

Cancer in Norway 2013

Cancer incidence, mortality,
survival and prevalence in Norway

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Kreft i Norges fylker 1954–2013



Cancer in Norway 2013

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General requests for cancer information, data or possible research collaborations are welcome, and should be sent to datautlevering@kreftregisteret.no

Cancer in Norway 2013

Cancer incidence, mortality, survival and prevalence in Norway

Foreword

Many countries have cancer registries, but few have the advantages of the Nordic countries with mandatory cancer reporting combined with personal identification numbers and population registries that record when people migrate out of the country. These advantages enable us not only to count the number of cancers accurately, but also to estimate cancer rates rather precisely. The Nordic countries can therefore provide detailed information on how cancer changes over time.

In some countries, the underlying population size is not known, and one can therefore only crudely estimate cancer rates. Other countries have additional complicating pseudonymization systems that can introduce mismatches that hamper the interpretation of both rates and trends in rates over time. These problems we avoid in the Nordic cancer registries, and our data remain highly valuable and sought after from all parts of the world. Over the past 60 years these data have provided the basis for studies that have identified important risk factors for cancer. In more recent years, these registry data have been used in assessing the effects of screening programs for cancer, and the data are increasingly being used for monitoring and comparing the quality of cancer treatment.

It is therefore of utmost importance that the ongoing revision of the European Union data protection framework do not in any way threaten the quality of the Nordic health registries. Changes in both our environment and lifestyle make it necessary to continuously monitor cancer rates, and conduct epidemiological and clinical cancer research. If the final adopted European Union regulations are too strict, then this may have severe consequences for all the Nordic health registries and for public health. We hope the European politicians will make the right decision.

Interpretation of cancer rates is not always straight forward. Cancer incidence is determined not only by whether the disease truly increases or decreases in a population, but also by the extent the disease is diagnosed. Increased screening one year can cause an immediate increase in incidence. Reduced screening will likewise reduce the incidence rate, but a few years later we may see increased rates of a more severe version of the cancer, often in a somewhat older age group. Evaluating the incidence rates together with the mortality rates can help us understand what the underlying changes are. However, knowledge about changes in the underlying risk factors, as well as knowledge of the cancer biology is also necessary to interpret the picture correctly. Improvement in survival is not necessarily a sign of improved cancer care. Survival is also a function of how early in the disease process the disease is detected. Thus survival curves must therefore be interpreted together with incidence and mortality rates.

A closer look at this year's cancer rates indicates that most rates are stable. There are some exceptions. The lung cancer rate continues to slightly decrease in men. In women, the lung cancer rate seems to stabilize over all, but continues to increase in those above 65. Examining the last decade we see that the rates for malignant melanoma have been on the rise for both men and women. Although the rates for 2013 are equal to or somewhat lower than those for 2012, we cannot yet draw any conclusion about a shift in trends. The incidence rate of breast cancer is largely stable, although there is some fluctuation from year to year. We will continue to monitor these rates closely.

The number of immigrants in Norway is increasing. As of 2014, immigrants comprise around 15% of the total population. Of the roughly 630 000 born outside of Norway, about 22% are from Western Europe and 33% from Eastern Europe. The largest non-European immigrant group is Somali, which represents about 4%, while immigrants from Iraq, Iran and Pakistan represent 9%, and the Philippines, Thailand and Vietnam represent 7.5%. The cancer registry regulations currently do not allow us to register data on country of origin. However, we hope this will be changed in the near future. By reporting some cancer rates by country or region of origin, we might pick up specific health challenges, which may be important for ensuring equality in health. One example is the recent increase in liver cancer rates in men. We can only speculate on whether this is due to more immigrants from countries with high hepatitis infection rates.

In the special issue of this year's report, we present cancer rates and trends by county. Examining so many numbers will, simply by chance, result in numbers that statistically are significantly different from the rest. The challenge is to sift through all the numbers and identify those that are definite outliers. We recommend some caution before drawing strong conclusions based on these numbers.

We thank all the clinical and pathology staff that have reported cancer cases to the registry, our coding staff for their careful job in coding the various reports, and the IT staff at various levels both at the registry, the hospitals and the regional level that help us slowly but surely move from paper to electronic reporting, so that we can publish our cancer reports earlier.

Oslo, March 2015

Giske Ursin
MD PhD

Cancer in Norway 2013

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Summary

In this annual report the Cancer Registry of Norway (CRN) provides incidence data on different cancers and the latest survival data.

Incidence/Cumulative risk

A total of 30 401 new cancer cases were reported in 2013: 54.2 per cent were among men and 45.8 per cent among women. The rates for 2013 show that cancer in prostate, lung, colon and bladder were the most common cancers in men, whereas breast, lung and colon cancer and malignant melanoma were the most common cancers in women. The relative impact of cancers, however, varies considerably by age. Among children (0-14 years of age) leukaemia and cancer in the central nervous system were the most common. These represent 52 per cent and 57 per cent of all cancer cases in boys and girls, respectively. In males aged 15-49 years, testicular cancer was the most common cancer, whereas prostate cancer was most common in middle aged and older men. In females, cancer in the central nervous system and Hodgkin lymphoma were the most common cancer types among 15-24 years old. Among 25-69 years old breast cancer was most common, and among the oldest women (70+) colon cancer was slightly more common than breast cancer.

Cancer trends should be interpreted by examining rates over the past several years. This is because there is some random variation in incidence rates from one year to another. Further, the numbers for 2013 might be slightly underreported due to delayed notification of cancer cases.

The incidence rate for all sites combined has increased by 3.2 per cent in men and 1.9 per cent in women when we compare the two most recent five-year periods (from 2004-2008 to 2009-2013).

For the most common cancers in men, the largest incidence increase in rates was observed for malignant melanoma, leukaemia, non-melanoma skin cancer and non-Hodgkin lymphoma. On the positive side, the rates for lung and bladder cancer showed a reduction.

In women, the strongest increase occurred in incidence rates of thyroid cancer, malignant melanoma, non-melanoma skin cancer, lung cancer and non-Hodgkin lymphoma. A reduction in rates was seen for ovary, corpus uteri, and rectal cancer. We suspect

that the rather large reduction seen for cancers in the central nervous system at least to some extent is due to underreporting of cases.

The probability of developing cancer before the age of 75 is 36 per cent in men and 29 per cent in women.

Prevalence

At the end of 2013 more than 232 000 Norwegians were alive after having had at least one cancer diagnosis at an earlier point in time.

Mortality

There were 10 699 deaths from cancer in Norway in 2013. Cancer of the lung, colon, rectum, prostate and female breast account for 50 per cent of the mortality.

Survival

This year's statistics confirm the trend we have seen over a number of years: Survival continues to increase. There is improved survival for almost all cancers, including breast, prostate, lung, colon and rectal cancer. This trend is partially due to improved treatment over time, but for breast and prostate cancer it is also due to screening. Increased attention to cancer in the population as well as among health care providers may also lead to higher numbers of diagnosed cancers.

From the period 2004-2008 to 2009-2013 the estimated five-year relative survival increased from:

- 88 to 89 per cent for breast cancer in women
- 85 to 91 per cent for prostate cancer
- 14 to 19 per cent for lung cancer in women
- 11 to 13 per cent for lung cancer in men
- 66 to 67 per cent for rectal cancer in women
- 62 to 67 per cent for rectal cancer in men
- 61 to 63 per cent for colon cancer in women
- 58 to 60 per cent for colon cancer in men

Table 0. Summary of cancer statistics for selected cancers

ICD-10	Site	Sex	Number of new cases 2013 (Table 6)	Age-standardised incidence rates 2009-13 (Table 14)	Per cent change in age-standardised incidence from the previous five-year period (2004-08)	Per cent diagnosed with localised disease 2009-2013 (Table 17)	Age-standardised mortality rates 2013 (Figure 8)	Five-year relative survival 2004-08 (Table 22)	Five-year relative survival (%) 2009-13 (Table 22)
C00-96	All sites	M	16 482	374.2	3.2	...	...	64.3	69.6
		F	13 919	302.0	1.9	...	...	67.4	69.9
C18	Colon	M	1 325	27.1	2.7	18.7	10.6	57.8	59.5
		F	1 456	24.6	4.6	18.6	8.5	60.9	63.3
C19-21	Rectum, rectosigmoid, anus	M	777	17.0	2.4	27.9	3.9	61.5	67.2
		F	569	10.6	-2.6	31.6	2.2	66.0	66.5
C33-34	Lung, trachea	M	1 555	34.9	-4.0	22.5	24.4	11.0	13.1
		F	1 301	26.0	8.2	25.8	17.8	14.1	18.8
C43	Melanoma of the skin	M	839	20.2	24.2	86.7	4.0	76.9	79.0
		F	880	21.1	24.4	91.1	2.6	88.9	88.4
C44	Skin, non-melanoma	M	908	16.8	7.5	...	...	...	...
		F	809	11.2	8.6	...	...	...	...
C50	Breast	F	3 220	75.6	0.1	42.6*	11.8	87.7	89.0
C53	Cervix uteri	F	282	9.5	1.6	61.8*	1.6	77.5	79.7
C54	Corpus uteri	F	768	16.1	-4.1	79.1	1.3	83.1	84.2
C56	Ovary	F	388	10.3	-9.8	21.1	5.4	44.1	44.7
C61	Prostate	M	4 836	107.6	4.6	64.6	15.9	85.0	91.4
C62	Testis	M	337	11.7	1.3	80.8	0.1	97.2	97.2
C66-68	Bladder, ureter, urethra	M	1 034	20.8	-6.9	82.9	4.3	74.0	74.2
		F	400	6.4	-0.5	79.4	1.4	65.7	67.7
C70-72, D32-33	Central nervous system	M	414	13.5	-7.6	49.3**	...	62.6	61.2
		F	464	15.4	-13.9	69.3**	...	78.1	76.7
C73	Thyroid	M	103	2.4	25.6	50.1	...	82.6	91.3
		F	246	6.7	28.9	64.4	...	92.8	94.9
C82-85, C96	Non-Hodgkin lymphoma	M	558	13.2	7.3	...	3.2	65.6	70.5
		F	413	9.6	6.8	...	1.5	65.4	76.4
C91-95, D45-47	Leukaemia	M	584	14.6	11.4	...	3.8	56.3	63.1
		F	413	10.1	7.4	...	3.0	59.4	65.8

* Stage I

*** Non-malignant

Preface with definitions and specifications

Definitions*

Incidence

The number of new cases (of disease) in a defined population within a specific period of time.

Incidence rate

The number of new cases that arise in a population (incidence) divided by the number of people who are at risk of getting cancer in the same period. The rate is expressed per 100 000 person-years. Person-years is a metric that combines persons and time (in years) as the denominator in rates.

Crude rate

Unadjusted rates, often estimated for the entire population, with no standardisation by age.

Age-specific rate

A rate calculated by age strata, often with five-year intervals.

Age-standardised incidence rate

Age-standardised (or age-adjusted) incidence rates are summary rates which would have been observed, given the schedule of age-specific rates, in a population with the age distribution of a given population. For this report we use the world standard population (Segi, 1960; Doll & al, 1966).

Prevalence

Prevalence is the number or proportion of a population that has the disease at a given point in time. In this report we use lifetime cancer prevalence which can be defined as the number of living individuals having ever been diagnosed with cancer.

Relative survival

The observed survival after a given period of time in a patient group, divided by the expected survival of a comparable group in the general population with respect to key factors affecting survival such as age, sex and calendar year of observation. Relative survival is thus determined by the mortality experienced by the patients regardless of whether an excess mortality may be directly or indirectly attributable to the disease under investigation. A key advantage is that it does not require cause-of-death information.

Conditional relative survival

The probability of surviving an additional number of years given that the person has already survived X years. As the time from diagnosis lengthens, this statistic becomes more informative to survivors than the conventional relative survival estimate. A five-year conditional relative survival that reaches close to 100% some number of years after diagnosis indicates that from thereon, there is little or no excess mortality in the patient group.

* Based on Last, 2001

List of the ICD-10 codes showing included or excluded morphologies

The list below gives a detailed description of specific morphologies that are included or excluded in all cancer statistics presented in the present report.

Table 1. Description of the ICD-10 codes

ICD-10	Site	Comments
C00 - 96	All sites	Includes the following D-diagnoses; D32-D33, D35.2-35.4, D42-D43, D44.3-D44.5 and D45-47
C38	Mediastinum, pleura	Excludes mesotheliomas (which are included in C45)
C44	Skin, non-melanoma	Excludes basal cell carcinoma
C56	Ovary	Excludes borderline tumours
C64	Kidney except renal pelvis	Excludes non-invasive papillary tumours
C65	Renal pelvis	Includes non-invasive papillary tumours
C66	Ureter	Includes non-invasive papillary tumours
C67	Bladder	Includes non-invasive papillary tumours
C68	Other and unspecified urinary organs	Includes non-invasive papillary tumours
C70	Meninges	Includes benign tumours (D32-33, D42-43)
C71	Brain	Includes benign tumours (D32-33, D42-43)
C72	Spinal cord, cranial nerves and other parts of central nervous system	Includes benign tumours (D32-33, D42-43)
C75	Other endocrine glands and related structures	Includes benign tumours (D35.2-35.4, D44.3-44.5)
C92	Myeloid leukaemia	Includes myelodysplastic syndrome (D46)
C95	Leukaemia of unspecified cell type	Includes polycythemia vera (D45) and other unspecified tumours in lymphatic or hematopoietic tissue (D47)

Changes from the previous version

- Cancer in anus (C21) has a different aetiology than colon and rectal cancers, and for this reason C21 is now presented separately.
- Cases of Kaposi's sarcoma (C46) are in the present publication included within the specific topography where it was diagnosed. The percentage of morphologically verified cases in Table 4 includes all cases that are verified by either histology or cytology or both.
- Other specified types of T/NK-cell lymphoma (C86) have not been reported in previous reports of Cancer in Norway, but are now included in the ICD-10 category Non-Hodgkin lymphoma (C82-86, C96).
- Previous publications of Cancer in Norway have used the number of inhabitants per 31st of December as the denominator in the calculations of rates. In the present issue we use the average number of inhabitants calculated as the mean between the population number as obtained by the 1st of January and 31st of December.
- Data on mortality is based on causes of death reported directly to the CRN from the Cause of Death Registry, as opposed to previous reports where these data have been based on the mortality database of WHO and data from Statistics Norway.

Notes

As part of our routines to keep up a high completeness and validity, reminders are sent to clinicians/hospitals responsible for the treatment for cases where clinical notifications are missing. In 2014, we sent fewer reminders than usual. We suspect that this is the reason why some sites, especially leukaemia and cancers in the central nervous system, have a lower number of new cases than reported in Cancer in Norway 2012.

Data sources and Methods

The population of Norway

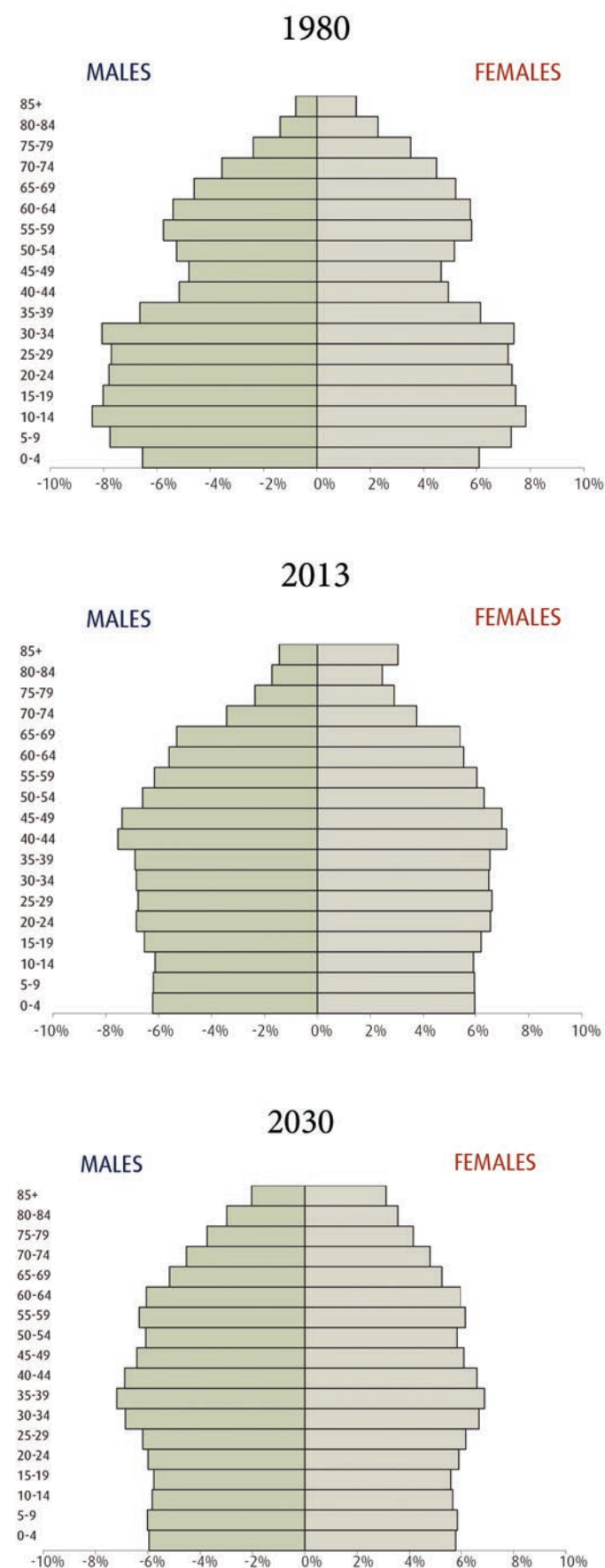
By the 1st of January 2014 the total number of inhabitants in Norway was 5.1 million. The immigrant population (first-generation) comprises 12.4% of the total population, and additional 2.5% are second-generation immigrants. About 49% of the first-generation immigrants come from EU/EEA, US, Canada, Australia and New Zealand, 28% come from Asia (incl. Turkey), and 12% come from Africa (Source: Statistics Norway).

Table 2 shows the age structure by sex for the Norwegian population in December 2013, while Figure 1 illustrates the changing age structure over time, comparing population distributions from 1980 and 2013 with projections for 2030 (Source: Statistics Norway). The population of Norway has increased since recording began, and this growth is expected to continue the next few decades. The total number of inhabitants in Norway has increased by 25% from 1980 to 2013, largely as a result of rising life expectancy and, more recently, due to increases in net immigration. By 2031, the size of the population is expected to increase to about 6 million, and by 2065 it will reach 7 million¹. The elderly will represent an increasingly large proportion of the population of Norway in the next quarter century. It is projected that by 2060, one out of five inhabitants (20%) will be 70 years or older (Tønnessen & al, 2014).

Table 2. Norwegian population 31.12.2013, by five-year age group and sex

Age group	Males	Females
00-04	160 017	151 895
05-09	159 165	151 585
10-14	157 471	150 712
15-19	167 828	157 977
20-24	175 613	166 815
25-29	173 979	168 357
30-34	175 690	165 373
35-39	176 984	166 344
40-44	193 557	182 249
45-49	189 552	177 676
50-54	169 626	160 829
55-59	158 084	153 835
60-64	143 897	141 388
65-69	136 419	137 556
70-74	88 052	95 421
75-79	60 542	73 808
80-84	44 025	62 385
85+	36 933	77 417
TOTAL	2 567 434	2 541 622

Figure 1. Age structure of the Norwegian population, 1980, 2013 and 2030



Forecast, source: Statistics Norway, www.ssb.no
Considered the scenario of medium national growth

¹ Considered the scenario of medium national growth

Data sources and registration routines

The Cancer Registry of Norway (CRN) has, since 1952, systematically collected notifications on cancer occurrence for the Norwegian population. The registration has from 1953 been considered to be close to complete, and a comprehensive study on data quality estimates the completeness to be 98.8% for the registration period 2001-05 (Larsen & al, 2009). The reporting of neoplasms has been mandatory since the implementation of a directive from the Ministry of Health and Social Affairs in January 1952. The CRN Regulations came into force in 2002 (Regulations for the collection and processing of data in the CRN). The main objectives of the CRN can be summarized as follows:

- Collect data on cancer occurrence and describe the distribution of cancer and changes over time.
- Provide a basis for research on the aetiology, diagnostic procedures, the natural course of the disease, and the effects of treatment in order to determine appropriate preventive measures and to improve the quality of medical care.
- Provide advice and information to public authorities and the general public about preventive measures.
- Perform epidemiological research of high international standard.

Data items registered in the Cancer Registry of Norway

The following must be reported to the CRN:

- All malignant neoplasms and precancerous disorders.
- All benign tumours of the central nervous system and meninges.

Registries

The incidence registry

The incidence registry contains the basic data items collected from clinicians and pathologists, as well as data from administrative patient discharge records and mortality sources. As of 1st of February 2015, the incidence registry contained information registered since 1953 on nearly 1.7 million cancer cases (including premalignant and some benign conditions) in more than 1.3 million persons. The incidence registry is updated continuously with information on both new cases and cases diagnosed previous years. The present report is based on data from the incidence registry.

Clinical registries

Clinical registries, i.e. comprehensive registration schemes dedicated to specific cancers, have been established to provide more detailed information about diagnostic procedures, pathology-examinations, treatment and follow-up. The aims are to provide data for monitoring patient outcome and survival and an empirical base for scientific studies concerning prognostic factors and treatment outcomes, as well as evaluation of the quality of cancer care.

The ongoing and expanding activities of these clinical registries are a major focus for CRN, and several clinical registries are now established. Each clinical registry has a reference group - a panel of multi-disciplinary experts from clinical and research milieus in Norway. These experts advise on the contents and operations of each clinical registry, and its strategic direction. Registries are integrated in the CRN's coding and registration activities. Table 3 shows the status of these clinical registries as of February 2015.

Table 3. Status of the clinical registries, February 2015

Clinical registry for	Clinical reference/ project group	Established with extended data*	Clinical parameters for electronical report specified	Electronical report form in use	National status
Colorectal cancer	Yes	Yes	Yes	Yes	2009
Malignant melanoma	Yes	Yes	Yes	Yes	2013
Breast cancer	Yes	Yes	Yes	Yes	2013
Prostate cancer	Yes	Yes	Yes	Yes	2009
Lymphomas and chronic lymphatic leukaemias	Yes	Yes	Yes	Yes	2013
Lung cancer	Yes	Yes	Yes	Yes	2013
Childhood cancer	Yes	Yes	Yes	Yes	2013
Gynecological cancer**	Yes	Yes	Yes	Yes	2013
Hematological cancer	Yes	No	Yes	No	Applied for
Central nervous system	Yes	No	Yes	No	Applied for
Oesophagus and stomach cancer	Yes	Yes	Yes	Yes	Applied for
Testicular cancer	Yes	No	Yes	No	Applied for
Sarcoma	Yes	No	No	No	Applied for

* Either by having a separate clinical report form and/or by having a database with extended information in addition to the incidence registry.

** Established for ovarian cancer, will be extended to include all gynecological cancers.

Notifications and sources of information

The sources of information and the notification process are illustrated in Figure 2. Hospitals, laboratories, general practitioners and Statistics Norway provide the key information that enables the CRN to collect, code and store data on cancer patients in Norway. Information from clinical notifications, pathological reports and death certificates are the main sources. These are processed and registered in both the clinical registries and the incidence registry. Information from the Norwegian Patient Registry is an important additional source for identifying cancer cases.

Clinical and pathological notifications

The CRN Regulations, as issued by the Ministry of Health and Social Affairs, require all hospitals, laboratories and general practitioners in Norway to report all new cases of cancer to the CRN within two months. The cases should be reported irrespective of whether the patient is treated, admitted, or seen only as an outpatient. Cancers in the clinical registries are reported on specific forms with extended information relevant for each cancer site (see clinical registries). In addition, there are two forms (clinical notifications) for reporting of the solid or non-solid tumours not yet included in a clinical registry. These forms provide information on primary site, symptoms, stage of disease, the basis for the diagnosis and

primary treatment given to the patient. Pathology reports from hospitals and independent laboratories provide histological, cytological or autopsy information. The information is identified and linked by the personal identification number system which was established in Norway in 1964.

Clinical notifications should be sent using the CRN electronical reporting service (KREMT) at the Norwegian Health Network. This system will replace paper forms by July 1st, 2015. More information about KREMT can be found at <http://kreftregisteret.no/no/Registrene/Innmelding-til-Kreftregisteret/KREMT---Kreftregisterets-elektroniske-meldetjeneste/>

As of February 2015, most laboratories still send paper copies of the pathology reports. A major focus for the future is to have more laboratories send electronical and structured pathology reports to the CRN.

Death certificates

Records held in the CRN are supplemented with relevant information on vital status from the National Population Registry. Records are regularly linked with the Cause of Death Registry run by the Norwegian Institute of Public Health. CRN receives and registers the death certificates in one or several batches every year. The automated procedure that matches registered cancer cases to death certificates is important for maintaining quality control, facilitating a high level of completeness and ensuring validity of

the CRN data items. Death certificates also represent a complementary source of information on new cancer cases which have not been reported previously, or where the diagnosis differs. Cancer cases first identified from death certificates are traced back to the hospital or physician responsible for the treatment of the patient to verify whether the patient had been diagnosed when alive or post mortem. If diagnosed when alive, clinical notifications and copies of pathology reports should be sent to the CRN.

The Norwegian Patient Registry

Since 2002, the CRN has received data files from the Patient Administrative Data System (PAS) used in all Norwegian hospitals. These files contain information about patients who have been treated for premalignant and malignant conditions since 1998, and therefore PAS has been a key source in finding information on unreported cases. Since 2010, the CRN has received this information from the Norwegian Patient Registry (NPR). The CRN receives all C-diagnoses, D00-D48 and some other diagnoses (ICD-10) from NPR and these can then be matched with current information in the CRN database. Reminders are sent to clinicians for those cases where no information about the diagnosis exists in the CRN (Figure 2).

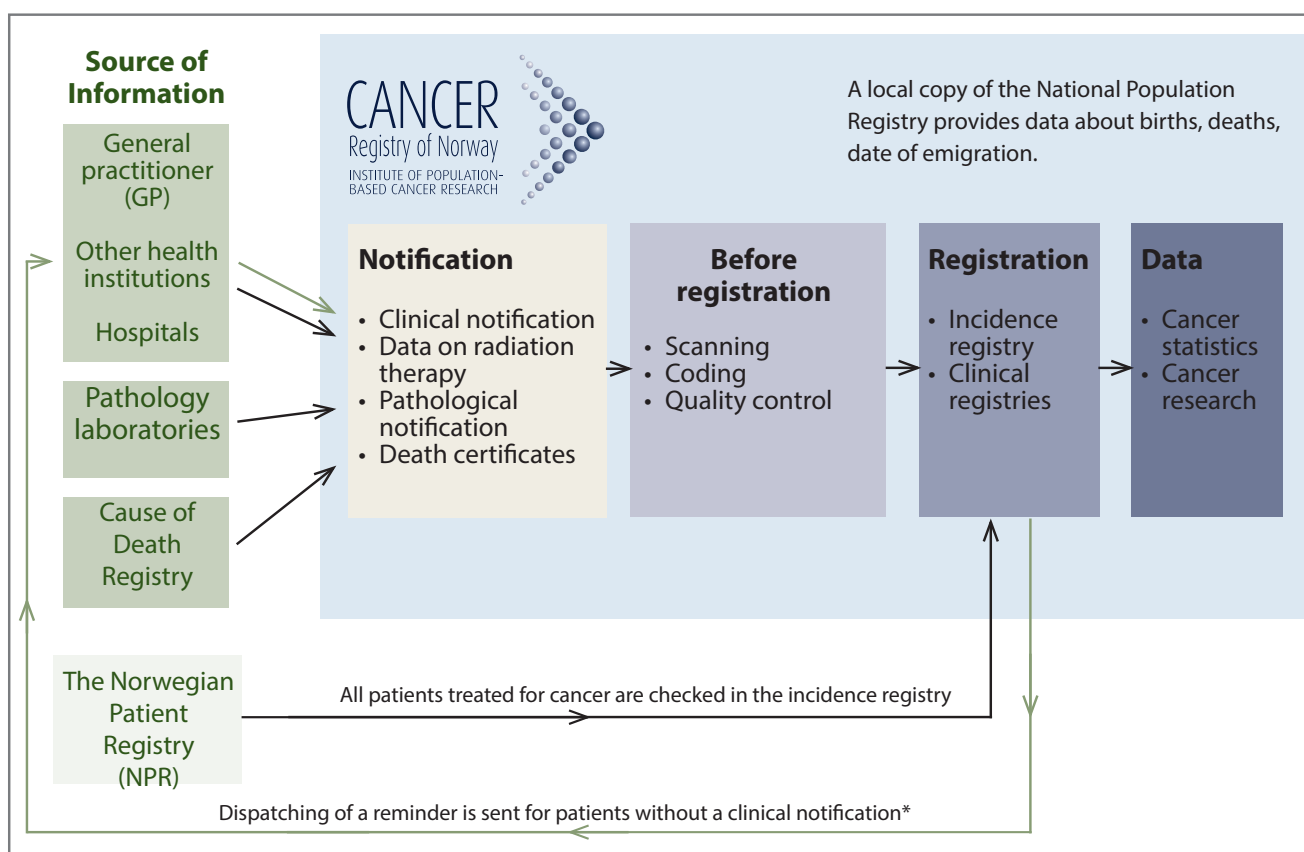
Dispatching of reminders to clinicians

It is mandatory to report clinical information on new cases of cancer no later than two months after the diagnosis has been determined. Thus, except for some few cases (e.g. cases diagnosed at autopsy), at least one clinical notification should be registered for each cancer case. The CRN receives information on cancer cases from several sources (clinical notifications, pathology notifications, autopsies, death certificates, radiation therapy and NPR). In those cases where the clinical notification is missing for a cancer case notified from one of the other sources, a reminder is sent to the hospital/ward/physician responsible for the treatment. About 100 000 reminders are sent annually, including repeat requests for information. The procedure for cancer registration and the dispatching of reminders are illustrated in Figure 2.

Incidence and mortality data

The incidence data presented in the first part of this report are based on an extraction from the incidence registry on the 1st of February 2015. The tables and figures in general represent either the latest year of complete incidence (2013) or the latest five-year period (2009–13), the latter grouping being used when the stratified numbers are too small to warrant presentation for a single year.

Figure 2. Sources of information and the processes of cancer registration at the CRN



* Dispatching of reminders for clinical notifications are sent for cases only notified from the NPR or cases only notified by a pathology notification/death certificate on radiation therapy data.

In the lower urinary tract atypical epithelial lesions are included in the data as well as invasive cancers. Further, in the central nervous system both benign and malignant neoplasms are included. Ovarian borderline tumours and basal cell carcinomas of the skin are excluded.

Registered codes from ICD-7, ICD-O-2 and ICD-O-3 are converted to ICD-10 using a combination of topography and morphology. Population data, stratified by year, sex and age, are provided by Statistics Norway. The main cancer types are tabulated according to their ICD-10 three digit categories. The “all sites” figure comprises all malignant neoplasms (ICD-10 C00-96) and the D-diagnoses listed in Table 1.

A list of the inclusion and exclusion criteria applied to several sites with respect to morphology is shown in Table 1. Corresponding mortality data coded in ICD-10 were obtained from the Cause of Death Registry and are presented in the same ICD-10 categories as for the rest of this report.

Multiple primary neoplasms

The coding and classification of multiple primary neoplasms follow the rules of the International Association of Research on Cancer – IARC (Fritz, A. 2000).

This version uses the IARC-rules with 12 different histological groups.

The rules of multiple primary neoplasms states that only one tumour is recognized as arising in an organ or pair of organs or tissue. This means that for this report only the very first invasive tumour of a defined histological type is counted within one three-character ICD-10 code (for example breast C50). A new cancer of the same histological group many years later in the same organ will not be counted. If there are different histological diagnoses, for example an adenocarcinoma and a sarcoma in the same organ, these will be counted as two cancers.

Some organs are considered as only one organ in this respect (for example trachea C33 and lung C34).

Multifocal tumors are counted only once. This is also the case for the systemic cancers lymphomas, leukemias, kaposi sarcoma and mesothelioma.

Metastases and changes in coding practice

For some cases, the Cancer Registry of Norway only receive histological reports and no clinical forms. In these cases, verified information on metastases at the time of diagnosis is missing. For patients diagnosed in the period between 1953 and 2008 the guidelines for coding was to consider these patients as having unknown metastatic status.

A detailed investigation of the data for these patients, including survival analyses, showed that most of them probably had a localised disease. Based on additional information from radiation therapy and data from the Norwegian Patient Registry, the coding practice thus was changed for all patients diagnosed after 01.01.2009.

Patients with missing information on stage are registered with a localized disease if

1. They have not been treated with radiation therapy towards other region than where the tumour has been diagnosed, and/or
2. There is no information on metastatic codes from the Norwegian Patient Registry.

This change in coding practice may have an effect on trends in incidence and survival of localised and unknown stage over time

Statistical methods used in this report

Four measures are used in this report to describe the burden and risk of disease: incidence, mortality, survival and prevalence.

Incidence and mortality

Incidence and mortality refer to new cases and number of deaths occurring, respectively. Both measures can be expressed as the absolute number, or as the rate, taking into account the size of the population at risk. Rates are essential for the comparisons of groups, and within groups over time. The denominator is the underlying person-time at risk in which the new cases or deaths in the numerator arose. Cancer incidence and mortality are presented in this report as both numbers and rates. Several different types of rates are also used in this report.

Age-specific rates

There are compelling reasons for adjusting for the effect of age when comparing cancer risk in populations. Age is a strong determinant of cancer risk. The crude rate, a rate based on the frequency of cancer in the entire population, is calculated ignoring possible stratifications by age. Although this measure is useful as an indicator of the total cancer burden, its utility in comparing cancer risk between groups is severely limited when the age distribution differs between groups, or where demographic changes have impacted the size and age structure of a population over time.

To obtain a more accurate picture of the true risk of cancer, rates are calculated for each age strata, usually grouped in five-year intervals. The age-specific rate for age class i , denoted as r_i is obtained by dividing the number of events, d_i , by the corresponding person-years, Y_i . As rates are most often given per 100 000 person-years we multiply by 100 000:

$$r_i = \frac{d_i}{Y_i} \cdot 100\,000$$

Rates are provided separately for males and females, because of the different patterns by sex. Age and sex-specific incidence and mortality rates are the basis of epidemiological analysis of cancer frequency data.

Age-standardised rates

To facilitate comparisons, a summary rate is required that takes into account age-specific rates in each comparison group. The summary measure that appears in this report is the age-standardised rate

(ASR), a statistic that is independent of the effects of age, thus allowing comparisons of cancer risk between different groups. The calculation of the ASR is an example of direct standardisation, whereby the observed age-specific rates are applied to a standard population. The populations in each age class of the Standard Population are known as the weights to be used in the standardisation process. Many possible sets of weights, w_i , can be used. The world standard population, a commonly-used reference, is utilised in this report (Segi, 1960; Doll & al, 1966). Although the weights of the world standard fail to resemble those of the Norwegian population in 2013 (Figure 3), this observation is of relatively little importance, since it is the ratio of ASRs, an estimate of the age-standardised relative risk between populations or within a population over time, that is the focus of interest. This characteristic has been shown to be rather insensitive to the choice of standard (Bray & al, 2002).

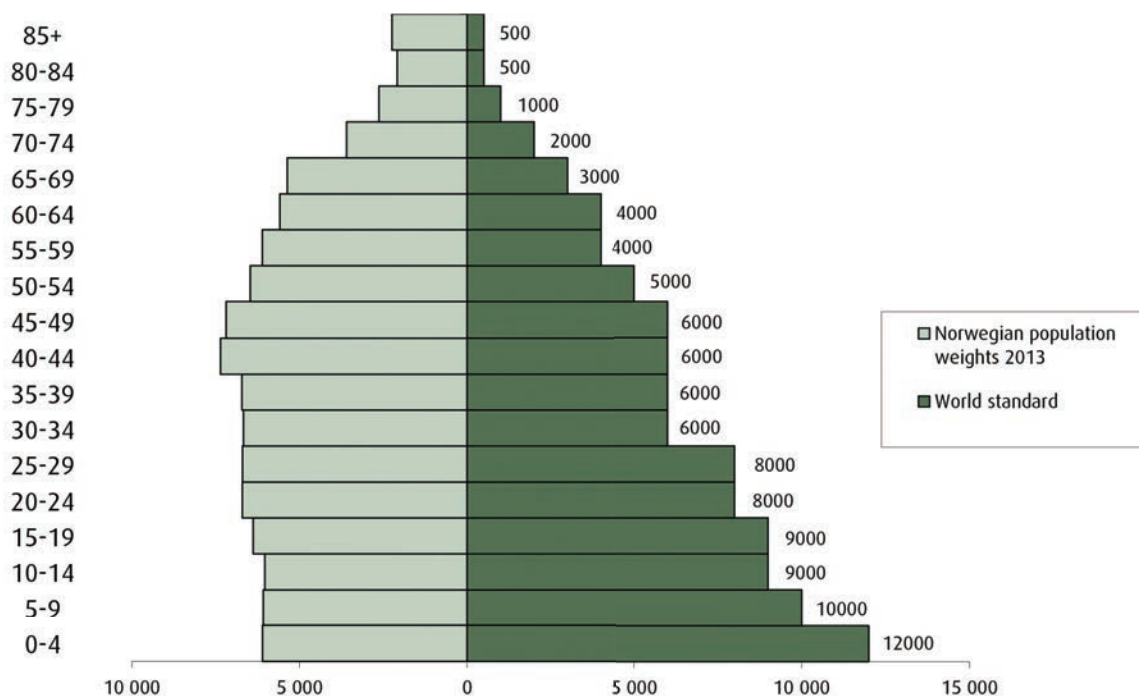
For weights w_i in the i th age class of the world standard and for A age classes with $i = 1, 2, \dots, A$, as before, r_i is the age-specific rate in the i th age class. The ASR is calculated as:

$$ASR = \frac{\sum_i r_i w_i}{\sum_i w_i}$$

Cumulative Risk

The cumulative risk is the probability that an individual will develop the cancer under study during a certain age span, in the absence of other competing causes of death (Day, 1992). The age span over which the risk is accumulated must be specified, and in this

Figure 3. Comparison of population weights



report, the range 0–74 years is used and provides an approximation of the risk of developing cancer. If before the age of 75 the cumulative risk is less than 10%, as is the case for most cancer forms, it is reasonably approximated by the cumulative rate.

The cumulative rate (CR) is the summation of the age-specific rates over each year of age from birth to a defined upper age limit. As age-specific incidence rates are computed according to five-year age groups, the cumulative rate is five times the sum of the age-specific rates calculated over the five-year age groups, assuming the age-specific rates are the same for all ages within the five-year age stratum:

$$CR = 5 \sum_i r_i$$

The cumulative rate has several advantages compared to age-standardised rates. Firstly, as a form of direct standardisation, the problem of choosing an arbitrary reference population is eliminated. Secondly, as an approximation to the cumulative risk, it has a greater intuitive appeal, and is more directly interpretable as a measurement of lifetime risk, assuming no other causes of death are in operation. The precise mathematical relationship between the two is:

$$\text{Cumulative risk} = 1 - e^{-CR}$$

Prevalence

Prevalence is the number or proportion of a population that has the disease at a given point in time. It is a complex measure of cancer incidence, mortality, and other factors affecting individuals after diagnosis and treatment.

Prevalence is a useful measure of the number of persons requiring care for chronic illnesses such as hypertension and diabetes. For cancer, on the other hand, many patients diagnosed in the past may now be considered cured, that is to say they no longer have a greater risk of death. However, some residual disability may be present subsequent to, for example, a specific treatment intervention, thus it is likely that the number of prevalent cancer cases also represents a useful measure.

Lifetime cancer prevalence can be defined as the number of persons alive having ever been diagnosed with cancer. Such a measure can easily be derived from the CRN's data, given the registration of cases

and complete follow up over many years. We provide additional estimates that may be useful for quantifying care burdens. Therefore this report shows the numbers of persons alive on 31st of December 2013 who were previously diagnosed with cancer within one year, one to four years, five to nine years, and 10 or more years.

We also show the number of patients who have been diagnosed with metastatic disease or local recurrence with metastasis and who were alive at various specific time points. This is another estimate of how the cancer burden has increased over time.

Survival

The survival time of a cancer patient is defined as the time that has elapsed between a cancer diagnosis and subsequent death or end of follow-up.

Follow-up data

To estimate long-term survival patterns and trends, vital statistics of patients diagnosed with cancer during 1960–2013 were obtained from the National Population Registry and Statistics Norway through 31st of December 2013.

The 23 most common cancer sites were selected for analysis, and grouped according to their respective ICD-10 categories. About 2.3% of the cases were excluded as they were either registered as DCO cases (Death Certificate Only), emigrated before diagnosis, or had zero survival time.

It has been shown that exclusion of patients with a prior cancer diagnosis, which often is associated with a poorer prognosis, may give rise to artificially elevated estimates of survival (Brenner & Hakulinen, 2007). Therefore patients with previous cancer diagnoses were included in each site-specific analysis.

However, to provide an estimate of “all sites” survival, analysis was restricted to first primary cancers. While the inclusion of multiple primaries has been recommended for comparative purposes, the corresponding reduction in the overall survival estimates has been shown to be negligible; the effect of their inclusion has been shown to reduce five-year survival in Norway (for diagnoses 1995–2009) by less than a percentage point (Rosso & al, 2009).

Results should be interpreted with caution. Survival of prostate cancer and breast cancer in women has been affected by the impact of PSA testing and mammographic screening, respectively.

Relative Survival

The most basic measure of survival is five-year survival, which represents the percentage of patients still alive 5 years after the date of diagnosis.

Not all deaths among cancer patients are due to the primary cancer under study. Deaths resulting from other causes will lower the survival and may possibly invalidate comparisons between populations. Relative survival is calculated to circumvent this problem by providing an estimate of net survival, and is defined as the observed survival proportion in a patient group divided by the expected survival of a comparable group in the general population with respect to age, sex and calendar year of investigation. At each time t (year) since diagnosis, the relative survival from the cancer, $R(t)$, is defined as follows:

$$R(t) = \frac{So(t)}{Se(t)}$$

where $So(t)$ is the observed survival of cancer patients while the calculation of expected survival $Se(t)$ is based on matching the major demographic characteristics of the patients to the general population. This requires the Norwegian population life tables from Statistics Norway by 1-year age group, sex, and 1-year calendar period. The method of Hakulinen (Hakulinen, 1982) was used for estimating expected survival.

With traditional cohort-based analyses, the most up-to-date estimates of longer-term survival would have pertained to patients diagnosed in the distant past, with corresponding profiles of prognosis. In contrast, period-based analyses consider the survival experience in recent years, and the survival that would have been observed in a hypothetical cohort of patients who experienced the same interval-specific survival as the patients who were actually at risk during a specific calendar period. Brenner and Hakulinen have concluded that period analysis should be used for routine purposes so as to advance the detection of progress in long-term cancer patient survival (Brenner & Hakulinen, 2002). Both clinicians and patients are primarily interested in up-to-date estimates of

survival, and its incorporation into Cancer in Norway aims to reflect the most recent developments in cancer care.

In this report, we have used a three-year period window (2011–2013) to estimate relative survival up to 15 years, thus patients diagnosed in 2010–2013 contribute with (part of) their survival experience the first year of follow up (part of the first year if they were diagnosed in 2010–2013), patients diagnosed in 2009–2012 contribute to the second year of follow up, patients diagnosed in 2008–2011 contribute to the third year of follow up etc. Thus, the period approach consists of the pieces of survival experience in 2011–2013 for all patients who have been diagnosed 15 years ago or less. The same approach is used to analyse time trends, using a three-year moving period window from 1965 to 2013. To increase stability in the estimates, stage-specific survival is presented using a five-year period window.

A more thorough review of, and rationale for, the utilisation of these survival methods was provided in the Special Issue of Cancer in Norway 2007.

Conditional relative survival

The majority of cancer survivors wish to obtain information on their current prognosis, once they have survived a certain period of time after diagnosis. Conditional survival is a key indicator in this respect, estimating survival proportions given that patients have already survived a certain duration of time (Hankey & Steinhorn, 1982; Janssen-Heijnen & al, 2007). The point at which conditional five-year relative survival reaches 100% is the point where there is no excess mortality among the cancer patients, and prognosis is equivalent to that experienced in the general population. As with the 15-year relative survival analyses, a three-year period window (2011–2013) is used in this report, and we present estimates of sex-specific five-year relative survival conditional on being alive 1 to 10 years after diagnosis. Estimates were not plotted when there were too few cancer survivors ($n < 20$).

Data quality, completeness and timeliness

Data quality

A comprehensive assessment of the data quality in the CRN was conducted in 2007 (Larsen & al, 2009). Larsen & al. reported that the coding and classification systems, in general, follow international standards. Estimated overall completeness was 98.8% for the registration period 2001–2005, a lower completeness was observed for haematological malignancies and cancers of the central nervous system. Practical aspects and techniques for addressing the data quality at a cancer registry, including the documentation of comparability, validity and timeliness was reviewed in 2009 (Bray & Parkin, 2009). Methods for the evaluation of registry completeness were also assessed the same year (Parkin & Bray, 2009).

Two indicators of accuracy are shown in Table 4, namely the percentage of cases morphologically verified (MV %), and the percentage of death certificate only registrations (DCO %). See Larsen & al, 2009 for further details. The CRN follows the rules for registration and reporting of multiple neoplasms as defined by the International Association of Cancer Registries (IACR) and the International Agency for Research on Cancer (IARC) (Fritz, 2000).

Completeness and timeliness of incidence

Table 5 shows the number of cancer cases diagnosed in 2012 as extracted on 22nd of April 2014 (for CiN 2012²), and on the 1st of February 2015. The number of cancer cases diagnosed in 2012 reported and appearing in this issue (CiN 2013) are 122 (0.4%) more than those reported in the previous Cancer in Norway (CiN 2012).

Common cancers such as colon, rectum lung, prostate and breast cancers appear to have been almost complete when CiN 2012 was published (difference $\leq 1.0\%$). The largest differences were shown for rare cancers such as C55 uterus, other (-38.5%). We also see that there was a reduction of cases of cervix uteri (-3.9%). This is due to cases judged not to be primary invasive cervical cancers right after the extraction of cases in April 2014 as noted in CiN 2012.

² In CiN 2012 we reported that there were 30 099 new cases, while the reported number for extracted data on 22nd of April 2014 is now 30 129. The discrepancy of 30 more cases is due to some changes in coding, especially affecting non-Hodgins lymphoma and leukaemia. As Table 5 aims to illustrate timeliness, we decided to include those 30 cases, so that the difference only includes new cases that have been reported after the publishing of CiN 2012.

