



# Living with and beyond cancer

## A report on cancer prevalence in Northern Ireland 2010

This is a summary of a report on prevalence of cancer in Northern Ireland at the end of 2010 which can be found at [www.qub.ac.uk/nicr](http://www.qub.ac.uk/nicr)

Cancer survival is improving and some cancer patients recover totally from their disease, especially if it is diagnosed at an early stage. The NI Cancer Registry cannot distinguish between people who are cured and those with active cancer and so in this report **cancer prevalence** is defined as the number of living people who have ever had a cancer diagnosis since the beginning of 1993. This is the commonly accepted international definition of cancer prevalence. It includes people diagnosed with cancer in the past and those who were recently diagnosed as well as some who are cured.

The data in this report provides those working with cancer some idea of the number of patients ever diagnosed, how many were recently diagnosed, the ages of these patients and the types of cancer they have had. It also lets us see that cancer is not a death sentence and many people in NI with cancer live long lives.

- At the end of 2010 there were 69,377 people living with a past diagnosis of cancer within the last 18 years. 46.3% of these survivors were male.
- Excluding the rarely fatal non-melanoma skin cancer (NMSC), there were 45,265 cancer survivors who had been diagnosed within the last 18 years. 43.4% of these survivors were male.
- Among cancer survivors diagnosed within the last 18 years (excluding NMSC), 13% of males were aged under 50, while 19% were aged 80 and over. However 17% of females were aged under 50, while 17% were aged 80 and over.

Table 1: 18-year prevalence of cancer in NI by sex and age at the end of 2010

Age at the end of 2010	Including NMSC			Excluding NMSC		
	Male	Female	Both sexes	Male	Female	Both sexes
<b>Under 50</b>	3,306	5,202	8,508	2,499	4,350	6,849
<b>50-59</b>	3,725	5,749	9,474	2,342	4,629	6,971
<b>60-69</b>	7,988	8,746	16,734	5,058	6,566	11,624
<b>70-79</b>	9,715	8,877	18,592	5,920	5,749	11,669
<b>80-89</b>	6,129	6,581	12,710	3,306	3,490	6,796
<b>90 and over</b>	1,273	2,086	3,359	528	828	1,356
<b>All ages</b>	<b>32,136</b>	<b>37,241</b>	<b>69,377</b>	<b>19,653</b>	<b>25,612</b>	<b>45,265</b>

Figure 1: 18-year prevalence of all cancers (excluding NMSC) by sex and time since diagnosis of first cancer

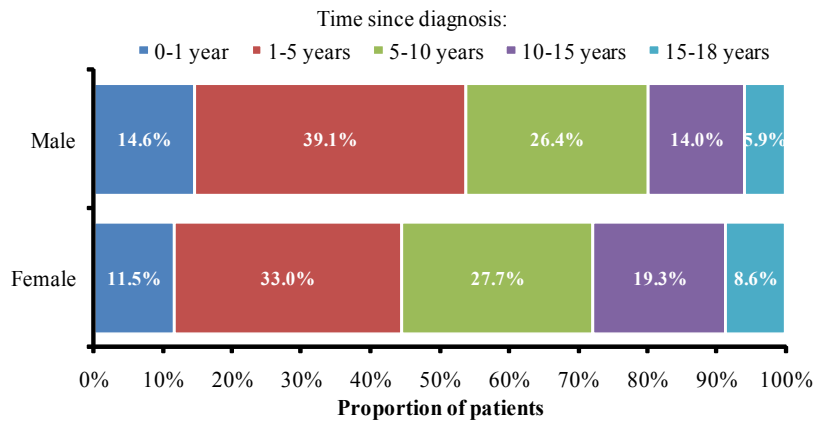
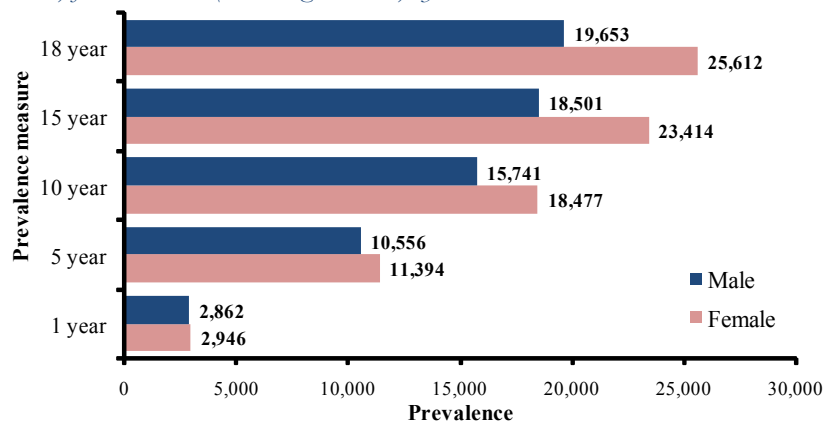


