



Cancer in Norway 2014

Cancer incidence, mortality,
survival and prevalence in Norway

Special issue:
Catch-HPV



Cancer in Norway 2014

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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 2014

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Foreword

The Cancer Registry of Norway released the numbers for 2013 in March 2015. We are therefore very pleased to present the 2014 numbers as early as December 2015. This improvement in timeliness of the cancer data is due to increased online reporting from clinicians, combined with a concentrated coding effort, and improvements in the Cancer Registry infrastructure.

There is one major change in the 2014 report in how we report the incidence rates. This year, we have used a Norwegian Standard Population, rather than the World Standard Population to estimate age- standardised rates. The practical implications of this is that the rates presented in this report are more comparable with the crude rates in Norway, but direct comparison with rates in other countries becomes more cumbersome. The change was necessary because the discrepancy between the World Standard Population and our own population had become too large. The World Standard Population was an artificial population defined in the 1960s, where 56% of the population was assumed to be under 30 years of age, and only 4% above age 70. Such an age structure is very different from the one we see in Norway today, where a majority of the population is above 30 (62%) or 70 years of age (11%). Using the new Norwegian Standard Population we get a more realistic picture of a population where many individuals have passed 50, and thus belong to an age group where most of the cancers occur. For direct comparisons with incidence rates in other countries, we suggest that our readers consult one of several international databases created for this purpose.

Additionally, the rates in this report are not directly comparable to our previous Cancer in Norway reports, and they will for many cancers appear to be higher than previously published rates. In order to facilitate comparisons over time, we refer our readers to the joint Nordic cancer database, NORDCAN, or to the online versions of our own data.

When interpreting cancer rates, we emphasise that cancer incidence, mortality and survival rates must be considered simultaneously. Improved survival of a cancer can be caused by improved treatment, but also of increased diagnosis of low-grade tumours. Currently, there is a discussion of whether low-grade ductal carcinomas in situ of the breast could remain untreated. This is an intriguing discussion, on a road paved with challenges. We know there is a substantial heterogeneity of breast tumours, and the initial subtype classification may not always provide the whole picture. There is still much uncertainty as to how breast and other tumours develop over time, and an indolent low-grade tumour may become more aggressive. Thus, although diagnostic methods increasingly move the cancer diagnosis to an earlier point in time, and even though there is a potential for overdiagnosis and overtreatment, cancer is not always what it seems and certainly not a disease that should be ignored.

This year's cancer rates show that lung cancer continues the slight decrease in men. In women, however, lung cancer rates are still on the rise in those above 65. Malignant melanoma and non-melanoma skin cancers continue their increase in both genders. All these cancer types are highly preventable, with substantial potential for improvement in the occurrence. For other cancers that have shown an increase, such as leukemia and non-Hodgkin lymphoma, we have no clear-cut explanation.

This year we proudly present a Special report on human papilloma virus, HPV. Our understanding of HPV-related cancers and how they can be prevented, has changed tremendously over the past decade. We have no specific HPV cure, and therefor prevention remains our most important weapon against this virus and the cancers it causes. A large thank you to Mari Nygård and her team who have contributed to the report.

Reports such as this one would not be feasible without the efforts of our colleagues in the hospitals who report the cancer cases, as well as the large number of staff at the Cancer Registry who code the cancers and assist with the development of this report. We thank everyone for their efforts in continuing to improve coding and the contents of our report.

Last, but not least, let us not forget that the report is based on the legal framework of the Cancer Registry. We are still waiting to see the final revisions of the European data protection framework. Cancer reporting is important, and can only be done correctly with a legal framework that allows for recording of disease using personal identifying information. This ensures that every case is counted, and only counted once. It is essential for the Norwegian Cancer Registry, as well as for the other Nordic registries, that the final adopted regulations are not too strict. We hope the European politicians understand the importance of these registries for public health in Europe and globally.

Oslo, December 2015

Giske Ursin
MD PhD
Director

Cancer in Norway 2014

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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 31 651 new cancer cases were reported in 2014: 53.8 per cent were among men and 46.2 percent among women. The rates for 2014 show that cancer in prostate, lung, colon and bladder were the most common cancers in men, whereas breast, colon, lung 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 56 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 (50+). 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 women 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 2014 might be slightly underreported due to delayed notification of cancer cases.

The incidence rate for all sites combined has increased by 2.6 per cent in men and 3.9 per cent in women when we compare the two most recent five-year periods (from 2005–2009 to 2010–2014).

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.

For the most common cancers in women, the strongest increase occurred in incidence rates of thyroid cancer, malignant melanoma, lung cancer, non-melanoma skin cancer, leukaemia 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 in men and women, at least to some extent, is due to under-reporting of cases. Among the more uncommon cancers, we see a steady increase in the incidence of liver cancers.

The probability of being diagnosed with a cancer before the age of 75 is 36 per cent in men and 29 per cent in women.

Prevalence

At the end of 2014 more than 242 000 Norwegians were alive after having had at least one cancer diagnosis at an earlier point in time.

Mortality

There were 10 971 deaths from cancer in Norway in 2014. Cancer of the lung, colon, rectum, prostate and female breast account for 50 per cent of the cancer mortality.

