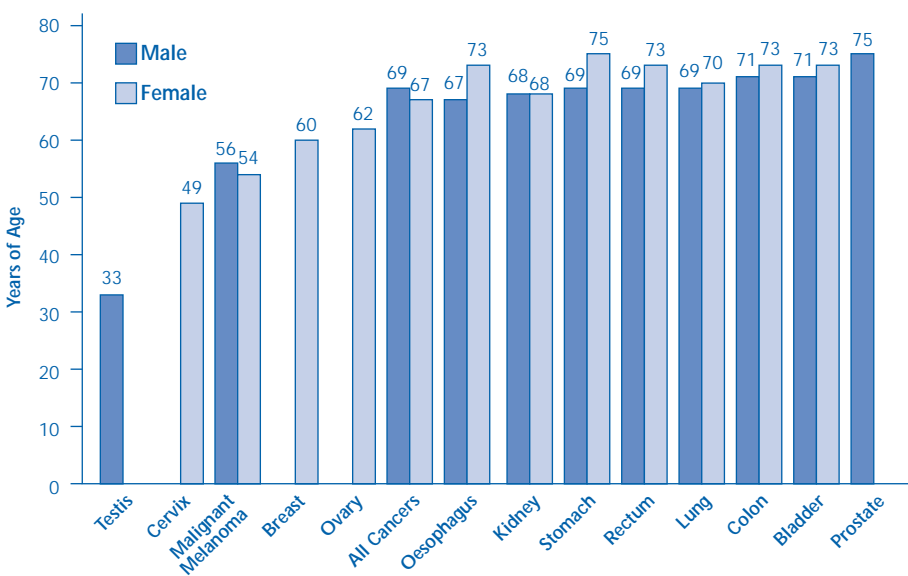
### Proportions of Selected Cancers by Sex

	Male	Female
All Cancers	49%	51%
Oesophagus	65%	35%
Stomach	63%	37%
Colon	52%	48%
Rectum	57%	43%
Lung	65%	35%
Malignant Melanoma	36%	64%
Breast	1%	99%
Bladder	68%	32%
Childhood	54%	46%

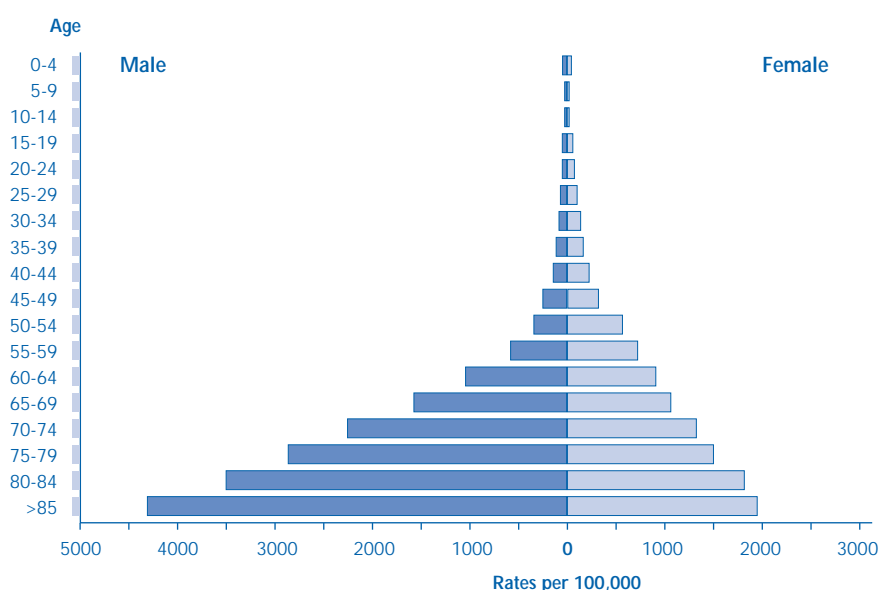
## Age and Cancer

While cancers generally occur in older people, cancers of the testis, cervix and malignant melanoma have a younger age of occurrence than other cancers. Cancer of the prostate occurs mainly in very old men. The rates of cancer rise steadily with age peaking in very old age. Male rates increase more rapidly than female rates.