Table 4 Percentage distribution of MV (morphologically verified) and DCO (death certificate only) by primary site 2009-2013

ICD10	Site	Cases	MV %	DCO %
C00-96	All sites	147626	94.1	2.0
C00-14	Mouth, pharynx	2663	98.9	0.4
C00	Lip	608	99.8	0.0
C01-02	Tongue	551	98.9	0.2
C03-06	Mouth, other	491	99.0	0.8
C07-08	Salivary glands	241	97.9	0.8
C09-14	Pharynx	772	98.4	0.5
C15-26	Digestive organs	30392	92.3	3.3
C15	Oesophagus	1195	97.4	1.6
C16	Stomach	2406	96.6	2.0
C17	Small intestine	737	96.7	1.5
C18	Colon	13188	95.6	1.9
C19-20	Rectum, rectosigmoid	6337	98.2	0.6
C21	Anus	345	98.0	0.6
C22	Liver	1049	75.2	11.2
C23-24	Gallbladder, bile ducts	867	84.7	5.9
C25	Pancreas	3594	73.2	10.9
C26	Other digestive organs	674	79.7	11.4
C30-34, C38	Respiratory organs	15030	89.5	3.2
C30-31	Nose, sinuses	214	98.6	0.5
C32	Larynx, epiglottis	591	99.2	0.7
C33-34	Lung, trachea	14156	89.0	3.3
C38	Mediastinum, pleura (non-mesothelioma)	69	76.8	11.6
C40-41	Bone	258	96.1	2.3
C43	Melanoma of the skin	8216	99.8	0.1
C44	Skin, non-melanoma	8253	99.7	0.2
C45	Mesothelioma	419	95.5	0.5
C47	Autonomic nervous system	45	97.8	0.0
C48-49	Soft tissues	788	96.4	1.4
C50	Breast	15005	99.3	0.4
C51-58	Female genital organs	8077	97.1	1.2
C53	Cervix uteri	1503	99.5	0.1
C54	Corpus uteri	3630	99.0	0.4
C55	Uterus, other	39	66.7	17.9
C56	Ovary	2200	93.1	2.6
C51-52, C57	Other female genital	690	96.1	2.2
C58	Placenta	15	73.3	0.0
C60-63	Male genital organs	25131	97.9	1.4
C61	Prostate	23355	97.7	1.4
C62	Testis	1553	99.7	0.2
C60, C63	Other male genital	223	98.7	0.0
C64-68	Urinary organs	10902	95.5	1.8
C64	Kidney excl. renal pelvis	3729	91.5	2.9
C65	Renal pelvis	451	94.7	1.1
C66-68	Bladder, ureter, urethra	6722	97.8	1.2
C69	Eye	328	61.3	0.6
C70-72, D32-33	Central nervous system	5060	64.0	2.8
C73	Thyroid gland	1507	99.2	0.3
C37, C74-75	Other endocrine glands	1121	69.2	0.9
C39, C76, C80	Other or unspecified	1663	60.4	16.8
C81-96	Lymphoid and haematopoietic tissue	12768	96.8	2.6
C81	Hodgkin lymphoma	667	99.6	0.1
C82-86, C96	Non-Hodgkin lymphoma	4794	99.0	0.6
C88	Malignant immunoproliferative diseases	295	98.0	1.7
C90	Multiple myeloma	1912	93.3	6.2
C91-95, D45-47	Leukaemia	5100	95.7	3.4

Table 5 Registered cancer cases in Norway, 2012 as obtained from the incidence registry extracted 22nd April 2014 and 1st February 2015

ICD10	Site	Cases diagnosed 2012 as of			
		22.4.2014	² 02.02.2015	Difference	%
C00-96	All sites	30129	30251	122	0.4
C00-14	Mouth, pharynx	540	550	10	1.9
C00	Lip	114	115	1	0.9
C01-02	Tongue	114	118	4	3.5
C03-06	Mouth, other	87	88	1	1.1
C07-08	Salivary glands	43	44	1	2.3
C09-14	Pharynx	182	185	3	1.6
C15-26	Digestive organs	6217	6252	35	0.6
C15	Oesophagus	239	244	5	2.1
C16	Stomach	470	467	-3	-0.6
C17	Small intestine	158	162	4	2.5
C18	Colon	2717	2724	7	0.3
C19-20	Rectum, rectosigmoid	1233	1245	12	1.0
C21	Anus	71	70	-1	-1.4
C22	Liver	215	219	4	1.9
C23-24	Gallbladder, bile ducts	187	189	2	1.1
C25	Pancreas	773	782	9	1.2
C26	Other digestive organs	154	150	-4	-2.6
C30-34, C38	Respiratory organs	3081	3100	19	0.6
C30-31	Nose, sinuses	50	50	0	0.0
C32	Larynx, epiglottis	117	118	1	0.9
C33-34	Lung, trachea	2902	2920	18	0.6
C38	Mediastinum, pleura (non-mesothelioma)	12	12	0	0.0
C40-41	Bone	46	46	0	0.0
C43	Melanoma of the skin	1755	1782	27	1.5
C44	Skin, non-melanoma	1676	1677	1	0.1
C45	Mesothelioma	81	81	0	0.0
C47	Autonomic nervous system	5	5	0	0.0
C48-49	Soft tissues	153	154	1	0.7
C50	Breast	2984	2987	3	0.1
C51-58	Female genital organs	1573	1555	-18	-1.1
C53	Cervix uteri	330	317	-13	-3.9
C54	Corpus uteri	643	647	4	0.6
C55	Uterus, other	13	8	-5	-38.5
C56	Ovary	452	446	-6	-1.3
C51-52, C57	Other female genital	131	133	2	1.5
C58	Placenta	4	4	0	0.0
C60-63	Male genital organs	5285	5282	-3	-0.1
C61	Prostate	4919	4914	-5	-0.1
C62	Testis	325	326	1	0.3
C60, C63	Other male genital	41	42	1	2.4
C64-68	Urinary organs	2204	2215	11	0.5
C64	Kidney excl. renal pelvis	781	787	6	0.8
C65	Renal pelvis	87	88	1	1.1
C66-68	Bladder, ureter, urethra	1336	1340	4	0.3
C69	Eye	59	59	0	0.0
C70-72, D32-33	Central nervous system	1013	1028	15	1.5
C73	Thyroid gland	312	316	4	1.3
C37, C74-75	Other endocrine glands	205	217	12	5.9
C39, C76, C80	Other or unspecified	295	288	-7	-2.4
C81-96	Lymphoid and haematopoietic tissue	2645	2657	12	0.5
C81	Hodgkin lymphoma	141	142	1	0.7
C82-86, C96	Non-Hodgkin lymphoma	999	1004	5	0.5
C88	Malignant immunoproliferative diseases	75	76	1	1.3
C90	Multiple myeloma	383	387	4	1.0
C91-95, D45-47	Leukaemia	1047	1048	1	0.1

² In CiN 2012 we reported that there were 30 099 new cases, while the reported number for extracted data on 22nd of April 2014 is now 30 129. The discrepancy of 30 more cases is due to some changes in coding, especially affecting non-Hodgins lymphoma and leukaemia. As Table 5 aims to illustrate timeliness, we decided to include those 30 cases, so that the difference only includes new cases that have been reported after the publishing of CiN 2012.

Cancer incidence, prevalence, mortality and survival in Norway 2013

Incidence

In 2013, 30 401 new cases of cancer (in 29 793 persons) were recorded in Norway, of which 16 482 occurred among men and 13 919 among women (Table 6). Cancers of the prostate, female breast, lung and colon are the most common cancers and account for 45% of the total cancer burden.

In men, prostate cancer continued to be the most frequent cancer (4 836 cases), followed by lung (1 555 cases) and colon cancer (1 325 cases). Breast cancer remained the most frequent cancer in women, with 3 220 new cases in 2013, followed by colon and lung cancer, with 1 456 and 1 301 incident cases, respectively.

When comparing the last five-year period (2009–2013) with the previous one (2004–08) we observe that there has been an overall increase in rates for all cancers combined at about 3% for men and 2% for women. Prostate cancer rates have had a slightly increase, while the rates for breast cancer are nearly the same for the two five-year periods. For both men and women there has been a remarkably increase in the rates of malignant melanoma.

Colon cancer rates had a slight increase for both genders, while the rates for rectum cancer rates have had a slight increase in men and a decrease in women.

On the positive side, the rate of lung and bladder cancer in men is decreasing. The steady rise in lung cancer rate for women has been a matter of great concern.

The rates for the last five-year period combined is still higher than for the previous period, but there are some uncertain signs of stabilisation during the latest three years (shown in more detail in the *trends section*).

Among more uncommon cancer sites, there has been a notable increase in the rates for liver cancer in men and thyroid cancer in women.

It is also worth mentioning that we suspect that the falling rates of CNS cancer might be due to an under-reporting of cases.

The vast majority of cancers in Norway, over 90% in men and 85% in women, are diagnosed among those aged 50 years and older (Figure 4). About half are diagnosed at ages 70 or older, while 40% of all new cases occur between the ages 50 and 69, in men and women alike. A larger proportion of cancers are diagnosed in women than men at the ages of 25 to 49, while slightly over 1% of the cancer burden, an equal proportion in males and females, occurs in children and young adults.

Figure 5 identifies the cancer types that are the main contributors to the disease burden at different ages. Cancers in the central nervous system and leukaemia were the most frequent cancers in boys and girls (0–14 years old). For young women (15–24) cancers in the central nervous system and Hodgkin lymphoma were the most common cancers, while testicular cancer was by far the most common cancer diagnosed in young men. Prostate cancer was the most frequent cancer in men above 50, while breast cancer was the most common cancer diagnosed in women from the ages 25 through to 69. Colon cancer was the most common cancer in women above 70.

Figure 4. Percentage distribution of cancer incidence by age, 2009–2013

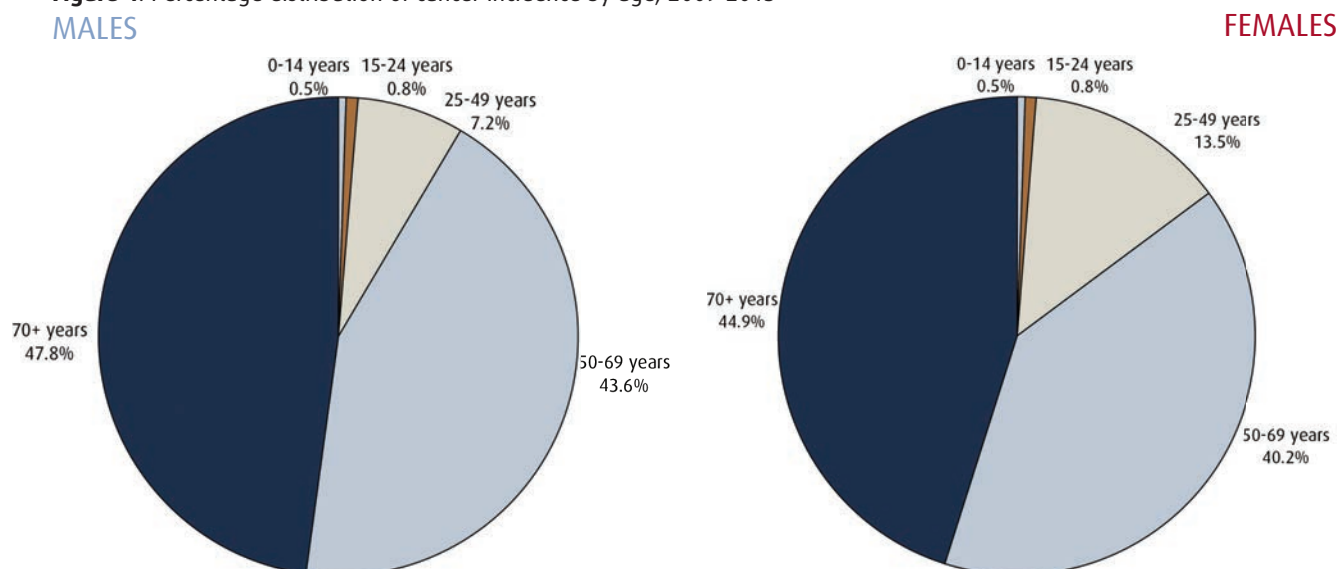


Table 6 Number of new cases by primary site and sex, 2013

ICD10	Site	Males	Females	Total
C00-96	All sites	16482	13919	30401
C00-14	Mouth, pharynx	343	193	536
C00	Lip	60	51	111
C01-02	Tongue	81	44	125
C03-06	Mouth, other	66	45	111
C07-08	Salivary glands	30	18	48
C09-14	Pharynx	106	35	141
C15-26	Digestive organs	3371	2983	6354
C15	Oesophagus	193	62	255
C16	Stomach	298	159	457
C17	Small intestine	86	46	132
C18	Colon	1325	1456	2781
C19-20	Rectum, rectosigmoid	777	569	1346
C21	Anus	13	51	64
C22	Liver	169	80	249
C23-24	Gallbladder, bile ducts	96	97	193
C25	Pancreas	352	380	732
C26	Other digestive organs	62	83	145
C30-34, C38	Respiratory organs	1694	1343	3037
C30-31	Nose, sinuses	30	18	48
C32	Larynx, epiglottis	103	20	123
C33-34	Lung, trachea	1555	1301	2856
C38	Mediastinum, pleura (non-mesothelioma)	6	4	10
C40-41	Bone	18	25	43
C43	Melanoma of the skin	839	880	1719
C44	Skin, non-melanoma	908	809	1717
C45	Mesothelioma	78	11	89
C47	Autonomic nervous system	5	6	11
C48-49	Soft tissues	78	92	170
C50	Breast	36	3220	3256
C51-58	Female genital organs		1590	1590
C53	Cervix uteri		282	282
C54	Corpus uteri		768	768
C55	Uterus, other		8	8
C56	Ovary		388	388
C51-52, C57	Other female genital		143	143
C58	Placenta		1	1
C60-63	Male genital organs	5219		5219
C61	Prostate	4836		4836
C62	Testis	337		337
C60, C63	Other male genital	46		46
C64-68	Urinary organs	1632	672	2304
C64	Kidney excl. renal pelvis	533	227	760
C65	Renal pelvis	65	45	110
C66-68	Bladder, ureter, urethra	1034	400	1434
C69	Eye	34	44	78
C70-72, D32-33	Central nervous system	414	464	878
C73	Thyroid gland	103	246	349
C37, C74-75	Other endocrine glands	84	94	178
C39, C76, C80	Other or unspecified	161	181	342
C81-96	Lymphoid and haematopoietic tissue	1465	1066	2531
C81	Hodgkin lymphoma	75	53	128
C82-86, C96	Non-Hodgkin lymphoma	558	413	971
C88	Malignant immunoproliferative diseases	29	26	55
C90	Multiple myeloma	219	161	380
C91-95, D45-47	Leukaemia	584	413	997

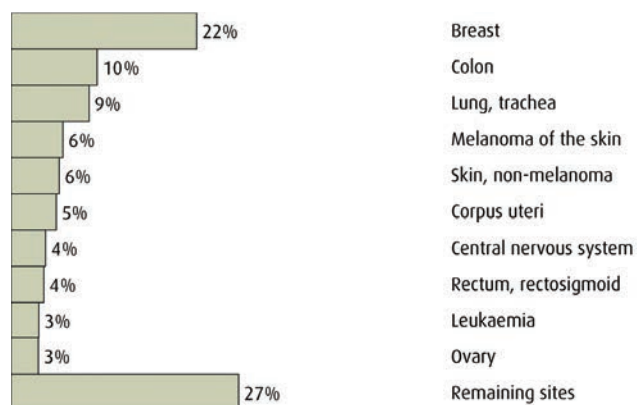
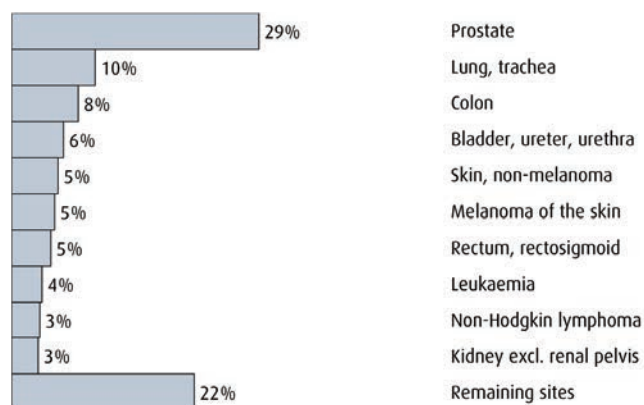
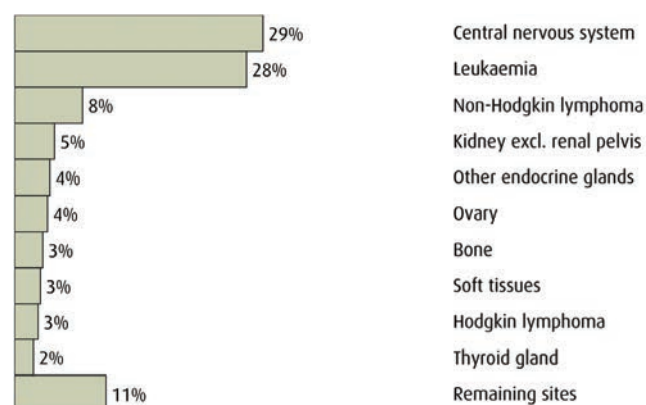
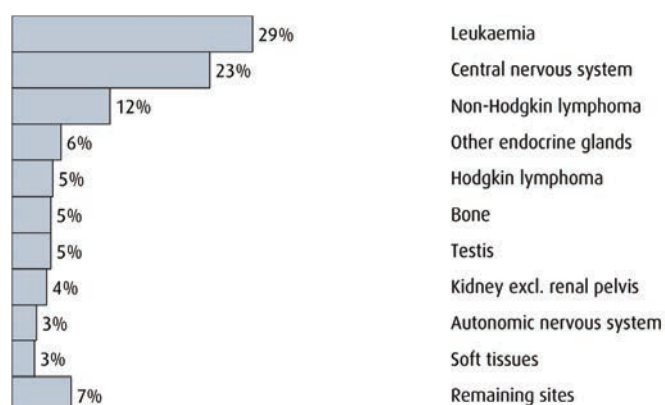
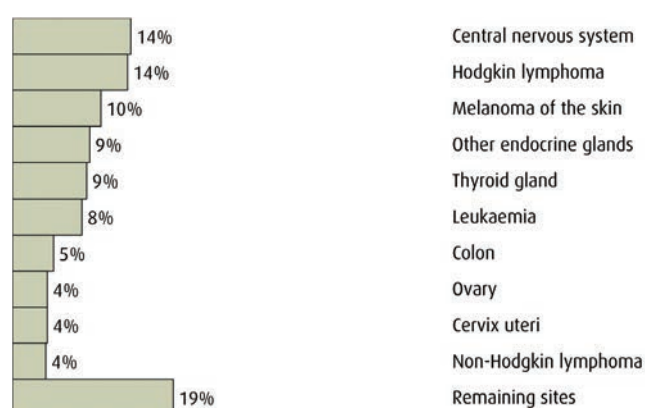
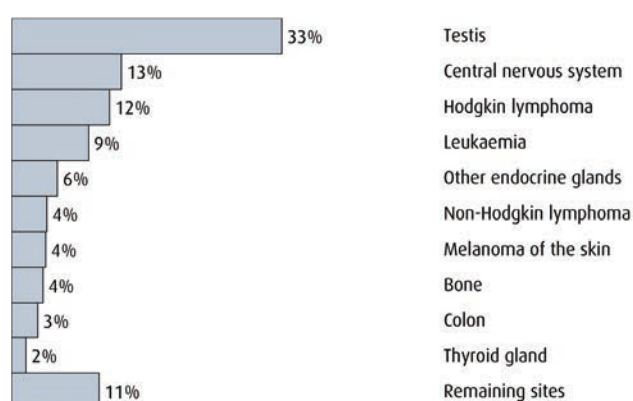
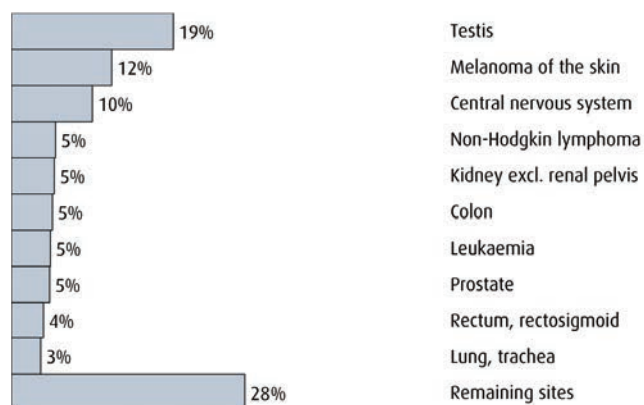
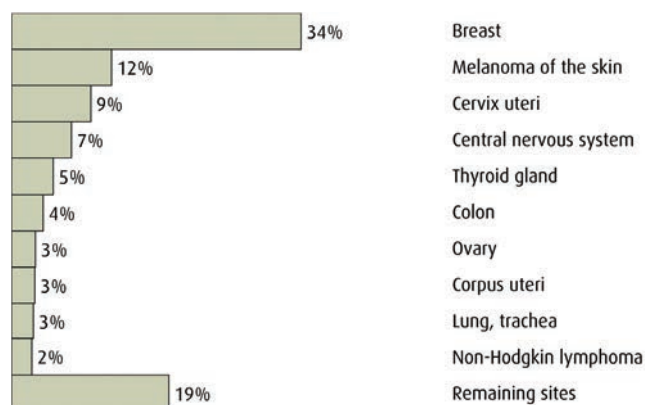
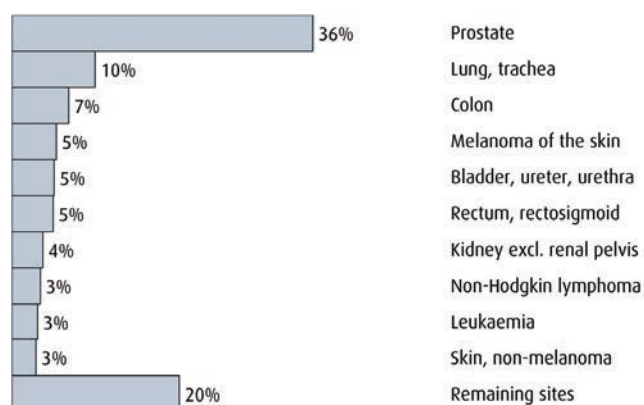
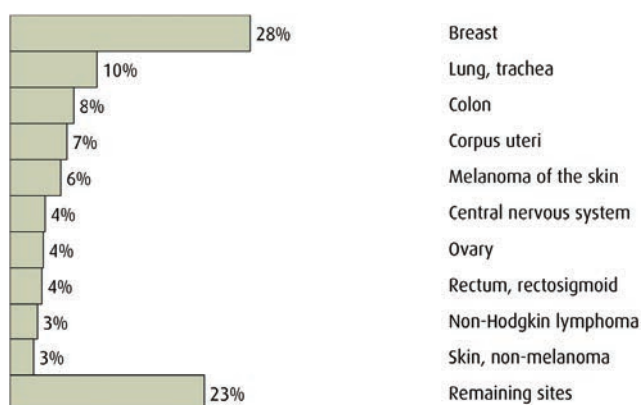
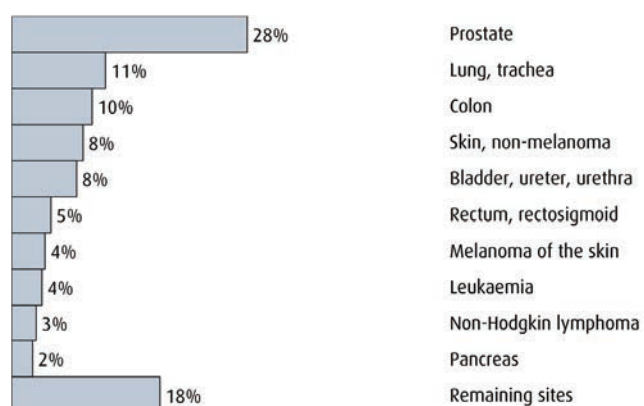
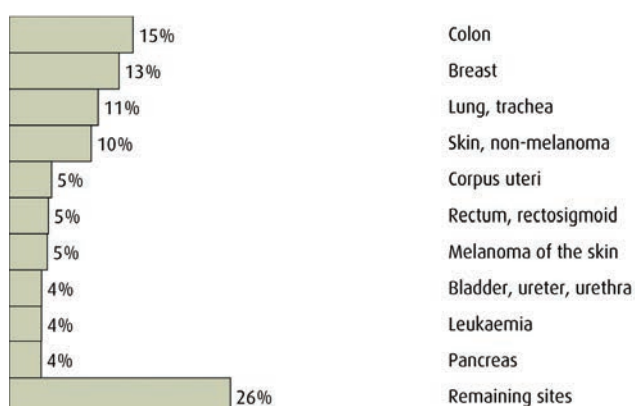
Figure 5. The most frequent types of cancer by age and sex, 2009-2013**A MALES** all ages (79 817 cases)**B FEMALE** all ages (67 809 cases)**C MALES** 0-14 years (414 cases)**D FEMALE** 0-14 years (360 cases)**E MALES** 15-24 years (635 cases)**F FEMALE** 15-24 years (537 cases)

Figure 5. The most frequent incident cancers by age and sex, 2009-2013**G MALES 25-49 years (5 749 cases)****H FEMALE 25-49 years (9 167 cases)****I MALES 50-69 years (34 838 cases)****J FEMALE 50-69 years (27 291 cases)****K MALES 70+ years (38 181 cases)****L FEMALE 70+ years (30 454 cases)**

The age-standardised rates and male:female (M:F) ratio for selected cancer types in 1979–1983 and 2009–2013 are compared in Table 7. Men tend to have higher incidence rates of for most cancer types in both time periods, with the exceptions of melanoma of the skin, cancer in the gallbladder, cancer in anus and thyroid cancer. The highest M:F ratios are observed for several of the head and neck cancers. The most frequent cancers including cancer of the

lung, bladder, stomach and rectum are consistently more common among men. The decline in the M:F ratios for several neoplasms over the last 25 years is largely the result of decreasing incidence trends in men and increasing incidence trends in women for a number of cancer types. This is especially striking for lung cancer.

Table 7 Sex ratios (male:female) of age-standardised rates (world) in 1979-83 and 2009-13 by primary site, sorted in descending order in last period

ICD10	Site	1979-83			2009-13		
		M	F	M:F ratio	M	F	M:F ratio
C32	Larynx, epiglottis	3.3	0.3	9.9	2.3	0.4	5.3
C15	Oesophagus	2.6	0.7	4.0	4.1	1.2	3.5
C66-68	Bladder, ureter, urethra	19.3	5.7	3.4	20.8	6.4	3.2
C09-14	Pharynx	1.7	0.6	3.1	3.0	1.1	2.7
C64	Kidney excl. renal pelvis	7.8	4.2	1.9	12.6	5.5	2.3
C22	Liver	1.8	1.0	1.9	3.1	1.5	2.1
C01-02	Tongue	1.1	0.5	2.5	1.8	0.9	2.0
C16	Stomach	17.8	9.2	1.9	6.4	3.3	2.0
C00	Lip	3.2	0.5	6.5	1.6	0.8	1.9
C19-20	Rectum, rectosigmoid	14.8	9.5	1.6	17.0	10.6	1.6
C65	Renal pelvis	0.9	0.3	2.6	1.1	0.7	1.6
C90	Multiple myeloma	4.7	3.0	1.5	4.8	3.1	1.5
C91-95, D45-47	Leukaemia	8.4	5.5	1.5	10.0	6.7	1.5
C82-86, C96	Non-Hodgkin lymphoma	6.5	4.8	1.3	13.2	9.6	1.4
C33-34	Lung, trachea	31.4	7.7	4.1	34.9	26.0	1.3
C81	Hodgkin lymphoma	2.4	1.6	1.6	2.8	2.2	1.3
C25	Pancreas	8.6	5.4	1.6	7.7	6.6	1.2
C18	Colon	17.9	17.6	1.0	27.1	24.6	1.1
C23-24	Gallbladder, bile ducts	1.1	1.7	0.6	1.8	1.8	1.0
C43	Melanoma of the skin	9.4	11.2	0.8	20.2	21.1	1.0
C21	Anus	0.3	0.7	0.4	0.5	1.1	0.5
C73	Thyroid gland	1.7	5.3	0.3	2.4	6.7	0.4

* A list of ICD-10 codes where morphologies are excluded or included is given in Table 1 (page 12) in this report.

Figure 6 depicts time trends in incidence for a number of common cancers. Of note are:

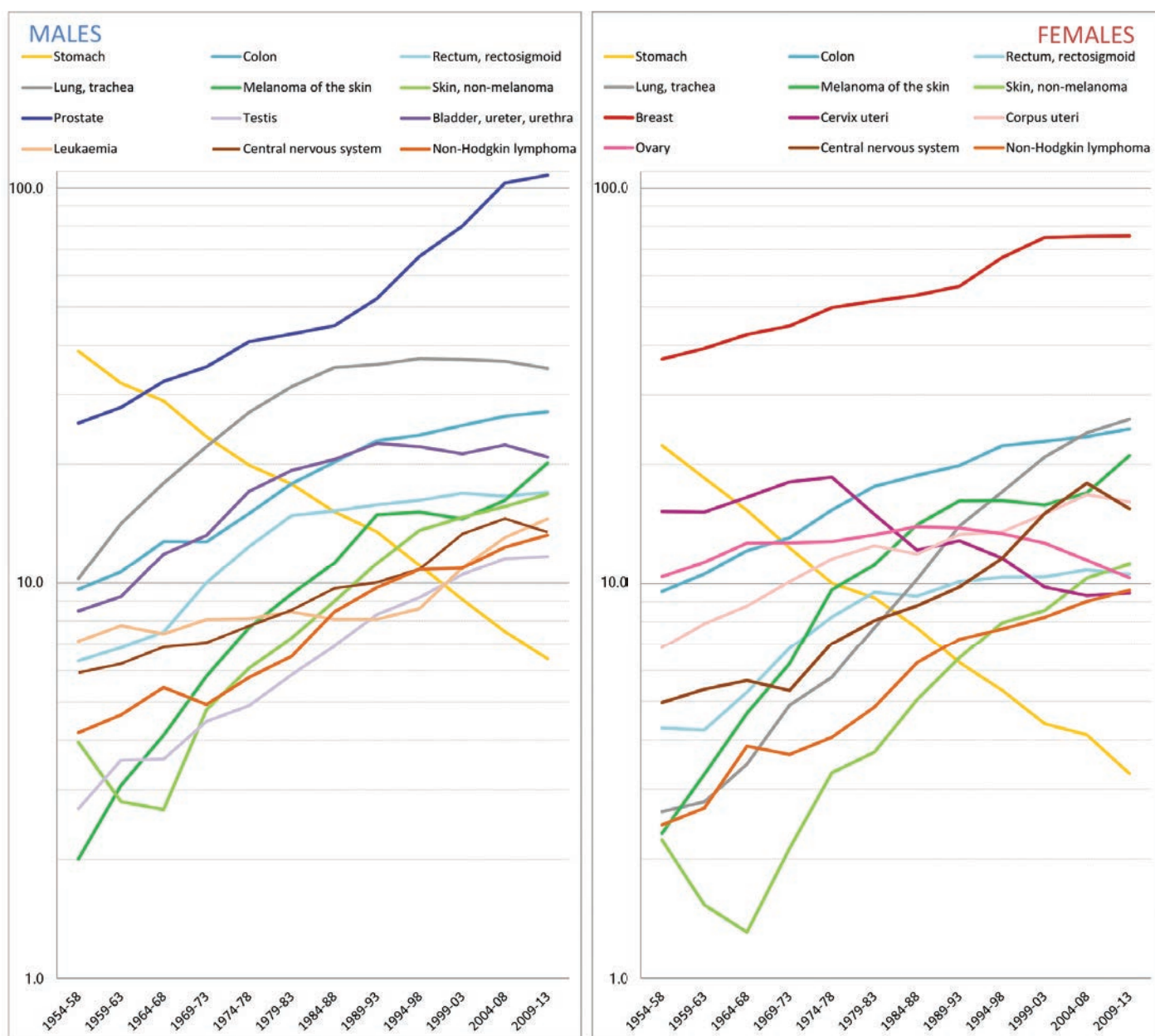
The incidence has increased for most cancer types since the first observation period in Norway (1954–58). Among common cancers, the most pronounced increases have been seen for lung cancer, skin cancer (both malignant melanoma and non-melanoma), non-Hodgkin lymphoma, tumours of the central nervous system, colon and rectum cancer, prostate cancer, and testis cancer.

Stomach cancer is one of the few that demonstrates a decreasing trend. In the first observation period stomach cancer was the most common cancer in men and women combined, in line with observations of cancer mortality reported by Norwegian general practitioners one hundred years ago (Gade, 1916). The marked decrease in incidence over 6 decades illustrates the vast potential for prevention by changes in environmental exposures or lifestyle habits. Use of refrigerators and control of *Helicobacter pylori*

infection (through hygiene and diet) are the most likely explanations for this trend.

The incidence of prostate cancer has increased 4-fold over the last 60 years. The dramatic upsurge from around 1990 illustrates the influence of changes in general practitioners' screening practice, health exams and diagnostic pressure. The introduction and subsequent widespread use of the Prostate Specific Antigen (PSA) test, followed by biopsies, is the main explanation for the doubling of the age-standardised incidence rate.

The incidence of breast cancer has doubled since the beginning of registration. The trend showed a monotonous rise until 2005, somewhat steeper during the late 1990s following the implementation of the Norwegian Breast Cancer Screening Programme. In the last ten years there have been some variations in the rate from one year to another, but the overall rate for the last two five-year periods indicates a stabilisation.

Figure 6. Time trends in age-standardised incidence rates (world) in Norway for selected cancers (semi log-scale), 1954-2013

Through 60 years, the incidence of lung cancer in women has increased almost 10-fold, and it is by far the most disquieting cancer problem among women. During the last two decades lung cancer has surpassed breast cancer as the most frequent cause of cancer death among women, and the incidence has surpassed that of colon cancer. The lung cancer trends largely reflect the historical changes in smoking habits. In fact, the first strong evidence of the close relationship between smoking and lung cancer came 60 years ago, in the early 1950s. The lung cancer trends year by year (shown in the trends section) do suggest a stabilisation for the last three years.

Melanoma of the skin is another cancer of concern. Back in 1953, it was an uncommon cancer, but today it ranges among the leading cancers both among men and women. After a period with non-rising rates during the 1990s, we have seen a consistent rise during the last decade, most probably caused by an increase in

exposure to ultra-violet rays through sun tanning and solarium use.

The downward trend in cancer of the uterine cervix (cervical cancer) is a result of identification and therapy of premalignant conditions as part of an organized screening programme. Vaccination against human papilloma virus was introduced as part of the Childhood Immunisation Programme in Norway in 2009 for girls born in 1997. Still, we do not expect that this primary prevention will affect the incidence rate for another 15 to 20 years.

For many common cancers, the explanation for an increase in incidence rate is unknown or incompletely understood. Colon cancer has been associated with an affluent western lifestyle, such as diet and lack of exercise. For testicular cancer and non-Hodgkin lymphoma, genetic factors play a role, other determinants are virtually unknown.

More detailed trends of incidence, mortality and survival for 23 cancers are provided later in this report.

Even if rates were to remain stable over the next 15 years, the number of new cases would increase as a result of the joint effects of population growth and ageing. The NORDCAN project (www-dep.iarc.fr/NORDCAN) provides access to online computations of short and long-term predictions of incidence and mortality in the Nordic countries.

The cumulative risk of cancer is shown in Table 8 and in Figure 7, for the 15 most common cancers in men and women, respectively. The cumulative risk of 13.5 for prostate cancer ranks highest in males and indicates that, in the absence of other causes of death, approximately one in seven men will develop this cancer before the age of 75. The corresponding risk of developing lung cancer is considerably lower in comparison, with about one in 25 men estimated to be diagnosed with the disease before the age of 75.

The cumulative risk of breast cancer ranks highest in women, with the figure of 8.2 indicating that about one in 12 Norwegian women develop this disease before the age of 75, in the absence of competing causes. As with men, lung and colon cancers rank second and third.

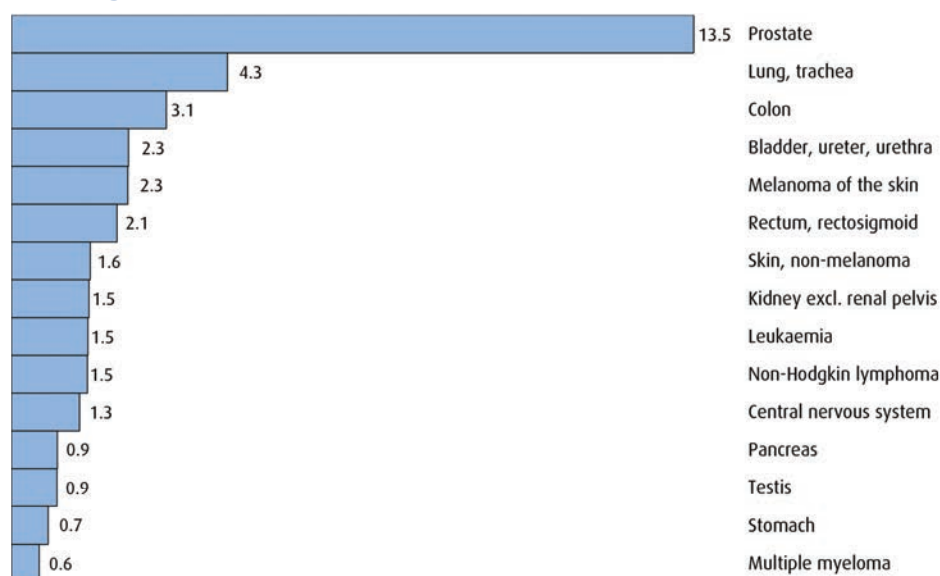
Tables 9-18 provide further information on the distribution of cancer incidence in Norway. The number of incident cases and rates are tabulated according to year of diagnosis, age group, county of residence, and stage.

Further information

This report can be downloaded from the Cancer Registry of Norway website in various formats.

Figure 7. Cumulative risk of developing cancer (%) by the age of 75 for selected cancers by sex, 2009-2013

MALES



FEMALES

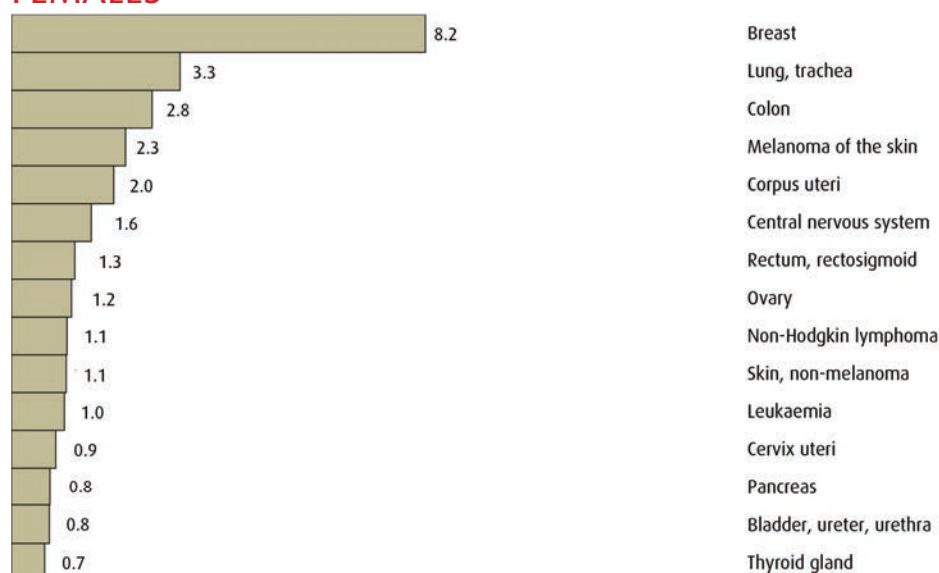


Table 8 Cumulative risk of developing cancer (%) by the age of 75 by primary site and sex, 2009-2013

ICD10	Site	Males	Females
C00-96	All sites	35.9	28.8
C00-14	Mouth, pharynx	1.0	0.5
C00	Lip	0.2	0.1
C01-02	Tongue	0.2	0.1
C03-06	Mouth, other	0.2	0.1
C07-08	Salivary glands	0.1	0.1
C09-14	Pharynx	0.4	0.1
C15-26	Digestive organs	8.0	5.9
C15	Oesophagus	0.5	0.1
C16	Stomach	0.7	0.3
C17	Small intestine	0.3	0.1
C18	Colon	3.1	2.8
C19-20	Rectum, rectosigmoid	2.1	1.3
C21	Anus	0.1	0.1
C22	Liver	0.3	0.2
C23-24	Gallbladder, bile ducts	0.2	0.2
C25	Pancreas	0.9	0.8
C26	Other digestive organs	0.1	0.1
C30-34, C38	Respiratory organs	4.6	3.4
C30-31	Nose, sinuses	0.1	0.0
C32	Larynx, epiglottis	0.3	0.1
C33-34	Lung, trachea	4.3	3.3
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0
C40-41	Bone	0.1	0.1
C43	Melanoma of the skin	2.3	2.3
C44	Skin, non-melanoma	1.6	1.1
C45	Mesothelioma	0.2	0.0
C47	Autonomic nervous system	0.0	0.0
C48-49	Soft tissues	0.2	0.2
C50	Breast	0.1	8.2
C51-58	Female genital organs		4.4
C53	Cervix uteri		0.9
C54	Corpus uteri		2.0
C55	Uterus, other		0.0
C56	Ovary		1.2
C51-52, C57	Other female genital		0.3
C58	Placenta		0.0
C60-63	Male genital organs	14.4	
C61	Prostate	13.5	
C62	Testis	0.9	
C60, C63	Other male genital	0.1	
C64-68	Urinary organs	3.9	1.5
C64	Kidney excl. renal pelvis	1.5	0.6
C65	Renal pelvis	0.1	0.1
C66-68	Bladder, ureter, urethra	2.3	0.8
C69	Eye	0.1	0.1
C70-72, D32-33	Central nervous system	1.3	1.6
C73	Thyroid gland	0.2	0.7
C37, C74-75	Other endocrine glands	0.3	0.3
C39, C76, C80	Other or unspecified	0.3	0.2
C81-96	Lymphoid and haematopoietic tissue	3.8	2.7
C81	Hodgkin lymphoma	0.2	0.2
C82-86, C96	Non-Hodgkin lymphoma	1.5	1.1
C88	Malignant immunoproliferative diseases	0.1	0.1
C90	Multiple myeloma	0.6	0.4
C91-95, D45-47	Leukaemia	1.5	1.0

Table 9a Number of new cases by primary site and year, 2004-2013

MALES

ICD10	Site	Year									
		2004	05	06	07	08	09	10	11	12	2013
C00-96	All sites	13449	13396	13720	14652	14819	15186	15287	16275	16587	16482
C00-14	Mouth, pharynx	257	252	289	285	273	349	314	328	366	343
C00	Lip	37	50	80	72	56	84	78	80	73	60
C01-02	Tongue	53	44	46	57	63	74	59	70	70	81
C03-06	Mouth, other	51	40	53	41	43	68	52	39	57	66
C07-08	Salivary glands	17	26	15	18	18	23	28	18	29	30
C09-14	Pharynx	99	92	95	97	93	100	97	121	137	106
C15-26	Digestive organs	2801	2774	2733	2868	2938	2956	3239	3124	3318	3371
C15	Oesophagus	149	133	148	133	162	148	187	181	174	193
C16	Stomach	348	304	303	337	300	264	300	321	284	298
C17	Small intestine	44	50	66	67	64	83	72	87	104	86
C18	Colon	1073	1075	1075	1111	1175	1126	1300	1232	1301	1325
C19-20	Rectum, rectosigmoid	675	668	644	639	675	731	746	694	748	777
C21	Anus	16	22	15	18	20	19	34	20	24	13
C22	Liver	83	77	90	98	99	98	128	132	137	169
C23-24	Gallbladder, bile ducts	67	85	58	59	66	74	88	58	86	96
C25	Pancreas	306	327	303	367	340	360	318	329	397	352
C26	Other digestive organs	40	33	31	39	37	53	66	70	63	62
C30-34, C38	Respiratory organs	1555	1554	1613	1625	1626	1658	1691	1761	1746	1694
C30-31	Nose, sinuses	25	24	18	28	24	23	20	22	31	30
C32	Larynx, epiglottis	100	101	116	78	113	89	105	100	99	103
C33-34	Lung, trachea	1419	1419	1470	1502	1484	1538	1558	1630	1608	1555
C38	Mediastinum, pleura (non-mesothelioma)	11	10	9	17	5	8	8	9	8	6
C40-41	Bone	28	25	24	21	23	37	27	29	33	18
C43	Melanoma of the skin	491	595	561	581	673	704	747	868	893	839
C44	Skin, non-melanoma	701	669	773	755	784	868	832	880	893	908
C45	Mesothelioma	75	74	56	63	64	69	78	63	65	78
C47	Autonomic nervous system	3	7	7	7	9	7	6	5	5	5
C48-49	Soft tissues	51	47	62	63	49	71	52	66	79	78
C50	Breast	14	18	14	19	21	15	13	27	28	36
C60-63	Male genital organs	4170	4019	4204	4800	4790	4755	4571	5304	5282	5219
C61	Prostate	3854	3709	3899	4450	4435	4382	4249	4974	4914	4836
C62	Testis	270	260	264	307	305	324	275	291	326	337
C60, C63	Other male genital	46	50	41	43	50	49	47	39	42	46
C64-68	Urinary organs	1407	1303	1331	1450	1439	1468	1472	1507	1573	1632
C64	Kidney excl. renal pelvis	395	366	364	401	418	426	490	522	530	533
C65	Renal pelvis	50	29	47	53	58	50	56	37	52	65
C66-68	Bladder, ureter, urethra	962	908	920	996	963	992	926	948	991	1034
C69	Eye	31	28	37	29	40	27	38	25	29	34
C70-72, D32-33	Central nervous system	391	461	428	503	455	457	464	477	480	414
C73	Thyroid gland	50	69	77	67	60	73	81	78	92	103
C37, C74-75	Other endocrine glands	79	100	93	137	135	140	108	114	123	84
C39, C76, C80	Other or unspecified	203	215	199	174	171	169	142	163	126	161
C81-96	Lymphoid and haematopoietic tissue	1142	1186	1219	1205	1269	1363	1412	1456	1456	1465
C81	Hodgkin lymphoma	75	63	67	68	77	81	76	65	81	75
C82-86, C96	Non-Hodgkin lymphoma	415	425	471	426	470	486	558	511	542	558
C88	Malignant immunoproliferative diseases	30	32	32	35	34	28	31	32	47	29
C90	Multiple myeloma	180	220	185	189	209	220	203	238	207	219
C91-95, D45-47	Leukaemia	442	446	464	487	479	548	544	610	579	584

Table 9b Number of new cases by primary site and year, 2004-2013

FEMALES

ICD10	Site	Year									
		2004	05	06	07	08	09	10	11	12	2013
C00-96	All sites	12039	12245	12503	12562	12774	13068	13331	13827	13664	13919
C00-14	Mouth, pharynx	134	182	206	169	195	174	211	201	184	193
C00	Lip	26	41	55	55	53	39	55	46	42	51
C01-02	Tongue	27	32	38	23	33	34	33	38	48	44
C03-06	Mouth, other	40	43	54	37	43	46	44	43	31	45
C07-08	Salivary glands	11	26	22	23	25	17	33	30	15	18
C09-14	Pharynx	30	40	37	31	41	38	46	44	48	35
C15-26	Digestive organs	2564	2625	2684	2692	2757	2849	2743	2875	2934	2983
C15	Oesophagus	54	60	45	56	59	54	66	60	70	62
C16	Stomach	218	235	218	216	212	221	177	199	183	159
C17	Small intestine	49	41	45	55	52	76	60	65	58	46
C18	Colon	1183	1197	1287	1267	1290	1359	1273	1393	1423	1456
C19-20	Rectum, rectosigmoid	520	520	516	505	519	519	527	529	497	569
C21	Anus	52	46	41	42	42	48	52	38	46	51
C22	Liver	42	58	43	54	66	66	78	79	82	80
C23-24	Gallbladder, bile ducts	65	82	78	83	82	85	92	88	103	97
C25	Pancreas	333	326	372	361	372	360	348	365	385	380
C26	Other digestive organs	48	60	39	53	63	61	70	59	87	83
C30-34, C38	Respiratory organs	978	994	1080	1159	1201	1192	1320	1271	1354	1343
C30-31	Nose, sinuses	27	17	22	32	16	12	20	19	19	18
C32	Larynx, epiglottis	13	19	12	17	23	20	19	17	19	20
C33-34	Lung, trachea	926	951	1041	1103	1158	1152	1273	1229	1312	1301
C38	Mediastinum, pleura (non-mesothelioma)	12	7	5	7	4	8	8	6	4	4
C40-41	Bone	16	17	20	22	23	29	24	23	13	25
C43	Melanoma of the skin	559	574	663	640	624	731	791	874	889	880
C44	Skin, non-melanoma	578	677	659	681	689	758	716	805	784	809
C45	Mesothelioma	10	9	21	14	10	12	14	13	16	11
C47	Autonomic nervous system	8	3	8	5	8	5	5	1	0	6
C48-49	Soft tissues	89	86	82	93	80	103	89	83	75	92
C50	Breast	2806	2822	2729	2753	2783	2752	2850	3105	2959	3220
C51-58	Female genital organs	1572	1580	1571	1546	1603	1588	1667	1677	1555	1590
C53	Cervix uteri	269	306	313	279	296	299	310	295	317	282
C54	Corpus uteri	684	680	661	673	720	712	759	744	647	768
C55	Uterus, other	8	6	9	3	8	11	6	6	8	8
C56	Ovary	467	436	457	447	460	431	446	489	446	388
C51-52, C57	Other female genital	140	146	127	143	119	133	143	138	133	143
C58	Placenta	4	6	4	1	0	2	3	5	4	1
C64-68	Urinary organs	575	603	589	597	616	635	641	660	642	672
C64	Kidney excl. renal pelvis	211	243	212	254	256	238	244	262	257	227
C65	Renal pelvis	27	18	26	23	28	38	33	39	36	45
C66-68	Bladder, ureter, urethra	337	342	351	320	332	359	364	359	349	400
C69	Eye	37	25	30	29	31	39	30	32	30	44
C70-72, D32-33	Central nervous system	595	596	627	634	593	627	584	545	548	464
C73	Thyroid gland	172	169	148	162	176	185	204	221	224	246
C37, C74-75	Other endocrine glands	98	106	126	121	161	130	115	119	94	94
C39, C76, C80	Other or unspecified	283	269	243	234	192	201	190	168	162	181
C81-96	Lymphoid and haematopoietic tissue	965	908	1017	1011	1032	1058	1137	1154	1201	1066
C81	Hodgkin lymphoma	47	49	48	49	42	47	57	71	61	53
C82-86, C96	Non-Hodgkin lymphoma	373	335	389	384	374	405	412	447	462	413
C88	Malignant immunoproliferative diseases	21	22	25	19	15	25	25	23	29	26
C90	Multiple myeloma	154	158	146	167	164	160	181	143	180	161
C91-95, D45-47	Leukaemia	370	344	409	392	437	421	462	470	469	413