Figure 2: Alternative prevalence measures (based upon time since diagnosis of first cancer) for all cancers (excluding NMSC) by sex



NMSC: Non-melanoma skin cancer

### Time since diagnosis

- Among the 19,653 male survivors (excluding NMSC) 14.6% had been diagnosed within the previous year while 5.9% had been first diagnosed between 15 and 18 years ago.
- Among the 25,612 female survivors (excluding NMSC) 11.5% had been diagnosed within the previous year while 8.6% had been first diagnosed between 15 and 18 years ago.

### Alternative prevalence measures

- The 18-year prevalence represents all patients diagnosed with cancer during 1993-2010 who were still alive at the end of 2010. Other prevalence measures are commonly used, which depend upon the diagnosis period considered.

## Cancer site

- Prevalence varies considerably by cancer site. It is dependent upon the incidence of the cancer, survival from the cancer and deaths from other causes.
- The cancer with the greatest prevalence is non-melanoma skin cancer among both men and women due to its high incidence and excellent survival. After this prostate cancer is the most common among men, while breast cancer is the most common among women.
- Colorectal cancer is the third most prevalent cancer among males and females separately (or fourth among both sexes combined); however lung cancer, which is one of the most commonly diagnosed cancers, is only the ninth most prevalent cancer due to its poor survival rate.

Table 2: Incidence, survival, mortality and prevalence of cancer by sex and cancer site