### Median Age at Diagnosis (Half of the cases diagnosed were above and below the age indicated)



### Average Annual Age Specific Rates (per 100,000) 1993-95, All Cancers excluding non-melanoma skin cancers



## How To Get Further Information

- General data is freely available in aggregated format unnamed with basic epidemiological analysis in the Incidence Report 1993-95 or online at: <http://qis.qub.ac.uk/nicr/intro.htm>. *Ad hoc* data requests can be dealt with by contacting the Registry directly.
- Named Data  
Access to named data is restricted to maintain confidentiality. Researchers must comply with the Registry's guidelines on confidentiality and issue of data which is available from the Registry on request. Researchers requiring named data will normally be required to provide evidence of ethical approval for their study. Preparation of named data for research may incur a cost.  
Doctors, GPs and consultants however, may have access to named data on patients they have treated at no cost.
- Investigation of Alleged Cancer Clusters:  
Vigilant individuals will often be concerned that a population has a higher rate of disease than they would expect. Part of this suspicion may reflect the increasing frequency with which cancer is diagnosed in our population.  
This increase has several causes:
  - Firstly, an ageing population, as we live longer we are more likely to develop diseases of old age, including cancer.
  - Secondly, competing causes of deaths such as infection has largely been controlled.
  - Thirdly, technological advances have improved the accuracy of diagnosis and so we are better at diagnosing cancer when it occurs.
  - Fourthly, lifestyle changes including the use of tobacco, a high fat/low fibre diet combined with increased alcohol consumption and reduced levels of exercise have increased our risk of developing cancer.

The Cancer Registry will follow procedures for cluster investigation as outlined by the Ontario Cancer Treatment and Research Foundation. (Ref: King WD, Darlington G A, Kreiger N. Response of a Cancer Registry to Reports of Disease Clusters, Br J Cancer 1993; Vol. 29: No. 10, 1418 - 25). Such analyses are likely to incur a cost.

The steps are as follows.

- Assessing the Inquiry
  - There must be sufficient numbers of cases, (minimum of 5 per unit of analysis and of the same type or body system)
  - A plausible biological association must exist with a suspected exposure.

In many reported clusters it will be impossible to proceed past this stage due to low numbers etc.

- Verification of Cases

If it is possible to proceed, the Registry will verify the quality of data, prior to analysis. This reduces reporting bias.

- Analysis

Analysis using special statistical methods designed for the study of spatial, temporal and/or space-time disease clustering will be undertaken in conjunction with the Small Area Health Statistics Unit (SAHSU) in London.

Recommendations based on the steps above may be:

- no further action
- future surveillance or
- a detailed study, depending on the satisfaction of criteria on statistical significance, biological plausibility and documentation of exposure.

## RECOMMENDATIONS FROM FIRST INCIDENCE REPORT

Experience gleaned from data acquisition and analysis 1993-95 suggest that a number of practical measures should be implemented in order to reduce the burden of cancer and enhance cancer registration in Northern Ireland. The following recommendations should be considered by the relevant authorities.

- Tobacco use, which is responsible for the majority of preventable cancers must be addressed in line with the Government White Paper on tobacco control.
- The rising levels of oesophageal cancer in young males requires further investigation and initiatives to reduce alcohol consumption.
- Further research into the aetiology of colon and rectal cancers and the role of diet in Northern Ireland should be conducted.
  
- The recording of stage at diagnosis for all tumours be enhanced.
- A Unique Patient Client Identifier should be introduced as soon as possible to improve identification of individuals and avoid duplication.
- Females with suspected breast cancer should have their disease stage, including lymph node status, assessed at diagnosis.
- Pathologically diagnosed CIN III (severe dysplasia) tumours should be consistently coded as SNOMED code M80772.
- A clear distinction should be made between invasive and non-invasive bladder tumours.
- Address information should conform to the British Standard BS6667.
- Pathology systems should endeavour to improve completeness of address information, particularly with regard to the recording of postcodes.
- Haematology bone marrow records should be computerised.
- Trusts should ensure that key data items on stage of disease, occupation and postcode are routinely and accurately collected.
- Hospital records should be stored in a manner so they are readily accessible and not mislaid.
- The radiology departments should routinely use the coding system available to them.
- Barrett's oesophagus should be consistently coded using the internationally agreed SNOMED code M73330.
- The assignment of site within the colon should be as precise as possible.

## CANCER PREVENTION

### EUROPEAN CODE AGAINST CANCER

Certain cancers may be avoided and general health improved if you adopt a healthier lifestyle

1. Do not smoke. Smokers, stop as quickly as possible and do not smoke in the presence of others.
2. If you drink alcohol, whether beer, wine or spirits, moderate your consumption.
3. Increase your daily intake of vegetables and fresh fruits. Eat cereals with a high fibre content frequently.
4. Avoid becoming overweight, increase physical activity and limit intake of fatty foods.
5. Avoid excessive exposure to the sun and avoid sunburn especially in children.
6. Apply strict regulations aimed at preventing any exposure to known cancer-causing substances. Follow all health and safety instructions on substances which may cause cancer.

### More cancers may be cured if detected early

7. See a doctor if you notice a lump, a sore which does not heal (including in the mouth), a mole which changes in shape, size or colour or any abnormal bleeding.
8. See a doctor if you have persistent problems, such as a persistent cough, persistent hoarseness, a change in bowel or urinary habits or an unexplained weight loss.

### For women

9. Have a cervical smear regularly. Participate in organised screening programmes for cervical cancer.
10. Check your breasts regularly. Participate in organised mammographic screening programmes if you are over 50.  
(Updated following EC Cancer Experts Meeting, Bonn 28-29 November 1994)



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