Table 10a Age-standardised (world) incidence rates per 100 000 person-years by primary site and year, 2004-2013**MALES**

ICD10	Site	Year									
		2004	05	06	07	08	09	10	11	12	2013
C00-96	All sites	357.8	351.1	355.0	374.9	372.2	374.8	364.7	381.7	380.7	369.2
C00-14	Mouth, pharynx	7.6	7.1	7.9	7.9	7.4	9.1	7.9	8.1	8.9	8.1
C00	Lip	1.0	1.3	2.0	1.8	1.3	2.0	1.8	1.7	1.5	1.3
C01-02	Tongue	1.6	1.3	1.2	1.6	1.8	2.1	1.6	1.8	1.7	1.9
C03-06	Mouth, other	1.5	1.1	1.5	1.1	1.2	1.7	1.2	0.9	1.4	1.6
C07-08	Salivary glands	0.5	0.7	0.4	0.5	0.5	0.6	0.6	0.5	0.7	0.7
C09-14	Pharynx	3.0	2.7	2.8	2.8	2.6	2.7	2.7	3.2	3.6	2.7
C15-26	Digestive organs	71.0	69.2	66.9	69.4	70.3	69.0	73.6	70.0	72.0	72.1
C15	Oesophagus	4.0	3.5	4.0	3.4	4.1	3.7	4.4	4.2	4.0	4.1
C16	Stomach	8.2	7.2	7.1	7.9	7.1	5.9	6.9	7.0	6.2	6.2
C17	Small intestine	1.2	1.3	1.8	1.7	1.6	2.3	1.8	2.1	2.5	1.9
C18	Colon	26.7	26.6	25.5	26.1	27.4	25.6	28.4	26.8	27.6	27.5
C19-20	Rectum, rectosigmoid	17.5	16.9	16.0	16.2	16.4	17.7	17.6	16.1	16.4	17.3
C21	Anus	0.5	0.7	0.4	0.5	0.5	0.5	0.8	0.5	0.6	0.3
C22	Liver	1.9	2.2	2.4	2.6	2.7	2.4	3.0	3.1	3.2	3.8
C23-24	Gallbladder, bile ducts	1.7	2.2	1.4	1.4	1.6	1.6	2.0	1.3	1.8	2.1
C25	Pancreas	8.1	8.0	7.7	8.8	8.1	8.1	7.2	7.5	8.5	7.5
C26	Other digestive organs	1.1	0.7	0.7	0.9	0.8	1.3	1.5	1.4	1.3	1.4
C30-34, C38	Respiratory organs	40.3	39.4	41.2	39.8	39.4	39.3	38.4	38.9	37.8	35.9
C30-31	Nose, sinuses	0.7	0.7	0.4	0.8	0.7	0.6	0.5	0.6	0.7	0.7
C32	Larynx, epiglottis	2.8	2.7	3.2	2.0	2.8	2.2	2.5	2.3	2.3	2.3
C33-34	Lung, trachea	36.6	35.7	37.4	36.6	35.8	36.4	35.2	35.8	34.7	32.8
C38	Mediastinum, pleura (non-mesothelioma)	0.3	0.2	0.2	0.4	0.1	0.2	0.2	0.2	0.2	0.1
C40-41	Bone	1.1	0.9	1.1	0.7	1.0	1.3	1.0	1.1	1.1	0.5
C43	Melanoma of the skin	14.7	17.0	15.5	16.0	17.8	18.3	19.3	21.7	21.6	19.6
C44	Skin, non-melanoma	15.4	14.6	16.6	15.6	16.0	17.4	16.7	16.6	16.8	16.6
C45	Mesothelioma	1.9	1.8	1.4	1.5	1.5	1.6	1.7	1.4	1.4	1.5
C47	Autonomic nervous system	0.1	0.4	0.3	0.3	0.5	0.5	0.4	0.2	0.3	0.1
C48-49	Soft tissues	1.6	1.4	2.0	1.8	1.5	1.9	1.3	2.1	2.2	2.1
C50	Breast	0.3	0.5	0.3	0.5	0.5	0.4	0.3	0.6	0.6	0.8
C60-63	Male genital organs	112.0	106.9	109.9	125.8	122.0	120.7	111.1	126.4	123.9	119.4
C61	Prostate	99.9	94.5	98.0	112.0	108.7	106.8	99.4	114.6	110.9	106.3
C62	Testis	11.1	10.9	10.8	12.6	12.1	12.7	10.5	11.0	12.0	12.1
C60, C63	Other male genital	1.0	1.4	1.0	1.1	1.3	1.2	1.2	0.8	1.1	1.0
C64-68	Urinary organs	35.2	32.5	32.4	35.2	34.9	34.3	33.5	34.3	35.0	35.4
C64	Kidney excl. renal pelvis	11.0	9.8	9.9	10.5	11.1	11.1	12.3	13.2	13.2	13.0
C65	Renal pelvis	1.3	0.8	1.2	1.3	1.5	1.1	1.2	0.8	1.0	1.4
C66-68	Bladder, ureter, urethra	23.0	21.8	21.3	23.4	22.3	22.0	20.0	20.3	20.8	21.1
C69	Eye	1.1	0.8	1.1	0.9	1.2	0.8	1.0	0.6	0.8	0.9
C70-72, D32-33	Central nervous system	12.9	15.2	13.7	16.6	14.4	13.9	13.7	14.0	13.9	11.8
C73	Thyroid gland	1.5	2.2	2.3	1.9	1.7	2.1	2.3	2.2	2.6	2.8
C37, C74-75	Other endocrine glands	2.8	3.0	3.2	4.3	4.2	4.6	3.3	3.4	3.7	2.4
C39, C76, C80	Other or unspecified	4.6	4.8	4.6	3.9	3.7	3.4	3.0	3.4	2.6	3.1
C81-96	Lymphoid and haematopoietic tissue	33.5	33.4	34.5	33.0	34.2	36.1	36.2	36.7	35.5	35.8
C81	Hodgkin lymphoma	3.1	2.7	2.5	2.4	2.9	3.0	2.9	2.4	3.0	2.7
C82-86, C96	Non-Hodgkin lymphoma	12.3	11.8	13.0	11.9	12.5	12.8	14.0	13.0	13.0	13.3
C88	Malignant immunoproliferative diseases	0.7	0.8	0.8	0.9	0.7	0.7	0.7	0.7	1.0	0.6
C90	Multiple myeloma	4.5	5.4	4.8	4.6	5.0	5.1	4.5	5.4	4.3	4.5
C91-95, D45-47	Leukaemia	12.9	12.7	13.5	13.2	13.0	14.5	14.1	15.2	14.2	14.7

Table 10b Age-standardised (world) incidence rates per 100 000 person-years by primary site and year, 2004-2013**FEMALES**

ICD10	Site	Year									
		2004	05	06	07	08	09	10	11	12	2013
C00-96	All sites	294.4	294.4	300.0	296.0	296.5	299.7	303.0	308.5	300.5	298.5
C00-14	Mouth, pharynx	3.2	4.2	5.0	3.7	4.3	4.0	4.9	4.5	3.8	4.2
C00	Lip	0.6	0.7	1.2	1.0	1.0	0.7	1.0	0.8	0.6	1.0
C01-02	Tongue	0.7	0.7	0.9	0.5	0.8	0.8	0.7	0.8	1.1	1.0
C03-06	Mouth, other	0.9	1.0	1.2	0.7	0.8	0.9	1.0	0.9	0.5	0.9
C07-08	Salivary glands	0.2	0.7	0.5	0.7	0.6	0.5	0.8	0.9	0.3	0.4
C09-14	Pharynx	0.8	1.1	1.1	0.8	1.1	1.0	1.3	1.1	1.2	0.9
C15-26	Digestive organs	51.7	50.9	52.6	51.4	51.3	53.5	50.7	53.4	53.7	53.5
C15	Oesophagus	1.1	1.1	0.9	1.0	1.2	1.0	1.2	1.2	1.3	1.1
C16	Stomach	4.5	4.4	4.1	4.0	3.6	3.9	3.0	3.4	3.2	2.9
C17	Small intestine	1.2	1.0	1.1	1.2	1.3	1.6	1.3	1.4	1.2	0.9
C18	Colon	23.4	22.7	24.3	23.7	23.5	24.3	22.8	25.4	25.7	24.8
C19-20	Rectum, rectosigmoid	10.9	10.8	11.2	10.9	10.5	10.6	10.4	10.8	9.8	11.2
C21	Anus	1.2	1.1	0.9	1.0	1.0	1.3	1.2	0.8	1.0	1.1
C22	Liver	1.0	1.3	0.8	1.0	1.2	1.4	1.4	1.5	1.5	1.7
C23-24	Gallbladder, bile ducts	1.2	1.6	1.5	1.6	1.6	1.6	1.8	1.6	1.9	1.8
C25	Pancreas	6.4	5.8	7.1	6.2	6.7	6.7	6.3	6.3	6.7	6.7
C26	Other digestive organs	0.9	1.0	0.6	0.8	0.9	1.0	1.2	1.0	1.5	1.3
C30-34, C38	Respiratory organs	23.6	23.6	25.1	26.4	26.7	25.7	28.5	26.4	27.4	26.7
C30-31	Nose, sinuses	0.5	0.4	0.5	0.7	0.3	0.3	0.4	0.5	0.4	0.4
C32	Larynx, epiglottis	0.3	0.5	0.3	0.4	0.6	0.5	0.4	0.4	0.5	0.4
C33-34	Lung, trachea	22.6	22.5	24.3	25.1	25.8	24.7	27.4	25.4	26.6	25.8
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.1
C40-41	Bone	0.7	0.6	0.8	0.8	0.7	1.0	1.0	0.8	0.4	0.7
C43	Melanoma of the skin	15.9	16.2	18.9	17.0	16.7	19.4	20.2	21.4	22.6	21.8
C44	Skin, non-melanoma	9.6	10.4	10.3	10.4	11.0	11.3	10.8	11.3	11.4	11.1
C45	Mesothelioma	0.1	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3
C47	Autonomic nervous system	0.4	0.2	0.3	0.3	0.4	0.2	0.2	0.1	0.0	0.2
C48-49	Soft tissues	2.5	2.7	2.2	2.5	2.1	2.7	2.2	2.2	1.9	2.2
C50	Breast	78.1	77.4	74.5	73.7	74.1	71.5	74.0	79.7	73.8	79.0
C51-58	Female genital organs	41.4	41.3	40.0	39.8	40.3	39.6	40.9	40.4	37.1	36.8
C53	Cervix uteri	8.7	9.9	9.8	8.9	9.3	9.7	9.8	9.4	9.9	8.6
C54	Corpus uteri	17.1	16.7	15.8	16.6	17.5	16.4	17.3	16.5	13.7	16.6
C55	Uterus, other	0.2	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1
C56	Ovary	12.4	11.2	11.3	11.2	11.1	10.5	10.6	11.4	10.5	8.7
C51-52, C57	Other female genital	2.8	3.2	2.8	3.0	2.2	2.8	2.9	2.9	2.7	2.7
C58	Placenta	0.2	0.3	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.0
C64-68	Urinary organs	11.3	12.8	12.4	12.5	12.8	13.2	12.8	12.6	12.1	12.5
C64	Kidney excl. renal pelvis	4.9	5.6	5.1	5.9	5.7	5.6	5.5	5.7	5.7	4.9
C65	Renal pelvis	0.4	0.3	0.5	0.4	0.5	0.8	0.6	0.7	0.6	0.8
C66-68	Bladder, ureter, urethra	5.9	6.8	6.8	6.2	6.5	6.7	6.7	6.2	5.8	6.7
C69	Eye	1.0	0.9	0.9	0.9	0.8	1.2	0.9	0.7	0.7	1.1
C70-72, D32-33	Central nervous system	17.7	18.2	17.8	18.7	17.3	17.7	16.5	15.5	15.1	12.6
C73	Thyroid gland	5.4	5.3	4.8	5.1	5.4	6.0	6.5	6.6	7.2	7.2
C37, C74-75	Other endocrine glands	3.3	4.0	4.5	4.3	5.4	4.8	3.7	3.9	2.8	3.0
C39, C76, C80	Other or unspecified	4.8	4.4	4.1	3.6	3.2	3.0	3.0	2.2	2.4	2.6
C81-96	Lymphoid and haematopoietic tissue	23.7	21.4	25.5	24.7	23.8	24.6	26.0	26.5	27.7	23.2
C81	Hodgkin lymphoma	1.8	2.0	2.1	1.9	1.4	1.9	2.0	2.8	2.4	2.0
C82-86, C96	Non-Hodgkin lymphoma	9.3	8.0	9.5	9.4	8.7	9.4	9.5	9.8	10.6	8.8
C88	Malignant immunoproliferative diseases	0.4	0.4	0.6	0.4	0.3	0.5	0.5	0.5	0.5	0.5
C90	Multiple myeloma	3.1	3.3	2.8	3.4	3.3	3.3	3.4	2.6	3.4	2.8
C91-95, D45-47	Leukaemia	9.0	7.7	10.6	9.6	10.1	9.5	10.5	10.8	10.7	9.0

Table 11a Average annual number of new cases by primary site and five-year age group, 2009-2013

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	38	21	24	48	79	103
C00-14	Mouth, pharynx	0	0	0	2	1	1
C00	Lip	0	0	0	0	0	0
C01-02	Tongue	0	0	0	0	1	0
C03-06	Mouth, other	0	0	0	0	0	0
C07-08	Salivary glands	0	0	0	0	0	0
C09-14	Pharynx	0	0	0	1	0	0
C15-26	Digestive organs	1	0	1	2	4	8
C15	Oesophagus	0	0	0	0	0	0
C16	Stomach	0	0	0	0	1	1
C17	Small intestine	0	0	0	0	0	1
C18	Colon	0	0	0	1	3	3
C19-20	Rectum, rectosigmoid	0	0	0	0	1	1
C21	Anus	0	0	0	0	0	0
C22	Liver	1	0	0	0	0	0
C23-24	Gallbladder, bile ducts	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	1
C26	Other digestive organs	0	0	0	0	0	0
C30-34, C38	Respiratory organs	0	0	0	1	1	1
C30-31	Nose, sinuses	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0
C33-34	Lung, trachea	0	0	0	1	0	1
C38	Mediastinum, pleura (non-mesothelioma)	0	0	0	0	0	0
C40-41	Bone	0	1	3	2	2	1
C43	Melanoma of the skin	0	0	0	1	4	5
C44	Skin, non-melanoma	1	0	0	1	1	2
C45	Mesothelioma	0	0	0	0	0	0
C47	Autonomic nervous system	2	1	0	0	1	0
C48-49	Soft tissues	2	0	0	0	1	1
C50	Breast	0	0	0	0	0	0
C60-63	Male genital organs	1	1	2	10	32	46
C61	Prostate	0	0	0	0	0	0
C62	Testis	1	1	2	10	32	46
C60, C63	Other male genital	0	0	0	0	0	0
C64-68	Urinary organs	3	0	0	1	1	3
C64	Kidney excl. renal pelvis	3	0	0	1	0	1
C65	Renal pelvis	0	0	0	0	0	0
C66-68	Bladder, ureter, urethra	0	0	0	1	1	1
C69	Eye	1	0	0	0	0	0
C70-72, D32-33	Central nervous system	7	6	6	9	8	13
C73	Thyroid gland	0	0	0	1	2	3
C37, C74-75	Other endocrine glands	3	1	1	3	4	3
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81-96	Lymphoid and haematopoietic tissue	17	11	10	15	17	16
C81	Hodgkin lymphoma	0	2	2	6	9	7
C82-86, C96	Non-Hodgkin lymphoma	3	3	3	3	2	3
C88	Malignant immunoproliferative diseases	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0
C91-95, D45-47	Leukaemia	14	6	4	5	7	5

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
151	198	276	422	738	1341	2176	2712	2352	2086	1790	1408	
2	4	10	13	32	46	52	55	39	37	23	22	
0	1	1	2	3	7	6	11	12	13	9	10	
1	1	2	3	9	8	10	13	9	6	4	3	
1	1	1	1	4	4	10	11	7	6	4	5	
1	1	1	1	2	2	2	3	3	3	3	3	
0	0	4	5	15	24	24	17	8	9	3	2	
13	27	47	77	149	272	391	519	471	467	431	321	
1	1	4	5	9	19	28	32	24	22	19	14	
1	4	3	9	14	23	35	43	41	41	46	32	
1	1	3	3	5	10	12	16	12	9	8	5	
5	8	15	24	50	90	134	193	191	198	191	149	
3	8	12	20	36	73	98	132	117	105	80	54	
0	0	1	1	3	3	3	3	2	3	2	1	
1	1	3	5	9	14	20	18	14	16	17	11	
0	1	1	1	4	8	10	12	12	10	10	10	
0	2	5	7	17	27	44	58	52	52	50	35	
1	1	0	2	3	5	6	11	7	10	8	8	
2	5	11	27	69	134	244	309	287	260	227	132	
0	1	1	0	2	3	3	5	3	2	2	2	
0	0	1	2	5	12	16	22	13	13	10	6	
2	4	9	24	61	119	225	281	269	245	214	123	
0	0	0	0	0	1	0	1	2	1	1	1	
1	0	1	1	2	2	3	3	2	2	1	1	
15	24	42	50	59	78	103	125	96	81	73	52	
4	5	8	10	15	28	57	98	115	146	176	209	
0	0	0	1	2	2	9	13	14	15	9	7	
0	0	0	0	0	0	0	1	0	0	0	0	
2	2	2	6	6	5	9	9	7	6	5	5	
0	0	1	1	1	2	4	4	5	3	2	2	
55	52	47	77	186	449	846	1062	811	589	436	324	
0	0	7	45	163	436	835	1049	805	583	428	318	
54	51	39	29	19	9	5	5	1	2	1	2	
0	1	1	3	4	4	6	7	4	4	6	4	
5	12	31	49	72	123	197	232	228	234	185	154	
3	8	19	27	41	54	80	80	72	53	36	22	
0	0	0	1	1	4	7	9	8	9	9	4	
1	5	12	21	30	65	110	143	148	173	140	128	
0	0	3	2	3	3	4	3	3	4	2	2	
19	21	22	35	37	49	55	50	41	37	24	20	
6	8	8	7	7	8	7	8	6	8	5	2	
4	6	7	8	10	11	15	11	11	9	4	3	
0	1	2	3	5	8	13	20	23	20	26	33	
22	28	34	55	82	121	169	188	193	169	163	119	
7	6	4	5	4	5	5	4	4	3	2	1	
7	12	16	22	35	46	70	83	71	60	54	37	
0	0	0	0	2	3	3	7	5	5	5	2	
1	1	3	6	13	19	25	26	34	32	32	23	
7	10	11	21	29	48	66	68	79	69	70	56	

Table 11b Average annual number of new cases by primary site and five-year age group, 2009-2013

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	33	16	22	41	67	121
C00-14	Mouth, pharynx	0	0	0	0	1	3
C00	Lip	0	0	0	0	0	0
C01-02	Tongue	0	0	0	0	0	1
C03-06	Mouth, other	0	0	0	0	0	0
C07-08	Salivary glands	0	0	0	0	1	1
C09-14	Pharynx	0	0	0	0	0	0
C15-26	Digestive organs	1	0	1	3	5	7
C15	Oesophagus	0	0	0	0	0	0
C16	Stomach	0	0	0	0	0	0
C17	Small intestine	0	0	0	0	0	0
C18	Colon	0	0	0	3	3	5
C19-20	Rectum, rectosigmoid	0	0	0	0	0	1
C21	Anus	0	0	0	0	0	0
C22	Liver	1	0	0	0	1	0
C23-24	Gallbladder, bile ducts	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	0
C26	Other digestive organs	0	0	0	0	0	0
C30-34, C38	Respiratory organs	0	1	0	0	2	2
C30-31	Nose, sinuses	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0
C33-34	Lung, trachea	0	0	0	0	1	1
C38	Mediastinum, pleura (non-mesothelioma)	0	0	0	0	0	0
C40-41	Bone	0	1	1	2	2	2
C43	Melanoma of the skin	0	0	0	2	9	20
C44	Skin, non-melanoma	1	0	0	1	1	1
C45	Mesothelioma	0	0	0	0	0	0
C47	Autonomic nervous system	1	0	0	0	0	0
C48-49	Soft tissues	1	1	1	1	1	2
C50	Breast	0	0	0	1	3	14
C51-58	Female genital organs	1	0	2	3	7	25
C53	Cervix uteri	0	0	0	0	4	20
C54	Corpus uteri	0	0	0	0	0	1
C55	Uterus, other	0	0	0	0	0	0
C56	Ovary	1	0	2	3	2	4
C51-52, C57	Other female genital	0	0	0	0	0	0
C58	Placenta	0	0	0	0	0	1
C64-68	Urinary organs	2	1	0	0	1	1
C64	Kidney excl. renal pelvis	2	1	0	0	1	1
C65	Renal pelvis	0	0	0	0	0	0
C66-68	Bladder, ureter, urethra	0	0	0	0	0	0
C69	Eye	1	0	0	0	0	1
C70-72, D32-33	Central nervous system	9	6	6	6	9	12
C73	Thyroid gland	0	0	1	2	7	11
C37, C74-75	Other endocrine glands	2	1	0	4	6	8
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81-96	Lymphoid and haematopoietic tissue	13	6	9	14	13	13
C81	Hodgkin lymphoma	0	0	2	8	7	6
C82-86, C96	Non-Hodgkin lymphoma	3	1	2	2	3	4
C88	Malignant immunoproliferative diseases	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0
C91-95, D45-47	Leukaemia	10	5	5	5	4	4

FEMALES

Age											
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
182	327	496	706	950	1190	1556	1762	1450	1439	1447	1755
2	3	6	9	16	18	22	25	19	18	19	29
0	0	1	1	2	3	4	4	6	5	8	11
1	0	1	2	4	3	6	6	3	4	4	5
0	0	1	1	2	3	4	7	6	4	5	7
1	1	1	2	2	2	2	2	2	2	2	3
0	1	2	3	6	7	6	7	3	3	1	2
13	23	40	76	119	187	274	364	375	423	442	524
0	0	1	1	3	4	6	12	8	8	6	13
0	2	3	6	10	9	14	22	19	26	31	44
0	0	1	3	5	6	8	7	8	8	8	7
7	9	16	31	48	79	117	168	189	214	230	261
2	5	10	20	28	46	61	70	70	73	65	76
0	1	1	3	5	5	7	6	4	5	4	5
1	1	0	3	3	5	8	9	8	10	13	14
0	1	1	2	3	7	12	13	13	12	13	16
2	2	6	6	12	22	37	49	48	56	59	69
0	0	1	2	2	3	6	8	9	11	12	18
3	5	11	31	64	112	183	222	211	194	151	105
0	1	0	0	1	2	2	1	2	2	2	2
0	0	1	0	1	3	2	3	2	3	2	1
2	4	10	29	60	106	177	218	206	190	146	101
0	0	0	1	1	1	1	0	1	0	1	1
1	0	2	2	1	1	2	1	1	1	1	2
24	45	61	67	67	81	82	99	75	57	63	82
2	3	8	10	17	26	44	65	76	101	133	282
0	0	0	0	1	0	2	2	2	3	1	2
0	0	0	0	0	0	0	0	0	0	0	0
1	3	4	4	5	7	15	13	9	8	8	7
39	95	184	294	362	364	424	404	207	187	187	213
36	64	73	90	129	170	200	227	168	147	129	144
28	47	41	35	26	20	21	18	11	9	10	10
3	7	13	26	51	87	104	127	97	85	67	58
0	0	0	0	1	0	1	1	1	1	2	2
3	8	15	21	42	52	58	64	43	42	35	46
1	1	4	7	10	11	17	18	16	11	15	27
1	0	0	0	0	0	0	0	0	0	0	0
1	4	13	18	26	47	73	89	87	94	95	98
1	4	9	9	15	19	32	36	33	33	26	24
0	0	0	0	1	3	4	6	5	7	7	4
0	1	3	9	10	25	36	47	49	54	61	70
1	1	1	1	2	4	4	6	3	3	3	3
19	26	33	39	45	53	68	61	50	33	36	42
14	23	21	21	22	20	21	15	14	9	7	5
5	9	10	8	11	9	11	9	6	6	4	2
1	0	2	2	5	7	14	14	15	22	32	66
18	21	28	36	59	82	117	145	130	132	136	149
8	6	3	2	2	2	2	4	2	2	2	1
5	9	11	15	27	40	53	58	53	48	49	46
0	0	0	1	1	1	4	4	3	5	3	3
0	1	2	4	9	12	17	24	18	29	23	26
6	6	11	14	20	28	41	55	55	48	58	73

Table 12a Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2009-2013

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	23.8	13.8	15.0	28.9	47.9	63.7
C00-14	Mouth, pharynx	0.1	0.3	0.2	1.0	0.4	0.5
C00	Lip	0.0	0.0	0.0	0.0	0.0	0.0
C01-02	Tongue	0.0	0.0	0.0	0.0	0.4	0.2
C03-06	Mouth, other	0.0	0.0	0.1	0.1	0.0	0.0
C07-08	Salivary glands	0.0	0.0	0.1	0.2	0.0	0.2
C09-14	Pharynx	0.1	0.3	0.0	0.6	0.0	0.0
C15-26	Digestive organs	0.5	0.0	0.4	1.2	2.4	4.7
C15	Oesophagus	0.0	0.0	0.0	0.0	0.0	0.0
C16	Stomach	0.0	0.0	0.0	0.1	0.4	0.4
C17	Small intestine	0.0	0.0	0.1	0.1	0.0	0.6
C18	Colon	0.0	0.0	0.1	0.7	1.7	2.1
C19-20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.4	0.6
C21	Anus	0.0	0.0	0.0	0.0	0.0	0.0
C22	Liver	0.5	0.0	0.0	0.1	0.0	0.2
C23-24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.0	0.0
C25	Pancreas	0.0	0.0	0.1	0.1	0.0	0.6
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.1
C30-34, C38	Respiratory organs	0.3	0.0	0.0	0.6	0.5	0.7
C30-31	Nose, sinuses	0.0	0.0	0.0	0.1	0.2	0.0
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0
C33-34	Lung, trachea	0.3	0.0	0.0	0.5	0.2	0.7
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.0	0.0	0.0	0.0
C40-41	Bone	0.0	0.5	1.9	1.4	1.5	0.7
C43	Melanoma of the skin	0.0	0.0	0.2	0.7	2.4	3.1
C44	Skin, non-melanoma	0.4	0.0	0.1	0.6	0.5	1.1
C45	Mesothelioma	0.0	0.0	0.0	0.0	0.0	0.0
C47	Autonomic nervous system	1.1	0.4	0.0	0.2	0.4	0.1
C48-49	Soft tissues	1.0	0.1	0.2	0.2	0.6	0.7
C50	Breast	0.0	0.0	0.0	0.0	0.0	0.0
C60-63	Male genital organs	0.8	0.5	1.2	5.9	19.3	28.6
C61	Prostate	0.0	0.0	0.0	0.1	0.0	0.0
C62	Testis	0.8	0.5	1.1	5.7	19.3	28.6
C60, C63	Other male genital	0.0	0.0	0.1	0.0	0.0	0.0
C64-68	Urinary organs	1.9	0.3	0.2	0.7	0.7	1.7
C64	Kidney excl. renal pelvis	1.6	0.3	0.2	0.4	0.2	0.9
C65	Renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66-68	Bladder, ureter, urethra	0.3	0.0	0.0	0.4	0.5	0.9
C69	Eye	0.5	0.1	0.0	0.1	0.1	0.0
C70-72, D32-33	Central nervous system	4.7	4.0	3.6	5.3	4.9	8.0
C73	Thyroid gland	0.0	0.0	0.1	0.4	1.0	1.7
C37, C74-75	Other endocrine glands	1.8	0.6	0.6	1.7	2.6	2.1
C39, C76, C80	Other or unspecified	0.0	0.0	0.0	0.0	0.1	0.1
C81-96	Lymphoid and haematopoietic tissue	10.7	6.9	6.0	8.9	10.6	9.7
C81	Hodgkin lymphoma	0.1	1.2	1.2	3.8	5.2	4.6
C82-86, C96	Non-Hodgkin lymphoma	2.0	2.1	2.0	1.9	1.3	2.1
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.0	0.0	0.0
C91-95, D45-47	Leukaemia	8.6	3.6	2.7	3.1	4.0	3.1

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
90.3	109.2	145.0	235.8	447.9	876.4	1495.1	2305.9	2992.2	3557.6	4071.2	4008.9	
1.4	2.3	5.0	7.5	19.7	30.1	35.7	46.8	49.9	62.4	51.8	63.8	
0.1	0.3	0.7	1.2	1.8	4.7	4.0	9.2	15.3	21.8	19.6	29.6	
0.4	0.7	1.2	1.9	5.7	5.5	7.0	10.9	11.7	9.9	9.1	7.4	
0.4	0.6	0.7	0.8	2.3	2.9	6.9	9.7	8.4	10.6	9.1	14.8	
0.4	0.6	0.5	0.7	1.0	1.4	1.5	2.9	3.8	5.1	6.4	7.4	
0.2	0.2	1.9	2.9	8.9	15.5	16.4	14.1	10.7	15.0	7.7	4.6	
7.9	15.1	24.5	43.3	90.6	178.0	268.4	441.3	599.5	795.9	981.0	914.3	
0.4	0.6	2.3	2.7	5.2	12.4	19.0	27.4	30.0	37.2	43.2	39.9	
0.5	2.2	1.7	4.9	8.4	15.3	23.8	36.6	51.7	70.3	105.1	92.2	
0.5	0.4	1.4	1.7	3.2	6.3	8.5	13.6	15.5	15.4	19.1	14.2	
3.1	4.5	8.1	13.3	30.1	59.1	92.3	164.5	243.0	338.1	433.4	424.1	
2.0	4.4	6.1	11.1	21.7	48.0	67.3	112.1	148.4	179.1	181.5	154.8	
0.0	0.1	0.3	0.6	1.7	1.7	2.2	2.7	2.8	5.1	4.1	4.0	
0.6	0.8	1.5	3.0	5.7	9.3	14.0	15.3	18.3	27.0	39.1	32.4	
0.1	0.6	0.6	0.7	2.7	5.1	6.9	10.5	14.8	17.4	23.2	29.0	
0.1	1.1	2.4	4.0	10.2	17.8	30.2	49.7	65.9	89.4	113.2	100.8	
0.6	0.4	0.2	1.3	1.8	3.1	4.1	9.0	9.2	17.1	19.1	22.8	
1.2	3.0	5.8	14.9	41.6	87.4	167.6	262.6	365.4	443.5	516.2	376.3	
0.2	0.4	0.5	0.2	1.3	1.7	2.3	3.9	4.1	3.4	5.5	4.6	
0.0	0.2	0.3	1.0	3.3	7.6	10.7	18.4	17.0	21.5	22.7	17.6	
1.0	2.3	4.7	13.4	37.0	77.5	154.3	239.3	342.3	417.2	486.2	350.7	
0.0	0.0	0.2	0.2	0.0	0.7	0.3	1.0	2.0	1.4	1.8	3.4	
0.7	0.2	0.7	0.4	1.0	1.2	1.8	2.9	2.0	3.8	2.7	2.3	
9.2	13.5	21.9	28.1	35.9	51.2	70.6	106.6	122.1	137.8	166.0	148.6	
2.3	3.0	4.4	5.7	8.9	18.0	39.2	83.5	146.6	249.4	400.2	595.5	
0.0	0.0	0.0	0.3	1.0	1.4	5.9	11.1	17.6	25.2	20.9	19.4	
0.1	0.0	0.1	0.0	0.1	0.0	0.3	0.5	0.3	0.0	0.0	0.6	
1.0	1.0	1.3	3.4	3.6	3.5	6.3	8.0	8.9	10.2	10.5	14.2	
0.0	0.1	0.4	0.3	0.7	1.4	2.5	3.4	5.9	4.4	3.6	6.8	
32.7	28.8	24.9	43.0	113.1	293.5	581.2	903.2	1032.1	1004.4	990.5	921.7	
0.0	0.1	3.8	25.1	99.0	284.6	573.9	892.3	1024.7	994.1	974.2	906.3	
32.6	28.2	20.7	16.4	11.8	6.1	3.2	4.6	1.8	3.4	2.3	4.6	
0.1	0.6	0.4	1.5	2.3	2.7	4.1	6.3	5.6	6.8	14.1	10.8	
2.9	6.8	16.0	27.5	43.7	80.4	135.1	197.1	290.3	399.8	420.2	437.2	
2.0	4.2	9.9	15.3	24.8	35.4	54.8	67.9	91.6	90.1	81.9	62.1	
0.0	0.1	0.1	0.4	0.8	2.5	4.5	7.7	10.7	15.0	20.9	10.2	
0.8	2.5	6.1	11.7	18.1	42.5	75.7	121.6	188.0	294.8	317.4	364.9	
0.2	0.1	1.5	1.0	1.7	2.2	2.7	2.9	3.8	6.8	4.1	4.6	
11.4	11.6	11.7	19.6	22.6	31.8	37.8	42.7	51.9	62.4	53.7	56.4	
3.4	4.2	4.2	3.9	4.5	5.0	4.7	7.1	7.9	13.6	11.8	6.8	
2.4	3.3	3.6	4.5	6.2	7.1	10.2	9.5	13.5	16.0	9.1	8.0	
0.0	0.4	0.8	1.9	3.0	5.4	8.8	16.7	28.8	33.4	58.2	92.8	
13.4	15.7	18.0	30.5	50.0	78.9	116.4	160.0	245.8	288.3	370.6	339.9	
4.1	3.2	2.1	3.0	2.4	3.1	3.2	3.7	4.6	4.8	4.5	2.8	
4.4	6.4	8.3	12.3	21.4	29.9	48.2	70.2	90.3	102.0	123.7	104.7	
0.0	0.0	0.2	0.2	1.0	1.8	2.3	5.6	6.6	8.9	12.3	6.8	
0.8	0.7	1.7	3.5	7.9	12.4	17.5	22.4	43.5	55.3	71.9	66.6	
4.1	5.4	5.8	11.5	17.4	31.6	45.2	58.0	100.8	117.4	158.3	158.8	

Table 12b Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2009-2013

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	22.1	11.1	14.7	26.0	42.1	77.1
C00-14	Mouth, pharynx	0.1	0.0	0.3	0.1	0.9	1.8
C00	Lip	0.1	0.0	0.0	0.0	0.0	0.3
C01-02	Tongue	0.0	0.0	0.0	0.0	0.1	0.4
C03-06	Mouth, other	0.0	0.0	0.0	0.0	0.1	0.3
C07-08	Salivary glands	0.0	0.0	0.3	0.1	0.4	0.6
C09-14	Pharynx	0.0	0.0	0.0	0.0	0.3	0.3
C15-26	Digestive organs	0.7	0.1	0.5	2.2	2.9	4.6
C15	Oesophagus	0.0	0.0	0.0	0.0	0.1	0.0
C16	Stomach	0.0	0.0	0.0	0.0	0.3	0.3
C17	Small intestine	0.0	0.0	0.0	0.1	0.1	0.1
C18	Colon	0.0	0.0	0.3	1.7	1.6	2.9
C19-20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.1	0.9
C21	Anus	0.0	0.0	0.0	0.0	0.1	0.0
C22	Liver	0.7	0.1	0.3	0.1	0.4	0.1
C23-24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.1	0.0
C25	Pancreas	0.0	0.0	0.0	0.3	0.0	0.0
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.3
C30-34, C38	Respiratory organs	0.0	0.4	0.0	0.0	1.0	1.1
C30-31	Nose, sinuses	0.0	0.1	0.0	0.0	0.3	0.3
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0
C33-34	Lung, trachea	0.0	0.3	0.0	0.0	0.8	0.9
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.0	0.0	0.0	0.0
C40-41	Bone	0.1	0.5	0.9	1.1	1.1	1.0
C43	Melanoma of the skin	0.3	0.3	0.1	1.4	5.7	12.5
C44	Skin, non-melanoma	0.4	0.1	0.1	0.8	0.6	0.9
C45	Mesothelioma	0.0	0.0	0.0	0.1	0.0	0.0
C47	Autonomic nervous system	0.7	0.0	0.0	0.1	0.0	0.0
C48-49	Soft tissues	0.7	0.4	0.4	0.4	0.8	1.1
C50	Breast	0.0	0.0	0.0	0.4	1.8	8.8
C51-58	Female genital organs	0.8	0.0	1.2	1.9	4.4	16.2
C53	Cervix uteri	0.0	0.0	0.0	0.1	2.7	12.6
C54	Corpus uteri	0.0	0.0	0.0	0.1	0.3	0.4
C55	Uterus, other	0.0	0.0	0.0	0.0	0.0	0.0
C56	Ovary	0.7	0.0	1.2	1.7	1.1	2.3
C51-52, C57	Other female genital	0.1	0.0	0.0	0.0	0.1	0.1
C58	Placenta	0.0	0.0	0.0	0.0	0.3	0.8
C64-68	Urinary organs	1.6	0.5	0.1	0.3	0.4	0.6
C64	Kidney excl. renal pelvis	1.6	0.5	0.1	0.1	0.4	0.4
C65	Renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66-68	Bladder, ureter, urethra	0.0	0.0	0.0	0.1	0.0	0.3
C69	Eye	0.8	0.0	0.0	0.0	0.1	0.9
C70-72, D32-33	Central nervous system	6.1	3.9	4.1	4.1	5.4	7.5
C73	Thyroid gland	0.0	0.1	0.9	1.4	4.6	6.9
C37, C74-75	Other endocrine glands	1.3	0.4	0.3	2.5	3.7	4.8
C39, C76, C80	Other or unspecified	0.0	0.1	0.0	0.0	0.3	0.1
C81-96	Lymphoid and haematopoietic tissue	8.5	4.1	5.8	9.2	8.5	8.2
C81	Hodgkin lymphoma	0.0	0.0	1.3	4.8	4.4	3.6
C82-86, C96	Non-Hodgkin lymphoma	1.7	0.9	1.2	1.0	1.6	2.3
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.1	0.0	0.0
C91-95, D45-47	Leukaemia	6.8	3.1	3.3	3.2	2.4	2.3

FEMALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
114.6	190.3	275.4	419.5	603.1	798.0	1090.7	1467.8	1654.2	1967.5	2240.8	2270.9	
1.4	1.7	3.2	5.5	10.4	12.3	15.1	21.2	22.1	24.9	29.7	37.3	
0.3	0.2	0.7	0.7	1.4	2.1	2.7	3.2	6.4	7.1	11.8	14.8	
0.4	0.1	0.7	1.3	2.5	2.3	4.1	4.7	3.0	6.0	6.2	6.0	
0.1	0.1	0.6	0.6	1.5	2.1	2.7	5.8	7.1	5.7	7.1	9.6	
0.5	0.7	0.3	1.1	1.1	1.1	1.3	2.0	2.1	2.5	2.8	3.9	
0.1	0.6	1.0	1.8	3.8	4.7	4.5	5.5	3.7	3.6	1.9	3.1	
8.4	13.3	22.2	44.9	75.3	125.3	192.2	303.4	428.3	578.3	684.5	677.7	
0.0	0.0	0.6	0.5	1.6	2.5	4.2	10.2	8.9	11.2	9.9	17.3	
0.3	1.3	1.7	3.7	6.6	6.3	9.8	18.3	21.4	35.0	48.0	56.9	
0.1	0.2	0.7	1.5	2.9	3.9	5.3	6.0	8.9	11.5	11.8	9.1	
4.6	5.2	8.9	18.5	30.3	53.3	82.0	140.1	215.6	292.3	356.8	338.3	
1.3	3.0	5.3	11.6	17.9	31.0	42.9	58.5	80.1	100.1	100.3	98.6	
0.3	0.5	0.7	2.0	2.9	3.1	4.6	5.2	5.0	7.1	6.5	6.7	
0.4	0.7	0.2	1.7	1.6	3.4	5.3	7.2	9.1	13.9	20.8	18.1	
0.3	0.7	0.6	1.1	2.2	4.8	8.1	10.5	14.4	16.4	20.8	20.2	
1.1	1.4	3.1	3.3	7.6	14.9	25.9	40.7	54.8	76.3	91.7	89.0	
0.1	0.2	0.6	1.0	1.5	2.1	3.9	6.8	10.0	14.5	18.0	23.3	
1.8	2.8	6.0	18.3	40.7	75.4	128.0	185.3	240.5	265.8	234.1	135.6	
0.1	0.3	0.1	0.2	0.9	1.3	1.5	1.2	2.5	2.2	3.4	2.8	
0.1	0.2	0.3	0.2	0.9	2.3	1.7	2.2	2.5	3.6	3.1	1.0	
1.5	2.2	5.5	17.5	38.3	71.4	124.2	181.8	234.8	259.5	226.1	130.7	
0.0	0.0	0.0	0.4	0.6	0.4	0.6	0.2	0.7	0.5	1.5	1.0	
0.9	0.2	0.9	1.0	0.4	0.9	1.3	0.8	0.9	1.6	2.2	2.6	
15.3	25.9	33.7	39.6	42.5	54.2	57.2	82.1	86.0	77.4	97.9	105.6	
1.5	2.0	4.5	6.2	10.7	17.6	31.1	54.3	87.2	138.6	206.3	364.7	
0.0	0.1	0.1	0.1	0.6	0.3	1.5	1.7	2.3	3.6	0.9	2.1	
0.1	0.1	0.1	0.0	0.0	0.1	0.3	0.2	0.5	0.0	0.0	0.5	
0.6	1.6	2.0	2.1	3.2	4.7	10.4	11.0	10.0	11.2	12.1	8.8	
24.4	55.5	102.3	174.5	229.5	243.9	297.3	336.8	235.7	255.6	289.9	275.9	
22.7	37.2	40.4	53.3	82.0	113.8	140.2	189.0	192.1	201.2	199.1	186.9	
17.6	27.5	22.9	20.9	16.5	13.4	14.4	14.8	13.0	12.3	14.9	13.5	
2.1	3.8	7.3	15.7	32.2	58.1	72.9	105.5	110.7	115.7	104.4	75.3	
0.0	0.0	0.0	0.1	0.5	0.3	0.4	0.5	0.7	0.8	2.8	2.8	
2.1	4.9	8.2	12.6	26.4	34.7	40.5	53.2	49.5	56.9	54.2	60.1	
0.5	0.8	2.0	3.9	6.2	7.2	11.9	15.0	18.3	15.6	22.9	35.2	
0.4	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.8	2.6	7.2	10.8	16.2	31.3	51.0	74.0	99.7	128.5	146.8	126.6	
0.6	2.2	5.2	5.5	9.4	12.7	22.6	30.0	37.6	44.6	40.6	30.5	
0.0	0.0	0.2	0.2	0.5	2.0	3.1	5.2	5.7	9.6	11.1	4.9	
0.1	0.3	1.8	5.1	6.3	16.5	25.4	38.8	56.4	74.4	95.1	91.1	
0.6	0.6	0.7	0.4	1.3	3.0	2.8	5.0	3.7	4.4	4.3	3.6	
11.9	15.2	18.4	23.3	28.7	35.4	47.4	50.7	56.6	45.7	56.4	54.6	
8.9	13.4	11.9	12.2	14.2	13.5	15.0	12.5	16.2	12.6	11.1	7.0	
3.1	5.4	5.4	4.8	6.9	6.3	8.0	7.3	6.6	7.9	5.9	2.8	
0.5	0.2	0.9	1.4	3.2	4.8	9.7	11.7	17.1	29.5	49.6	85.2	
11.6	12.4	15.4	21.3	37.4	55.3	82.3	121.0	148.8	180.7	210.0	193.4	
4.8	3.3	1.4	1.3	1.5	1.1	1.5	3.2	2.5	3.3	3.4	1.0	
3.1	5.4	6.2	8.7	17.3	26.6	36.9	48.5	60.2	65.9	76.5	59.8	
0.0	0.0	0.1	0.5	0.6	0.9	3.1	3.3	3.4	6.3	5.0	3.9	
0.1	0.5	1.3	2.6	5.5	8.0	12.2	19.8	20.1	39.1	35.6	33.6	
3.5	3.4	6.3	8.2	12.6	18.6	28.6	46.2	62.5	66.2	89.5	95.0	

Table 13a Average annual number of new cases by primary site and five-year period, 1954-2013

ICD10	Site	1954-58	1959-63	1964-68	1969-73
C00-96	All sites	3735	4304	5096	5902
C00-14	Mouth, pharynx	181	190	191	234
C00	Lip	96	97	97	121
C01-02	Tongue	16	21	21	23
C03-06	Mouth, other	21	25	27	30
C07-08	Salivary glands	11	12	12	15
C09-14	Pharynx	36	36	35	46
C15-26	Digestive organs	1612	1676	1820	1905
C15	Oesophagus	72	82	76	80
C16	Stomach	872	807	794	695
C17	Small intestine	14	9	15	17
C18	Colon	216	266	347	372
C19-20	Rectum, rectosigmoid	143	172	204	293
C21	Anus	4	8	6	5
C22	Liver	16	22	32	45
C23-24	Gallbladder, bile ducts	14	20	25	27
C25	Pancreas	130	152	202	244
C26	Other digestive organs	131	139	118	130
C30-34, C38	Respiratory organs	276	404	554	721
C30-31	Nose, sinuses	20	19	21	23
C32	Larynx, epiglottis	26	40	59	70
C33-34	Lung, trachea	220	334	463	613
C38	Mediastinum, pleura (non-mesothelioma)	11	11	12	16
C40-41	Bone	17	13	19	17
C43	Melanoma of the skin	42	67	92	133
C44	Skin, non-melanoma	91	72	76	143
C45	Mesothelioma	0	1	2	6
C47	Autonomic nervous system	17	16	17	13
C48-49	Soft tissues	21	26	34	44
C50	Breast	7	7	9	9
C60-63	Male genital organs	673	831	1042	1241
C61	Prostate	606	746	953	1131
C62	Testis	50	65	65	86
C60, C63	Other male genital	17	21	23	24
C64-68	Urinary organs	278	352	479	564
C64	Kidney excl. renal pelvis	83	114	145	160
C65	Renal pelvis	6	11	15	22
C66-68	Bladder, ureter, urethra	189	228	319	382
C69	Eye	17	18	20	22
C70-72, D32-33	Central nervous system	113	127	145	155
C73	Thyroid gland	17	24	29	37
C37, C74-75	Other endocrine glands	6	8	11	25
C39, C76, C80	Other or unspecified	47	72	109	135
C81-96	Lymphoid and haematopoietic tissue	320	398	450	498
C81	Hodgkin lymphoma	38	51	60	63
C82-86, C96	Non-Hodgkin lymphoma	85	103	132	126
C88	Malignant immunoproliferative diseases	0	0	1	3
C90	Multiple myeloma	58	77	86	107
C91-95, D45-47	Leukaemia	139	167	172	200