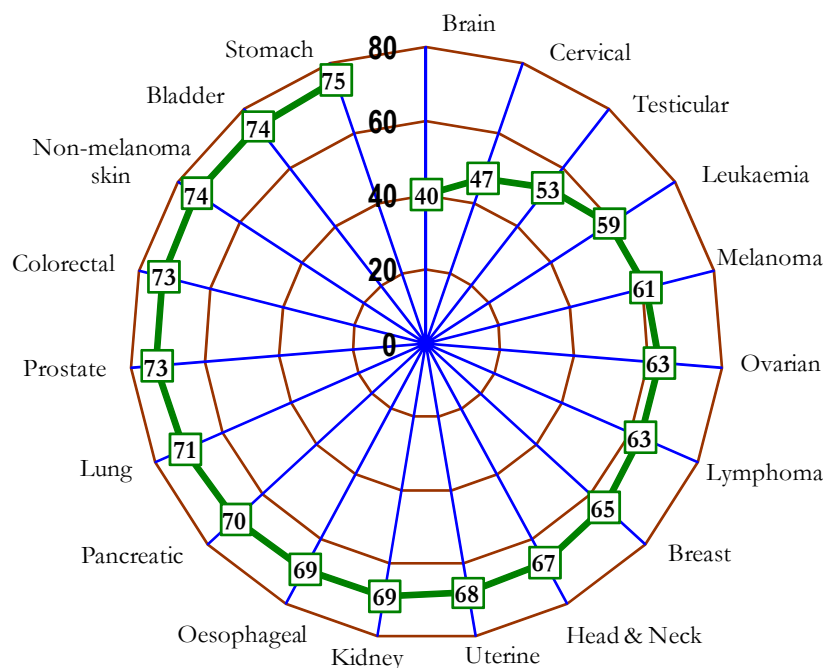
Cancer Site	Incidence per year (2006-2010)		Cancer mortality per year (2006-2010)		Five-year relative survival (2001-2005)		18-year prevalence (2010)	
	Male	Female	Male	Female	Male	Female	Male	Female
Head & Neck	190	83	63	27	60.2%	56.0%	1,207	503
Oesophageal	121	64	109	58	12.1%	14.5%	280	133
Stomach	137	91	84	60	16.0%	17.4%	371	241
Colorectal	622	509	238	195	50.7%	53.4%	3,491	3,136
Pancreatic	105	100	105	101	2.3%†		77	68
Lung	616	414	529	358	7.2%	9.9%	871	670
Melanoma	116	157	26	28	82.0%	94.2%	1,078	1,779
Non-melanoma skin	1,643	1,350	9	8	99.9%	99.3%	14,190	12,965
Breast	6	1,149	2	299	-	81.3%	53	11,393
Cervical	-	105	-	24	-	72.0%	-	1,041
Uterine	-	214	-	42	-	73.6%	-	1,818
Ovarian	-	158	-	121	-	33.8%	-	874
Prostate	965	-	226	-	79.8%	-	6,646	-
Testicular	59	-	2	-	97.5%	-	918	-
Kidney	154	100	56	41	44.2%	47.1%	838	573
Bladder	158	62	69	32	63.7%	48.5%	1,004	351
Brain	81	53	61	39	19.4%	20.2%	260	222
Lymphoma	178	170	54	55	61.8%	61.5%	1,317	1,285
Leukaemia	104	78	53	43	41.3%	42.6%	578	435
Unknown primary	131	176	120	137	12.2%	9.8%	233	319
<b>All (ex. NMSC)</b>	<b>4,080</b>	<b>4,000</b>	<b>2,039</b>	<b>1,855</b>	<b>45.9%</b>	<b>53.8%</b>	<b>19,653</b>	<b>25,612</b>
<b>All (inc. NMSC)</b>	<b>5,723</b>	<b>5,350</b>	<b>2,048</b>	<b>1,863</b>	<b>60.5%</b>	<b>64.7%</b>	<b>32,136</b>	<b>37,241</b>

† Male and Female combined; NMSC: Non-melanoma skin cancer

## Cancer site and age

- The median age of cancer survivors diagnosed within the last 18 years at the end of 2010 ranged from 40 years of age for brain cancer survivors to 75 years of age for stomach cancer survivors.
- The median age of survivors at the end of 2010 was similar to the median age at diagnosis for cancers with poor survival or more frequently diagnosed among the elderly, such as lung cancer. However it differed for those cancers with excellent survival which were also more commonly diagnosed among younger people, such as testicular cancer and melanoma.