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
7062	8048	8896	9925	10900	11883	14007	15963
238	244	258	259	258	259	271	340
115	102	102	85	67	56	59	75
27	33	38	38	45	49	53	71
30	45	45	54	53	50	46	56
16	13	14	22	18	22	19	26
50	51	59	61	75	82	95	112
2079	2285	2351	2450	2499	2609	2823	3202
89	88	90	106	112	124	145	177
628	599	542	497	424	359	318	293
19	24	27	29	39	51	58	86
472	591	700	818	882	969	1102	1257
382	486	514	554	574	625	660	739
8	10	13	14	20	16	18	22
53	57	67	62	56	79	89	133
37	37	51	50	57	58	67	80
258	284	297	284	280	290	329	351
132	109	50	36	55	38	36	63
929	1119	1277	1331	1409	1496	1595	1710
25	22	22	23	21	24	24	25
81	98	110	103	104	111	102	99
805	980	1137	1193	1272	1348	1459	1578
18	19	8	12	12	13	10	8
25	22	22	20	22	22	24	29
186	235	297	412	454	475	580	810
201	251	331	434	543	614	736	876
14	21	34	38	50	60	66	71
10	8	7	8	6	6	7	6
54	53	41	44	50	50	54	69
10	12	12	13	14	15	17	24
1535	1742	1960	2364	2897	3339	4397	5026
1410	1593	1775	2143	2640	3049	4069	4671
98	123	156	194	217	254	281	311
26	27	29	27	40	36	46	45
754	893	1006	1122	1137	1179	1386	1530
198	231	261	285	276	308	389	500
28	29	28	30	40	35	47	52
528	633	717	808	821	835	950	978
20	27	23	27	28	32	33	31
179	204	240	258	294	377	448	458
39	49	44	47	46	52	65	85
27	39	42	45	59	80	109	114
169	203	257	287	294	249	192	152
593	639	696	765	839	969	1204	1430
65	59	48	54	52	63	70	76
163	187	250	297	337	359	441	531
8	8	9	13	20	26	33	33
138	153	156	159	170	164	197	217
219	232	234	241	260	357	464	573

Table 13b Average annual number of new cases by primary site and five-year period, 1954-2013

ICD10	Site	1954-58	1959-63	1964-68	1969-73
C00-96	All sites	3969	4385	5015	5684
C00-14	Mouth, pharynx	64	60	74	77
C00	Lip	7	8	11	9
C01-02	Tongue	13	12	15	18
C03-06	Mouth, other	12	12	16	17
C07-08	Salivary glands	8	9	16	14
C09-14	Pharynx	24	20	16	19
C15-26	Digestive organs	1356	1418	1505	1646
C15	Oesophagus	24	25	30	29
C16	Stomach	607	562	515	455
C17	Small intestine	10	9	12	17
C18	Colon	254	308	395	454
C19-20	Rectum, rectosigmoid	111	122	165	237
C21	Anus	4	10	11	12
C22	Liver	11	14	15	27
C23-24	Gallbladder, bile ducts	43	51	54	56
C25	Pancreas	89	112	136	178
C26	Other digestive organs	203	205	173	180
C30-34, C38	Respiratory organs	86	98	130	182
C30-31	Nose, sinuses	14	12	14	14
C32	Larynx, epiglottis	2	3	6	7
C33-34	Lung, trachea	65	77	104	156
C38	Mediastinum, pleura (non-mesothelioma)	5	6	7	6
C40-41	Bone	12	10	12	12
C43	Melanoma of the skin	51	74	108	145
C44	Skin, non-melanoma	60	45	44	82
C45	Mesothelioma	0	1	1	2
C47	Autonomic nervous system	17	14	11	15
C48-49	Soft tissues	18	23	27	34
C50	Breast	868	999	1151	1279
C51-58	Female genital organs	813	913	1037	1180
C53	Cervix uteri	332	343	380	420
C54	Corpus uteri	159	199	239	294
C55	Uterus, other	22	22	15	13
C56	Ovary	236	276	335	344
C51-52, C57	Other female genital	63	70	64	105
C58	Placenta	2	2	4	4
C64-68	Urinary organs	180	205	240	295
C64	Kidney excl. renal pelvis	69	87	96	116
C65	Renal pelvis	6	5	8	12
C66-68	Bladder, ureter, urethra	105	113	136	167
C69	Eye	14	17	18	17
C70-72, D32-33	Central nervous system	100	115	129	123
C73	Thyroid gland	51	56	71	97
C37, C74-75	Other endocrine glands	8	5	9	12
C39, C76, C80	Other or unspecified	41	61	83	98
C81-96	Lymphoid and haematopoietic tissue	231	272	366	387
C81	Hodgkin lymphoma	28	33	46	42
C82-86, C96	Non-Hodgkin lymphoma	55	69	107	109
C88	Malignant immunoproliferative diseases	0	0	0	2
C90	Multiple myeloma	37	44	77	89
C91-95, D45-47	Leukaemia	110	126	135	145

FEMALES

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
6687	7486	8180	9059	10026	11091	12425	13562
81	95	113	111	133	133	177	193
13	18	23	30	29	25	46	47
17	18	27	21	23	29	31	39
16	25	30	29	38	30	43	42
11	15	12	15	19	21	21	23
23	19	21	16	23	28	36	42
1862	2099	2189	2259	2432	2509	2664	2877
34	31	36	38	46	52	55	62
411	410	366	319	283	233	220	188
19	25	28	32	33	49	48	61
592	730	837	922	1073	1149	1245	1381
303	383	400	446	463	479	516	528
16	23	24	34	38	37	45	47
29	37	45	48	37	50	53	77
59	78	83	73	77	80	78	93
201	241	291	290	317	328	353	368
197	141	81	57	66	53	53	72
220	291	398	538	674	853	1082	1296
13	12	16	15	16	15	23	18
8	12	11	14	21	19	17	19
192	263	367	503	630	812	1036	1253
7	5	4	5	6	6	7	6
13	14	15	15	16	22	20	23
237	297	387	472	500	532	612	833
135	173	251	346	446	510	657	774
3	1	7	8	9	11	13	13
6	6	7	9	9	3	6	3
44	47	44	46	48	67	86	88
1504	1636	1798	1939	2279	2610	2779	2977
1285	1296	1274	1380	1416	1469	1574	1615
443	381	331	362	336	297	293	301
349	382	387	443	476	574	684	726
6	8	5	7	9	10	7	8
356	395	448	454	466	463	453	440
130	127	101	107	126	121	135	138
2	4	3	7	3	3	3	3
349	407	437	476	509	535	596	650
129	149	173	190	196	194	235	246
19	15	15	18	25	27	24	38
202	242	249	268	288	313	336	366
21	22	21	28	30	30	30	35
171	205	237	281	346	477	609	554
119	145	137	140	121	135	165	216
22	43	39	47	55	75	122	110
144	189	245	315	307	301	244	180
470	519	583	649	699	819	987	1123
43	40	35	34	36	46	47	58
132	170	223	270	290	334	371	428
3	5	6	12	11	15	20	26
118	126	138	140	141	153	158	165
173	178	181	194	221	271	390	447

Table 14a Age-standardised (world) incidence rates per 100 000 person-years by primary site and five-year period, 1954-2013

ICD10	Site	1954-58	1959-63	1964-68	1969-73
C00-96	All sites	169.4	177.3	192.9	208.8
C00-14	Mouth, pharynx	8.1	7.8	7.3	8.3
C00	Lip	4.2	4.0	3.6	4.3
C01-02	Tongue	0.7	0.9	0.8	0.8
C03-06	Mouth, other	0.9	1.0	1.0	1.0
C07-08	Salivary glands	0.5	0.5	0.5	0.6
C09-14	Pharynx	1.7	1.5	1.3	1.6
C15-26	Digestive organs	71.7	67.0	66.4	64.9
C15	Oesophagus	3.2	3.3	2.7	2.7
C16	Stomach	38.6	32.1	28.9	23.5
C17	Small intestine	0.6	0.4	0.6	0.6
C18	Colon	9.6	10.7	12.7	12.7
C19-20	Rectum, rectosigmoid	6.3	6.9	7.5	10.0
C21	Anus	0.2	0.3	0.2	0.2
C22	Liver	0.8	1.0	1.2	1.6
C23-24	Gallbladder, bile ducts	0.6	0.8	0.9	0.9
C25	Pancreas	5.9	6.1	7.4	8.3
C26	Other digestive organs	5.8	5.5	4.3	4.4
C30-34, C38	Respiratory organs	12.9	17.1	21.5	26.1
C30-31	Nose, sinuses	0.9	0.8	0.8	0.8
C32	Larynx, epiglottis	1.2	1.7	2.3	2.6
C33-34	Lung, trachea	10.3	14.2	17.9	22.2
C38	Mediastinum, pleura (non-mesothelioma)	0.5	0.5	0.5	0.6
C40-41	Bone	1.0	0.7	0.9	0.8
C43	Melanoma of the skin	2.0	3.1	4.1	5.8
C44	Skin, non-melanoma	3.9	2.8	2.7	4.8
C45	Mesothelioma	0.0	0.1	0.1	0.2
C47	Autonomic nervous system	0.8	0.8	0.8	0.6
C48-49	Soft tissues	1.0	1.1	1.4	1.7
C50	Breast	0.3	0.3	0.3	0.3
C60-63	Male genital organs	28.8	32.3	36.9	40.6
C61	Prostate	25.4	27.9	32.4	35.3
C62	Testis	2.7	3.6	3.6	4.5
C60, C63	Other male genital	0.8	0.8	0.9	0.8
C64-68	Urinary organs	12.7	14.6	18.0	19.9
C64	Kidney excl. renal pelvis	3.9	4.9	5.6	5.9
C65	Renal pelvis	0.3	0.4	0.6	0.8
C66-68	Bladder, ureter, urethra	8.5	9.2	11.8	13.2
C69	Eye	0.9	0.8	0.9	1.0
C70-72, D32-33	Central nervous system	5.9	6.2	6.9	7.0
C73	Thyroid gland	0.8	1.0	1.2	1.5
C37, C74-75	Other endocrine glands	0.3	0.4	0.5	1.2
C39, C76, C80	Other or unspecified	2.2	3.0	4.2	4.7
C81-96	Lymphoid and haematopoietic tissue	16.0	18.1	18.9	19.5
C81	Hodgkin lymphoma	2.1	2.6	2.8	2.8
C82-86, C96	Non-Hodgkin lymphoma	4.2	4.6	5.4	4.9
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.1
C90	Multiple myeloma	2.7	3.1	3.2	3.6
C91-95, D45-47	Leukaemia	7.1	7.8	7.4	8.1

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
233.8	253.1	267.7	288.9	310.4	328.8	362.5	374.2
8.2	8.0	8.5	8.4	8.2	7.9	7.6	8.4
3.9	3.2	3.1	2.5	2.0	1.5	1.5	1.6
1.0	1.1	1.3	1.3	1.4	1.6	1.5	1.8
1.0	1.5	1.5	1.7	1.7	1.5	1.3	1.4
0.6	0.4	0.5	0.7	0.6	0.7	0.5	0.6
1.7	1.7	2.1	2.2	2.5	2.6	2.8	3.0
66.3	68.8	67.9	68.9	68.0	68.6	69.3	71.3
2.9	2.6	2.8	3.3	3.2	3.4	3.8	4.1
19.9	17.8	15.2	13.5	11.1	9.1	7.5	6.4
0.7	0.8	0.9	0.9	1.1	1.5	1.6	2.1
15.0	17.9	20.2	22.9	23.7	25.1	26.4	27.1
12.4	14.8	15.2	15.8	16.2	16.9	16.6	17.0
0.3	0.3	0.4	0.4	0.6	0.5	0.5	0.5
1.8	1.8	2.1	1.9	1.6	2.2	2.4	3.1
1.1	1.1	1.4	1.4	1.5	1.5	1.6	1.8
8.2	8.6	8.4	7.9	7.6	7.6	8.1	7.7
4.1	3.1	1.3	0.9	1.4	0.9	0.8	1.4
31.4	36.1	39.7	40.0	41.3	41.1	40.0	38.0
0.8	0.7	0.7	0.7	0.6	0.7	0.7	0.6
2.8	3.3	3.6	3.2	3.3	3.2	2.7	2.3
27.1	31.4	35.2	35.7	37.0	36.8	36.4	34.9
0.7	0.7	0.3	0.3	0.4	0.4	0.2	0.2
1.1	1.0	1.0	0.9	1.0	0.9	0.9	1.0
7.7	9.4	11.2	14.9	15.1	14.5	16.2	20.2
6.1	7.2	9.0	11.2	13.6	14.7	15.6	16.8
0.5	0.7	1.1	1.2	1.4	1.6	1.6	1.5
0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3
2.1	2.0	1.5	1.6	1.7	1.6	1.7	1.9
0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.6
46.6	49.4	52.6	61.6	77.4	91.6	115.5	120.4
40.8	42.7	44.8	52.5	67.1	80.0	102.9	107.6
4.9	5.9	6.9	8.3	9.2	10.5	11.5	11.7
0.9	0.8	0.9	0.8	1.1	1.0	1.2	1.0
25.0	28.0	29.8	32.1	31.7	31.1	34.1	34.5
7.0	7.8	8.4	8.7	8.4	9.0	10.5	12.6
0.9	0.9	0.8	0.9	1.2	0.9	1.2	1.1
17.1	19.3	20.5	22.6	22.2	21.3	22.4	20.8
0.8	1.1	0.9	1.0	1.0	1.0	1.0	0.8
7.8	8.5	9.7	10.0	10.8	13.3	14.6	13.5
1.5	1.7	1.5	1.7	1.6	1.7	1.9	2.4
1.2	1.8	1.8	1.8	2.3	2.8	3.5	3.5
5.6	6.2	7.4	7.8	7.7	6.0	4.3	3.1
21.3	22.3	23.3	25.0	26.8	29.5	33.8	36.1
2.7	2.4	1.9	2.2	2.3	2.6	2.7	2.8
5.8	6.5	8.4	9.7	10.8	10.9	12.3	13.2
0.2	0.3	0.2	0.4	0.5	0.7	0.8	0.7
4.5	4.7	4.6	4.5	4.6	4.4	4.9	4.8
8.1	8.4	8.1	8.1	8.6	10.9	13.1	14.6

Table 14b Age-standardised (world) incidence rates per 100 000 person-years by primary site and five-year period, 1954-2013

ICD10	Site	1954-58	1959-63	1964-68	1969-73
C00-96	All sites	163.7	167.0	177.5	188.8
C00-14	Mouth, pharynx	2.5	2.2	2.4	2.4
C00	Lip	0.3	0.3	0.4	0.3
C01-02	Tongue	0.5	0.4	0.4	0.5
C03-06	Mouth, other	0.5	0.4	0.5	0.5
C07-08	Salivary glands	0.3	0.3	0.6	0.5
C09-14	Pharynx	1.0	0.7	0.5	0.6
C15-26	Digestive organs	50.3	47.5	45.6	45.7
C15	Oesophagus	0.9	0.8	0.9	0.7
C16	Stomach	22.3	18.5	15.3	12.3
C17	Small intestine	0.4	0.3	0.4	0.5
C18	Colon	9.5	10.6	12.1	13.1
C19-20	Rectum, rectosigmoid	4.3	4.2	5.3	6.8
C21	Anus	0.2	0.4	0.3	0.3
C22	Liver	0.4	0.6	0.5	0.8
C23-24	Gallbladder, bile ducts	1.6	1.7	1.6	1.5
C25	Pancreas	3.4	3.9	4.1	4.9
C26	Other digestive organs	7.3	6.6	5.0	4.7
C30-34, C38	Respiratory organs	3.5	3.6	4.4	5.7
C30-31	Nose, sinuses	0.6	0.4	0.4	0.4
C32	Larynx, epiglottis	0.1	0.1	0.2	0.2
C33-34	Lung, trachea	2.6	2.8	3.5	4.9
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.2	0.3	0.2
C40-41	Bone	0.7	0.6	0.6	0.6
C43	Melanoma of the skin	2.3	3.3	4.7	6.2
C44	Skin, non-melanoma	2.2	1.5	1.3	2.1
C45	Mesothelioma	0.0	0.0	0.0	0.1
C47	Autonomic nervous system	0.8	0.6	0.5	0.7
C48-49	Soft tissues	0.8	1.0	1.1	1.3
C50	Breast	36.9	39.3	42.6	44.8
C51-58	Female genital organs	35.9	37.9	40.7	44.4
C53	Cervix uteri	15.2	15.2	16.5	18.1
C54	Corpus uteri	6.9	7.9	8.8	10.1
C55	Uterus, other	0.8	0.8	0.4	0.3
C56	Ovary	10.4	11.3	12.7	12.7
C51-52, C57	Other female genital	2.5	2.6	2.0	3.0
C58	Placenta	0.1	0.1	0.3	0.2
C64-68	Urinary organs	7.3	7.3	7.7	8.5
C64	Kidney excl. renal pelvis	3.0	3.3	3.3	3.6
C65	Renal pelvis	0.3	0.2	0.3	0.3
C66-68	Bladder, ureter, urethra	4.0	3.9	4.2	4.6
C69	Eye	0.7	0.7	0.7	0.7
C70-72, D32-33	Central nervous system	5.0	5.4	5.7	5.3
C73	Thyroid gland	2.1	2.4	2.9	3.8
C37, C74-75	Other endocrine glands	0.4	0.2	0.4	0.6
C39, C76, C80	Other or unspecified	1.7	2.2	2.8	2.8
C81-96	Lymphoid and haematopoietic tissue	10.6	11.3	13.6	13.1
C81	Hodgkin lymphoma	1.4	1.6	2.0	1.7
C82-86, C96	Non-Hodgkin lymphoma	2.4	2.7	3.9	3.7
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.1
C90	Multiple myeloma	1.5	1.5	2.4	2.5
C91-95, D45-47	Leukaemia	5.3	5.5	5.3	5.1

FEMALES

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
209.1	219.6	225.8	242.6	261.3	278.4	296.3	302.0
2.2	2.6	2.9	2.9	3.4	3.3	4.1	4.3
0.4	0.5	0.5	0.7	0.6	0.5	0.9	0.8
0.4	0.5	0.7	0.6	0.6	0.7	0.7	0.9
0.4	0.6	0.7	0.7	1.0	0.7	0.9	0.8
0.3	0.5	0.4	0.5	0.5	0.6	0.6	0.6
0.7	0.6	0.6	0.5	0.7	0.8	1.0	1.1
47.2	49.2	48.0	48.1	50.1	50.3	51.5	53.0
0.8	0.7	0.8	0.8	0.9	1.0	1.1	1.2
10.0	9.2	7.7	6.3	5.3	4.4	4.1	3.3
0.6	0.7	0.7	0.8	0.8	1.2	1.1	1.3
15.3	17.6	18.8	19.9	22.3	22.9	23.5	24.6
8.2	9.5	9.3	10.1	10.4	10.4	10.8	10.6
0.5	0.7	0.7	0.9	1.0	0.9	1.0	1.1
0.8	1.0	1.0	1.2	0.8	1.1	1.1	1.5
1.4	1.7	1.6	1.5	1.5	1.6	1.5	1.8
5.0	5.4	6.1	5.8	6.1	6.1	6.4	6.6
4.5	2.7	1.3	0.9	1.0	0.8	0.8	1.2
6.6	8.5	11.1	14.9	18.2	21.9	25.1	27.0
0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.4
0.2	0.3	0.3	0.4	0.6	0.5	0.4	0.4
5.8	7.7	10.2	14.0	17.1	20.9	24.1	26.0
0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1
0.5	0.6	0.6	0.6	0.7	0.9	0.7	0.8
9.7	11.2	14.1	16.2	16.2	15.8	16.9	21.1
3.3	3.7	5.1	6.5	7.9	8.5	10.3	11.2
0.1	0.0	0.2	0.2	0.2	0.3	0.2	0.3
0.3	0.3	0.3	0.4	0.4	0.2	0.3	0.1
1.5	1.6	1.4	1.5	1.4	1.8	2.4	2.2
49.9	51.7	53.6	56.4	66.7	75.0	75.5	75.6
46.6	44.3	40.6	42.9	41.6	40.4	40.6	39.0
18.6	15.0	12.1	12.8	11.6	9.8	9.3	9.5
11.5	12.5	11.9	13.3	13.5	15.0	16.8	16.1
0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1
12.8	13.3	13.9	13.8	13.4	12.6	11.5	10.3
3.5	3.2	2.4	2.5	2.8	2.6	2.8	2.8
0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.1
9.5	10.2	10.3	10.9	11.1	11.5	12.4	12.6
3.9	4.2	4.4	4.7	4.7	4.6	5.4	5.5
0.5	0.3	0.3	0.4	0.5	0.6	0.5	0.7
5.1	5.7	5.5	5.8	5.9	6.3	6.5	6.4
0.7	0.8	0.8	0.9	1.0	0.8	0.9	0.9
7.0	8.1	8.8	9.8	11.6	15.0	17.9	15.4
4.7	5.3	5.0	4.9	4.0	4.4	5.2	6.7
1.0	2.0	1.7	1.9	2.2	2.8	4.3	3.6
3.7	4.4	5.2	6.3	6.0	5.0	4.0	2.6
14.6	15.1	16.2	17.2	18.7	20.6	23.8	25.5
1.7	1.6	1.3	1.4	1.5	1.9	1.8	2.2
4.1	4.8	6.3	7.2	7.7	8.2	9.0	9.6
0.1	0.1	0.1	0.3	0.2	0.3	0.4	0.5
3.1	3.0	3.0	2.9	2.8	3.1	3.2	3.1
5.6	5.5	5.4	5.4	6.4	7.1	9.4	10.1

Table 15a Average annual number of new cases by primary site and county, 2009-2013

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	15963	1047	1677	1429	690	658	936
C00-14	Mouth, pharynx	340	21	33	42	15	12	20
C00	Lip	75	6	7	5	4	3	6
C01-02	Tongue	71	3	7	9	2	3	3
C03-06	Mouth, other	56	3	5	8	2	2	3
C07-08	Salivary glands	26	2	3	3	1	0	1
C09-14	Pharynx	112	7	11	17	6	4	7
C15-26	Digestive organs	3202	201	326	298	140	136	177
C15	Oesophagus	177	9	19	16	9	10	10
C16	Stomach	293	15	25	26	13	12	13
C17	Small intestine	86	6	9	5	3	3	4
C18	Colon	1257	83	124	109	51	55	73
C19-20	Rectum, rectosigmoid	739	49	80	63	33	30	43
C21	Anus	22	1	2	4	1	0	1
C22	Liver	133	7	14	21	7	5	5
C23-24	Gallbladder, bile ducts	80	5	9	8	4	6	5
C25	Pancreas	351	19	36	37	17	13	21
C26	Other digestive organs	63	5	8	8	3	2	3
C30-34, C38	Respiratory organs	1710	116	153	139	76	78	86
C30-31	Nose, sinuses	25	1	3	2	1	1	1
C32	Larynx, epiglottitis	99	7	8	10	5	5	5
C33-34	Lung, trachea	1578	108	142	126	70	71	80
C38	Mediastinum, pleura (non-mesothelioma)	8	1	0	0	0	1	0
C40-41	Bone	29	2	3	3	1	1	0
C43	Melanoma of the skin	810	55	110	84	35	25	50
C44	Skin, non-melanoma	876	57	88	78	34	30	67
C45	Mesothelioma	71	4	7	6	3	3	5
C47	Autonomic nervous system	6	0	0	0	1	0	0
C48-49	Soft tissues	69	3	9	9	3	3	4
C50	Breast	24	1	3	3	1	1	1
C60-63	Male genital organs	5026	362	537	389	202	209	307
C61	Prostate	4671	346	502	344	189	196	292
C62	Testis	311	15	31	40	12	12	12
C60, C63	Other male genital	45	1	4	5	1	2	3
C64-68	Urinary organs	1530	102	157	135	73	62	92
C64	Kidney excl. renal pelvis	500	32	53	45	22	20	34
C65	Renal pelvis	52	5	5	5	2	2	3
C66-68	Bladder, ureter, urethra	978	65	100	84	48	39	55
C69	Eye	31	2	2	4	1	1	1
C70-72, D32-33	Central nervous system	458	29	45	41	20	16	24
C73	Thyroid gland	85	5	10	13	3	2	5
C37, C74-75	Other endocrine glands	114	6	12	13	4	4	6
C39, C76, C80	Other or unspecified	152	9	12	16	7	9	10
C81-96	Lymphoid and haematopoietic tissue	1430	69	169	156	71	66	80
C81	Hodgkin lymphoma	76	4	8	8	6	3	4
C82-86, C96	Non-Hodgkin lymphoma	531	27	56	60	24	29	23
C88	Malignant immunoproliferative diseases	33	1	6	1	1	1	3
C90	Multiple myeloma	217	9	26	23	11	10	14
C91-95, D45-47	Leukaemia	573	27	73	63	30	24	37

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sor-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finmark
907	606	408	525	1334	1588	398	923	860	448	814	490	224
19	15	7	10	27	33	7	19	20	7	20	8	5
4	4	2	2	8	6	1	5	4	2	4	2	1
6	3	1	1	6	7	1	5	4	1	4	1	2
2	2	2	1	6	7	2	3	2	1	3	1	1
1	2	0	1	2	3	0	1	1	1	2	1	0
5	5	2	4	4	10	2	5	8	2	7	4	1
166	110	77	99	251	323	84	189	187	101	181	112	44
11	5	5	5	12	18	5	8	9	5	13	5	2
13	11	8	10	24	32	9	17	15	9	21	12	7
6	3	1	3	10	10	2	4	8	2	3	3	2
67	44	27	38	102	133	35	82	71	43	68	38	14
40	20	18	25	55	74	22	46	41	22	38	31	9
1	1	1	0	2	1	1	1	2	1	1	0	1
6	7	3	3	10	11	2	5	9	3	9	5	1
3	3	3	2	5	6	3	4	6	2	4	3	1
16	15	10	9	27	34	6	18	23	12	21	12	6
4	1	2	2	3	4	1	3	3	2	4	2	2
104	63	48	67	148	159	41	96	94	52	92	55	40
1	1	0	1	3	2	1	1	1	1	2	1	1
5	5	1	2	9	9	2	8	4	3	6	4	1
97	56	46	64	136	146	39	86	89	47	84	51	38
0	1	0	0	0	1	0	0	0	0	0	0	0
1	1	1	1	2	4	1	1	1	1	2	0	1
61	33	19	26	80	75	14	30	44	24	25	16	5
61	48	29	45	77	90	17	32	41	24	32	18	6
6	3	2	3	5	9	2	4	2	1	2	1	1
0	0	0	0	1	1	0	0	0	0	0	0	0
5	2	2	2	5	6	2	3	4	3	4	2	0
1	2	1	1	2	2	0	1	1	0	1	1	0
271	186	127	145	441	505	139	340	258	126	252	165	66
254	175	118	132	408	470	131	317	234	119	234	152	59
14	9	8	12	30	30	7	20	22	6	14	12	6
3	2	1	1	3	5	1	3	2	1	4	1	1
87	55	38	48	114	157	35	93	80	44	84	51	24
28	20	11	20	37	48	11	31	30	14	23	13	8
2	3	2	2	3	5	1	2	4	2	2	2	1
57	32	25	27	74	104	23	59	47	28	60	36	15
2	1	1	1	3	2	1	3	2	1	1	0	1
24	20	11	16	43	47	11	21	29	16	25	14	7
3	3	1	4	4	9	1	7	5	2	4	3	2
7	6	3	4	8	14	3	3	6	4	6	4	1
8	4	4	5	11	16	4	7	9	4	8	5	3
80	52	39	49	114	135	36	73	75	39	73	36	18
3	2	2	2	6	7	1	5	5	1	3	3	1
24	19	16	18	42	51	14	32	31	16	27	14	9
4	1	0	1	2	6	0	1	1	0	2	1	0
12	8	5	5	17	19	6	13	11	7	14	5	3
36	23	15	23	46	53	15	23	27	15	26	12	5

Table 15b Average annual number of new cases by primary site and county, 2009-2013

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	13562	842	1453	1468	600	558	793
C00-14	Mouth, pharynx	193	13	20	25	10	10	10
C00	Lip	47	3	4	5	3	3	3
C01-02	Tongue	39	2	5	6	2	1	2
C03-06	Mouth, other	42	2	5	5	2	3	2
C07-08	Salivary glands	23	2	2	3	1	2	0
C09-14	Pharynx	42	3	3	7	2	1	2
C15-26	Digestive organs	2877	187	285	279	129	112	163
C15	Oesophagus	62	3	6	10	3	3	3
C16	Stomach	188	8	13	17	8	8	8
C17	Small intestine	61	5	6	6	4	2	4
C18	Colon	1381	97	131	134	58	49	84
C19-20	Rectum, rectosigmoid	528	34	62	49	20	23	29
C21	Anus	47	2	7	4	2	2	2
C22	Liver	77	5	8	10	4	2	3
C23-24	Gallbladder, bile ducts	93	5	10	10	6	5	5
C25	Pancreas	368	24	37	32	18	16	21
C26	Other digestive organs	72	5	6	8	5	3	4
C30-34, C38	Respiratory organs	1296	88	145	135	61	51	69
C30-31	Nose, sinuses	18	1	2	1	1	1	2
C32	Larynx, epiglottis	19	1	2	4	1	1	0
C33-34	Lung, trachea	1253	86	140	129	58	49	67
C38	Mediastinum, pleura (non-mesothelioma)	6	1	1	0	0	0	0
C40-41	Bone	23	1	1	3	1	1	0
C43	Melanoma of the skin	833	53	104	93	33	32	48
C44	Skin, non-melanoma	774	49	73	73	29	24	66
C45	Mesothelioma	13	1	2	1	1	0	1
C47	Autonomic nervous system	3	0	0	0	0	0	0
C48-49	Soft tissues	88	5	10	10	4	5	3
C50	Breast	2977	176	340	360	125	123	168
C51-58	Female genital organs	1615	101	171	178	78	78	97
C53	Cervix uteri	301	16	35	37	15	14	16
C54	Corpus uteri	726	44	74	75	37	35	44
C55	Uterus, other	8	0	1	1	0	0	1
C56	Ovary	440	32	47	50	19	21	27
C51-52, C57	Other female genital	138	8	13	14	6	7	9
C58	Placenta	3	0	0	1	0	0	0
C64-68	Urinary organs	650	45	59	71	29	29	35
C64	Kidney excl. renal pelvis	246	17	24	23	11	11	16
C65	Renal pelvis	38	2	4	5	2	1	2
C66-68	Bladder, ureter, urethra	366	26	30	43	16	18	18
C69	Eye	35	2	3	4	2	2	2
C70-72, D32-33	Central nervous system	554	29	57	51	23	23	31
C73	Thyroid gland	216	9	25	31	8	8	12
C37, C74-75	Other endocrine glands	110	6	11	10	4	2	6
C39, C76, C80	Other or unspecified	180	10	16	21	10	8	11
C81-96	Lymphoid and haematopoietic tissue	1123	65	130	121	53	48	70
C81	Hodgkin lymphoma	58	3	7	8	2	1	4
C82-86, C96	Non-Hodgkin lymphoma	428	25	46	45	21	18	22
C88	Malignant immunoproliferative diseases	26	1	4	2	2	1	3
C90	Multiple myeloma	165	9	19	18	10	10	12
C91-95, D45-47	Leukaemia	447	26	54	49	18	18	29

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	More og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finmark
733	517	313	494	1113	1313	295	696	780	370	664	393	168
10	8	5	6	14	15	4	9	9	5	12	6	1
3	1	1	2	5	3	1	3	2	2	3	1	0
2	2	1	1	2	2	2	1	2	1	2	1	0
2	3	1	1	3	4	1	2	2	1	3	1	0
1	0	1	1	2	2	0	1	2	1	1	1	0
2	2	1	1	3	3	0	2	2	1	3	1	1
144	93	56	96	235	292	75	180	175	84	157	92	42
4	3	1	1	4	4	2	3	5	1	4	2	1
9	7	2	5	16	24	6	14	11	6	13	8	5
2	2	1	2	4	7	2	3	7	2	2	2	1
65	42	28	47	126	140	36	90	80	39	75	43	17
32	17	10	20	38	59	12	31	27	16	25	16	7
3	1	1	2	3	4	1	2	3	1	3	1	1
4	1	1	2	6	6	2	4	7	2	3	4	2
4	4	2	3	6	9	3	6	6	3	4	2	0
17	13	8	12	27	34	8	22	24	11	23	13	8
3	3	2	2	5	5	2	5	4	3	4	2	0
76	48	35	58	101	113	22	62	76	33	64	39	20
2	1	0	1	1	2	0	1	1	0	1	1	0
1	1	0	0	1	2	0	1	1	0	1	1	0
73	46	34	56	98	109	22	60	74	33	62	37	19
0	0	0	0	0	0	0	0	1	0	1	0	1
1	1	1	1	3	3	0	1	1	1	1	0	0
57	33	20	28	89	76	14	33	54	21	22	16	6
45	45	29	49	75	73	10	27	35	18	31	16	5
1	0	0	0	1	1	1	0	1	0	0	1	0
0	0	0	0	0	1	0	0	0	0	0	0	0
4	4	2	1	5	7	2	5	6	2	7	4	2
156	103	67	108	244	288	61	155	167	86	134	83	34
86	67	35	56	131	150	32	74	88	42	83	50	18
18	10	6	9	21	28	6	14	14	9	19	9	4
38	30	16	26	62	72	14	32	43	18	35	23	6
0	0	0	0	0	1	0	0	0	1	0	0	0
20	19	10	17	40	36	10	19	24	10	21	12	7
9	8	3	4	8	13	4	8	7	4	7	5	1
1	0	0	0	0	0	0	0	0	0	0	0	0
30	23	18	18	45	67	14	37	43	15	39	22	10
10	10	5	8	14	24	6	13	17	7	16	10	4
3	1	1	1	3	6	0	2	3	1	2	1	0
17	12	11	10	29	38	8	22	23	7	21	11	6
2	1	0	1	4	5	1	2	1	0	1	2	0
35	22	10	18	50	60	17	25	32	20	26	16	9
11	9	4	9	10	20	4	11	15	3	15	10	3
5	3	1	4	6	19	5	6	6	4	6	3	1
9	9	4	7	13	14	4	9	9	7	12	6	3
60	47	26	34	87	110	28	58	61	29	54	29	14
2	2	2	2	4	5	1	5	4	1	2	2	0
22	15	10	15	32	43	9	23	25	12	25	13	7
1	1	0	1	1	3	1	1	1	0	1	0	1
8	6	4	4	10	14	4	9	10	4	9	4	2
26	22	10	12	40	44	13	21	22	11	18	10	5

Table 16a Age-standardised (world) incidence rates per 100 000 person-years by county and primary site, 2009-2013

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	374.2	409.4	371.9	344.2	349.4	343.5	393.1
C00-14	Mouth, pharynx	8.4	8.7	7.7	10.7	8.2	6.3	8.7
C00	Lip	1.6	2.4	1.5	1.1	1.7	1.4	2.4
C01-02	Tongue	1.8	1.3	1.6	2.3	1.7	1.3	1.4
C03-06	Mouth, other	1.4	1.2	1.3	1.8	0.9	1.2	1.2
C07-08	Salivary glands	0.6	0.9	0.6	0.9	0.3	0.3	0.3
C09-14	Pharynx	3.0	2.9	2.7	4.5	3.6	2.2	3.4
C15-26	Digestive organs	71.3	75.2	68.9	69.5	66.1	67.2	70.7
C15	Oesophagus	4.1	3.7	4.0	4.1	4.9	4.6	3.9
C16	Stomach	6.4	5.6	5.2	5.9	5.6	6.3	5.1
C17	Small intestine	2.1	2.5	2.0	1.3	1.3	1.9	1.5
C18	Colon	27.1	30.0	25.9	24.8	22.6	25.2	28.9
C19-20	Rectum, rectosigmoid	17.0	19.1	17.3	14.8	16.0	16.5	17.5
C21	Anus	0.5	0.6	0.5	1.1	0.2	0.2	0.4
C22	Liver	3.1	2.9	3.1	4.9	3.9	2.4	1.9
C23-24	Gallbladder, bile ducts	1.8	2.1	1.8	2.0	1.7	3.0	1.9
C25	Pancreas	7.7	7.0	7.7	8.8	8.5	6.2	8.1
C26	Other digestive organs	1.4	1.7	1.6	1.9	1.4	0.9	1.4
C30-34, C38	Respiratory organs	38.0	43.3	31.7	33.2	36.2	38.5	34.5
C30-31	Nose, sinuses	0.6	0.3	0.6	0.5	0.5	0.8	0.6
C32	Larynx, epiglottis	2.3	2.5	1.9	2.3	2.6	2.4	1.8
C33-34	Lung, trachea	34.9	40.1	29.1	30.3	32.9	34.9	32.0
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.4	0.1	0.1	0.2	0.3	0.1
C40-41	Bone	1.0	1.4	0.9	1.0	0.7	0.8	0.3
C43	Melanoma of the skin	20.2	22.6	25.9	20.0	18.4	15.3	22.2
C44	Skin, non-melanoma	16.8	18.1	15.8	15.8	12.3	12.7	23.1
C45	Mesothelioma	1.5	1.5	1.4	1.4	1.3	1.4	2.2
C47	Autonomic nervous system	0.3	0.0	0.2	0.2	0.9	0.0	0.5
C48-49	Soft tissues	1.9	1.5	2.3	2.4	2.4	2.2	2.0
C50	Breast	0.6	0.6	0.7	0.7	0.6	0.5	0.6
C60-63	Male genital organs	120.4	141.7	121.0	95.8	105.2	111.8	130.5
C61	Prostate	107.6	130.3	109.5	84.3	91.5	96.7	120.7
C62	Testis	11.7	10.9	10.7	10.3	12.8	14.0	8.5
C60, C63	Other male genital	1.0	0.5	0.8	1.1	0.9	1.1	1.3
C64-68	Urinary organs	34.5	39.2	33.9	31.9	34.8	31.3	38.3
C64	Kidney excl. renal pelvis	12.6	14.0	12.4	11.6	12.4	11.3	15.5
C65	Renal pelvis	1.1	1.7	1.0	1.1	0.9	1.1	1.1
C66-68	Bladder, ureter, urethra	20.8	23.5	20.6	19.1	21.5	18.9	21.7
C69	Eye	0.8	1.0	0.7	1.0	0.6	0.7	0.6
C70-72, D32-33	Central nervous system	13.5	15.1	12.7	11.4	14.1	10.6	12.7
C73	Thyroid gland	2.4	2.3	2.5	3.3	2.2	0.9	2.8
C37, C74-75	Other endocrine glands	3.5	3.4	3.4	3.7	3.1	2.4	3.4
C39, C76, C80	Other or unspecified	3.1	3.3	2.2	3.6	2.7	3.9	3.6
C81-96	Lymphoid and haematopoietic tissue	36.1	30.5	40.0	38.6	39.8	37.0	36.5
C81	Hodgkin lymphoma	2.8	2.6	2.8	2.4	5.4	2.6	2.7
C82-86, C96	Non-Hodgkin lymphoma	13.2	11.9	13.0	15.0	12.5	16.1	9.8
C88	Malignant immunoproliferative diseases	0.7	0.4	1.3	0.3	0.4	0.3	1.3
C90	Multiple myeloma	4.8	3.5	5.6	5.3	4.8	4.5	5.7
C91-95, D45-47	Leukaemia	14.6	12.1	17.3	15.6	16.8	13.5	17.1

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	More og Romsdal	Sør-Trøn- delag	Nord-Trøn- delag	Nordland	Troms	Finnmark
419.6	367.9	412.6	369.9	403.2	391.8	370.8	384.1	351.0	346.7	351.9	352.7	333.5
9.5	9.7	7.5	7.8	8.2	8.7	6.4	8.3	8.5	5.9	8.9	6.3	7.5
1.7	2.0	1.5	1.6	2.2	1.4	0.6	1.8	1.6	1.4	1.4	1.2	0.8
3.1	1.9	1.5	0.9	1.9	2.1	0.5	2.5	1.9	1.3	2.2	0.7	3.1
1.3	1.3	1.7	0.5	2.0	1.9	2.3	1.0	0.9	0.6	1.3	0.4	1.1
0.7	1.2	0.2	1.2	0.5	0.7	0.5	0.6	0.2	0.5	0.7	0.5	0.4
2.7	3.3	2.6	3.7	1.6	2.8	2.4	2.3	3.8	2.2	3.2	3.6	2.0
72.3	64.2	73.9	65.8	73.5	75.5	72.7	72.8	71.4	71.2	73.1	77.0	63.9
5.4	3.3	5.2	3.5	3.6	4.3	4.7	3.6	3.6	3.3	5.1	3.7	3.7
5.4	6.2	7.8	6.9	7.1	7.2	8.1	6.7	5.8	6.2	8.2	8.1	10.2
2.9	2.0	1.1	2.5	3.1	2.5	1.7	1.8	2.9	1.9	1.3	2.2	2.5
27.9	25.0	25.7	24.6	29.2	30.4	28.5	29.9	25.8	29.7	27.7	25.4	19.3
17.6	11.8	17.0	17.6	16.6	18.1	18.9	18.6	16.3	16.5	15.7	22.6	14.0
0.4	0.5	0.6	0.2	0.5	0.3	0.4	0.6	0.9	0.4	0.3	0.4	1.2
2.6	4.2	2.6	2.0	3.4	2.8	1.9	2.0	3.6	2.3	3.5	4.2	0.9
1.3	1.8	2.4	1.0	1.4	1.4	2.5	1.4	2.6	1.2	1.5	1.5	1.1
6.7	8.6	9.8	6.2	7.7	7.5	4.8	6.8	8.8	8.6	8.2	7.8	8.7
2.1	0.8	1.5	1.2	0.9	0.9	1.2	1.4	1.1	1.0	1.5	1.2	2.4
46.4	36.3	46.8	45.6	43.4	36.8	37.5	38.2	35.3	37.3	37.0	37.2	54.5
0.7	1.1	0.4	0.4	0.8	0.5	0.4	0.5	0.5	1.2	0.9	0.6	1.2
2.1	2.6	1.4	1.6	2.8	2.3	1.4	3.5	1.5	2.6	2.5	2.6	2.0
43.4	32.2	44.9	43.4	39.6	33.6	35.7	34.0	33.3	33.4	33.5	33.9	51.2
0.2	0.4	0.0	0.2	0.1	0.3	0.0	0.2	0.1	0.1	0.1	0.0	0.2
0.9	1.4	1.1	0.8	1.0	1.5	0.8	0.9	0.6	1.2	1.7	0.3	2.1
30.7	21.8	19.8	18.3	24.7	19.8	15.4	13.0	19.5	20.3	12.5	12.5	9.0
22.5	23.5	24.9	26.6	20.0	18.2	11.0	10.7	14.2	14.9	11.8	11.4	8.0
2.5	1.5	1.6	1.6	1.4	1.9	2.0	1.7	0.8	0.9	0.9	0.7	1.2
0.3	0.4	0.2	0.6	0.4	0.3	0.0	0.2	0.3	1.2	0.2	0.1	0.0
2.2	2.0	1.9	1.7	1.6	1.7	1.7	1.3	1.8	3.0	1.6	1.5	0.2
0.6	0.8	0.6	0.8	0.6	0.5	0.1	0.1	0.5	0.1	0.7	0.5	0.6
127.0	114.0	131.3	106.4	135.7	129.0	135.9	146.2	108.3	100.7	111.5	120.4	99.6
114.3	103.3	117.0	92.3	122.7	116.4	122.2	129.6	94.1	90.1	98.0	105.6	84.7
11.4	9.5	13.6	13.1	12.0	11.4	12.6	15.2	13.3	9.9	11.9	14.0	14.1
1.4	1.1	0.7	1.0	1.0	1.3	1.1	1.4	0.9	0.7	1.6	0.8	0.8
38.1	32.7	36.0	32.4	33.3	37.1	31.0	37.3	31.8	32.5	34.8	33.4	35.4
13.7	13.9	12.1	14.4	11.8	12.5	11.1	14.4	12.9	12.1	10.9	9.8	12.0
0.8	1.8	1.5	1.2	0.8	1.2	0.8	0.9	1.2	1.4	0.6	1.3	1.9
23.5	17.1	22.3	16.8	20.7	23.4	19.0	22.1	17.6	18.9	23.3	22.4	21.6
1.1	0.7	1.2	0.6	0.9	0.6	0.7	1.4	0.9	1.2	0.6	0.0	0.7
15.4	16.0	15.1	13.8	15.6	14.2	11.6	11.8	13.5	14.9	13.4	12.5	12.7
2.3	1.8	1.3	3.7	1.4	2.7	0.9	3.5	2.6	2.3	1.9	2.1	2.7
4.3	4.9	3.7	3.8	2.6	4.6	3.7	1.7	3.4	4.3	4.2	3.5	2.2
3.1	2.2	3.5	3.2	2.9	3.4	2.9	2.8	3.2	2.0	3.0	3.3	4.7
40.5	33.8	42.3	36.6	36.1	35.3	36.7	32.4	34.3	32.7	34.1	29.8	28.4
2.6	1.5	3.1	2.7	2.8	2.5	1.2	3.6	3.4	2.5	2.6	4.0	1.3
11.8	12.2	15.7	13.8	13.0	13.5	13.6	13.7	13.8	12.6	12.7	11.5	13.5
1.7	0.8	0.3	0.3	0.5	1.3	0.3	0.2	0.4	0.3	0.7	0.7	0.5
5.2	4.9	5.1	2.8	4.9	4.2	5.7	4.9	4.3	4.8	5.5	3.3	3.7
19.1	14.6	18.0	17.0	14.8	13.8	15.8	9.9	12.3	12.6	12.5	10.2	9.3

Table 16b Age-standardised (world) incidence rates per 100 000 person-years by county and primary site, 2009-2013

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	302.0	310.8	309.2	305.6	294.6	289.7	314.4
C00-14	Mouth, pharynx	4.3	5.0	4.0	5.5	5.7	4.9	3.6
C00	Lip	0.8	1.1	0.6	0.9	1.2	1.0	0.9
C01-02	Tongue	0.9	0.8	1.4	1.2	1.1	0.7	0.9
C03-06	Mouth, other	0.8	0.7	0.8	1.0	1.2	1.3	0.8
C07-08	Salivary glands	0.6	1.3	0.4	0.6	0.9	1.1	0.0
C09-14	Pharynx	1.1	1.2	0.8	1.8	1.3	0.8	0.9
C15-26	Digestive organs	53.0	57.3	52.3	50.0	49.5	46.4	54.6
C15	Oesophagus	1.2	1.2	1.1	1.8	1.0	1.4	0.8
C16	Stomach	3.3	2.4	2.2	2.9	3.3	2.7	2.8
C17	Small intestine	1.3	1.5	1.0	1.5	1.6	0.5	1.6
C18	Colon	24.6	28.7	23.6	22.7	22.6	19.7	26.6
C19-20	Rectum, rectosigmoid	10.6	10.9	11.8	9.0	8.7	10.2	11.0
C21	Anus	1.1	0.8	1.4	1.0	1.1	1.3	1.0
C22	Liver	1.5	1.6	1.6	1.9	1.9	1.2	1.1
C23-24	Gallbladder, bile ducts	1.8	1.7	1.9	2.0	2.0	2.0	1.8
C25	Pancreas	6.6	7.1	6.6	5.8	5.9	6.2	6.5
C26	Other digestive organs	1.2	1.4	1.2	1.3	1.4	1.2	1.3
C30-34, C38	Respiratory organs	27.0	30.3	28.1	26.9	27.0	24.3	25.7
C30-31	Nose, sinuses	0.4	0.3	0.5	0.3	0.4	0.5	0.7
C32	Larynx, epiglottis	0.4	0.3	0.4	0.8	0.7	0.3	0.1
C33-34	Lung, trachea	26.0	29.6	27.1	25.7	25.9	23.4	24.9
C38	Mediastinum, pleura (non-mesothelioma)	0.1	0.1	0.1	0.1	0.0	0.0	0.0
C40-41	Bone	0.8	0.8	0.5	0.8	0.9	0.6	0.4
C43	Melanoma of the skin	21.1	22.4	24.8	20.1	18.0	20.7	22.2
C44	Skin, non-melanoma	11.2	10.7	10.6	9.5	8.8	7.5	17.9
C45	Mesothelioma	0.3	0.3	0.4	0.3	0.2	0.1	0.6
C47	Autonomic nervous system	0.1	0.3	0.1	0.2	0.0	0.0	0.2
C48-49	Soft tissues	2.2	2.3	2.2	2.6	1.9	2.6	1.5
C50	Breast	75.6	74.3	79.3	85.5	70.5	73.2	75.2
C51-58	Female genital organs	39.0	41.0	38.2	39.3	42.6	43.1	42.0
C53	Cervix uteri	9.5	8.8	9.5	9.4	12.3	11.0	10.0
C54	Corpus uteri	16.1	16.6	15.4	16.4	17.8	16.3	17.6
C55	Uterus, other	0.1	0.0	0.1	0.2	0.1	0.1	0.3
C56	Ovary	10.3	13.2	10.4	10.8	8.9	11.7	10.7
C51-52, C57	Other female genital	2.8	2.3	2.6	2.4	3.3	3.7	3.4
C58	Placenta	0.1	0.0	0.1	0.2	0.2	0.4	0.0
C64-68	Urinary organs	12.6	15.2	10.5	12.1	12.7	12.9	13.3
C64	Kidney excl. renal pelvis	5.5	6.1	4.8	4.7	5.1	5.5	6.7
C65	Renal pelvis	0.7	0.7	0.6	0.8	0.8	0.4	0.3
C66-68	Bladder, ureter, urethra	6.4	8.4	5.1	6.5	6.8	7.0	6.3
C69	Eye	0.9	0.7	0.6	0.9	1.4	1.5	0.8
C70-72, D32-33	Central nervous system	15.4	14.8	14.1	11.9	15.5	16.2	15.6
C73	Thyroid gland	6.7	5.1	7.2	8.2	6.1	6.2	6.6
C37, C74-75	Other endocrine glands	3.6	3.9	3.8	2.8	3.5	1.6	2.8
C39, C76, C80	Other or unspecified	2.6	2.6	2.5	2.9	3.5	2.6	2.5
C81-96	Lymphoid and haematopoietic tissue	25.5	24.0	29.7	26.1	26.8	25.2	29.0
C81	Hodgkin lymphoma	2.2	1.9	2.7	2.6	2.5	1.7	2.7
C82-86, C96	Non-Hodgkin lymphoma	9.6	8.8	10.6	9.3	11.0	9.2	9.1
C88	Malignant immunoproliferative diseases	0.5	0.5	0.7	0.5	0.6	0.2	1.0
C90	Multiple myeloma	3.1	2.6	3.8	3.1	4.1	4.4	3.8
C91-95, D45-47	Leukaemia	10.1	10.2	11.9	10.6	8.6	9.5	12.4

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøn- delag	Nord-Trøn- delag	Nordland	Troms	Finnmark
318.0	301.2	307.7	313.7	316.1	307.0	288.4	279.9	305.4	287.5	284.1	276.9	258.9
4.1	4.9	5.1	4.4	4.0	3.4	2.8	3.5	3.2	3.4	5.0	5.0	2.2
0.9	0.4	1.2	1.0	1.2	0.7	0.9	0.8	0.5	0.6	1.2	0.4	0.0
1.0	1.2	0.7	0.9	0.8	0.4	1.2	0.6	0.8	0.6	0.7	1.1	0.3
0.5	1.9	1.1	0.8	0.7	0.8	0.3	0.8	0.5	0.5	0.9	0.8	0.0
0.2	0.0	0.9	0.7	0.5	0.6	0.3	0.3	0.7	0.6	0.5	1.7	0.4
1.4	1.3	1.2	1.1	0.9	0.9	0.0	0.9	0.8	1.2	1.6	1.0	1.5
50.5	43.2	46.5	51.7	57.9	56.1	55.0	56.1	56.6	54.0	53.3	51.3	54.5
1.5	1.6	0.7	0.4	0.9	0.8	1.3	0.8	1.4	0.7	1.4	1.4	1.0
2.5	3.5	0.9	2.4	3.6	4.3	4.8	4.8	3.5	3.2	4.4	4.5	5.8
0.5	0.8	1.0	1.1	1.1	1.6	1.8	0.9	2.5	1.3	0.9	1.1	1.5
22.2	18.7	24.2	24.4	30.1	25.7	25.7	26.6	25.5	23.0	24.8	22.8	21.7
12.2	8.0	9.1	11.8	10.2	12.5	11.0	10.1	9.5	11.7	10.4	9.8	10.6
1.3	0.7	0.8	1.1	0.8	1.1	1.4	1.0	1.3	1.1	1.2	0.6	1.5
1.6	1.0	0.7	0.7	1.5	1.2	1.2	1.4	2.3	1.9	1.3	2.2	2.2
1.3	1.8	1.1	1.5	1.7	2.0	1.5	2.0	1.7	2.0	1.5	1.4	0.1
6.1	5.7	6.2	7.3	6.7	6.3	4.6	7.4	7.8	7.4	6.6	6.7	9.9
1.3	1.5	2.0	1.0	1.2	0.6	1.7	1.1	1.3	1.7	1.1	0.8	0.3
31.6	26.7	32.9	36.2	27.4	24.5	22.0	23.1	27.3	22.6	24.0	25.3	28.0
0.9	0.5	0.4	0.4	0.3	0.3	0.0	0.4	0.4	0.2	0.2	0.4	0.0
0.5	0.6	0.3	0.3	0.3	0.5	0.4	0.5	0.2	0.3	0.2	0.7	0.3
30.1	25.6	32.2	35.3	26.7	23.6	21.5	22.0	26.3	21.9	23.4	24.2	26.4
0.1	0.1	0.0	0.2	0.1	0.1	0.0	0.2	0.3	0.2	0.2	0.0	1.3
0.7	0.8	2.3	0.6	1.4	0.7	0.4	0.9	0.6	1.2	0.9	0.3	0.0
28.8	22.7	21.8	19.9	26.9	19.7	16.7	14.3	25.3	22.7	11.6	14.3	11.2
12.2	17.0	18.7	20.5	14.2	11.1	5.9	7.0	9.8	9.0	8.8	8.6	7.3
0.3	0.0	0.2	0.1	0.3	0.3	0.6	0.2	0.2	0.2	0.2	0.6	0.2
0.1	0.0	0.0	0.4	0.1	0.2	1.0	0.1	0.1	0.0	0.2	0.0	0.0
2.0	2.6	2.4	1.2	1.5	2.1	2.4	2.1	3.0	1.4	3.0	3.0	2.9
76.2	71.0	76.6	78.3	78.7	77.2	70.4	74.5	72.7	76.4	67.1	66.4	58.5
41.4	43.0	38.4	38.7	40.0	38.4	35.4	32.7	36.1	34.6	40.8	37.1	32.5
11.8	8.9	9.1	8.7	7.7	9.5	8.7	8.7	7.5	9.4	13.0	9.3	9.6
16.0	18.0	15.6	16.1	17.9	16.9	13.4	12.9	16.2	14.0	15.4	16.1	8.9
0.2	0.3	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.4	0.0	0.1	0.4
9.4	12.0	10.7	11.6	11.9	8.9	9.7	8.1	9.7	7.8	9.7	8.4	11.7
3.3	3.9	2.8	2.2	2.2	3.0	3.5	3.0	2.6	2.6	2.7	3.0	1.9
0.6	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.2	0.4	0.0	0.3	0.0
11.2	12.5	14.8	10.6	11.7	13.6	11.5	13.7	14.7	9.8	13.7	13.5	12.8
4.9	6.2	5.5	5.5	4.3	5.8	5.0	6.0	6.7	4.8	6.0	6.2	6.6
1.1	0.3	0.9	0.4	0.6	1.1	0.2	0.8	1.0	0.3	0.7	0.8	0.0
5.2	6.0	8.4	4.7	6.8	6.7	6.2	6.9	7.0	4.7	7.0	6.4	6.2
1.2	0.5	0.2	0.2	1.5	1.4	1.9	0.7	0.7	0.4	0.6	1.4	0.3
18.3	16.8	11.6	14.6	18.2	17.4	20.0	13.1	16.3	18.8	14.8	14.1	18.4
7.3	7.2	5.2	7.9	3.4	6.9	5.3	6.2	8.0	3.6	9.0	8.9	5.1
3.9	3.1	1.9	3.3	2.0	6.6	9.3	4.5	3.6	4.8	4.7	2.7	2.4
2.8	3.8	2.5	2.2	2.5	2.3	1.8	2.2	2.3	3.2	2.7	2.6	2.7
25.2	25.3	26.5	22.9	24.4	25.2	26.0	25.0	24.8	21.6	23.8	21.9	19.9
1.9	2.1	3.1	2.1	1.7	1.9	2.3	3.4	2.2	1.8	1.4	2.0	1.0
9.8	7.5	9.5	9.8	9.0	9.8	9.5	8.8	10.0	8.8	11.0	9.5	9.3
0.4	0.5	0.5	0.4	0.2	0.7	0.9	0.4	0.3	0.4	0.3	0.3	0.6
2.8	2.7	3.1	2.0	2.3	2.9	3.0	3.1	3.1	2.6	3.1	2.8	1.9
10.4	12.5	10.4	8.4	11.2	9.9	10.4	9.3	9.1	8.1	8.0	7.2	7.1

Table 17a Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1954-2013

ICD-10	Site	Stage	1954-58	1959-63	1964-68	1969-73
C00-14	Mouth, pharynx	Total	181	190	191	234
		Localised	126	130	133	151
		Regional	43	46	43	55
		Distant	2	6	7	10
		Unknown	9	9	8	17
C15	Oesophagus	Total	72	82	76	80
		Localised	43	50	47	37
		Regional	9	11	9	16
		Distant	13	16	17	21
		Unknown	6	5	4	7
C16	Stomach	Total	872	807	794	695
		Localised	252	218	216	165
		Regional	192	166	164	157
		Distant	334	356	340	312
		Unknown	95	67	74	60
C18	Colon	Total	216	266	347	372
		Localised	87	107	138	133
		Regional	56	68	82	94
		Distant	61	78	112	125
		Unknown	13	14	15	20
C19-20	Rectum, rectosigmoid	Total	143	172	204	293
		Localised	71	84	98	133
		Regional	33	41	58	79
		Distant	28	36	42	67
		Unknown	11	11	7	13
C22	Liver	Total	16	22	32	45
		Localised	8	10	17	20
		Regional	1	1	1	2
		Distant	6	9	13	18
		Unknown	1	2	1	5
C23-24	Gallbladder, bile ducts	Total	14	20	25	27
		Localised	8	7	9	8
		Regional	1	4	4	4
		Distant	5	8	11	12
		Unknown	1	1	1	2
C25	Pancreas	Total	130	152	202	244
		Localised	38	46	57	49
		Regional	11	17	26	32
		Distant	68	79	109	139
		Unknown	12	10	9	24
C33-34	Lung, trachea	Total	220	334	463	613
		Localised	67	101	161	196
		Regional	42	71	94	116
		Distant	91	139	188	254
		Unknown	20	24	19	48
C43	Melanoma of the skin	Total	42	67	92	133
		Localised	24	43	60	90
		Regional	9	9	12	16
		Distant	6	13	16	17
		Unknown	3	1	3	10
C61	Prostate	Total	606	746	953	1131
		Localised	357	445	641	727
		Regional	30	34	31	52
		Distant	161	200	218	245
		Unknown	57	67	63	108
C62	Testis	Total	50	65	65	86
		Localised	34	43	44	48
		Regional	2	3	4	11
		Distant	13	16	17	24
		Unknown	1	2	1	3
C64	Kidney except renal pelvis	Total	83	114	145	160
		Localised	44	59	76	69
		Regional	6	13	19	29
		Distant	28	37	45	58
		Unknown	4	5	4	4
C66-68	Bladder, ureter, urethra	Total	189	228	319	382
		Localised	145	187	269	302
		Regional	14	19	29	40
		Distant	19	14	16	22
		Unknown	10	8	5	18
C70-72, D32-33	Central nervous system	Total	113	127	145	155
		Non-malignant	26	39	37	47
		Malignant	87	88	108	108
C73	Thyroid gland	Total	17	24	29	37
		Localised	7	6	7	15
		Regional	6	12	14	13
		Distant	4	6	7	8
		Unknown	1	1	0	1

MALES

Period								% 2009-13
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13	
238	244	258	259	258	259	271	340	100.0
156	147	165	153	127	88	91	160	47.2
65	86	82	91	91	105	128	157	46.2
9	7	7	10	12	12	14	14	4.2
8	4	4	6	27	55	39	8	2.4
89	88	90	106	112	124	145	177	100.0
44	43	39	44	39	24	31	72	40.8
19	20	23	25	21	29	42	48	27.0
22	22	25	31	30	39	43	54	30.5
5	5	2	5	22	33	30	3	1.8
628	599	542	497	424	359	318	293	100.0
179	183	176	176	110	58	62	112	38.1
140	162	153	135	129	106	92	84	28.7
270	222	190	162	138	129	110	91	31.1
39	32	22	23	47	66	54	6	2.1
472	591	700	818	882	969	1102	1257	100.0
151	169	211	283	197	167	192	235	18.7
160	248	276	288	412	469	566	668	53.2
145	153	190	215	234	252	278	328	26.1
16	21	23	32	39	81	66	26	2.1
382	486	514	554	574	625	660	739	100.0
180	217	217	251	214	161	156	207	27.9
113	167	197	190	225	257	308	383	51.8
79	90	91	100	109	128	134	142	19.2
9	11	9	13	26	79	63	8	1.0
53	57	67	62	56	79	89	133	100.0
25	30	35	38	25	27	30	66	49.7
6	4	5	4	3	5	11	15	11.4
20	15	19	10	12	18	21	30	22.9
2	8	8	10	16	29	28	21	16.0
37	37	51	50	57	58	67	80	100.0
11	12	20	18	10	12	11	15	19.2
9	8	10	9	12	13	24	36	44.5
16	14	15	15	16	15	19	23	28.6
1	3	5	8	18	17	14	6	7.7
258	284	297	284	280	290	329	351	100.0
44	55	61	63	31	20	24	44	12.6
34	37	38	26	35	48	77	75	21.4
156	159	157	144	130	152	181	189	53.8
24	34	41	51	84	69	46	43	12.2
805	980	1137	1193	1272	1348	1459	1578	100.0
260	329	376	409	288	204	193	355	22.5
145	171	244	218	300	350	432	438	27.8
345	412	444	464	512	630	679	702	44.5
55	68	73	101	171	164	155	83	5.2
186	235	297	412	454	475	580	810	100.0
152	192	255	350	364	276	278	703	86.7
16	16	16	19	14	18	26	48	5.9
14	18	17	26	24	34	30	30	3.7
3	9	9	18	52	147	247	30	3.7
1410	1593	1775	2143	2640	3049	4069	4671	100.0
952	1075	1172	1470	1410	1055	1856	3017	64.6
75	62	60	77	107	146	356	1180	25.3
293	358	486	436	409	390	408	369	7.9
90	98	57	160	714	1458	1449	105	2.3
98	123	156	194	217	254	281	311	100.0
56	63	97	131	137	137	165	251	80.8
20	34	35	35	36	39	49	30	9.8
21	23	23	25	29	30	30	27	8.6
1	3	1	3	16	48	37	3	0.8
198	231	261	285	276	308	389	500	100.0
81	99	121	148	124	122	173	357	71.4
47	46	53	39	43	42	38	42	8.3
67	78	78	78	70	74	89	85	17.1
4	8	10	20	40	70	88	16	3.2
528	633	717	808	821	835	950	978	100.0
434	534	621	719	615	438	514	811	82.9
54	58	55	44	41	52	77	63	6.5
29	29	28	28	30	35	36	35	3.6
12	12	13	16	135	311	322	69	7.1
179	204	240	258	294	377	448	458	100.0
52	63	73	96	132	180	238	226	49.3
127	141	167	163	162	197	209	233	50.7
39	49	44	47	46	52	65	85	100.0
19	22	22	24	19	18	19	43	50.1
14	19	14	13	15	20	30	36	41.9
5	7	7	8	9	7	9	5	6.1
1	1	0	2	3	7	8	2	1.9

Table 17b Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1954-2013

ICD-10	Site	Stage	1954-58	1959-63	1964-68	1969-73
C00-14	Mouth, pharynx	Total	64	60	74	77
		Localised	40	34	44	41
		Regional	19	19	27	27
		Distant	2	4	2	5
		Unknown	3	4	1	5
C15	Oesophagus	Total	24	25	30	29
		Localised	17	17	20	15
		Regional	2	4	3	5
		Distant	2	3	5	7
		Unknown	3	2	2	3
C16	Stomach	Total	607	562	515	455
		Localised	179	151	141	101
		Regional	112	97	93	89
		Distant	221	235	220	217
		Unknown	96	79	61	48
C18	Colon	Total	254	308	395	454
		Localised	104	124	158	162
		Regional	57	75	94	130
		Distant	69	89	124	137
		Unknown	25	20	19	25
C19-20	Rectum, rectosigmoid	Total	111	122	165	237
		Localised	54	57	76	110
		Regional	27	30	44	66
		Distant	22	28	37	53
		Unknown	8	8	8	8
C22	Liver	Total	11	14	15	27
		Localised	4	6	7	12
		Regional	1	0	1	1
		Distant	5	6	7	11
		Unknown	1	2	1	3
C23-24	Gallbladder, bile ducts	Total	43	51	54	56
		Localised	13	14	15	14
		Regional	6	10	8	9
		Distant	21	25	30	30
		Unknown	3	3	1	3
C25	Pancreas	Total	89	112	136	178
		Localised	29	32	44	42
		Regional	9	10	14	20
		Distant	43	60	69	95
		Unknown	8	10	8	21
C33-34	Lung, trachea	Total	65	77	104	156
		Localised	18	20	33	50
		Regional	8	9	14	23
		Distant	30	41	52	71
		Unknown	9	7	6	11
C43	Melanoma of the skin	Total	51	74	108	145
		Localised	39	59	85	111
		Regional	6	7	6	11
		Distant	4	6	11	11
		Unknown	1	2	6	13
C50	Breast	Total	868	999	1151	1279
		Pagets stage 0				13
		I	374	456	551	608
		II	334	354	368	405
		III	45	64	92	85
		IV	88	96	109	112
C53	Cervix uteri	Unknown	28	29	31	56
		Total	332	343	380	420
		I	133	142	178	220
		II	95	116	134	119
		III	69	52	42	55
		IV	26	24	21	21
C54	Corpus uteri	Unknown	9	8	5	6
		Total	159	199	239	294
		Localised	125	163	194	240
		Regional	10	10	14	16
		Distant	17	20	30	33
		Unknown	6	6	2	6
C56	Ovary	Total	236	276	335	344
		Localised	73	87	108	133
		Regional	21	18	16	24
		Distant	134	156	204	181
		Unknown	8	14	6	5
C64	Kidney except renal pelvis	Total	69	87	96	116
		Localised	42	49	53	59
		Regional	6	10	10	20
		Distant	18	24	30	33
		Unknown	3	4	3	5
C66-68	Bladder, ureter, urethra	Total	105	113	136	167
		Localised	65	72	92	106
		Regional	12	14	21	27
		Distant	18	18	18	22
		Unknown	10	10	6	12
C70-72, D32-33	Central nervous system	Total	100	115	129	123
		Non-malignant	36	50	61	52
		Malignant	63	65	68	71
C73	Thyroid gland	Total	51	56	71	97
		Localised	25	23	38	52
		Regional	15	19	23	29
		Distant	8	12	10	11
		Unknown	3	2	1	5

FEMALES

Period								% 2009-13
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13	
81	95	113	111	133	133	177	193	100.0
45	55	66	75	77	49	71	109	56.5
27	34	41	30	37	45	66	75	39.1
4	3	4	4	5	6	5	6	2.9
5	4	2	2	13	32	34	3	1.5
34	31	36	38	46	52	55	62	100.0
20	14	21	21	19	12	12	33	52.2
7	7	9	6	8	9	14	14	22.4
5	7	5	8	9	12	12	13	20.8
2	3	1	3	10	19	17	3	4.5
411	410	366	319	283	233	220	188	100.0
107	126	132	122	84	43	44	76	40.4
91	108	94	77	73	61	56	42	22.3
178	141	120	102	89	80	78	63	33.4
36	35	20	17	37	49	41	7	3.9
592	730	837	922	1073	1149	1245	1381	100.0
190	209	239	326	238	204	222	257	18.6
204	300	354	340	507	560	648	760	55.0
175	188	208	212	255	272	294	317	22.9
22	34	35	45	73	113	80	47	3.4
303	383	400	446	463	479	516	528	100.0
140	174	172	219	178	134	127	167	31.6
86	129	142	139	177	190	235	257	48.7
67	68	72	75	82	88	97	95	18.0
9	11	14	13	26	66	57	9	1.7
29	37	45	48	37	50	53	77	100.0
15	16	22	24	13	12	14	37	47.8
1	1	3	3	2	6	8	9	11.7
12	16	12	10	8	10	12	18	22.9
1	4	7	11	14	22	18	14	17.7
59	78	83	73	77	80	78	93	100.0
16	24	30	22	16	10	16	14	15.5
10	15	17	13	14	16	20	32	34.8
30	34	26	25	23	28	27	37	39.8
4	5	10	14	23	26	16	9	9.9
201	241	291	290	317	328	353	368	100.0
42	48	71	74	35	27	37	57	15.6
25	31	38	27	35	46	76	76	20.6
116	129	140	122	138	155	171	178	48.5
19	32	42	67	109	99	68	56	15.3
192	263	367	503	630	812	1036	1253	100.0
55	75	112	152	138	119	160	323	25.8
30	38	66	99	134	192	276	322	25.7
92	125	163	205	260	392	492	542	43.2
14	24	26	47	98	109	108	67	5.3
237	297	387	472	500	532	612	833	100.0
213	264	355	431	414	332	313	759	91.1
9	13	11	12	10	14	17	33	3.9
13	11	12	14	19	21	19	16	1.9
3	9	9	14	58	165	263	25	3.0
1504	1636	1798	1939	2279	2610	2779	2977	100.0
23	29	36	31	16	21	22	26	0.9
773	874	575	293	677	906	1156	1267	42.6
426	466	618	717	823	1028	1147	1077	36.2
113	85	119	99	86	91	92	149	5.0
118	105	116	130	128	134	118	103	3.5
50	77	334	669	549	431	244	355	11.9
443	381	331	362	336	297	293	301	100.0
247	219	182	216	202	176	160	186	1.2
108	76	73	67	66	52	64	60	61.8
60	53	49	45	37	35	26	21	20.1
24	22	23	30	26	26	30	28	7.0
5	10	4	5	5	8	12	2	9.2
349	382	387	443	476	574	684	726	100.0
283	284	295	333	350	354	446	574	79.1
32	51	44	48	49	67	77	47	6.4
31	36	41	56	61	74	92	92	12.7
3	11	7	6	16	79	69	13	1.8
356	395	448	454	466	463	453	440	100.0
120	105	121	130	108	81	84	93	21.1
23	41	25	17	13	14	12	15	3.4
207	238	289	290	307	306	315	295	67.1
5	10	13	16	39	63	42	37	8.4
129	149	173	190	196	194	235	246	100.0
64	70	82	106	94	74	111	173	70.5
25	33	30	23	22	20	22	19	7.8
37	40	52	44	48	48	39	38	15.4
3	6	9	17	31	52	63	15	6.3
202	242	249	268	288	313	336	366	100.0
144	184	208	224	192	145	171	291	79.4
25	25	23	16	19	23	32	26	7.2
21	21	12	17	16	25	21	19	5.2
11	13	7	11	60	120	113	30	8.2
171	205	237	281	346	477	609	554	100.0
72	89	115	157	210	327	446	383	69.3
99	116	122	124	136	150	163	170	30.7
119	145	137	140	121	135	165	216	100.0
74	96	93	91	67	63	73	139	64.4
30	32	32	33	38	41	52	67	31.0
13	12	9	11	9	10	11	7	3.1
2	4	3	4	8	22	30	3	1.5

Table 18a Age-standardised (world) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1954-2013

ICD-10	Site	Stage	1954-58	1959-63	1964-68	1969-73
C00-14	Mouth, pharynx	Total	8.1	7.8	7.3	8.3
		Localised	5.7	5.3	5.1	5.4
		Regional	1.9	1.9	1.6	2.0
		Distant	0.1	0.3	0.3	0.4
		Unknown	0.4	0.4	0.3	0.6
C15	Oesophagus	Total	3.2	3.3	2.7	2.7
		Localised	1.9	2.0	1.6	1.2
		Regional	0.4	0.5	0.3	0.5
		Distant	0.6	0.7	0.6	0.7
		Unknown	0.3	0.2	0.1	0.2
C16	Stomach	Total	38.6	32.1	28.9	23.5
		Localised	10.8	8.4	7.6	5.5
		Regional	8.9	6.8	6.1	5.4
		Distant	15.1	14.4	12.6	10.7
		Unknown	3.9	2.5	2.6	1.9
C18	Colon	Total	9.6	10.7	12.7	12.7
		Localised	3.8	4.2	5.0	4.5
		Regional	2.5	2.8	3.1	3.3
		Distant	2.7	3.2	4.1	4.3
		Unknown	0.6	0.5	0.5	0.6
C19-20	Rectum, rectosigmoid	Total	6.3	6.9	7.5	10.0
		Localised	3.1	3.3	3.6	4.5
		Regional	1.5	1.7	2.1	2.8
		Distant	1.2	1.4	1.5	2.3
		Unknown	0.5	0.4	0.2	0.4
C22	Liver	Total	0.8	1.0	1.2	1.6
		Localised	0.4	0.4	0.6	0.7
		Regional	0.0	0.0	0.0	0.1
		Distant	0.3	0.4	0.5	0.7
		Unknown	0.1	0.1	0.0	0.2
C23-24	Gallbladder, bile ducts	Total	0.6	0.8	0.9	0.9
		Localised	0.4	0.3	0.3	0.3
		Regional	0.1	0.2	0.2	0.2
		Distant	0.2	0.3	0.4	0.4
		Unknown	0.0	0.0	0.0	0.1
C25	Pancreas	Total	5.9	6.1	7.4	8.3
		Localised	1.7	1.8	2.0	1.6
		Regional	0.5	0.7	1.0	1.1
		Distant	3.1	3.2	4.0	4.8
		Unknown	0.5	0.4	0.3	0.8
C33-34	Lung, trachea	Total	10.3	14.2	17.9	22.2
		Localised	3.1	4.2	6.1	7.0
		Regional	2.0	3.1	3.8	4.3
		Distant	4.3	5.9	7.3	9.3
		Unknown	0.9	0.9	0.7	1.6
C43	Melanoma of the skin	Total	2.0	3.1	4.1	5.8
		Localised	1.1	2.0	2.7	3.9
		Regional	0.4	0.4	0.6	0.7
		Distant	0.3	0.6	0.7	0.7
		Unknown	0.1	0.1	0.1	0.5
C61	Prostate	Total	25.4	27.9	32.4	35.3
		Localised	14.9	16.5	21.8	22.5
		Regional	1.3	1.3	1.1	1.6
		Distant	6.8	7.5	7.4	7.8
		Unknown	2.4	2.5	2.1	3.3
C62	Testis	Total	2.7	3.6	3.6	4.5
		Localised	1.8	2.4	2.4	2.5
		Regional	0.1	0.2	0.2	0.6
		Distant	0.8	0.9	1.0	1.2
		Unknown	0.1	0.1	0.1	0.2
C64	Kidney except renal pelvis	Total	3.9	4.9	5.6	5.9
		Localised	2.1	2.6	3.0	2.6
		Regional	0.3	0.6	0.8	1.1
		Distant	1.3	1.5	1.7	2.1
		Unknown	0.2	0.2	0.2	0.2
C66-68	Bladder, ureter, urethra	Total	8.5	9.2	11.8	13.2
		Localised	6.5	7.6	10.0	10.5
		Regional	0.6	0.8	1.1	1.3
		Distant	0.9	0.6	0.6	0.8
		Unknown	0.4	0.3	0.2	0.6
C70-72, D32-33	Central nervous system	Total	5.9	6.2	6.9	7.0
		Non-malignant	1.3	1.9	1.7	2.1
		Malignant	4.6	4.4	5.2	5.0
C73	Thyroid gland	Total	0.8	1.0	1.2	1.5
		Localised	0.3	0.3	0.3	0.6
		Regional	0.3	0.5	0.6	0.5
		Distant	0.2	0.3	0.2	0.3
		Unknown	0.0	0.0	0.0	0.0

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
8.2	8.0	8.5	8.4	8.2	7.9	7.6	8.4
5.4	4.8	5.3	4.8	4.0	2.6	2.5	3.8
2.2	2.9	2.8	3.1	3.1	3.4	3.7	4.0
0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.3
0.3	0.1	0.1	0.2	0.8	1.6	1.0	0.2
2.9	2.6	2.8	3.3	3.2	3.4	3.8	4.1
1.4	1.2	1.1	1.3	1.1	0.6	0.8	1.6
0.6	0.6	0.7	0.9	0.7	0.9	1.2	1.1
0.7	0.7	0.8	1.0	0.9	1.1	1.2	1.3
0.1	0.1	0.1	0.1	0.6	0.8	0.7	0.1
19.9	17.8	15.2	13.5	11.1	9.1	7.5	6.4
5.6	5.2	4.7	4.5	2.7	1.5	1.4	2.4
4.5	5.0	4.4	3.9	3.6	2.8	2.2	1.9
8.7	6.7	5.5	4.5	3.8	3.4	2.7	2.0
1.1	0.9	0.6	0.6	1.0	1.4	1.2	0.1
15.0	17.9	20.2	22.9	23.7	25.1	26.4	27.1
4.8	5.1	5.9	7.7	5.2	4.3	4.6	5.0
5.2	7.6	8.2	8.2	11.1	12.0	13.4	14.4
4.6	4.6	5.6	6.2	6.5	6.7	7.0	7.4
0.5	0.6	0.5	0.8	0.9	2.0	1.4	0.4
12.4	14.8	15.2	15.8	16.2	16.9	16.6	17.0
5.8	6.6	6.3	6.9	5.9	4.3	3.9	4.6
3.7	5.2	6.0	5.6	6.4	7.0	7.8	8.9
2.6	2.8	2.7	2.9	3.2	3.6	3.5	3.4
0.3	0.3	0.2	0.3	0.7	2.0	1.5	0.1
1.8	1.8	2.1	1.9	1.6	2.2	2.4	3.1
0.9	1.0	1.1	1.1	0.7	0.8	0.8	1.5
0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.4
0.7	0.5	0.6	0.3	0.3	0.5	0.6	0.7
0.1	0.2	0.2	0.3	0.4	0.7	0.7	0.4
1.1	1.1	1.4	1.4	1.5	1.5	1.6	1.8
0.3	0.4	0.6	0.5	0.3	0.3	0.3	0.3
0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.9
0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5
0.0	0.1	0.2	0.2	0.4	0.4	0.3	0.1
8.2	8.6	8.4	7.9	7.6	7.6	8.1	7.7
1.3	1.5	1.6	1.6	0.8	0.5	0.5	1.0
1.1	1.2	1.1	0.8	1.1	1.3	2.0	1.7
5.1	4.9	4.6	4.2	3.7	4.2	4.7	4.3
0.7	1.0	1.1	1.3	2.0	1.6	1.0	0.7
27.1	31.4	35.2	35.7	37.0	36.8	36.4	34.9
8.4	10.1	10.9	11.6	8.2	5.6	4.8	7.8
5.2	5.9	7.9	6.9	8.9	9.5	10.8	9.9
11.7	13.5	14.3	14.6	15.5	17.8	17.3	15.8
1.7	1.9	2.0	2.6	4.4	3.9	3.6	1.5
7.7	9.4	11.2	14.9	15.1	14.5	16.2	20.2
6.4	7.7	9.7	12.7	12.3	8.6	8.0	17.6
0.7	0.7	0.6	0.7	0.5	0.6	0.7	1.1
0.5	0.7	0.7	0.9	0.8	1.0	0.8	0.7
0.1	0.3	0.3	0.6	1.7	4.4	6.8	0.7
40.8	42.7	44.8	52.5	67.1	80.0	102.9	107.6
27.5	28.6	29.3	35.5	36.2	29.8	49.2	72.2
2.2	1.7	1.7	2.5	3.6	4.5	9.4	26.6
8.6	9.8	12.4	10.9	9.8	9.0	8.8	7.2
2.6	2.6	1.4	3.7	17.4	36.7	35.5	1.7
4.9	5.9	6.9	8.3	9.2	10.5	11.5	11.7
2.8	3.0	4.3	5.6	5.7	5.7	6.7	9.4
1.0	1.6	1.6	1.5	1.5	1.6	2.0	1.2
1.0	1.1	1.0	1.1	1.3	1.3	1.3	1.0
0.0	0.1	0.1	0.1	0.7	1.9	1.5	0.1
7.0	7.8	8.4	8.7	8.4	9.0	10.5	12.6
2.9	3.4	4.0	4.7	3.9	3.7	4.8	9.1
1.7	1.6	1.7	1.2	1.3	1.2	1.0	1.0
2.3	2.5	2.5	2.3	2.1	2.1	2.3	2.1
0.1	0.2	0.3	0.5	1.1	1.9	2.3	0.3
17.1	19.3	20.5	22.6	22.2	21.3	22.4	20.8
14.1	16.4	17.9	20.0	16.9	11.4	12.2	17.3
1.7	1.7	1.5	1.3	1.1	1.4	1.9	1.4
0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.7
0.4	0.4	0.4	0.4	3.4	7.6	7.4	1.4
7.8	8.5	9.7	10.0	10.8	13.3	14.6	13.5
2.1	2.4	2.7	3.5	5.0	6.3	7.8	6.7
5.6	6.1	7.0	6.6	5.9	7.0	6.7	6.7
1.5	1.7	1.5	1.7	1.6	1.7	1.9	2.4
0.8	0.8	0.8	0.9	0.7	0.6	0.6	1.2
0.5	0.7	0.5	0.5	0.5	0.7	0.9	1.0
0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1
0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0

Table 18b Age-standardised (world) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1954-2013

ICD-10	Site	Stage	1954-58	1959-63	1964-68	1969-73
C00-14	Mouth, pharynx	Total	2.5	2.2	2.4	2.4
		Localised	1.6	1.3	1.4	1.3
		Regional	0.7	0.6	0.8	0.8
		Distant	0.1	0.1	0.1	0.1
		Unknown	0.1	0.1	0.0	0.1
C15	Oesophagus	Total	0.9	0.8	0.9	0.7
		Localised	0.6	0.5	0.6	0.4
		Regional	0.1	0.1	0.1	0.1
		Distant	0.1	0.1	0.1	0.2
		Unknown	0.1	0.1	0.1	0.1
C16	Stomach	Total	22.3	18.5	15.3	12.3
		Localised	6.3	4.7	4.0	2.5
		Regional	4.5	3.5	3.0	2.6
		Distant	8.5	8.0	6.8	6.2
		Unknown	3.1	2.3	1.6	1.1
C18	Colon	Total	9.5	10.6	12.1	13.1
		Localised	3.9	4.2	4.8	4.6
		Regional	2.2	2.7	3.0	3.8
		Distant	2.6	3.1	3.8	4.0
		Unknown	0.8	0.6	0.5	0.6
C19-20	Rectum, rectosigmoid	Total	4.3	4.2	5.3	6.8
		Localised	2.0	2.0	2.5	3.2
		Regional	1.1	1.1	1.4	1.9
		Distant	0.9	0.9	1.2	1.5
		Unknown	0.3	0.2	0.2	0.2
C22	Liver	Total	0.4	0.6	0.5	0.8
		Localised	0.2	0.2	0.3	0.4
		Regional	0.0	0.0	0.0	0.0
		Distant	0.2	0.3	0.2	0.3
		Unknown	0.0	0.1	0.0	0.1
C23-24	Gallbladder, bile ducts	Total	1.6	1.7	1.6	1.5
		Localised	0.5	0.4	0.5	0.4
		Regional	0.2	0.3	0.2	0.2
		Distant	0.8	0.8	0.9	0.8
		Unknown	0.1	0.1	0.0	0.1
C25	Pancreas	Total	3.4	3.9	4.1	4.9
		Localised	1.1	1.0	1.3	1.1
		Regional	0.4	0.4	0.5	0.6
		Distant	1.6	2.2	2.1	2.7
		Unknown	0.3	0.3	0.2	0.6
C33-34	Lung, trachea	Total	2.6	2.8	3.5	4.9
		Localised	0.7	0.7	1.1	1.5
		Regional	0.3	0.3	0.5	0.8
		Distant	1.3	1.5	1.7	2.3
		Unknown	0.4	0.2	0.2	0.3
C43	Melanoma of the skin	Total	2.3	3.3	4.7	6.2
		Localised	1.8	2.6	3.7	4.9
		Regional	0.3	0.3	0.3	0.5
		Distant	0.2	0.2	0.5	0.4
		Unknown	0.1	0.1	0.2	0.5
C50	Breast	Total	36.9	39.3	42.6	44.8
		Pagets stage 0	0.0	0.0	0.0	0.4
		I	15.8	17.8	20.3	21.2
		II	14.7	14.5	14.3	14.8
		III	1.7	2.3	3.2	2.7
		IV	3.6	3.6	3.7	3.6
C53	Cervix uteri	Unknown	1.1	1.1	1.1	2.0
		Total	15.2	15.2	16.5	18.1
		I	0.0	0.0	0.0	0.0
		II	6.2	6.6	8.3	10.4
		III	4.4	5.1	5.7	4.7
		IV	3.1	2.1	1.6	2.1
C54	Corpus uteri	Unknown	1.1	1.0	0.8	0.7
		Total	6.9	7.9	8.8	10.1
		Localised	5.4	6.5	7.2	8.4
		Regional	0.4	0.4	0.5	0.5
		Distant	0.7	0.8	1.1	1.0
C56	Ovary	Unknown	0.3	0.2	0.0	0.2
		Total	10.4	11.3	12.7	12.7
		Localised	3.3	3.8	4.3	5.1
		Regional	0.9	0.7	0.6	0.9
		Distant	5.8	6.2	7.6	6.4
C64	Kidney except renal pelvis	Unknown	0.3	0.5	0.2	0.2
		Total	3.0	3.3	3.3	3.6
		Localised	1.8	1.8	1.9	1.9
		Regional	0.3	0.4	0.3	0.7
		Distant	0.7	1.0	1.0	0.9
C66-68	Bladder, ureter, urethra	Unknown	0.1	0.1	0.1	0.1
		Total	4.0	3.9	4.2	4.6
		Localised	2.5	2.4	2.8	3.0
		Regional	0.5	0.5	0.6	0.8
		Distant	0.7	0.6	0.5	0.6
C70-72, D32-33	Central nervous system	Unknown	0.4	0.3	0.2	0.3
		Total	5.0	5.4	5.7	5.3
		Non-malignant	1.7	2.2	2.5	2.1
C73	Thyroid gland	Malignant	3.2	3.2	3.1	3.3
		Total	2.1	2.4	2.9	3.8
		Localised	1.0	1.0	1.6	2.2
		Regional	0.7	0.9	0.9	1.1
		Distant	0.3	0.4	0.3	0.3
		Unknown	0.1	0.1	0.0	0.2

FEMALES

Period							
1974-78	1979-83	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
2.2	2.6	2.9	2.9	3.4	3.3	4.1	4.3
1.2	1.6	1.7	1.8	2.0	1.3	1.6	2.3
0.8	0.9	1.1	0.8	0.9	1.2	1.6	1.8
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.3	0.7	0.7	0.0
0.8	0.7	0.8	0.8	0.9	1.0	1.1	1.2
0.4	0.3	0.4	0.4	0.4	0.2	0.2	0.6
0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3
0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.3
0.0	0.1	0.0	0.0	0.2	0.3	0.3	0.0
10.0	9.2	7.7	6.3	5.3	4.4	4.1	3.3
2.5	2.7	2.5	2.2	1.4	0.8	0.8	1.3
2.4	2.6	2.2	1.7	1.5	1.2	1.1	0.7
4.5	3.3	2.7	2.1	2.0	1.7	1.6	1.3
0.7	0.6	0.3	0.3	0.5	0.6	0.6	0.1
15.3	17.6	18.8	19.9	22.3	22.9	23.5	24.6
4.9	4.9	5.3	6.8	5.0	4.1	4.0	4.6
5.4	7.5	8.1	7.5	10.7	11.2	12.3	13.6
4.6	4.5	4.9	4.9	5.7	5.8	6.0	6.0
0.5	0.6	0.5	0.7	1.0	1.8	1.2	0.4
8.2	9.5	9.3	10.1	10.4	10.4	10.8	10.6
3.7	4.4	4.0	4.8	3.9	3.0	2.6	3.3
2.5	3.2	3.4	3.4	4.2	4.3	5.0	5.3
1.8	1.7	1.7	1.7	1.9	2.0	2.2	1.9
0.2	0.2	0.2	0.2	0.4	1.1	1.0	0.1
0.8	1.0	1.0	1.2	0.8	1.1	1.1	1.5
0.4	0.4	0.5	0.6	0.4	0.3	0.3	0.8
0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.2
0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.4
0.0	0.1	0.1	0.2	0.2	0.4	0.3	0.2
1.4	1.7	1.6	1.5	1.5	1.6	1.5	1.8
0.4	0.5	0.6	0.4	0.3	0.2	0.3	0.2
0.3	0.4	0.4	0.3	0.3	0.4	0.5	0.7
0.7	0.7	0.5	0.6	0.5	0.6	0.5	0.7
0.1	0.1	0.1	0.2	0.4	0.4	0.2	0.1
5.0	5.4	6.1	5.8	6.1	6.1	6.4	6.6
1.0	1.0	1.3	1.3	0.7	0.4	0.6	1.1
0.7	0.8	0.9	0.6	0.8	1.0	1.5	1.5
2.9	3.1	3.1	2.8	3.0	3.3	3.4	3.4
0.4	0.6	0.7	1.0	1.6	1.5	0.9	0.6
5.8	7.7	10.2	14.0	17.1	20.9	24.1	26.0
1.6	2.1	2.9	4.1	3.7	3.1	3.7	6.8
0.9	1.2	2.1	2.9	3.8	5.0	6.6	6.9
2.8	3.9	4.7	6.0	7.5	10.5	11.6	11.5
0.3	0.6	0.6	0.9	2.1	2.3	2.1	0.8
9.7	11.2	14.1	16.2	16.2	15.8	16.9	21.1
8.9	10.1	13.1	15.1	13.7	10.2	8.9	19.5
0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.6
0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.4
0.1	0.3	0.2	0.4	1.8	4.7	7.3	0.5
49.9	51.7	53.6	56.4	66.7	75.0	75.5	75.6
0.7	0.8	1.0	0.9	0.4	0.5	0.5	0.7
25.5	26.9	16.9	8.8	20.9	28.2	33.4	33.9
15.0	15.8	19.5	22.3	25.7	31.0	32.2	28.2
3.2	2.3	3.2	2.6	2.1	2.4	2.2	3.7
3.6	3.2	3.2	3.6	3.6	3.3	2.8	2.4
1.8	2.7	9.7	18.2	13.9	9.6	4.3	6.7
18.6	15.0	12.1	12.8	11.6	9.8	9.3	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
11.5	9.5	7.3	8.1	7.5	6.4	5.6	6.2
4.0	2.7	2.6	2.3	2.1	1.6	1.9	1.8
2.1	1.7	1.5	1.4	1.1	0.9	0.7	0.6
0.8	0.6	0.6	0.9	0.7	0.7	0.8	0.7
0.1	0.4	0.1	0.1	0.1	0.2	0.3	0.0
11.5	12.5	11.9	13.3	13.5	15.0	16.8	16.1
9.6	9.6	9.3	10.2	10.2	9.6	11.4	12.9
0.9	1.5	1.2	1.4	1.3	1.7	1.8	0.9
0.9	1.0	1.2	1.5	1.7	1.9	2.1	2.0
0.1	0.3	0.2	0.1	0.3	1.8	1.5	0.2
12.8	13.3	13.9	13.8	13.4	12.6	11.5	10.3
4.6	3.7	4.1	4.3	3.6	2.6	2.5	2.6
0.8	1.4	0.8	0.5	0.3	0.3	0.3	0.4
7.1	7.9	8.8	8.6	8.7	8.1	7.8	6.9
0.2	0.3	0.2	0.3	0.8	1.5	0.9	0.6
3.9	4.2	4.4	4.7	4.7	4.6	5.4	5.5
2.0	2.0	2.2	2.8	2.6	2.0	2.8	4.2
0.7	0.9	0.8	0.7	0.6	0.4	0.5	0.4
1.1	1.1	1.3	1.0	1.1	1.0	0.8	0.7
0.1	0.1	0.1	0.3	0.5	1.1	1.4	0.2
5.1	5.7	5.5	5.8	5.9	6.3	6.5	6.4
3.7	4.3	4.6	4.9	4.0	3.1	3.4	5.1
0.6	0.6	0.5	0.4	0.4	0.5	0.6	0.5
0.6	0.5	0.3	0.3	0.4	0.5	0.4	0.3
0.3	0.3	0.1	0.2	1.0	2.2	2.0	0.5
7.0	8.1	8.8	9.8	11.6	15.0	17.9	15.4
2.9	3.2	3.9	5.1	6.9	10.2	13.0	10.6
4.2	4.8	4.8	4.7	4.7	4.8	5.0	4.9
4.7	5.3	5.0	4.9	4.0	4.4	5.2	6.7
3.1	3.7	3.6	3.3	2.4	2.2	2.4	4.4
1.2	1.2	1.1	1.2	1.2	1.4	1.6	2.1
0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1
0.1	0.1	0.1	0.1	0.2	0.6	0.9	0.1

Prevalence

As of 31st of December 2013, more than 232 000 persons were alive and previously diagnosed with cancer in Norway. The cancer prevalence in Table 19 provides the numbers of cancer survivors a given number of years after diagnosis (<1, 1–4, 5–9 and ≥10 years), and approximates the number of patients in Norway (of both sexes) potentially requiring some form of cancer care. The highest 10-year prevalence occurs for breast cancer (17 783) followed by melanoma of the skin (10 089), prostate (6 810) and colon cancer (5 985).

In terms of new cases, there are almost twice as many lung cancers as melanoma in Norway, but the prevalence of lung cancer survivors ten years after the diagnosis is less than 10% of the prevalence of melanoma patients. This reflects the vast difference in survival between the two cancers. Differences in prognosis, rather than incidence, may explain much of the site-specific variability in prevalence.