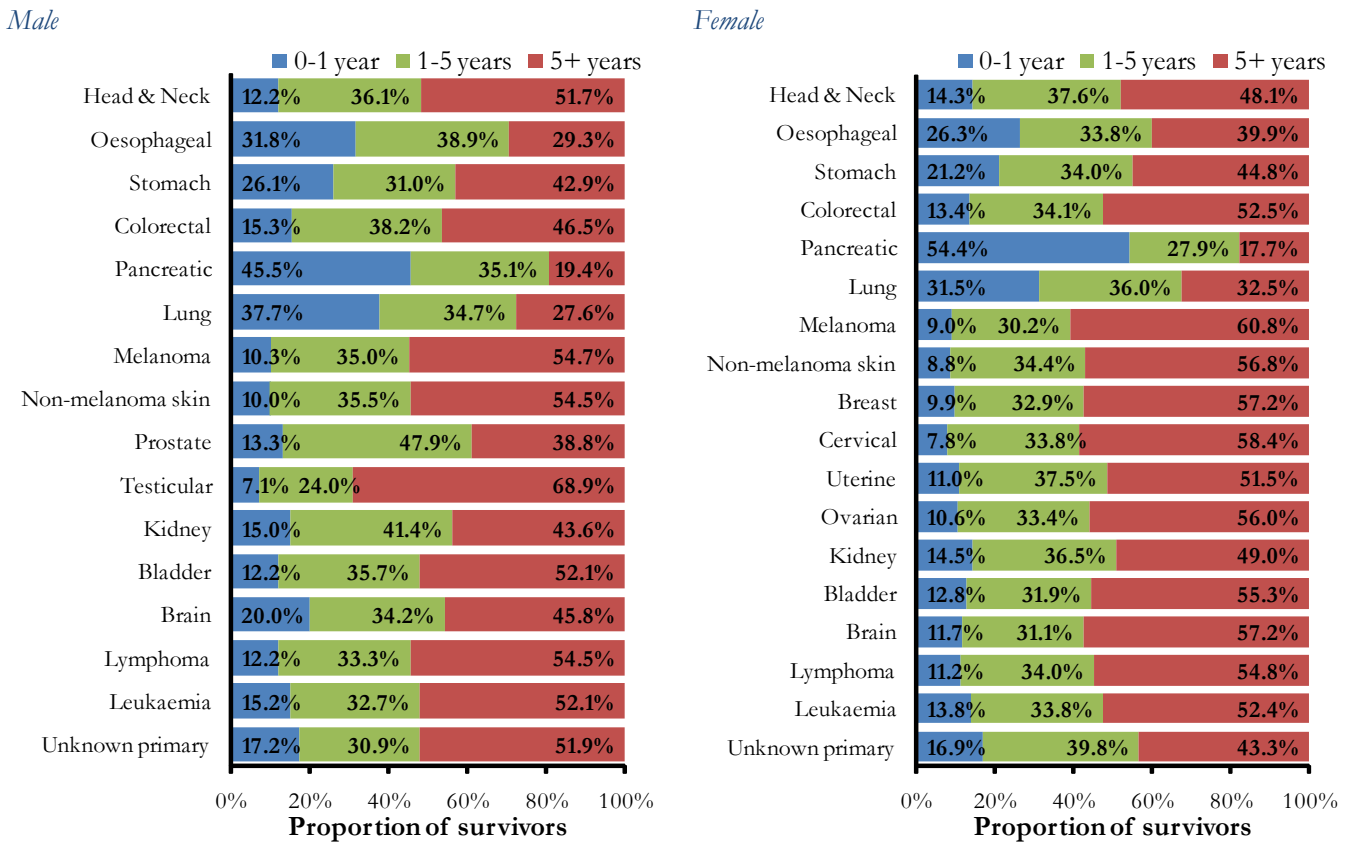
Figure 3: Median age of cancer survivors diagnosed within the last 18 years at the end of 2010 by cancer site



## Time since diagnosis

- The proportion of survivors diagnosed within the last 18 years who were diagnosed less than one year ago varied depending upon how good or bad survival from the disease is. Thus 45.5% of male and 54.4% of female pancreatic cancer survivors were diagnosed during 2010, while only 10.3% of male melanoma and 9.0% of female melanoma survivors were diagnosed in 2010 as many melanoma patients survive a long time after their diagnosis.