Table 19 Prevalence of cancer 31.12.2003 and 31.12.2013, both sexes

ICD10	Site	Total no. of persons alive		Years after diagnosis (prevalence 2013)			
		31.12.03	31.12.13	<1	1-4	5-9	10+
C00-96	All sites	158752	232774	21885	66630	56143	88116
C00-14	Mouth, pharynx	3201	4337	458	1381	1012	1486
C00	Lip	1227	1366	106	388	326	546
C01-02	Tongue	491	802	119	272	175	236
C03-06	Mouth, other	560	702	92	211	170	229
C07-08	Salivary glands	424	520	40	129	107	244
C09-14	Pharynx	533	1014	121	406	251	236
C15-26	Digestive organs	25247	34649	4603	11085	8153	10808
C15	Oesophagus	248	496	171	197	69	59
C16	Stomach	2056	1941	308	509	411	713
C17	Small intestine	515	944	112	372	228	232
C18	Colon	13775	19069	2293	6127	4664	5985
C19-20	Rectum, rectosigmoid	7815	10663	1216	3362	2556	3529
C21	Anus	478	633	56	192	166	219
C22	Liver	170	402	128	140	61	73
C23-24	Gallbladder, bile ducts	268	420	116	145	70	89
C25	Pancreas	458	765	295	290	96	84
C26	Other digestive organs	83	186	65	45	42	34
C30-34, C38	Respiratory organs	5030	7617	1858	2790	1485	1484
C30-31	Nose, sinuses	266	338	46	98	87	107
C32	Larynx, epiglottis	1074	1128	113	326	269	420
C33-34	Lung, trachea	3668	6163	1708	2384	1129	942
C38	Mediastinum, pleura (non-mesothelioma)	42	39	6	10	4	19
C40-41	Bone	534	732	31	152	129	420
C43	Melanoma of the skin	14345	21130	1659	5401	3981	10089
C44	Skin, non-melanoma	9116	13719	1609	4843	3461	3806
C45	Mesothelioma	87	119	64	40	6	9
C47	Autonomic nervous system	224	250	7	24	38	181
C48-49	Soft tissues	1011	1422	150	375	277	620
C50	Breast	29240	41224	3136	10285	10020	17783
C51-58	Female genital organs	18808	21746	1422	4538	4265	11521
C53	Cervix uteri	6742	6897	267	998	1000	4632
C54	Corpus uteri	7283	9590	734	2302	2294	4260
C55	Uterus, other	39	44	4	10	5	25
C56	Ovary	3947	4179	321	957	735	2166
C51-52, C57	Other female genital	974	1239	120	338	293	488
C58	Placenta	132	152	1	14	13	124
C60-63	Male genital organs	23637	46572	4965	16959	13570	11078
C61	Prostate	18647	39355	4615	15733	12197	6810
C62	Testis	4706	6899	330	1164	1301	4104
C60, C63	Other male genital	342	475	41	128	123	183
C64-68	Urinary organs	12786	17634	1956	5498	4360	5820
C64	Kidney excl. renal pelvis	3382	5693	638	1978	1418	1659
C65	Renal pelvis	437	598	97	190	129	182
C66-68	Bladder, ureter, urethra	9175	11656	1268	3454	2888	4046
C69	Eye	825	991	76	212	176	527
C70-72, D32-33	Central nervous system	6901	11458	728	2739	3052	4939
C73	Thyroid gland	3624	4985	318	997	860	2810
C37, C74-75	Other endocrine glands	1900	3415	173	836	921	1485
C39, C76, C80	Other or unspecified	475	564	125	157	107	175
C81-96	Lymphoid and haematopoietic tissue	11595	20027	2051	6623	4929	6424
C81	Hodgkin lymphoma	1761	2480	124	476	474	1406
C82-86, C96	Non-Hodgkin lymphoma	4883	8383	839	2704	2134	2706
C88	Malignant immunoproliferative diseases	287	501	54	205	149	93
C90	Multiple myeloma	1218	1774	288	813	427	246
C91-95, D45-47	Leukaemia	3482	7070	793	2520	1775	1982

Table 20 shows the prevalent number of patients alive at specific time points with metastasis or who developed a local recurrence. Only patients with metastasis confirmed histologically are included. Patients with metastatic disease now live longer than before and they more often have diagnostic work-up and surgery for metastatic lesions. They are also given more chemotherapy than before. This patient group represents an increasing demand of personnel and costs in the health care system.

Table 20 Prevalence of patients diagnosed with a metastasis during lifetime, by health region, both sexes

Health region	Alive by 31st of Dec. 1988	Alive by 31st of Dec. 1993	Alive by 31st of Dec. 1998	Alive by 31st of Dec. 2003	Alive by 31st of Dec. 2008	Alive by 31st of Dec. 2013
Total	6065	7979	9674	12079	15228	18037
East	3459	4501	5522	6860	8774	10399
West	1147	1583	1886	2462	2982	3602
Middle	896	1156	1369	1684	2074	2369
North	563	739	898	1077	1399	1668

Mortality

There were 10 699 deaths from cancer in Norway in 2013, of which 5 735 were among men and 4 964 among women (Table 21). Cancers of the lung, colon, rectum, prostate and female breast account for half of the total cancer mortality. As previously, lung cancer ranks first in men in terms of cancer mortality numbers, responsible for 1 208 deaths, followed by prostate cancer (988 deaths) colon cancer (559 deaths) and pancreas cancer (350 deaths).

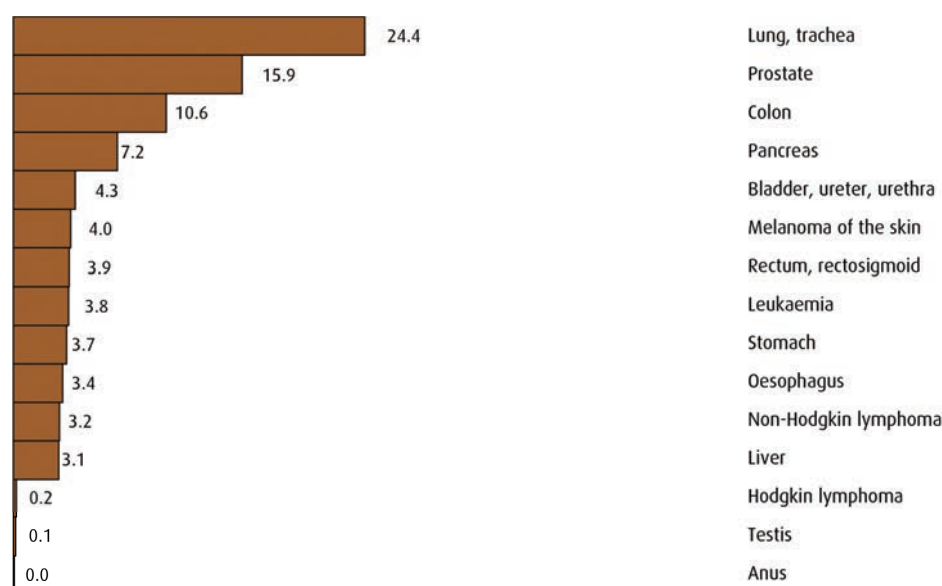
Lung cancer mortality also ranks highest among women (954 deaths). Breast cancer (630 deaths) and colon cancer (612 deaths), respectively, represent the second and third most frequent cause of cancer deaths among women.

Figure 8 shows the distribution of age-standardised mortality rates for selected cancer sites. There is at least a 200-fold difference in rates across these cancers. Given the very poor prognosis for pancreatic cancer, it ranks among the top five causes of cancer death among both men and women, even though pancreatic cancer is a relatively rare cancer.

The trends section in this report examines the mortality, incidence and survival for 23 selected cancer sites.

Figure 8. Age-standardised (world) mortality rates per 100 000 person-years for selected cancers in Norway, 2013

Males



Females

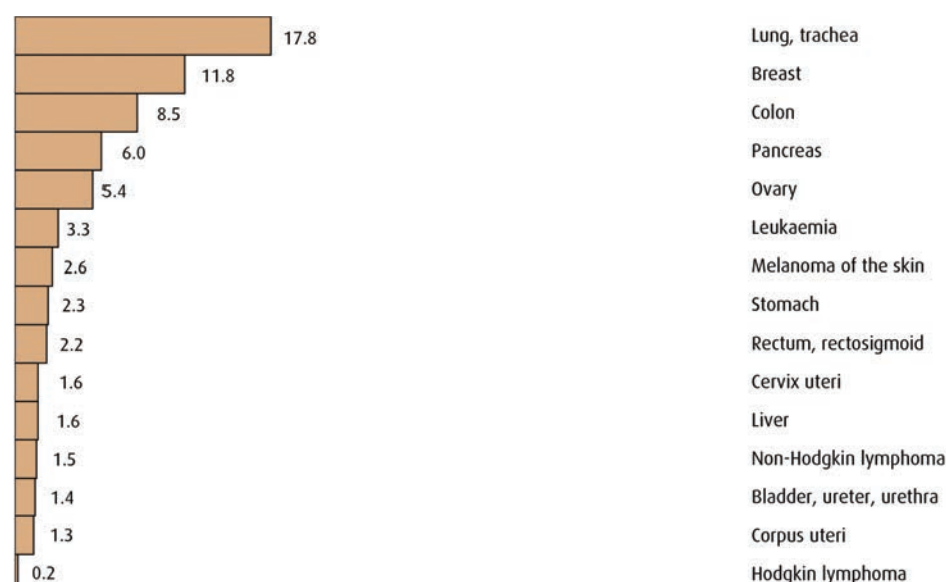


Table 21 Number of cancer deaths in Norway by primary site and sex, 2013

ICD10	Site	Males	Females	Total
C00-96	All sites	5735	4964	10699
C00-14	Mouth, pharynx	94	56	150
C00	Lip	1		1
C01-02	Tongue	18	12	30
C03-06	Mouth, other	28	18	46
C07-08	Salivary glands	11	11	22
C09-14	Pharynx	36	15	51
C15-26	Digestive organs	1680	1507	3187
C15	Oesophagus	161	48	209
C16	Stomach	181	139	320
C17	Small intestine	26	30	56
C18	Colon	559	612	1171
C19-20	Rectum, rectosigmoid	195	160	355
C21	Anus	6	8	14
C22	Liver	145	87	232
C23-24	Gallbladder, bile ducts	27	41	68
C25	Pancreas	350	350	700
C26	Other digestive organs	30	32	62
C30-34, C38	Respiratory organs	1244	966	2210
C30-31	Nose, sinuses	7	1	8
C32	Larynx, epiglottis	23	7	30
C33-34	Lung, trachea	1208	954	2162
C38	Mediastinum, pleura (non-mesothelioma)	6	4	10
C40-41	Bone	11	10	21
C43	Melanoma of the skin	187	140	327
C44	Skin, non-melanoma	30	20	50
C45	Mesothelioma	63	13	76
C47	Autonomic nervous system	1	1	2
C48-49	Soft tissues	31	42	73
C50	Breast	7	630	637
C51-58	Female genital organs		573	573
C53	Cervix uteri		75	75
C54	Corpus uteri		78	78
C55	Uterus, other		79	79
C56	Ovary		284	284
C51-52, C57	Other female genital		57	57
C58	Placenta			
C60-63	Male genital organs	1008		1008
C61	Prostate	988		988
C62	Testis	6		6
C60, C63	Other male genital	14		14
C64-68	Urinary organs	423	211	634
C64	Kidney excl. renal pelvis	165	100	265
C65	Renal pelvis	2	2	4
C66-68	Bladder, ureter, urethra	256	109	365
C69	Eye	2	1	3
C70-72, D32-33	Central nervous system	218	132	350
C73	Thyroid gland	5	14	19
C37, C74-75	Other endocrine glands	1	2	3
C39, C76, C80	Other or unspecified	179	206	385
C81-96	Lymphoid and haematopoietic tissue	551	440	991
C81	Hodgkin lymphoma	10	10	20
C82-86, C96	Non-Hodgkin lymphoma	163	114	277
C88	Malignant immunoproliferative diseases	7	5	12
C90	Multiple myeloma	132	114	246
C91-95, D45-47	Leukaemia	239	197	436

Survival

Long-term estimates of survival are becoming increasingly relevant as life expectancy amongst cancer patients increases and cancer care continues to advance (Brenner & Hakulinen, 2002). Table 23 gives the 1-, 5-, 10- and 15-year relative survival estimates (with 95% confidence intervals) for the follow-up period 2011–2013 by cancer site and sex. Less frequent cancer diagnoses and groups with low survival will have few cases left especially at 10 and 15 years after diagnosis, and the 95% confidence intervals should be taken into consideration in any interpretation of the relative survival estimates.

Given that cancer patients survive longer, there is a need to communicate information about prognosis not only at the time of diagnosis, but also later because prognosis tends to improve for those surviving the first year(s) after diagnosis. (Janssen-Heijnen & al, 2007). Figures 9-A to 9-X depict these two aspects of cancer survival in Norway for all cancers combined and for 23 specific cancer types. Relative survival estimates are presented by sex and age, 1 to 15 years after diagnosis, with age strata determined specifically according to relevant biological and/or clinical criteria.

For some sites, the cumulative survival curves tend to level off a certain number of years after diagnosis, indicating that from this point forward, the cancer patient group has similar mortality to the group without cancer, or in other words, statistically, these patients appear to be “cured” (Lambert, 2007). This concept of “statistical cure” involves attributes of survival observed among patients as a group, and should be distinguished from clinical cure, as is determined on the basis of a lack of specific symptoms in an individual.

Estimates of five-year relative survival conditional on being alive 1 to 10 years after diagnosis are included in the sex-specific figures, and better quantify the prognosis of cancer patients at time points beyond the initial diagnosis (Figure 9-A to 9-X, dashed lines). When conditional five-year relative survival reaches 90-95% we usually say that there is little or no excess mortality — analogous to the notion of statistical cure that may be observed in the long-term relative survival estimates.

The overall profile of the sex- and age-specific survival of all cancer patients 1 to 15 years after diagnosis in Norway is presented in Figure 9-A. The levelling-off of the five-year relative survival occurs some 8 to 10 years after diagnosis, while the attainment of five-year conditional relative survival estimates of 90-95% is observed in patients alive 3–5 years after diagnosis (dashed lines). As mentioned in the trends section, the combined cancer group is an aggregate of many different cancer types with different diagnostic and treatment possibilities. Survival estimates will be particularly influenced by PSA testing for prostate cancer and mammographic screening for female breast cancer.

The cumulative five-year relative survival described by cancer site, sex and age, and five-year conditional relative survival by site and age (Figures 9-B to 9-X) are fairly self-explanatory and highlight the wide variations in patient survival according to these three variables. The 90 percentage-point difference in five-year survival among patients with testicular cancer (Figure 9-Q) compared to patients with pancreatic cancer (Figure 9-I) strikingly illustrates the wide differential in prognosis according to type of cancer. Long-term survival following diagnosis of melanoma and cancers of the oral cavity, central nervous system and thyroid gland clearly varies between men and women. This may be due to biological or anatomical differences or may relate to sex-specific differences in stage at presentation, subsite or histological type, as well as levels of co-morbidity.

The overall cancer survival tends to diminish with increasing age at diagnosis, yet the age-specific differences are rather narrow for colon cancer (Figure 9-E) relative to, for example, cervix cancer (Figure 9-M) or non-Hodgkin lymphoma (Figure 9-W). For certain cancers, including breast and corpus uteri cancer, long-term survival among patients diagnosed under the age of 50 are slightly lower than for patients diagnosed at the age 50-59. This in part represents the diagnosis of more aggressive tumours in the younger age group, and, for breast cancer, the impact of screening in the older group.

The figures also illustrate a positive aspect of cancer survival; cancer patients who are alive a certain time after diagnosis show good prospects of surviving their cancer and being cured. In fact, for more than two-thirds of the cancer groups, the five-year conditional relative survival reaches 90% 2–5 years after diagnosis. In general terms, this means that survivors of these cancers will, within a few years of diagnosis, have mortality rates similar to that of the general population, and would be considered (statistically) cured. The extent to which survivors may be considered cured does however vary; five-year conditional survival from breast cancer reaches 90% 2 years after diagnosis (Figure 9-L) and slowly increases to about 95% 10 years from diagnosis. As is evident from the continual decline in long-term breast cancer cumulative survival, there remains a persistent excess mortality for women with this disease.

Table 22 provides the five-year relative survival estimates over the last four decades by stage, cancer site and sex. While the stage-specific count of cases by five-year period of diagnosis in Tables 17 a and b are not equivalent to the size of the patient groups used in the survival calculations, the numbers do provide a reasonable indication of the absolute number of patients involved in the survival analyses at different time periods and their relative distribution.

In general, caution is required in interpreting cancer-specific incidence and survival according to stage, particularly given the time-varying proportion of staging recorded as unknown. Due to changes in coding practice described in the Data sources and methods section, any observed reduction in relative survival for localised disease between the last two periods in Table 22 are most probably due to those coding changes and do not reflect a real change in survival for patients with localised cancer.

A visual description of survival trends in colon, breast and prostate cancer by stage was provided in the Special Issue in Cancer in Norway 2007.

Table 22a Five-year relative survival (period approach) by primary site, stage and period of follow up, 1974 - 2013****MALES**

ICD10	Site	Stage	Relative survival (%)							
			1974-78	1979-1983	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
C00-96	All sites	Total	36.1	39.8	42.5	46.5	51.2	56.8	64.3	69.6
C00-14	Mouth, pharynx	Total	64.4	60.6	58.2	55.3	56.7	57.0	59.7	63.4
		Localized	83.0	81.3	79.7	75.1	78.1	81.3	82.4	76.8
		Regional	25.5	27.8	24.5	28.4	32.5	39.9	47.9	54.9
		Distant	-	-	-	5.1	16.4	13.1	11.6	11.8
		Unknown	-	-	-	-	49.6	56.8	64.5	60.6
C15	Oesophagus	Total	3.4	2.5	4.3	5.2	5.1	8.5	8.3	14.8
		Localized	3.6	3.1	5.0	8.2	10.9	19.4	21.7	25.2
		Regional	5.7	2.6	9.7	5.2	5.1	8.9	10.3	18.0
		Distant	0.0	0.3	0.0	0.9	0.0	2.4	0.2	0.0
		Unknown	-	-	0.0	-	0.0	7.3	6.0	-
C16	Stomach	Total	14.4	15.9	16.4	17.7	17.1	17.8	20.2	24.4
		Localized	39.7	37.6	38.2	36.1	40.1	55.7	57.0	44.8
		Regional	16.3	19.7	20.2	20.0	19.0	20.5	21.6	22.9
		Distant	1.5	0.9	1.0	0.6	0.5	1.5	1.5	3.3
		Unknown	8.0	2.0	1.7	6.5	5.2	15.5	22.7	26.3
C18	Colon	Total	40.3	44.9	47.3	47.2	51.1	54.0	57.8	59.5
		Localized	69.5	73.1	77.7	77.1	83.4	89.2	86.5	79.8
		Regional	47.0	54.0	56.8	55.8	63.1	68.6	71.7	77.7
		Distant	5.2	5.6	4.0	4.1	4.4	5.9	9.5	11.1
		Unknown	26.9	17.5	12.3	11.8	15.2	49.9	58.8	32.1
C19-20	Rectum, rectosigmoid	Total	35.9	41.2	45.6	46.9	52.8	56.7	61.5	67.2
		Localized	58.0	61.6	66.6	67.1	75.6	85.6	85.9	79.4
		Regional	25.5	38.4	41.9	45.8	53.8	63.5	70.2	80.3
		Distant	3.9	3.2	2.8	3.3	5.3	8.6	12.3	17.1
		Unknown	-	12.7	-	37.6	29.4	45.4	57.3	39.8
C22	Liver	Total	1.3	1.8	1.2	3.3	3.0	5.4	8.0	14.9
		Localized	3.4	2.1	2.8	4.2	7.3	13.9	18.4	24.1
		Regional	0.0	0.0	0.0	0.0	0.0	0.0	5.7	6.3
		Distant	0.0	0.8	0.0	0.0	0.1	0.0	3.1	1.0
		Unknown	0.0	0.0	0.0	-	0.6	2.4	3.4	-
C23-24	Gallbladder, bile ducts	Total	5.1	6.6	9.9	8.8	8.3	13.4	15.0	18.6
		Localized	9.2	11.7	17.5	14.5	28.2	24.9	40.7	34.6
		Regional	13.6	-	14.0	19.3	13.4	25.8	16.9	24.2
		Distant	0.0	0.7	1.5	0.5	1.7	1.2	3.6	1.2
		Unknown	0.0	0.0	-	-	0.0	8.5	3.7	-
C25	Pancreas	Total	1.0	0.9	1.0	1.6	1.7	2.3	4.2	4.7
		Localized	3.8	2.2	1.7	2.7	5.4	6.5	18.4	19.9
		Regional	2.4	3.7	2.9	4.8	6.2	6.4	7.5	7.6
		Distant	0.2	0.2	0.3	0.5	0.4	1.3	1.5	1.4
		Unknown	1.1	3.0	3.0	2.2	1.2	1.2	3.0	7.4
C33-34	Lung, trachea	Total	6.8	7.6	7.7	7.4	8.1	8.2	11.0	13.1
		Localized	16.4	16.8	19.0	15.3	22.4	32.2	44.2	40.1
		Regional	8.8	11.0	8.4	11.5	9.4	9.8	13.3	16.5
		Distant	0.6	0.9	0.5	0.7	0.6	0.6	1.2	1.6
		Unknown	2.3	4.0	2.4	2.7	6.4	6.3	12.2	10.6
C43	Melanoma of the skin	Total	62.7	71.0	70.9	76.8	79.0	78.5	76.9	79.0
		Localized	72.5	79.9	79.6	85.4	85.5	87.8	87.3	84.9
		Regional	30.6	34.4	27.4	38.3	33.5	37.4	45.1	40.0
		Distant	6.6	10.5	0.4	8.0	12.6	10.9	6.1	12.3
		Unknown	-	-	56.4	40.9	70.0	77.5	76.4	69.5
C61	Prostate	Total	53.4	54.9	56.7	58.0	66.4	77.6	85.0	91.4
		Localized	66.5	70.1	72.4	70.8	77.3	92.0	96.5	98.5
		Regional	37.8	37.5	42.6	57.8	71.8	79.4	82.4	90.9
		Distant	19.2	18.5	19.9	24.4	24.5	24.4	30.6	35.5
		Unknown	41.5	36.2	42.6	53.0	65.5	80.9	86.1	89.2
C62	Testis	Total	70.7	87.0	93.1	95.5	96.2	95.7	97.2	97.2
		Localized	87.9	95.9	98.3	98.5	100.0	98.5	99.5	99.2
		Regional	70.1	94.1	95.7	94.8	98.8	95.4	97.6	96.0
		Distant	27.3	51.4	74.0	80.9	75.3	82.7	84.7	85.6
		Unknown	-	-	-	-	86.3	97.0	97.2	-
C64	Kidney except renal pelvis	Total	36.6	37.8	43.6	44.3	48.1	52.8	60.8	68.8
		Localized	70.2	68.1	74.0	69.1	73.6	79.8	85.2	86.8
		Regional	43.8	44.5	47.1	50.3	52.6	55.9	53.1	54.8
		Distant	4.1	4.7	4.7	5.3	4.9	7.0	8.5	9.6
		Unknown	-	-	-	28.9	28.1	56.7	69.7	77.4
C66-68	Bladder, ureter, urethra	Total	61.0	66.1	67.9	71.1	70.6	72.0	74.0	74.2
		Localized	70.8	74.8	75.2	77.4	77.5	84.0	85.1	81.6
		Regional	21.0	25.7	25.4	26.7	22.0	31.2	25.6	31.1
		Distant	4.3	1.0	2.8	8.6	3.4	5.5	5.4	3.7
		Unknown	31.4	24.9	41.4	50.9	61.8	69.0	75.0	75.3
C70-72, D32-33	Central nervous system	Total	26.5	34.5	38.6	42.9	49.7	53.5	62.6	61.2
		Non-malignant	48.1	64.1	77.2	74.1	87.0	92.0	94.2	93.9
		Malignant	18.3	23.7	24.3	29.8	25.1	22.3	27.6	27.2
C73	Thyroid gland	Total	78.8	76.2	79.0	78.8	74.4	86.4	82.6	91.3
		Localized	89.5	94.5	90.0	93.0	99.5	98.5	98.9	95.6
		Regional	81.2	80.5	88.4	87.1	79.3	91.3	83.9	96.0
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	-	-	-	-
C81	Hodgkin lymphoma	Total	49.5	63.2	66.5	82.9	85.1	89.2	90.4	86.6
C82-86, C96	Non-Hodgkin lymphoma	Total	34.8	43.3	43.8	47.1	51.7	54.9	65.6	70.5
		Localized	45.9	50.6	47.3	60.2	-	0.0	0.0	0.0
		Regional	0.0	-	-	-	0.0	0.0	0.0	0.0
		Distant	-	-	-	0.0	0.0	0.0	0.0	0.0
		Unknown	27.0	38.8	43.5	46.4	51.6	54.9	65.6	70.5
C91-95	Leukaemia	Total	19.9	22.9	28.0	37.4	42.3	51.4	56.3	63.1

-/-: Not estimated due to few patients in the group (<50 patients at start of interval 0-1)

* Caution is advised when interpreting survival trends according to stage due to changes in coding practices. From 1993 there was a large increase in the number of patients with unknown stage, corresponding to an increase in survival for patients with localized or unknown stage for several sites. From 2009, this coding practice was reversed, corresponding to a decrease in survival for patients with localized or unknown stage for several sites.

Table 22b Five-year relative survival (period approach) by primary site, stage and period of follow up, 1974 - 2013****FEMALES**

ICD10	Site	Stage	Relative survival (%)							
			1974-78	1979-1983	1984-88	1989-93	1994-98	1999-03	2004-08	2009-13
C00-96	All sites	Total	48.5	51.5	53.0	56.6	59.1	62.9	67.4	69.9
C00-14	Mouth, pharynx	Total	57.6	61.0	56.7	63.9	62.9	60.3	70.0	70.8
		Localized	73.3	78.9	74.2	75.8	79.7	84.6	85.0	82.6
		Regional	39.7	36.0	35.2	45.0	37.9	40.3	54.7	55.3
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	56.0	53.5	76.5	-
C15	Oesophagus	Total	5.7	8.8	8.4	6.4	9.8	7.8	11.7	14.7
		Localized	4.8	16.5	7.1	12.1	11.9	24.4	24.3	28.8
		Regional	-	-	11.4	-	-	-	9.7	18.1
		Distant	-	0.0	-	0.0	0.0	0.0	6.9	0.0
		Unknown	0.0	0.0	-	0.0	-	5.9	8.1	-
C16	Stomach	Total	12.7	16.3	19.1	21.8	20.5	22.2	21.9	22.9
		Localized	33.7	42.5	39.8	39.4	45.3	66.6	56.7	44.6
		Regional	17.7	17.8	19.7	25.9	24.2	28.5	25.0	21.3
		Distant	2.3	0.8	1.0	1.4	0.7	2.2	3.7	2.6
		Unknown	5.8	4.0	7.2	11.9	12.6	12.4	22.4	-
C18	Colon	Total	39.4	45.4	47.8	52.0	55.3	56.0	60.9	63.3
		Localized	70.9	73.6	77.7	81.0	88.1	87.9	91.5	85.3
		Regional	42.8	56.8	57.0	59.9	65.3	68.6	73.6	78.7
		Distant	4.6	4.0	4.0	4.5	6.4	8.2	10.9	13.3
		Unknown	21.0	19.1	9.3	20.7	23.4	48.5	52.9	19.4
C19-20	Rectum, rectosigmoid	Total	42.9	45.2	48.0	52.2	57.3	59.9	66.0	66.5
		Localized	68.5	68.2	71.4	72.2	79.4	91.1	91.9	82.0
		Regional	31.1	39.0	43.5	51.1	57.8	64.7	72.6	76.8
		Distant	4.1	5.5	3.3	4.6	4.7	7.0	11.6	17.8
		Unknown	-	-	16.2	21.8	35.6	41.6	64.5	31.9
C22	Liver	Total	2.0	1.7	2.3	6.3	6.7	8.3	11.4	16.0
		Localized	1.9	6.3	4.2	11.4	11.0	21.0	23.0	27.7
		Regional	0.0	0.0	0.0	-	-	-	-	-
		Distant	0.0	0.0	0.0	0.3	-	0.0	5.0	1.0
		Unknown	0.0	0.0	0.0	-	4.2	5.9	10.0	-
C23-24	Gallbladder, bile ducts	Total	6.2	7.6	8.7	7.5	7.9	12.1	10.9	14.5
		Localized	20.7	23.4	17.1	19.0	26.0	29.8	22.6	30.7
		Regional	17.0	5.5	15.8	14.2	12.8	27.5	21.1	24.6
		Distant	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.6
		Unknown	0.0	-	-	2.7	1.8	11.3	3.9	-
C25	Pancreas	Total	1.0	1.0	1.6	1.9	2.3	2.4	3.3	6.5
		Localized	5.3	2.6	2.1	5.2	10.0	10.5	15.4	20.6
		Regional	1.2	3.7	5.9	5.8	5.9	3.3	4.5	9.8
		Distant	0.2	0.3	0.5	0.2	0.7	0.5	1.0	1.5
		Unknown	0.0	0.0	2.0	1.6	1.5	3.7	3.5	4.6
C33-34	Lung, trachea	Total	9.4	11.1	6.6	10.3	10.1	13.2	14.1	18.8
		Localized	27.3	27.4	20.9	22.2	30.5	50.2	52.5	50.9
		Regional	15.6	15.0	4.9	14.5	11.4	14.0	15.9	22.1
		Distant	0.7	1.3	0.2	1.6	0.9	2.3	1.6	2.5
		Unknown	3.5	11.4	8.0	5.1	4.3	14.5	16.9	18.5
C43	Melanoma of the skin	Total	79.4	84.0	86.6	88.6	89.4	89.2	88.9	88.4
		Localized	85.8	89.6	91.1	92.7	93.6	95.1	93.6	93.1
		Regional	35.4	39.8	51.0	34.3	54.5	53.4	55.7	52.7
		Distant	18.0	12.3	6.4	12.1	18.2	15.7	19.7	24.5
		Unknown	-	-	67.0	67.7	81.4	88.9	90.0	76.1
C50	Breast	Total	68.4	72.1	73.7	75.3	78.5	84.5	87.7	89.0
		Localized	79.7	73.1	77.2	73.6	91.6	97.8	98.7	96.9
		I	84.8	86.5	87.1	92.9	94.1	97.7	98.2	98.9
		II	58.8	62.0	67.2	73.9	76.4	81.9	87.0	89.2
		III	45.7	51.1	48.0	50.2	55.7	65.1	67.9	79.1
		IV	14.5	14.3	14.4	18.2	18.3	17.6	18.6	25.1
		Unknown	80.0	81.1	87.6	83.7	84.7	85.3	78.3	66.4
C53	Cervix uteri	Total	70.9	69.6	67.7	67.4	72.0	73.6	77.5	79.7
		I	89.7	87.2	86.3	83.8	88.1	92.6	93.5	92.5
		II	65.3	62.4	58.4	58.8	58.0	61.6	71.3	78.6
		III	28.6	34.1	30.8	30.5	37.9	37.1	47.5	54.1
		IV	11.0	6.8	9.7	19.9	19.1	8.6	20.0	22.3
		Unknown	-	-	-	-	-	-	78.3	-
C54	Corpus uteri	Total	76.8	77.1	75.7	76.8	79.6	82.8	83.1	84.2
		Localized	83.9	87.1	86.2	86.6	88.4	94.5	91.7	94.1
		Regional	57.4	60.8	59.2	64.2	75.7	73.7	76.5	68.5
		Distant	25.2	18.4	24.2	28.6	37.4	34.6	42.8	37.9
		Unknown	-	42.4	-	-	35.5	72.7	83.6	82.0
C56	Ovary	Total	39.0	38.9	37.1	38.2	40.8	45.8	44.1	44.7
		Localized	72.4	79.8	82.2	81.0	87.3	90.8	91.0	88.1
		Regional	43.4	44.8	51.0	47.8	46.3	57.7	73.6	68.0
		Distant	15.7	19.7	16.7	18.5	22.4	29.4	27.9	30.6
		Unknown	-	50.5	25.3	17.7	25.2	57.4	51.6	35.2
C64	Kidney except renal pelvis	Total	40.5	41.9	46.3	52.2	50.5	52.9	65.9	71.9
		Localized	67.3	69.8	75.2	76.8	79.2	84.5	85.1	88.1
		Regional	38.9	50.5	48.3	48.9	52.2	45.0	49.1	46.8
		Distant	4.8	2.6	7.5	7.0	3.7	8.3	11.8	12.8
		Unknown	0.0	0.0	-	28.0	20.9	55.0	69.1	71.6
C66-68	Bladder, ureter, urethra	Total	48.8	53.5	59.8	62.4	59.4	61.8	65.7	67.7
		Localized	63.5	67.5	69.4	72.1	70.9	82.7	80.7	76.6
		Regional	15.9	13.8	15.5	14.4	25.9	27.5	19.6	22.0
		Distant	5.3	3.6	4.8	2.8	3.9	4.2	2.7	10.2
		Unknown	-	19.4	-	-	39.5	55.5	67.4	64.4
C70-72, D32-33	Central nervous system	Total	37.7	44.1	50.9	59.6	62.0	69.5	78.1	76.7
		Non-malignant	72.2	77.2	85.0	84.1	89.2	91.9	95.7	94.9
		Malignant	16.6	20.5	24.0	34.1	26.8	26.1	30.9	31.0
C73	Thyroid gland	Total	82.0	84.9	88.1	89.5	89.1	91.0	92.8	94.9
		Localized	95.2	94.7	96.1	97.3	98.8	101.9	101.5	100.0
		Regional	80.3	81.2	85.4	85.9	85.4	87.7	89.1	93.5
		Distant	10.1	15.7	7.3	17.1	-	-	41.9	-
C81	Hodgkin lymphoma	Total	44.4	66.8	70.1	75.1	85.6	89.3	84.9	91.4
C82-86, C96	Non-Hodgkin lymphoma	Total	41.6	45.2	49.2	54.1	54.3	59.5	65.4	76.4
		Localized	53.7	50.2	52.5	53.0	-	0.0	0.0	0.0
		Regional	-	-	-	0.0	-	0.0	0.0	0.0
		Distant	-	-	0.0	-	0.0	0.0	0.0	0.0
C91-95	Leukaemia	Total	19.5	24.8	29.2	34.9	46.1	50.8	59.4	65.8

-/-: Not estimated due to few patients in the group (<50 patients at start of interval 0-1)

* Caution is advised when interpreting survival trends according to stage due to changes in coding practices. From 1993 there was a large increase in the number of patients with unknown stage, corresponding to an increase in survival for patients with localized or unknown stage for several sites. From 2009, this coding practice was reversed, corresponding to a decrease in survival for patients with localized or unknown stage for several sites.

Table 23 1-, 5-, 10- and 15-year relative survival proportion (95% confidence interval) by cancer site and sex, period approach follow-up 2011 - 2013

ICD10	Site	Sex	1-year		5-year		10-year		15-year	
C00-14	Mouth, pharynx	M	83.9	(81.3, 86.3)	65.6	(61.8, 69.2)	53.5	(48.9, 58.2)	45.2	(39.9, 50.7)
		F	87.2	(83.8, 90.0)	72.4	(67.4, 76.9)	64.0	(57.7, 70.2)	59.7	(51.7, 67.7)
C15	Oesophagus	M	40.6	(36.5, 44.7)	16.0	(12.6, 19.9)	14.1	(10.1, 19.0)	15.6	(10.1, 22.5)
		F	48.6	(41.0, 55.9)	20.8	(14.1, 28.8)	17.3	(9.6, 27.5)	12.1	(3.8, 27.5)
C16	Stomach	M	52.1	(48.7, 55.4)	24.8	(21.6, 28.2)	22.4	(18.7, 26.4)	21.8	(17.5, 26.7)
		F	46.2	(41.8, 50.5)	22.9	(19.1, 27.1)	22.0	(17.8, 26.7)	20.9	(16.0, 26.5)
C18	Colon	M	78.7	(77.2, 80.1)	58.9	(56.8, 60.9)	54.2	(51.5, 56.8)	49.6	(46.1, 53.1)
		F	80.1	(78.7, 81.4)	64.7	(62.8, 66.7)	58.5	(56.0, 61.0)	52.9	(49.8, 56.1)
C19-20	Rectum, rectosigmoid	M	86.7	(85.0, 88.2)	67.9	(65.3, 70.4)	57.1	(53.7, 60.4)	53.2	(48.9, 57.5)
		F	86.0	(83.9, 87.8)	67.5	(64.5, 70.3)	63.6	(59.9, 67.3)	59.8	(55.1, 64.5)
C22	Liver	M	36.8	(31.7, 42.0)	16.0	(11.8, 20.9)	12.1	(5.6, 21.6)	13.6	(5.8, 25.8)
		F	36.5	(29.6, 43.4)	17.9	(12.2, 24.5)	16.3	(9.3, 25.5)	17.8	(9.1, 30.2)
C23-24	Gallbladder, bile ducts	M	51.1	(44.1, 57.8)	21.4	(15.2, 28.6)	20.2	(13.1, 28.9)	17.6	(8.9, 30.3)
		F	39.3	(33.4, 45.1)	13.0	(9.1, 17.7)	11.0	(6.9, 16.5)	13.9	(8.4, 21.2)
C25	Pancreas	M	23.8	(21.2, 26.5)	4.9	(3.6, 6.6)	3.6	(2.3, 5.3)	2.9	(1.5, 5.1)
		F	23.1	(20.6, 25.7)	7.5	(5.8, 9.5)	6.4	(4.4, 9.0)	6.5	(4.0, 9.9)
C33-34	Lung, trachea	M	38.2	(36.7, 39.6)	14.3	(13.1, 15.5)	10.1	(8.9, 11.4)	7.7	(6.4, 9.1)
		F	46.5	(44.9, 48.2)	19.6	(18.1, 21.0)	14.9	(13.3, 16.5)	11.6	(9.9, 13.5)
C43	Melanoma of the skin	M	95.1	(94.0, 96.1)	80.5	(78.2, 82.7)	75.2	(72.1, 78.2)	71.2	(67.4, 75.0)
		F	97.5	(96.6, 98.3)	88.7	(86.8, 90.5)	85.6	(83.0, 88.1)	85.6	(82.5, 88.7)
C50	Breast	F	97.8	(97.3, 98.1)	89.1	(88.2, 90.0)	82.2	(81.0, 83.4)	77.0	(75.4, 78.5)
C53	Cervix uteri	F	93.0	(91.0, 94.6)	80.8	(77.8, 83.6)	78.3	(74.7, 81.5)	75.1	(71.1, 78.9)
C54	Corpus uteri	F	93.2	(91.9, 94.3)	83.4	(81.3, 85.4)	80.0	(77.2, 82.7)	76.7	(73.0, 80.2)
C56	Ovary	F	77.1	(74.6, 79.4)	46.7	(43.6, 49.7)	39.3	(36.1, 42.6)	37.7	(34.2, 41.3)
C61	Prostate	M	98.9	(98.5, 99.2)	92.2	(91.3, 93.0)	82.9	(81.4, 84.4)	75.1	(72.7, 77.5)
C62	Testis	M	98.3	(97.1, 99.0)	97.0	(95.5, 98.2)	96.6	(94.7, 98.0)	96.9	(94.8, 98.7)
C64	Kidney except renal pelvis	M	84.6	(82.6, 86.5)	68.8	(65.6, 71.7)	58.8	(54.7, 62.9)	57.5	(52.0, 63.0)
		F	83.9	(80.7, 86.6)	72.9	(68.7, 76.8)	66.1	(60.5, 71.5)	59.5	(52.2, 66.9)
C66-68	Bladder, ureter, urethra	M	88.1	(86.7, 89.5)	74.9	(72.6, 77.2)	67.3	(64.1, 70.4)	61.7	(57.6, 65.9)
		F	81.9	(79.2, 84.4)	66.9	(63.1, 70.6)	64.4	(59.5, 69.3)	56.7	(50.6, 63.1)
C70-72, D32-33	Central nervous system	M	76.5	(74.1, 78.8)	60.9	(58.0, 63.8)	58.1	(54.7, 61.3)	56.5	(52.6, 60.4)
		F	86.3	(84.4, 88.1)	76.0	(73.5, 78.4)	73.9	(71.0, 76.7)	70.5	(66.9, 74.0)
C73	Thyroid gland	M	94.3	(90.1, 96.9)	94.4	(88.7, 98.7)	91.2	(82.8, 97.9)	89.4	(78.3, 98.9)
		F	95.9	(93.9, 97.4)	95.1	(92.3, 97.3)	93.9	(89.8, 97.4)	94.8	(89.5, 99.4)
C81	Hodgkin lymphoma	M	92.4	(87.9, 95.4)	87.6	(81.7, 92.1)	85.5	(78.7, 90.9)	84.5	(76.9, 90.9)
		F	96.3	(92.2, 98.4)	91.6	(85.1, 96.0)	94.6	(87.3, 99.7)	99.0	(91.0, 104.7)
C82-86, C96	Non-Hodgkin lymphoma	M	83.0	(80.8, 84.9)	71.8	(68.9, 74.6)	65.4	(61.5, 69.1)	61.5	(56.5, 66.4)
		F	85.0	(82.8, 87.0)	76.9	(73.7, 79.8)	71.4	(67.3, 75.5)	69.3	(63.8, 74.7)
C91-95	Leukaemia	M	79.9	(77.8, 81.9)	62.0	(59.0, 64.9)	55.3	(51.5, 59.1)	53.0	(48.1, 58.0)
		F	78.3	(75.8, 80.7)	66.3	(63.0, 69.5)	59.7	(55.4, 64.0)	61.5	(55.8, 67.1)

Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9A: All sites (ICD10 C00–96, D32–33, D35.2–35.4, D42–43, D44.3–44.5, D45–47)

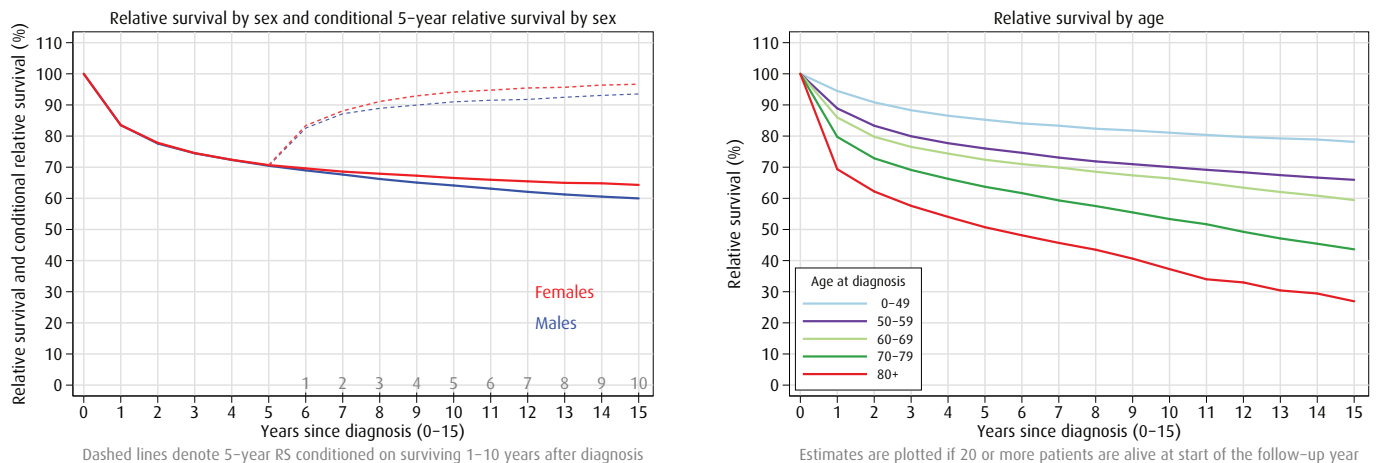


Figure 9B: Mouth, pharynx (ICD-10 C00–14)

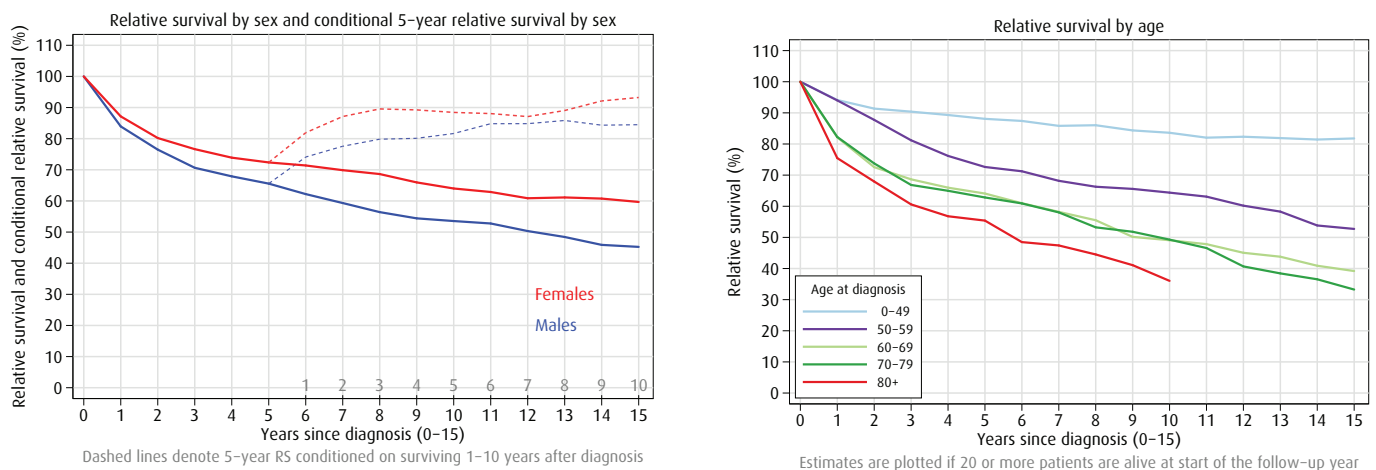
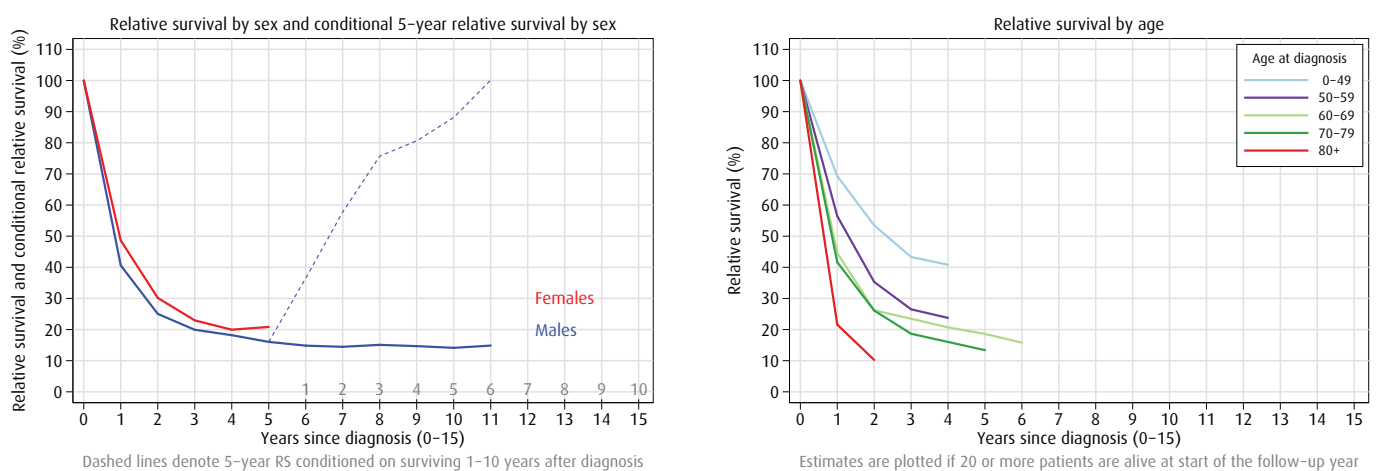


Figure 9C: Oesophagus (ICD-10 C15)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9D: Stomach (ICD-10 C16)

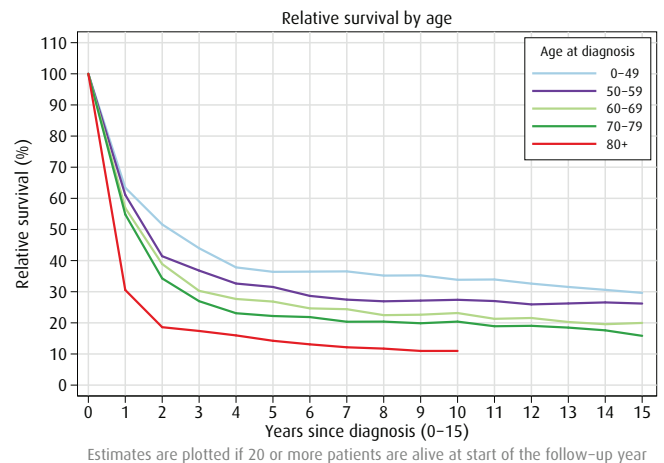
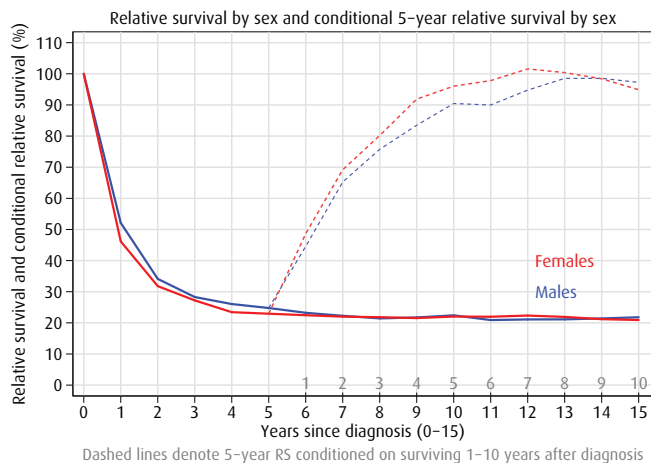


Figure 9E: Colon (ICD-10 C18)

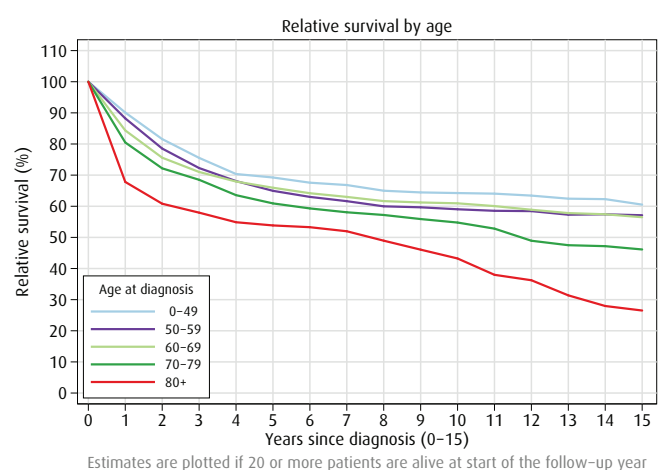
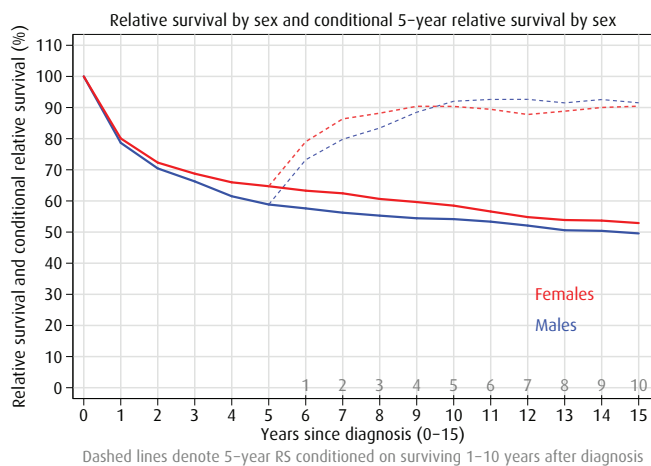
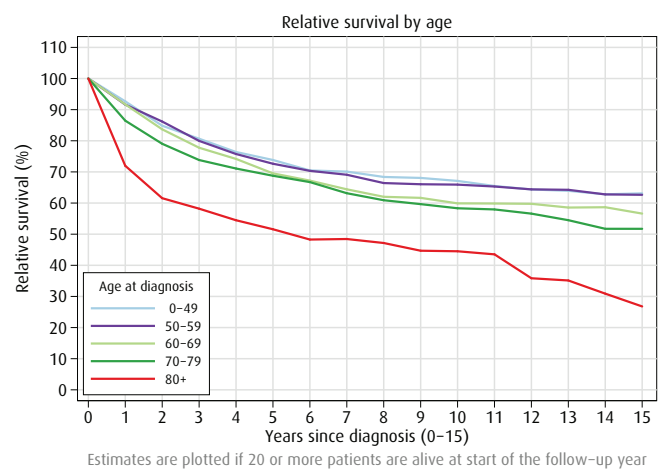
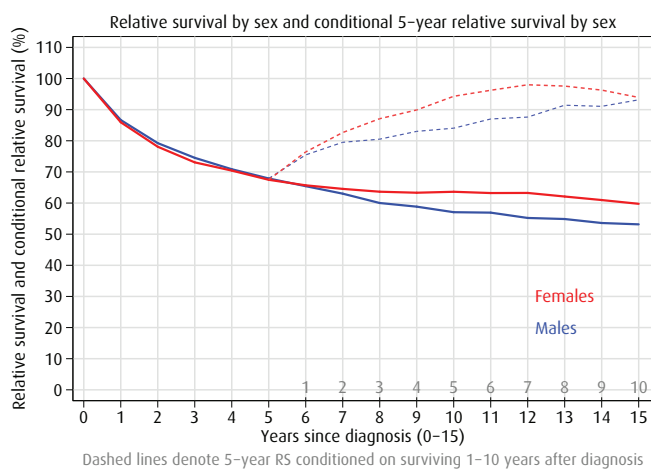


Figure 9F: Rectum, rectosigmoid (ICD-10 C19–20)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9G: Liver (ICD-10 C22)

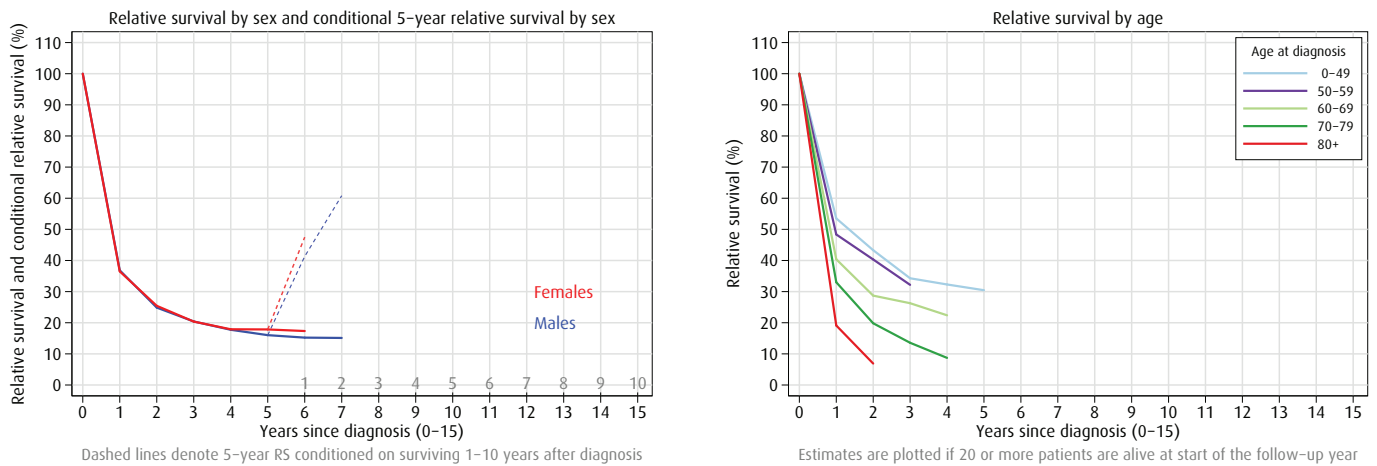


Figure 9H: Gallbladder, bile ducts (ICD-10 C23–24)

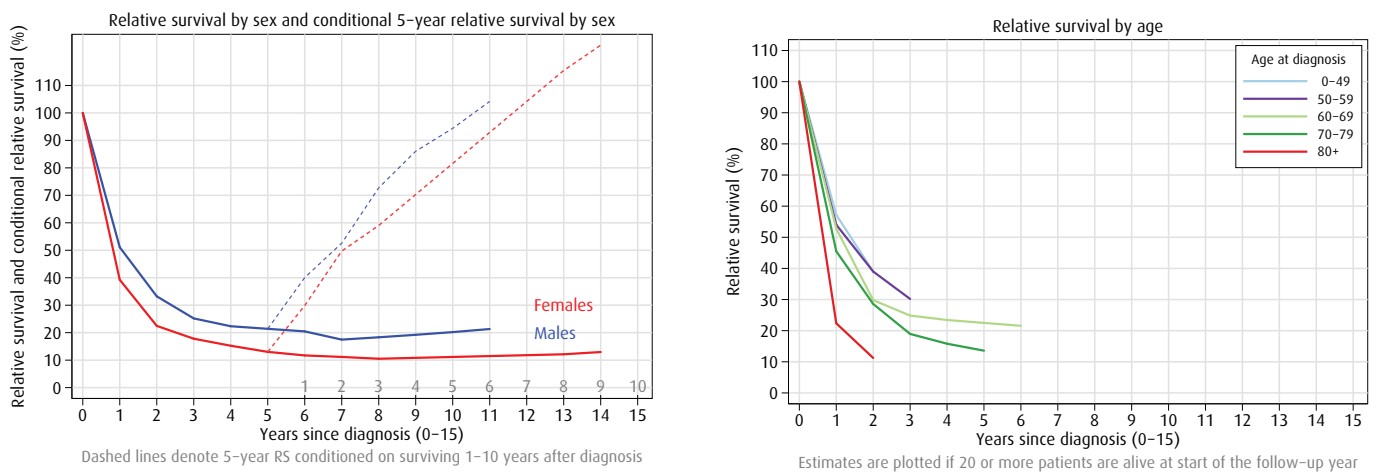
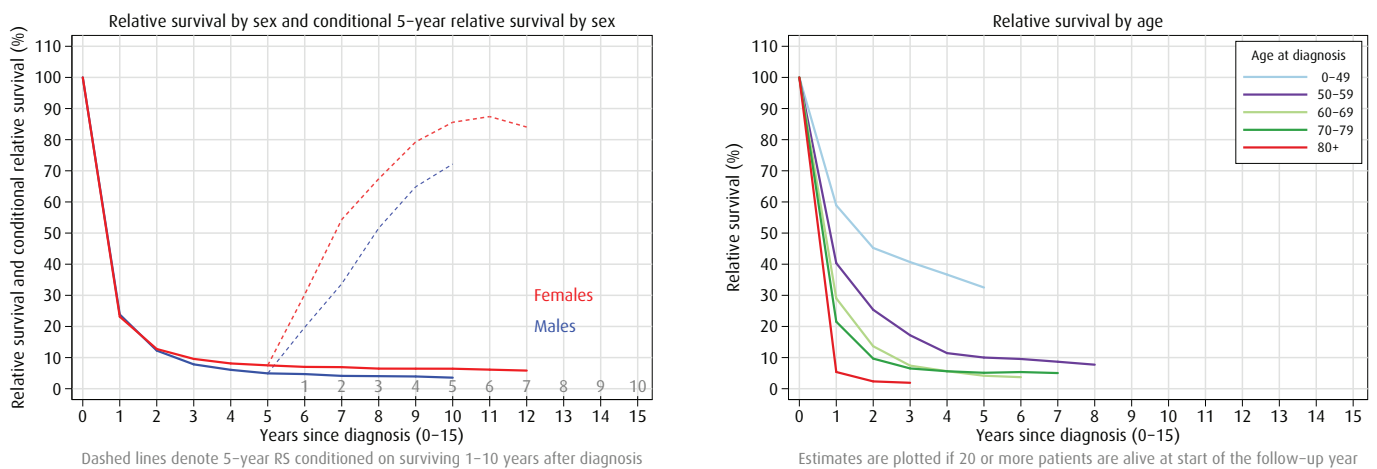


Figure 9I: Pancreas (ICD-10 C25)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9J: Lung, trachea (ICD-10 C33–34)

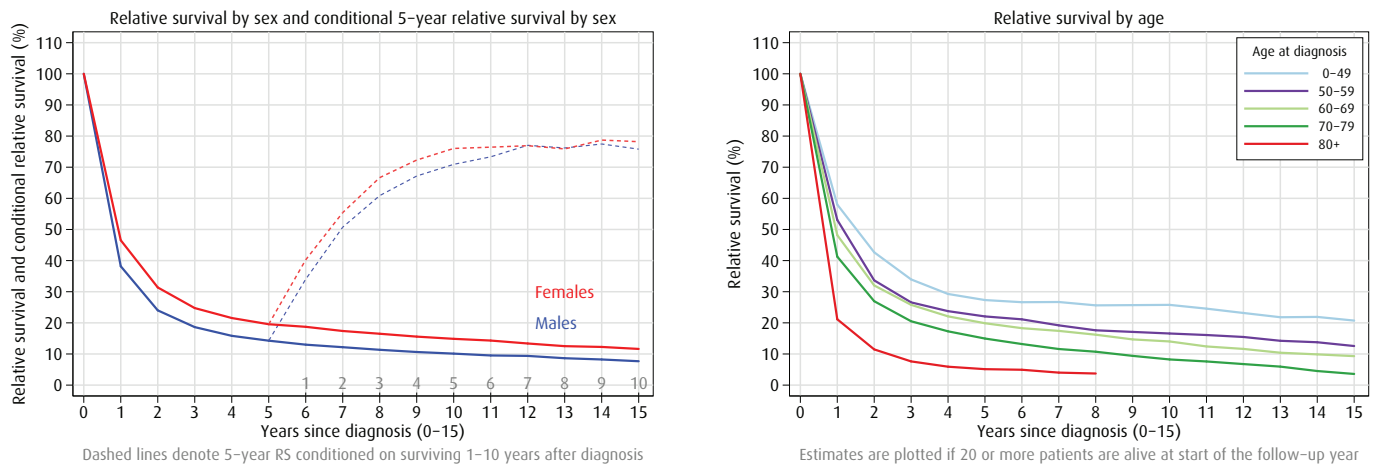


Figure 9K: Melanoma of the skin (ICD-10 C43)

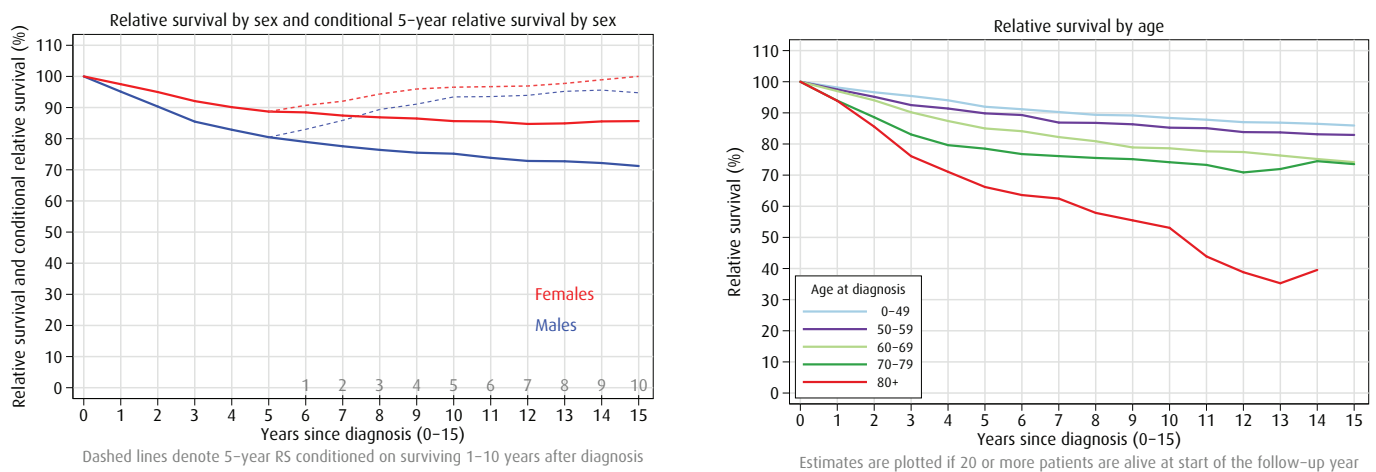
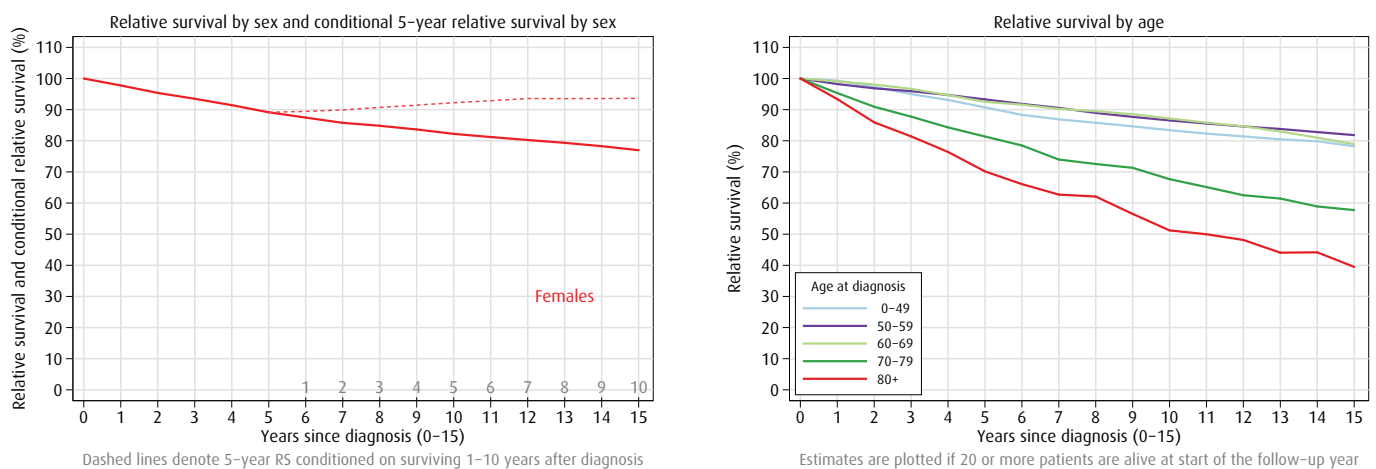


Figure 9L: Breast (ICD-10 C50)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9M: Cervix uteri (ICD-10 C53)

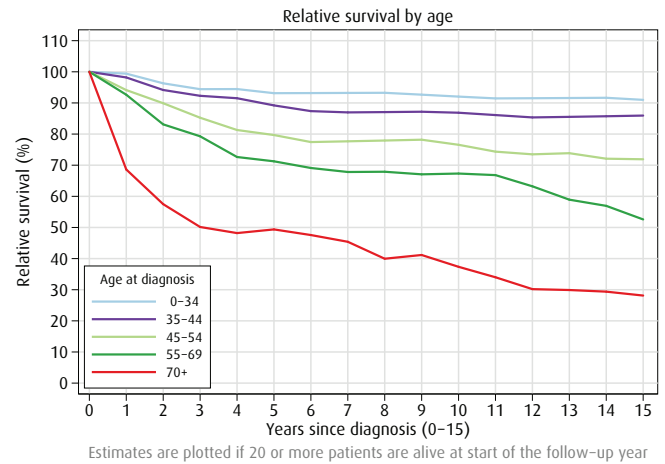
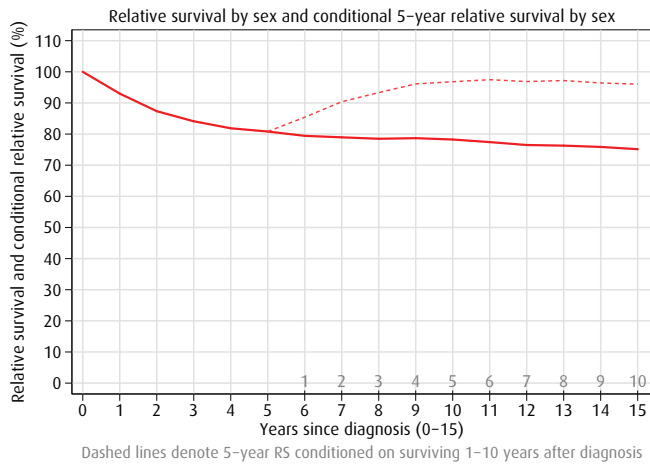


Figure 9N: Corpus uteri (ICD-10 C54)

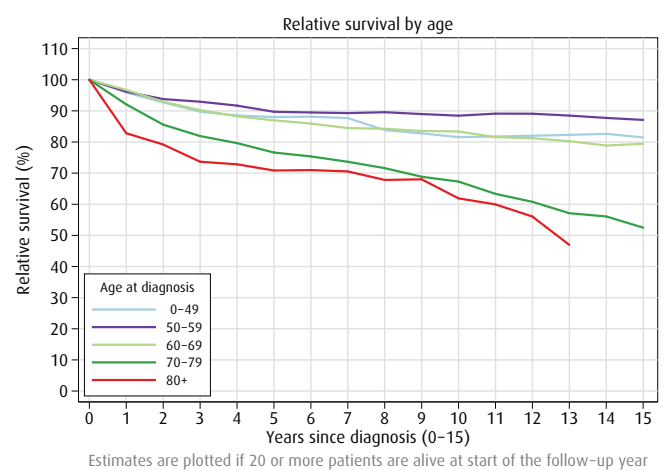
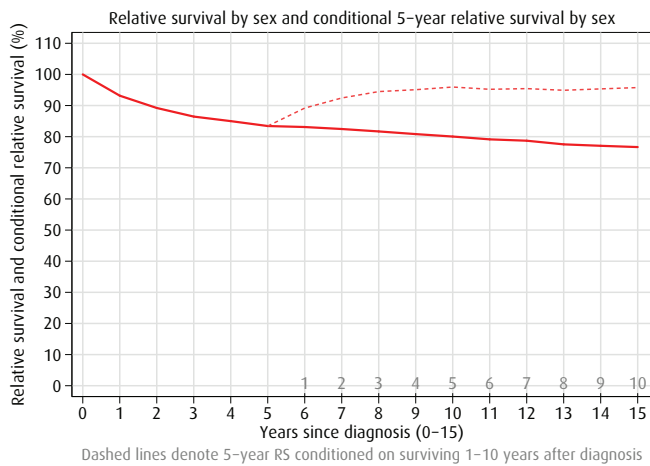
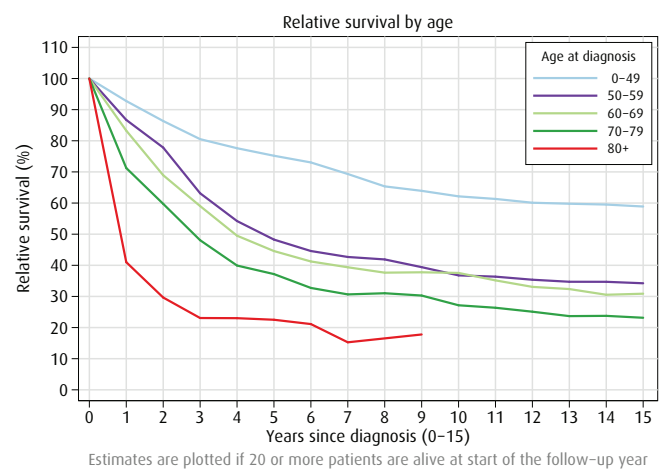
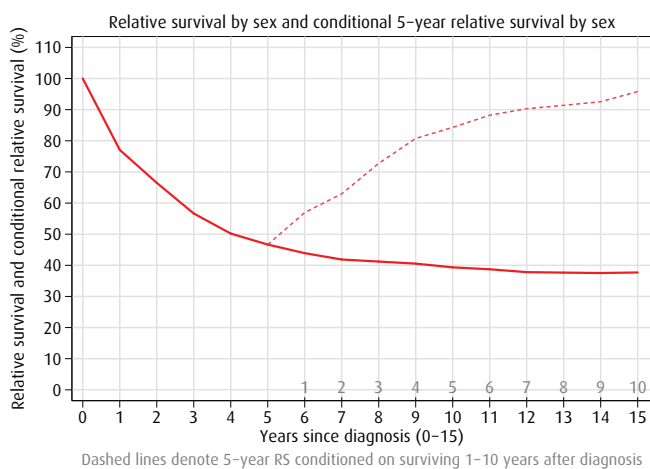


Figure 9O: Ovary (ICD-10 C56)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9P: Prostate (ICD-10 C61)

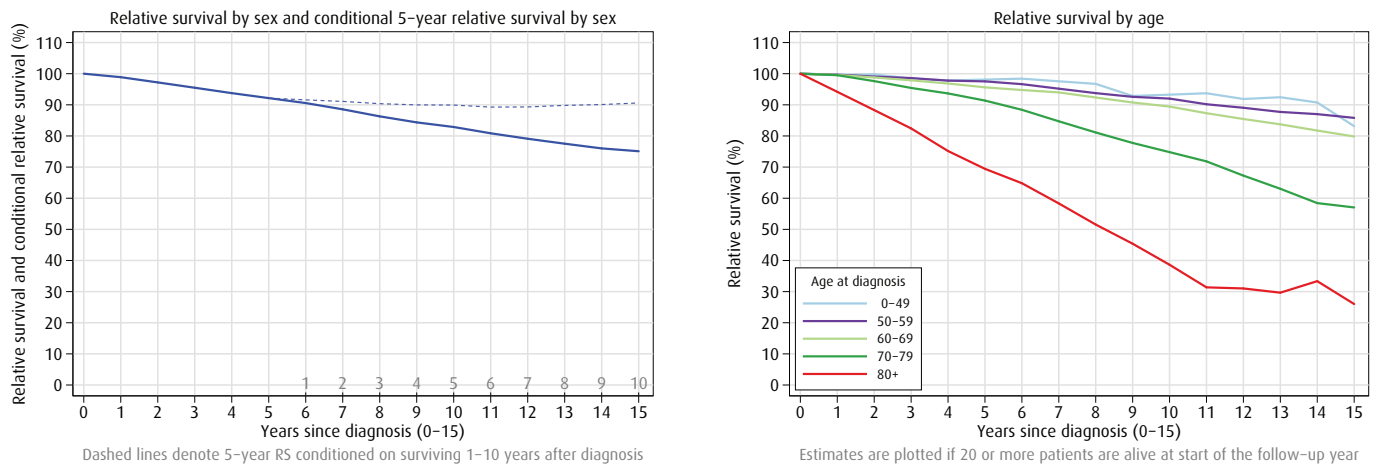


Figure 9Q: Testis (ICD-10 C62)

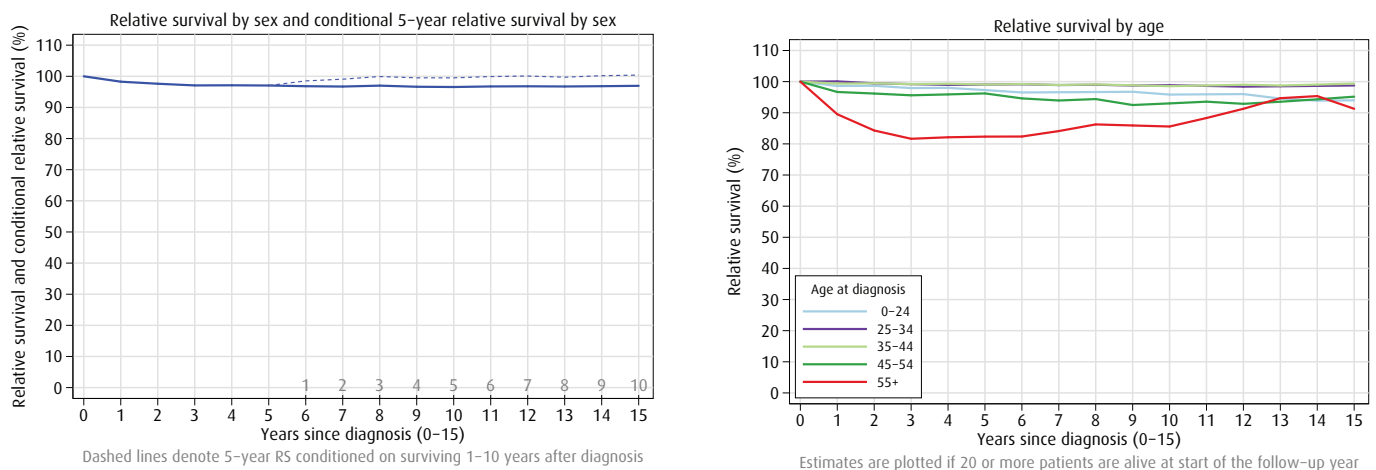
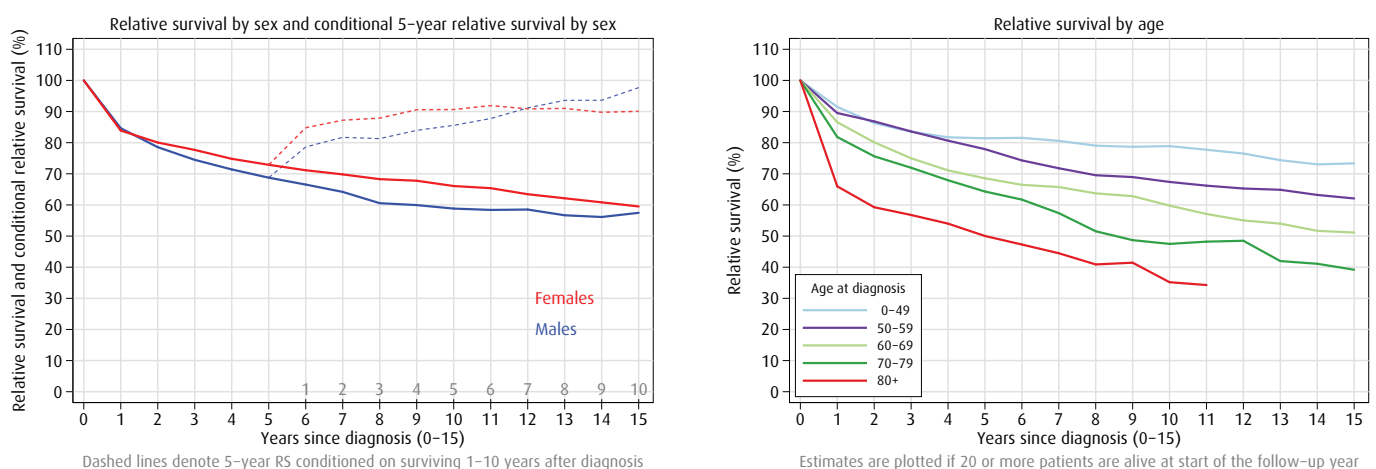


Figure 9R: Kidney excluding renal pelvis (ICD-10 C64)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9S: Bladder, ureter, urethra (ICD-10 C66–68)

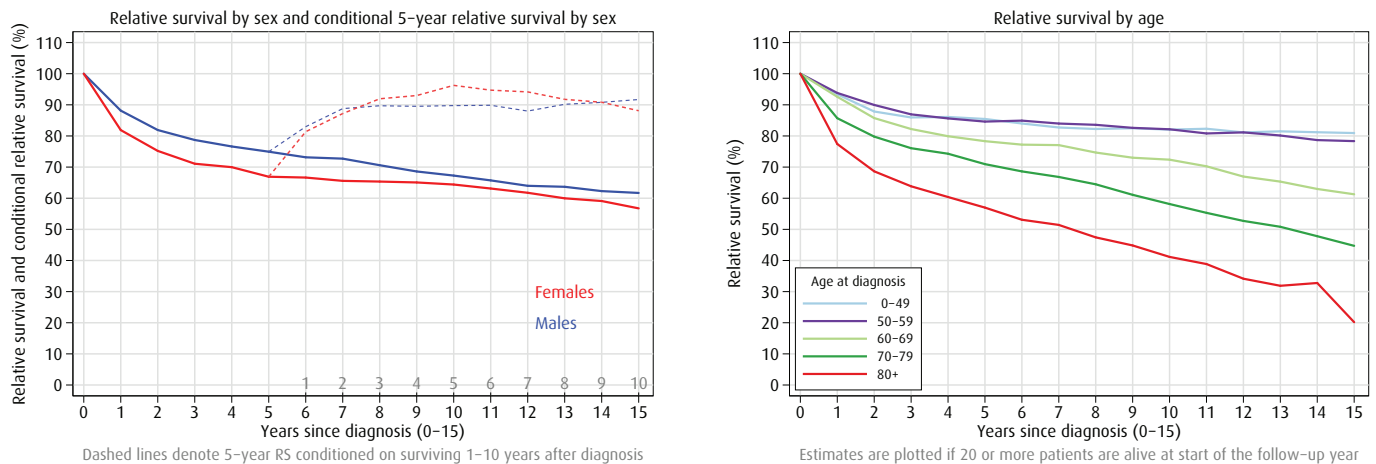


Figure 9T: Central nervous system (ICD-10 C70–72, D32–33, D35.2–35.4, D42–43, D44.3–44.5)

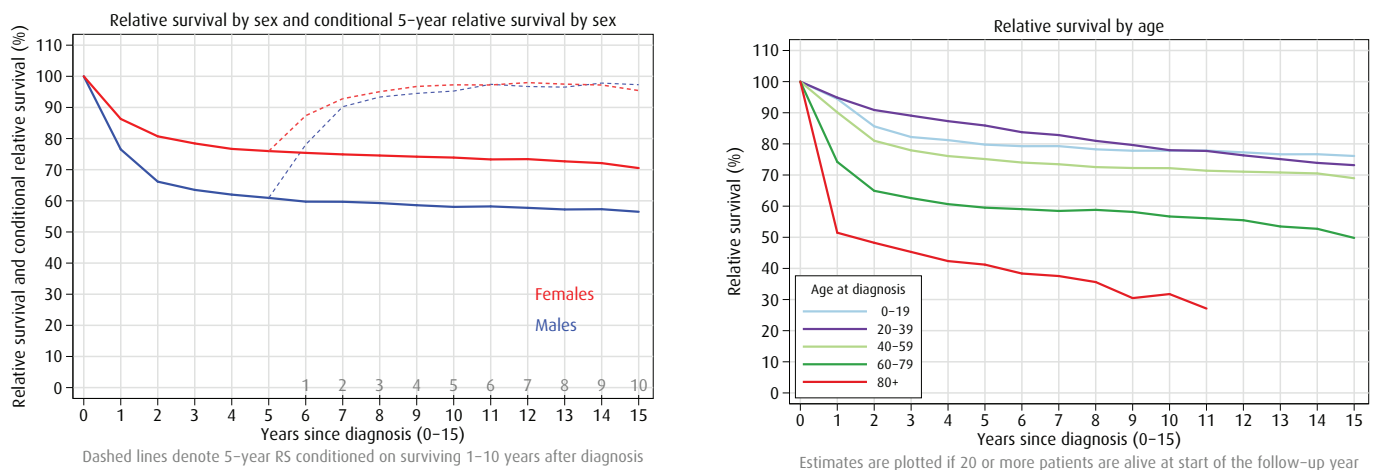
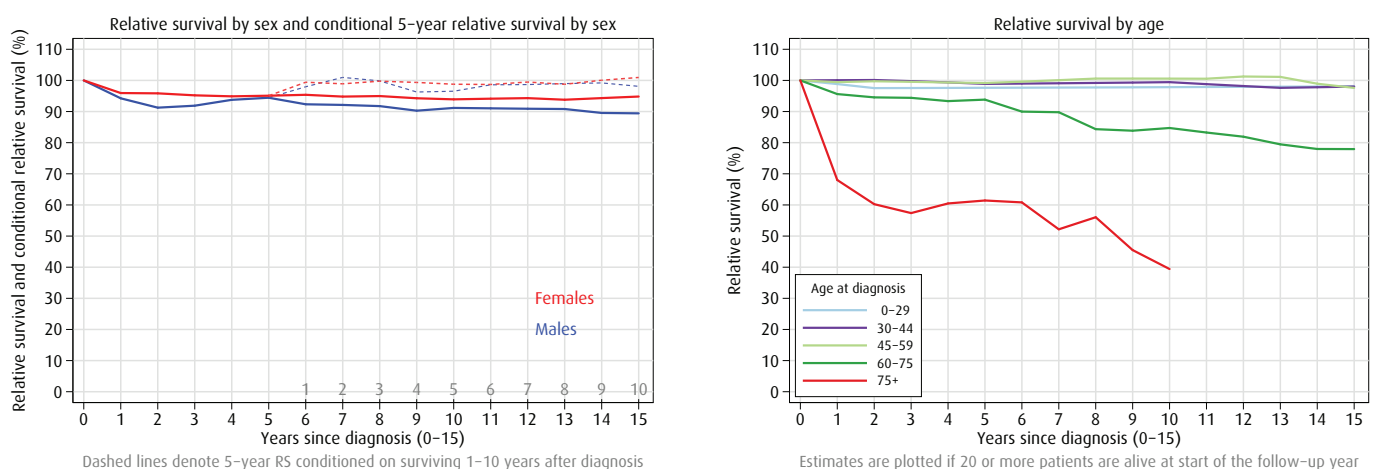


Figure 9U: Thyroid gland (ICD-10 C73)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–13)

Figure 9V: Hodgkin lymphoma (ICD-10 C81)

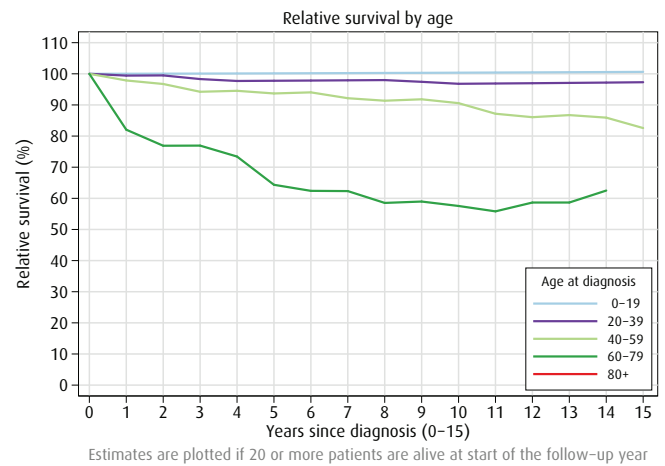
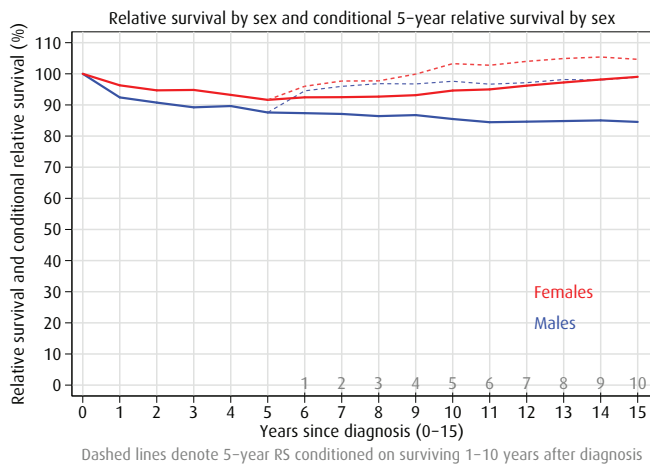


Figure 9W: Non-Hodgkin lymphoma (ICD-10 C82–86, C96)

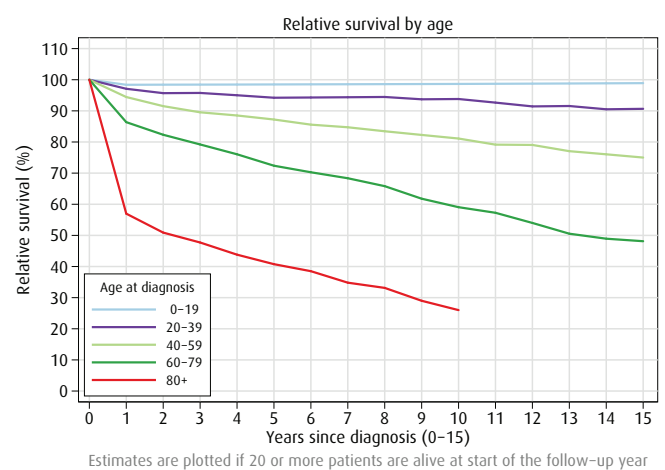
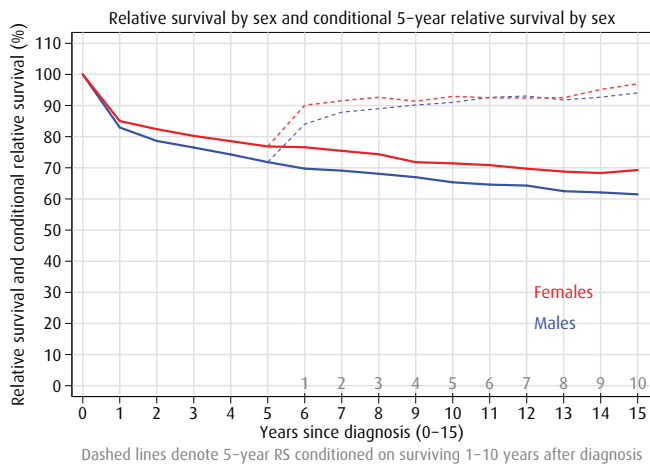
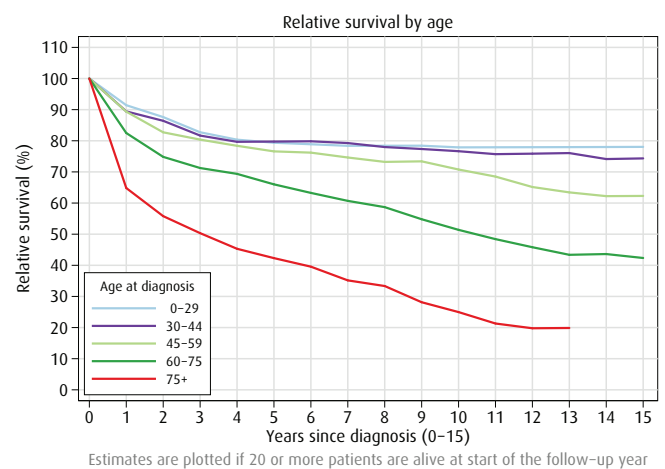
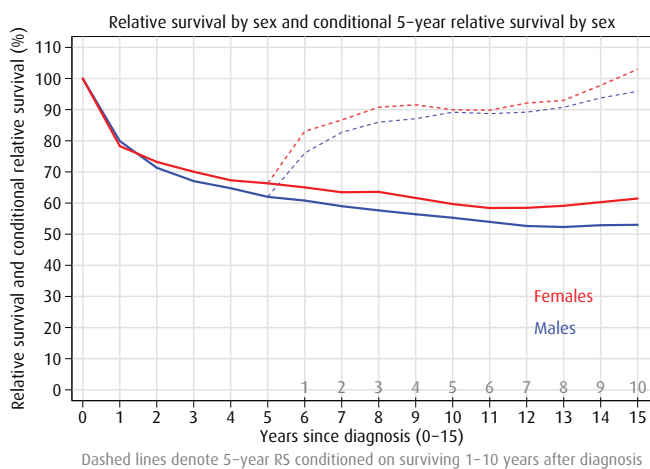


Figure 9X: Leukaemia (ICD-10 C91–95, D45–47)



Trends in incidence, mortality and survival, Norway 1965-2013

There has been considerable discussion as to the relative merits of incidence, mortality and survival analysis in cancer research generally, and in time trend analysis specifically (Boyle, 1989; Coleman, 2000; Doll & Peto, 1981; Peto & al, 2000). Analysing trends in incidence may provide some insight into changes in the incidence and distribution of risk factors to the changes in cancer screening and to the impact of interventions aimed at prevention and early diagnosis. Mortality rates and survival proportions are both key measures of disease outcome, and may alert us to the beneficial effects of screening, or to the introduction of more effective therapies and better disease management.

The contribution of artefacts to the observed cancer incidence and mortality trends have been comprehensively addressed (Saxen, 1982 ; Muir & al, 1994). Others have investigated the accuracy of death certificates (e.g. Percy & al, 1981; Alfsen & al, 2010). Apart from artefacts related to registration practices, many of the factors that affect incidence also apply to mortality, given that both rely on the accuracy of the initial cancer diagnosis. As with incidence, survival estimates are susceptible to changes in diagnostic methods and disease classifications, as well as the extent of cancer screening that detect cases in an earlier stage of the disease.

There is a general consensus that a combined description of trends in incidence, mortality and survival aids our understanding of the underlying biological, epidemiological and clinical processes. As each indicator is subject to unique or shared artefacts that tend to vary according to cancer type over time, their simultaneous assessment often enables the identification of systematic deviations in one or more of the three measures. Figure 10-A to 10-X present time trends during 1965–2013 for age-standardised incidence and mortality rates and five-year relative survival estimates based on a moving three-year observation (period) window. The survival trends are plotted as crude rather than age-standardised estimates for purposes of consistency; the age-specific numbers were sparse for certain neoplasms for certain years, and thus standardised estimates could not be calculated. It should be noted that these summary measures will often fail to reflect true underlying age-calendar-year interactions for specific cancers, such

as differences in survival and mortality trends by age with respect to calendar time, or the presence of strong birth cohort influences in incidence trends.

The trends for “All sites” in Figure 10-A is a persistent increase in cancer incidence and survival in Norway over the last four decades, combined with a fairly stable mortality until the early 1990s. The decline in mortality that follows is more rapid in men than in women. The interpretation of these aggregated estimates is complex, in that they comprise many different cancer types variable in terms of their capacity to be diagnosed as well as treated. Important contributions to the downward trend in men came from lung cancer, prostate cancer and stomach cancer, and in women, from breast cancer and stomach cancer.

For men, nearly 30% of all cancers diagnosed in 2013 were prostate cancers. General screening for prostate cancer using the PSA test is not recommended in Norway. However, the proportion of cases where PSA testing has led to further examination is still increasing and it is the leading single cause for performing a biopsy. The increase in both incidence and five-year relative survival from 1990 (Figure 10-O) probably reflects the availability of the PSA test and the upsurge in its use and in the detection of disease. However mortality has declined from around 1996 and both early diagnosis and improved and more active treatment may have had an impact.

Breast cancer comprises more than 20% of all female cancer cases. There was a monotonous trend in incidence rates between 1952 and 2005 with a steeper increase in the mid 1990s followed by a notable decline 2005 and 2009 (Figure 10-M). The Norwegian Breast Cancer Screening Programme started as a four-year pilot project in four of the 19 Norwegian counties in 1996, and gradually expanded to become nationwide by 2005. The programme invites women aged 50-69 years to biennial screening. The implementation of the screening programme explains much of the increasing incidence trend from the mid-1990s to 2005.

Breast cancer rates fluctuate from 2011 to 2013, with the lowest rate being in 2012. Examining trends by age-group does not give a clear picture, and we therefore think this may simply be random fluctuation over time.

Breast cancer mortality began declining in the mid 1990s (Figure 10-M), and today the mortality rate is nearly half of what it used to be. These good news most likely reflect improved diagnostics, better treatment, as well as the implementation of the systematic screening programme for breast cancer.

Trends in lung cancer incidence and mortality follow each other closely, reflecting the poor survival over time. The varying trends by sex reflect the different phases of the smoking epidemic in Norwegian men and women (Figure 10-J). Overall lung cancer incidence and mortality rates among males began to level off in the early 1990s, in contrast to the continuing increase for women. It is worth noting that the age-standardised lung cancer rates conceal a slight decrease in younger women (< 60 years). While five-year relative survival for lung cancer patients has not changed substantially, the observation of a slight improvement during the last decade, more evident in women, is intriguing. This may be a result of better surgical treatment, earlier stage at presentation, and less co-morbidity.

Both colon and rectal cancer incidence has been increasing for many decades, but the rectal cancer rates have levelled off since the 1980s (Figure 10-E and 10-F). Of particular note is the increasing survival and declining mortality from rectal cancer in both sexes. The most important determinant is probably the national introduction of total mesorectal excision in the early 1990s, increasing specialisation, and use of preoperative radiation. However, our colon cancer incidence and mortality rates are among the highest in the Nordic countries, and remain a health concern.

Some other specific sites are also worthy of note. The long-term decline in stomach cancer incidence and mortality is most likely caused by primary prevention following the widespread use of refrigerators and the assumed reduction in *Helicobacter pylori* infections, following changes both in diet and hygiene. The survival of stomach cancer has increased moderately over time (Figure 10-D).

In contrast, the incidence rate of testicular cancer increased gradually during the last decades (Figure 10-Q). This cancer has now the highest five-year relative survival (97.2%). The improved survival started in the 1970s with the introduction of cisplatin therapy for advanced germ-cell tumours, leading to greatly improved prognosis for testicular cancer in young and middle-aged men.

Finally, some cancers have had a remarkable increase in incidence rates during the last years. This is liver cancer in men, cancer in the thyroid gland in women and malignant melanoma in both genders. The increase in incidence rates for malignant melanoma is probably best explained by increased sun tanning. The rise in melanoma incidence could also be caused by more frequent check-ups at the general practitioners' offices or in pharmacies. But the moderate but steady increase in melanoma mortality indicates that some of the increase in incidence is caused by a higher risk of disease. The rise of thyroid cancers among women during the last decade is also seen in the other Nordic countries, except in Iceland where the rates have been consistently higher than in Scandinavia since 1960. We do not know why there has been increasing rate of liver cancer.