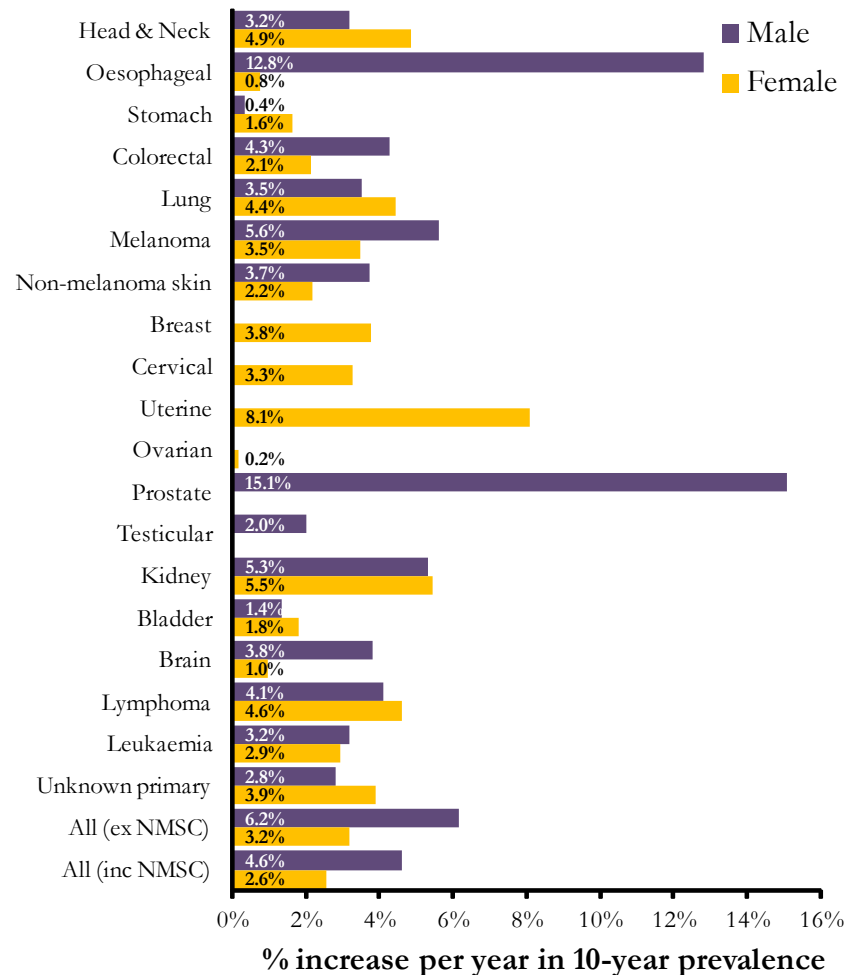
Figure 4: 18-year prevalence by sex, cancer site and time since diagnosis



### Trends in 10-year prevalence

- To allow for analysis of the change in prevalence over time we look at a fixed period of time after diagnosis. Including NMSC the number of cancer survivors diagnosed within the previous 10 years increased by 4.6% for males and 2.6% for females each year between 2002 and 2010. Excluding NMSC the number of cancer survivors increased by 6.2% for males and 3.2% for females each year.
- Excluding those cancers with a small number of survivors, the annual percentage increase in 10-year prevalence between 2002 and 2010 was greatest among male prostate and oesophageal cancer, both of which saw the number of survivors more than double over the eight year period. Among females the percentage increase was greatest for uterine and kidney cancers.
  - The increases were caused by several factors. Incidence of cancer increased due to the increase and ageing of the Northern Ireland population, with incidence of many cancers also increasing due to increases in lifestyle related risk factors (e.g. increases in obesity leading to a rise in uterine cancer) and changes in diagnostic procedures (e.g. increases in the use of PSA testing leading to a rise in

Figure 5: Annual percentage increase in 10-year prevalence between 2002 and 2010 by cancer site and sex



diagnosis of prostate cancer). In addition, improvements in survival from cancer, greater completeness of cancer registration and reductions in the number of deaths from other diseases (such as heart disease) have also contributed to the increase in the number of cancer survivors.

## Area of residence

- 18-year cancer prevalence (excluding NMSC) at the end of 2010 in each Health and Social Care Trust ranged from 5,018 males and 6,447 females in the Northern Trust to 3,075 males and 3,775 females in the Western Trust. The variation is dependent upon the area's population, age structure, incidence of cancer and mortality from both cancer and other causes (such as heart disease etc).
- 18-year cancer prevalence at the end of 2010 in each Local Government District (LGD) ranged from 475 in Moyle LGD to 7,038 in Belfast LGD.