In summary, the overall trends in cancer survival probably reflect both artefacts, such as screening and improved diagnostics, as well as improved treatment. For prostate and breast cancer both early diagnosis and improvements in treatment are likely to have played a role. For rectal cancer the improved survival is most likely caused by better treatment.

Note to figures 10-A to 10-X:

The mortality rates used in the trends figures have some deviations from the incidence and survival estimates. Anal cancer is included in the mortality rates in figure 10-E, and cases of topography ICD10 D45-47 are not included in the mortality rates in figure 10-X. All mortality rates in figures 10-A to 10-X were calculated using the end-year population.

Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-A: All sites (ICD10 C00-96, D32-33, D35.2-35.4, D42-43, D44.3-44.5, D45-47)

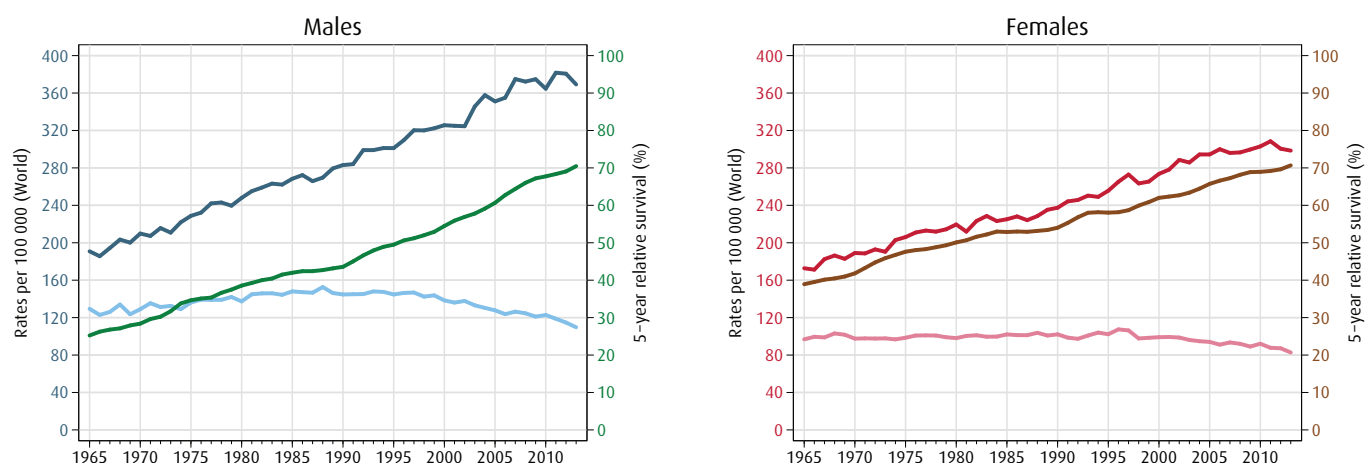


Figure 10-B: Mouth, pharynx (ICD-10 C00-14)

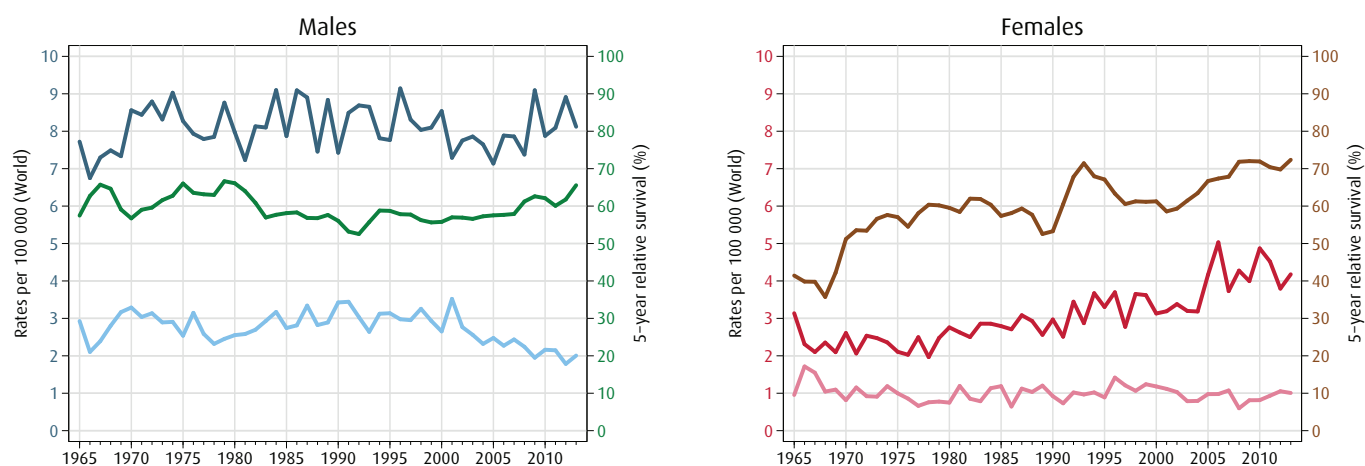
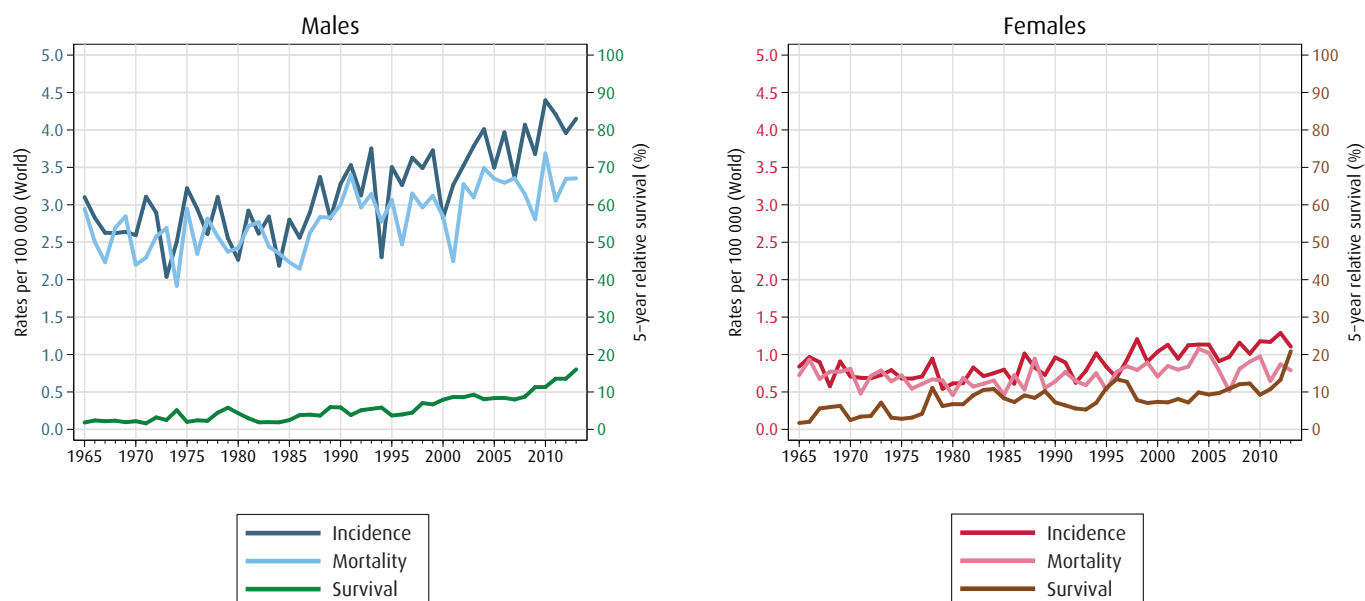


Figure 10-C: Oesophagus (ICD-10 C15)



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Figure 10-D: Stomach (ICD-10 C16)

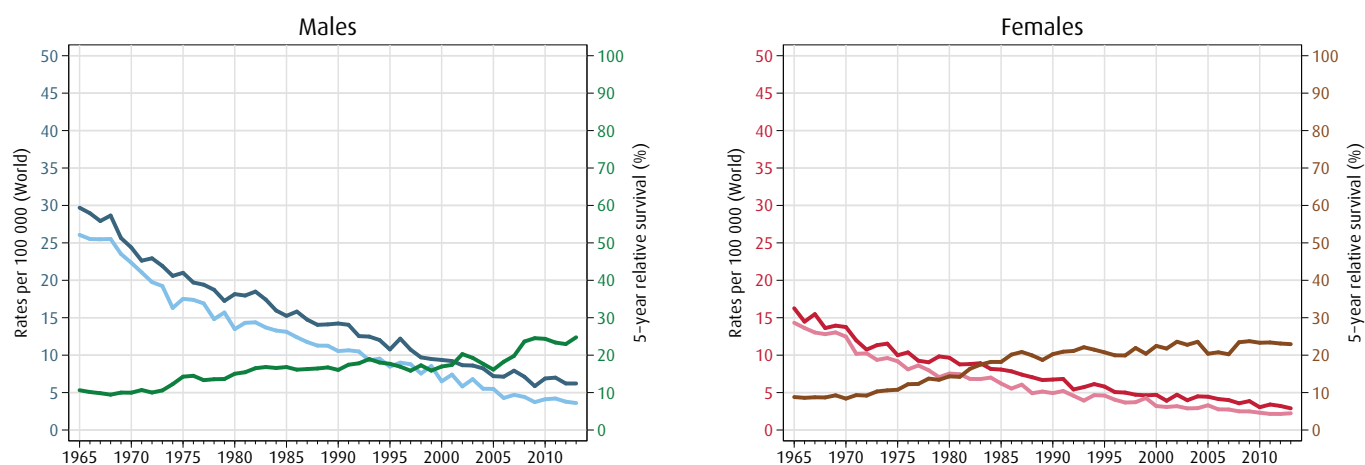


Figure 10-E: Colon (ICD-10 C18)

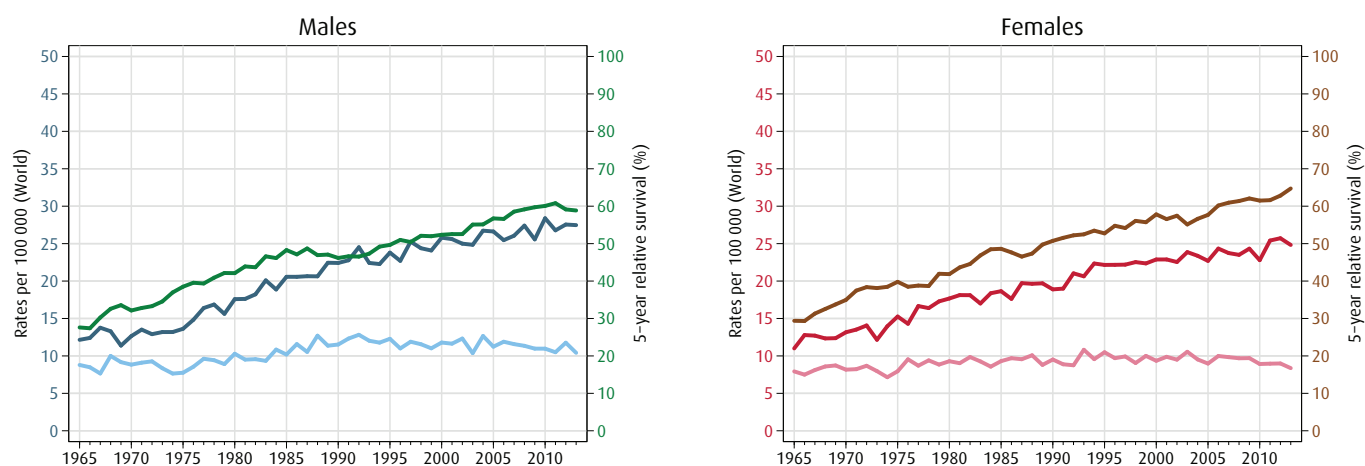
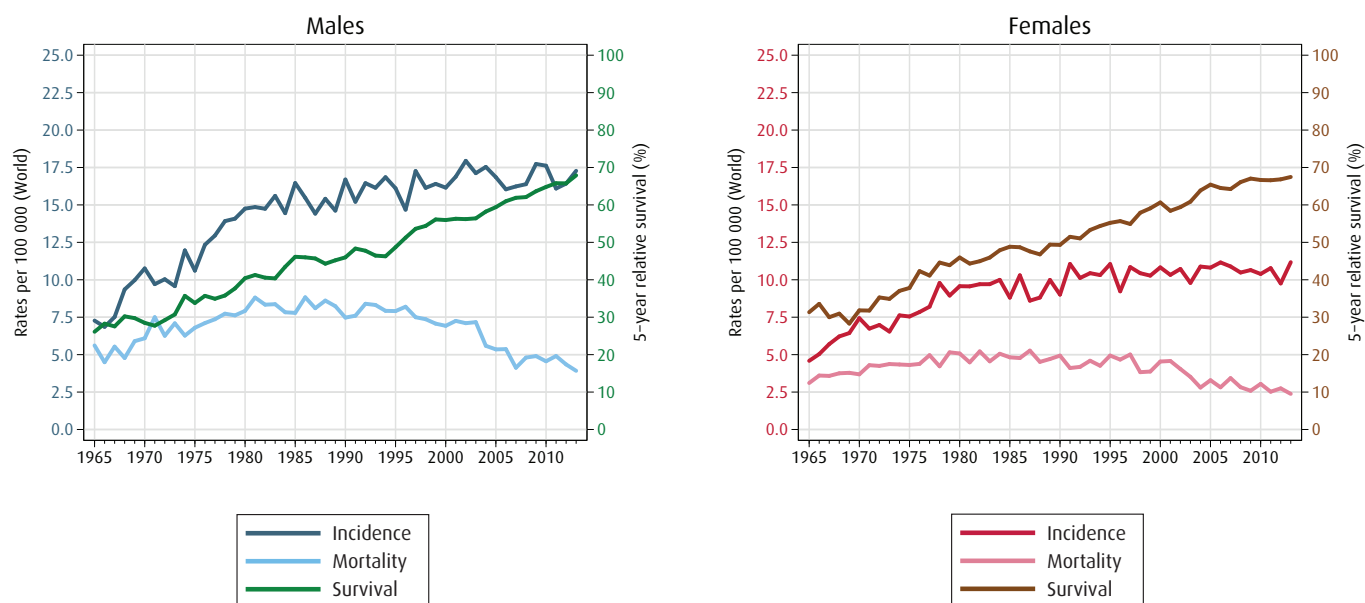


Figure 10-F: Rectum, rectosigmoid (ICD-10 C19-20)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-G: Liver (ICD-10 C22)

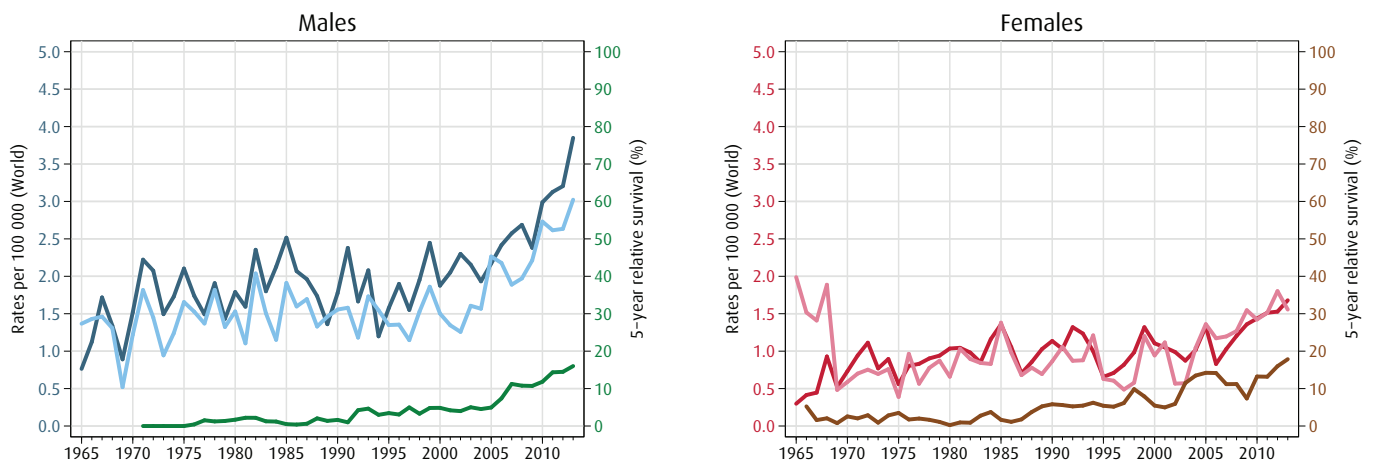


Figure 10-H: Gallbladder, bile ducts (ICD-10 C23-24)

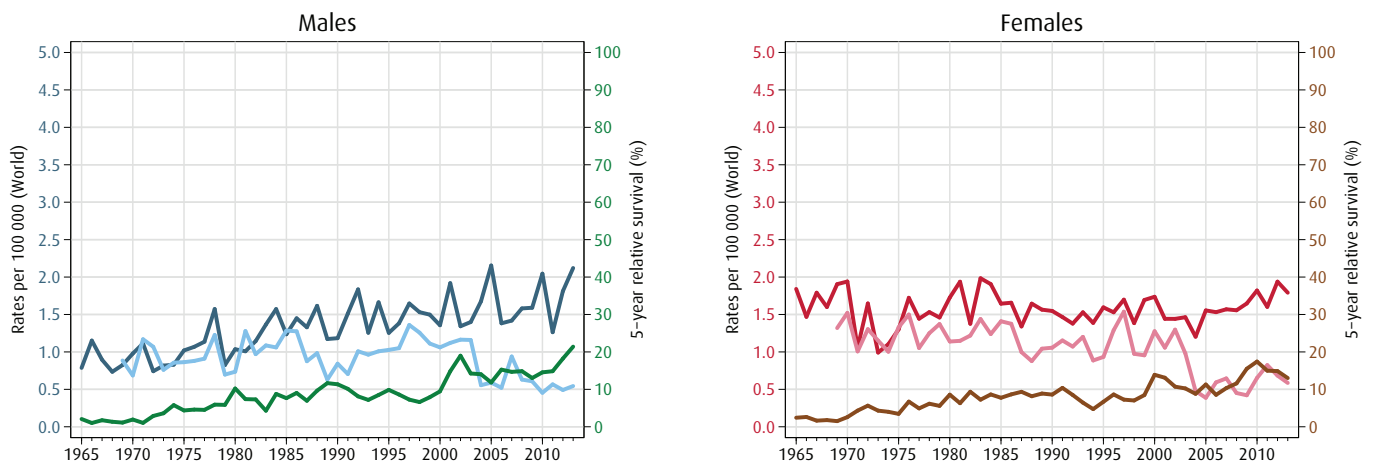
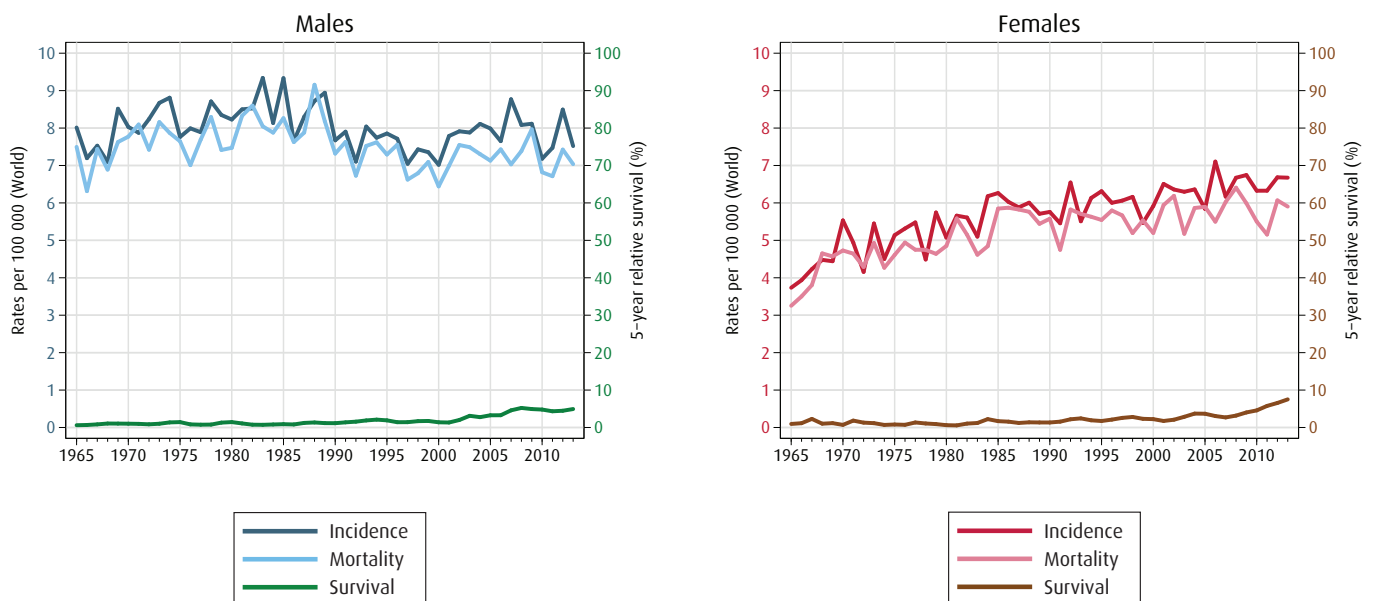


Figure 10-I: Pancreas (ICD-10 C25)



Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-J: Lung, trachea (ICD-10 C33-34)

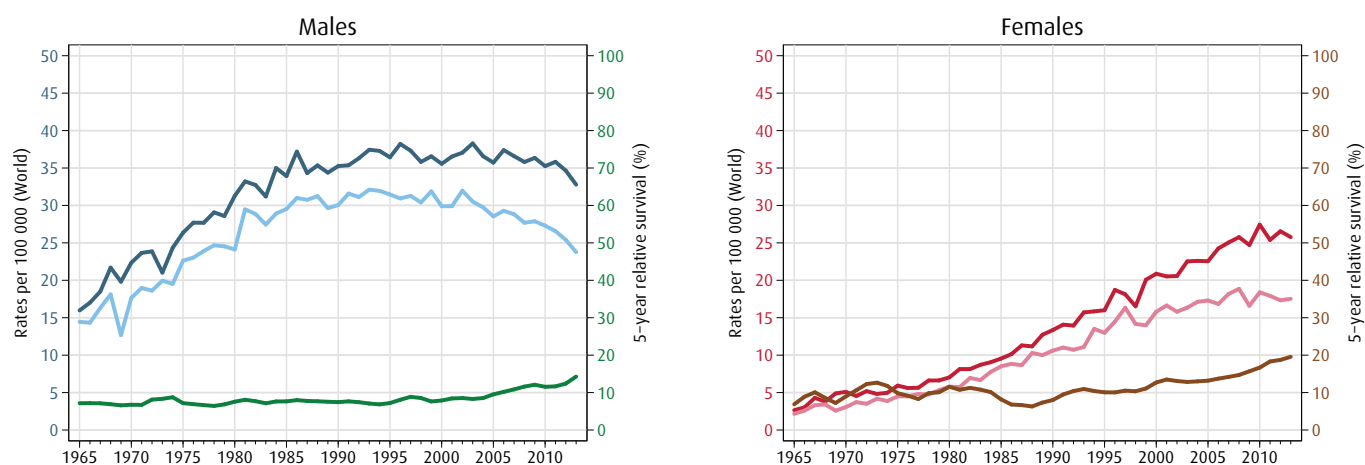


Figure 10-K: Melanoma of the skin (ICD-10 C43)

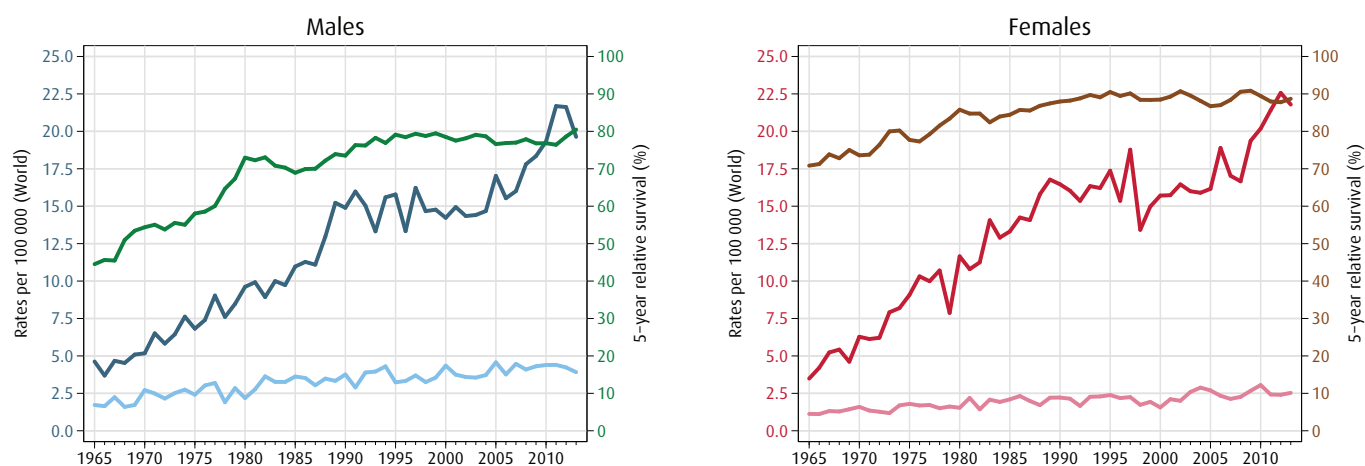
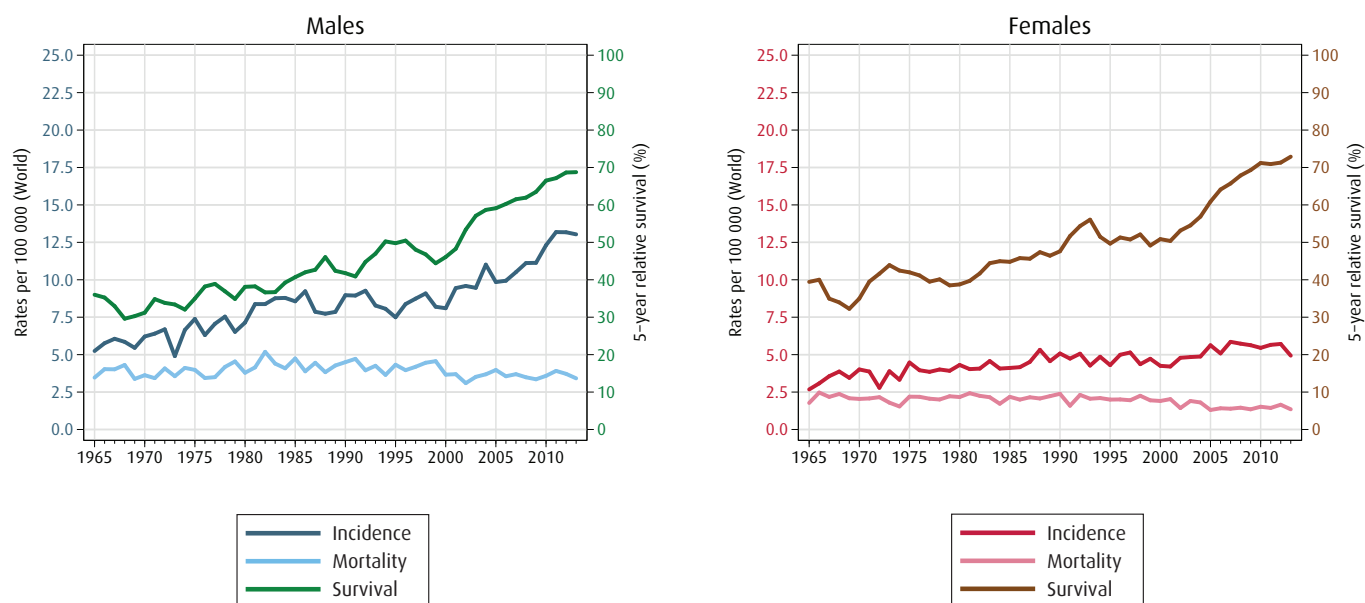


Figure 10-L: Kidney excluding renal pelvis (ICD-10 C64)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-M: Breast (ICD-10 C50)

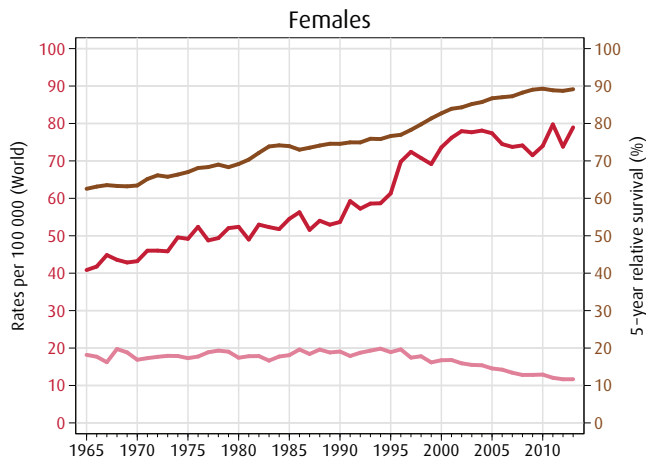


Figure 10-N: Cervix uteri (ICD-10 C53)

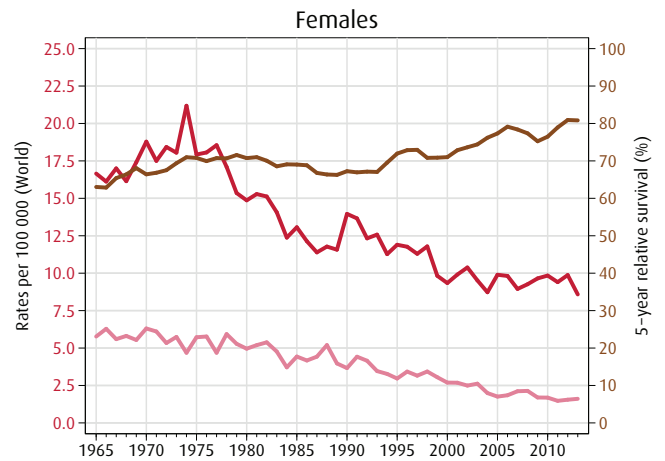


Figure 10-O: Prostate (ICD-10 C61)

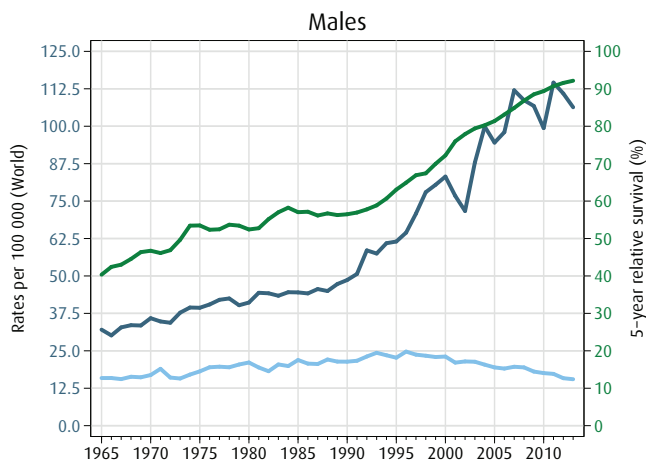


Figure 10-P: Corpus uteri (ICD-10 C54)

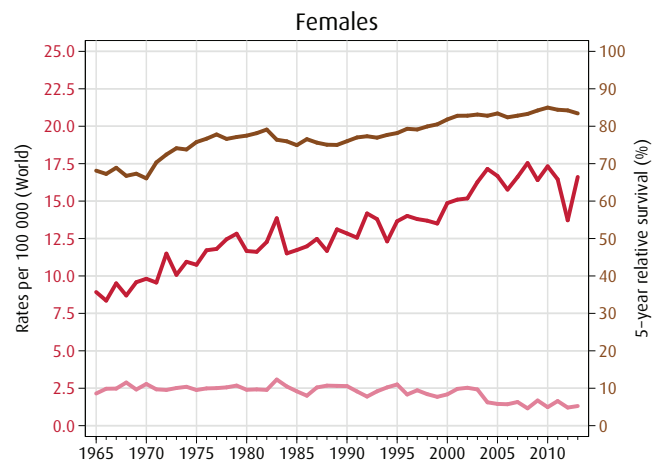


Figure 10-Q: Testis (ICD-10 C62)

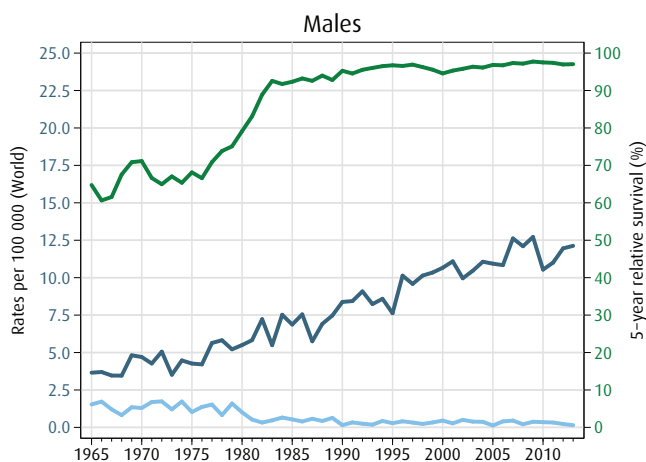
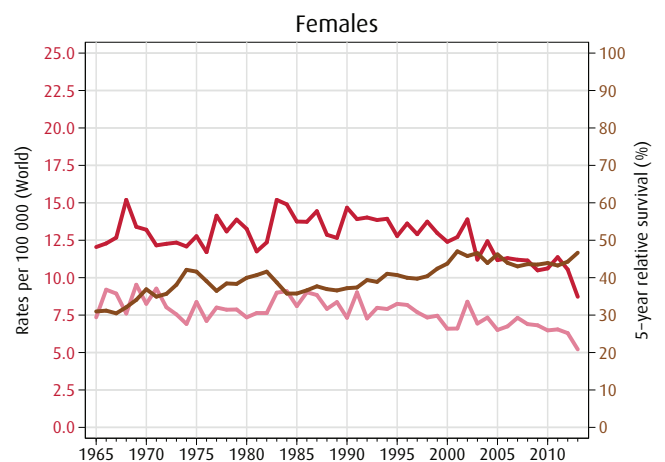


Figure 10-R: Ovary (ICD-10 C56)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-S: Bladder, ureter, urethra (ICD-10 C66-68)

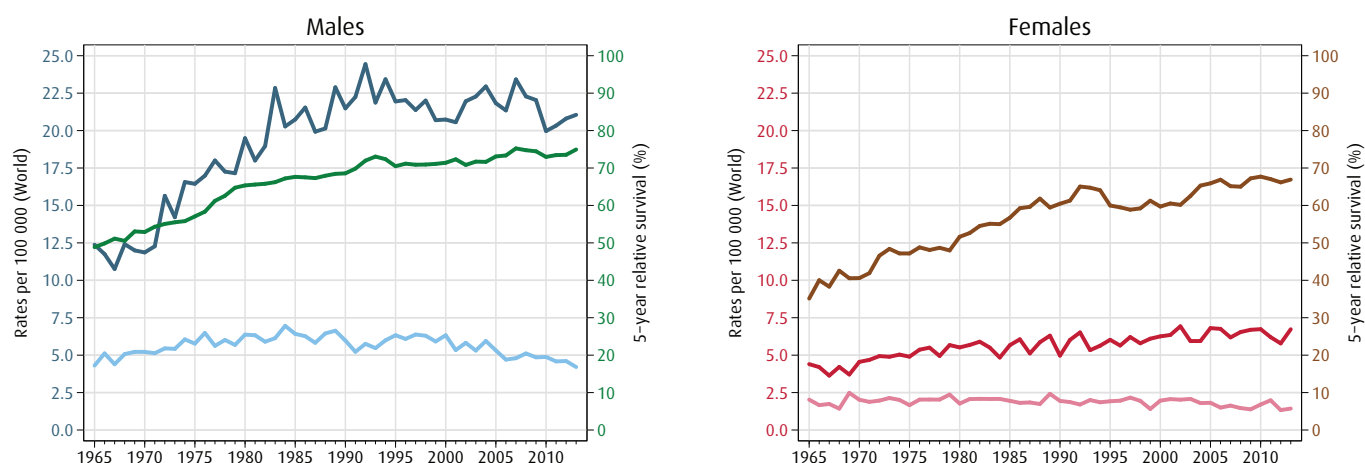


Figure 10-T: Central nervous system (ICD-10 C70-72, D32-33, D35.2-35.4, D42-43, D44.3-44.5)

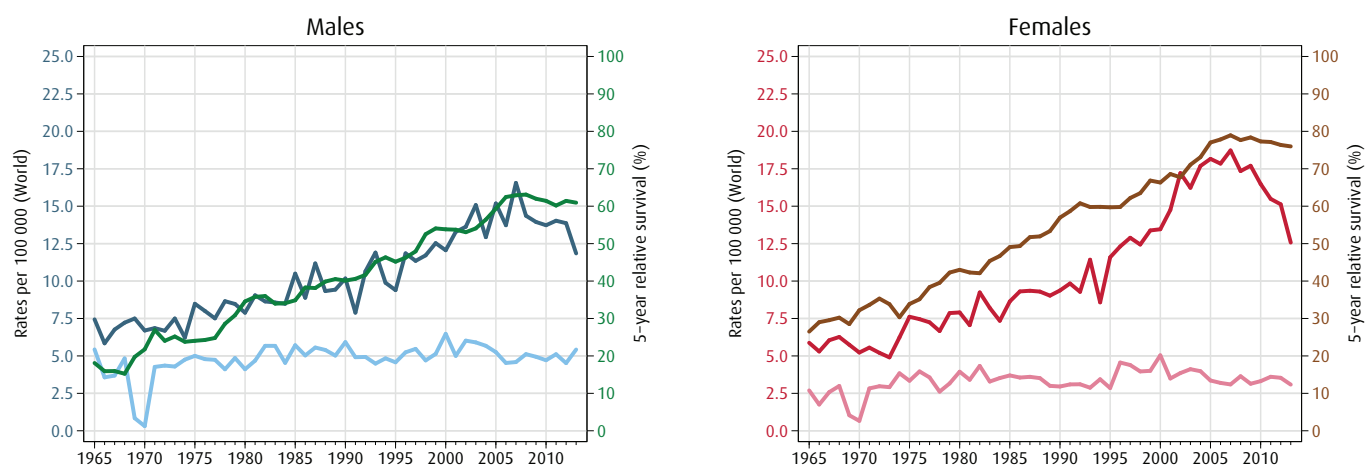
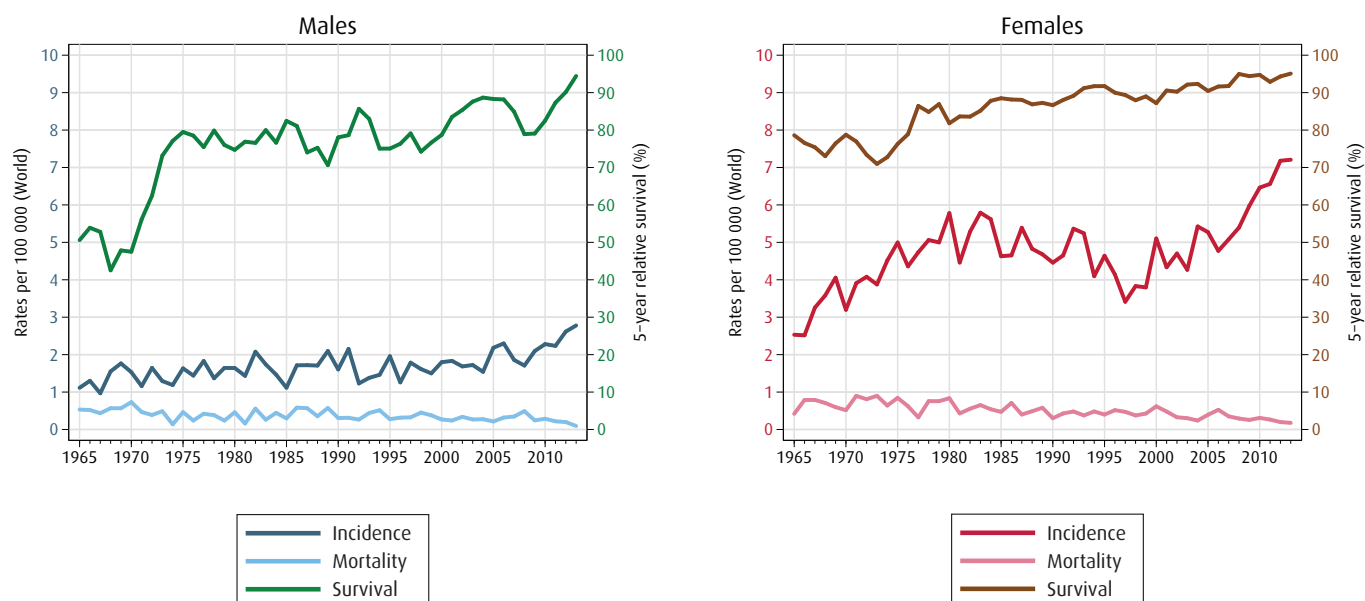


Figure 10-U: Thyroid gland (ICD-10 C73)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Trends in incidence and mortality rates and five-year relative survival proportions

Figure 10-V: Hodgkin lymphoma (ICD-10 C81)

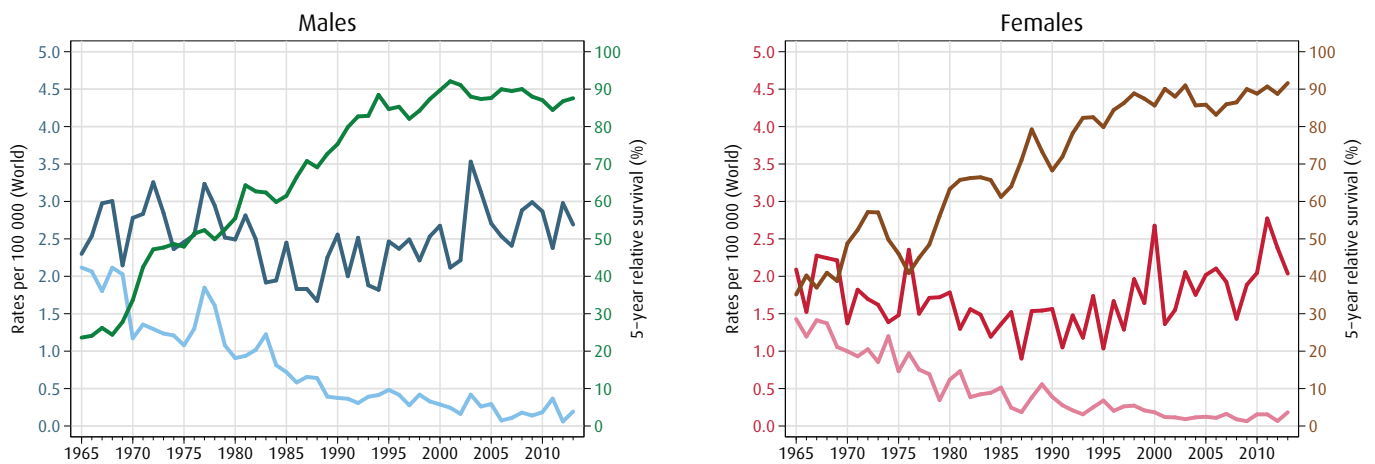


Figure 10-W: Non-Hodgkin lymphoma (ICD-10 C82-86, C96)

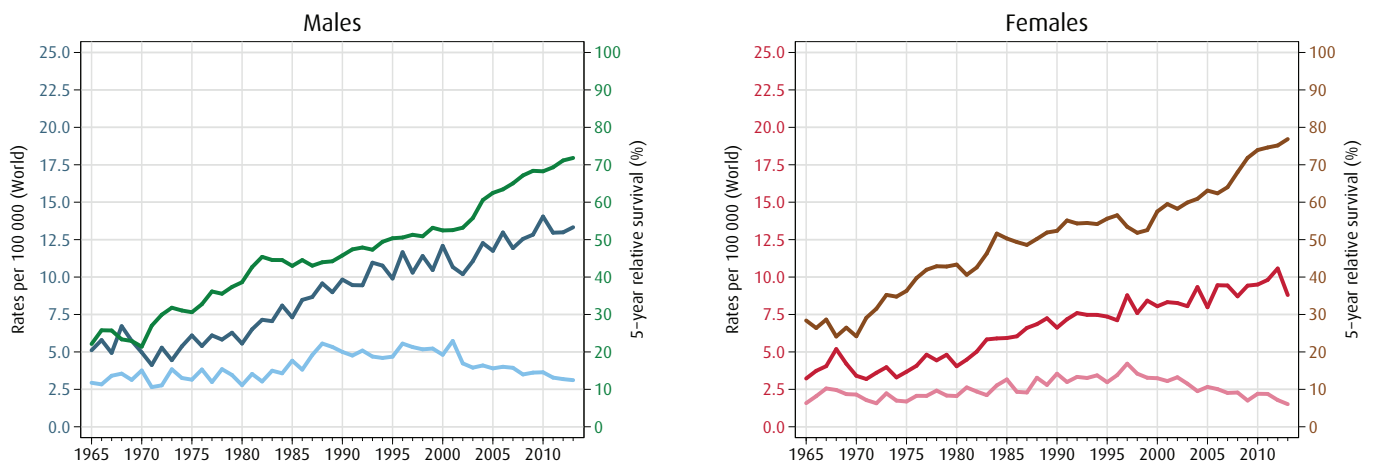
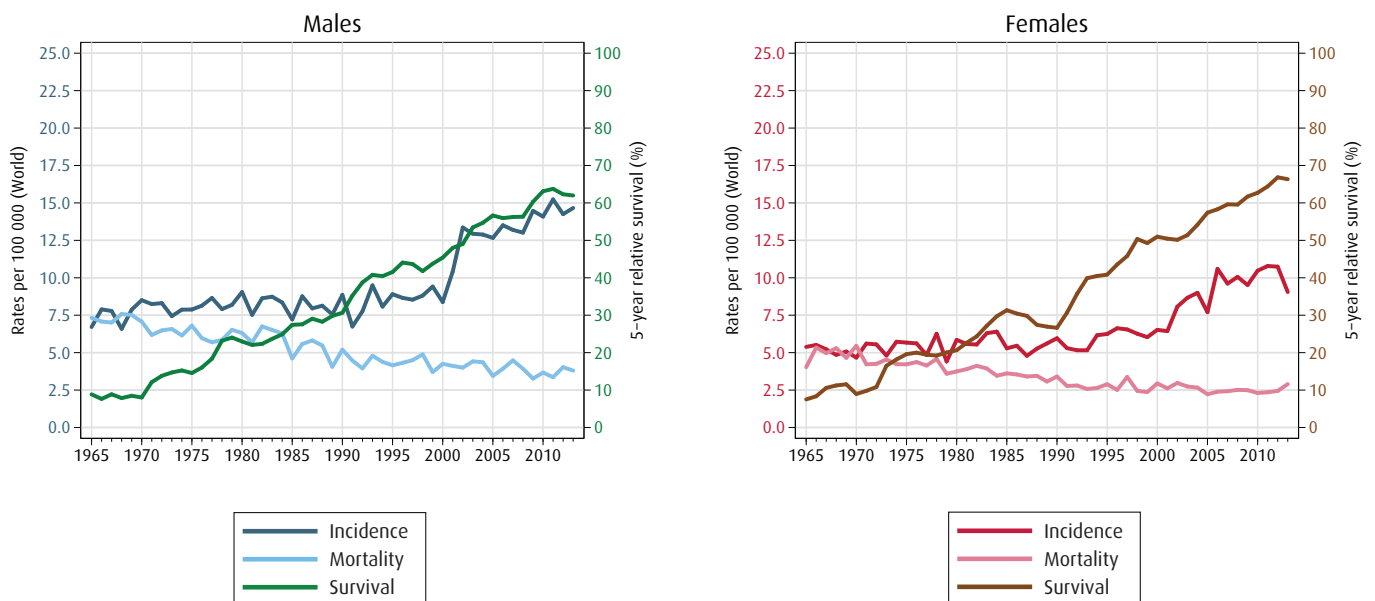


Figure 10-X: Leukaemia (ICD-10 C91-95, D45-47)



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