Figure 6: 18-year prevalence from all cancers (excluding NMSC) by Local Government District

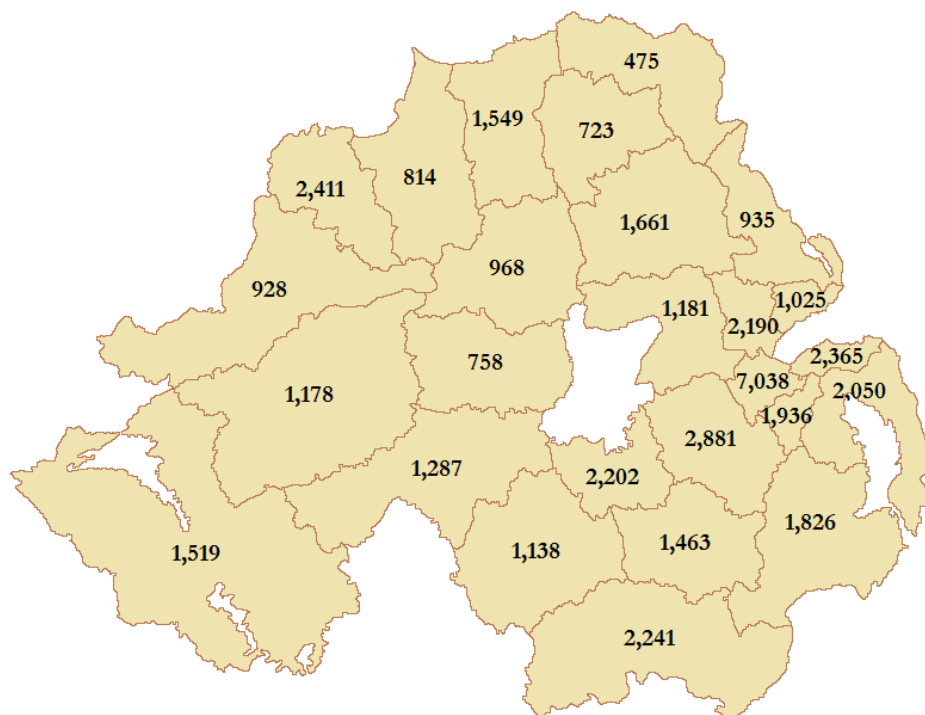


Table 3: 18-year prevalence of cancer in Northern Ireland by sex, and Health and Social Care Trust of residence

Sex and cancer site	Health and Social Care Trust						Northern Ireland
	Belfast	Northern	South-Eastern	Southern	Western	Unknown	
<b>Male</b>							
Non-melanoma skin	2,465	3,425	2,670	2,763	1,905	962	14,190
Prostate	1,105	1,744	1,318	1,301	1,102	76	6,646
Colorectal	655	947	723	609	528	29	3,491
Lung	232	197	148	138	130	26	871
All cancers (ex. NMSC)	3,715	5,018	3,902	3,659	3,075	284	19,653
<b>All cancers (inc. NMSC)</b>	<b>5,859</b>	<b>8,018</b>	<b>6,193</b>	<b>6,068</b>	<b>4,763</b>	<b>1,235</b>	<b>32,136</b>
<b>Female</b>							
Non-melanoma skin	2,578	3,018	2,639	2,513	1,587	630	12,965
Breast	2,243	2,935	2,372	2,082	1,705	56	11,393
Colorectal	631	790	653	533	505	24	3,136
Lung	199	141	121	90	101	18	670
All cancers (ex. NMSC)	5,259	6,447	5,220	4,672	3,775	239	25,612
<b>All cancers (inc. NMSC)</b>	<b>7,552</b>	<b>9,149</b>	<b>7,576</b>	<b>6,907</b>	<b>5,194</b>	<b>863</b>	<b>37,241</b>

NMSC: Non-melanoma skin cancer

## Further Information

Further data from the Northern Ireland Cancer Registry is available from the Registry web site: [www.qub.ac.uk/nicr](http://www.qub.ac.uk/nicr), and

**NI Cancer Registry**  
Centre for Public Health  
Mulhouse Building  
Grosvenor Road  
Belfast, BT12 6DP

Phone: +44 (0)28 9063 2573  
e-mail: [nicr@qub.ac.uk](mailto:nicr@qub.ac.uk)



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Queen's  
University  
Belfast