Survival

From the period 2005–2009 to 2010–2014 the estimated five-year relative survival changed from:

- 89 to 91 per cent for prostate cancer
- 88 to 88 per cent for breast cancer in women
- 12 to 13 per cent for lung cancer in men
- 17 to 19 per cent for lung cancer in women
- 59 to 59 per cent for colon cancer in men
- 62 to 63 per cent for colon cancer in women
- 64 to 66 per cent for rectal cancer in men
- 65 to 66 per cent for rectal cancer in women

Table 1. Summary of cancer statistics for selected cancers

ICD10	Site	Sex	Number of new cases, 2014	Age-standardised incidence rates per 100 000 person-years, 2010–14	Percent change in age-standardised incidence from the previous five-year period, 2005–09	Percent diagnosed with localised disease, 2010–14	Age-standardised mortality rates per 100 000 person-years, 2014	Five-year relative survival (%), 2005–09	Five-year relative survival (%), 2010–14
C00–96	All sites	M	17 024	718.0	2.6	...	...	66.5	68.9
		F	14 627	539.5	3.9	...	...	67.1	68.5
C18	Colon	M	1 359	59.2	6.0	19.7	24.8	58.7	58.9
		F	1 442	51.4	3.9	19.1	20.3	61.5	62.8
C19–20	Rectum, rectosigmoid	M	798	33.4	0.5	28.3	10.4	63.5	66.2
		F	567	20.7	-1.1	32.8	6.2	64.6	66.0
C33–34	Lung, trachea	M	1 596	68.0	-2.1	22.3	51.8	11.8	13.2
		F	1 423	52.5	12.9	25.0	35	16.8	19.2
C43	Melanoma of the skin	M	1 015	42.2	28.0	87.2	7.7	75.6	79.0
		F	988	37.1	28.9	91.6	5.2	87	87.5
C44	Skin, non-melanoma	M	1 005	46.7	9.1	...	...	...	...
		F	917	31.0	12.0	...	...	...	...
C50	Breast	F	3 324	126.5	4.2	39.4*	23.5	87.8	88.0
C53	Cervix uteri	F	338	13.3	-0.5	60.3*	2.3	77.1	80.4
C54	Corpus uteri	F	727	27.1	-2.3	80.0	2.9	81.6	82.2
C56	Ovary	F	424	15.8	-7.3	22.5	10.6	43.0	44.5
C61	Prostate	M	4 889	203.3	0.3	64.0	54.6	88.9	90.8
C62	Testis	M	321	12.2	0.4	83.3	0.2	97.5	98.2
C66–68	Bladder, ureter, urethra	M	1 087	47.4	-4.4	84.4	12.2	72.4	73.1
		F	363	13.1	1.0	80.5	3.8	63.2	65.1
C70–72, D32–33	Central nervous system	M	457	18.4	-7.0	49.9**	...	59.3	58.4
		F	502	19.1	-16.9	69.2**	...	76.3	75.1
C73	Thyroid	M	114	4.5	26.7	53.0	...	84.6	89.2
		F	239	9.3	29.0	63.3	...	91.5	92.9
C82–85, C96	Non-Hodgkin lymphoma	M	539	22.5	8.3	...	6.7	63.7	68.5
		F	443	16.3	7.8	...	4.6	70.6	72.6
C91–95, D45–47	Leukaemia	M	545	22.9	9.6	...	7.3	58.7	59.8
		F	457	16.6	9.5	...	5.7	62.7	63.2

* Stage I
** Non-malignant

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 rate

Age-standardised (or age-adjusted) incidence rates are summary rates that 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 Norwegian mid-year population in 2014.

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 that 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.

* All the definitions are based on Last, 2001

About this publication

List of the ICD-10 codes with included and 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 2. 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 Excludes all basal cell carcinomas
C38	Mediastinum, pleura	Excludes mesotheliomas (which are included in C45)
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 polycythaemia vera (D45) and other unspecified tumours in lymphatic or hematopoietic tissue (D47)

Some of the D-codes are not included in the subsequent tables and figures due to lack of space.

Changes from the previous version

- Age-standardised incidence rates are calculated using the Norwegian mid-year population in 2014 as the standard population. This is a major change from previous reports of Cancer in Norway, where the World standard population (Segi, 1960; Doll & al, 1966) was used. Note that this alteration results in higher age-standardised rates than previous reported. Details are given in the *Data sources and Methods* section.
- Relative survival is now estimated using the Ederer II method with age-standardisation. This gives more correct estimates for long-term survival than using the Hakulinen method that were used in previous reports. Of note is that the estimates tend to be somewhat lower. Details are given in the *Data sources and Methods* section.
- The practice in Norway in earlier reports has been to register all extragonadal germ cell tumors on either C56 (Ovary) or C62 (Testis). This is now changed, and they are now registered at the organ where the pathologist/clinician stated it has originated.
- In previous reports basal cell carcinomas in other organs than skin have been included. In the present report, we have excluded all basal cell carcinomas, and this has led to a slightly lower number of cases.
- The coding of C57 (Other female genital) is changed according to the new pathology descriptions of serous tumours in Adnexa uteri, and has probably led to some higher rates for this site.

Purpose and intended audience

The aim of the annual publication of Cancer in Norway is to provide detailed cancer statistics. This publication should help health professionals, policy-makers and researchers to identify and make decisions about areas that need more attention and investigation. This publication may also be valuable for the media, educators and members of the public with an interest in cancer.

Data sources and Methods

The population of Norway

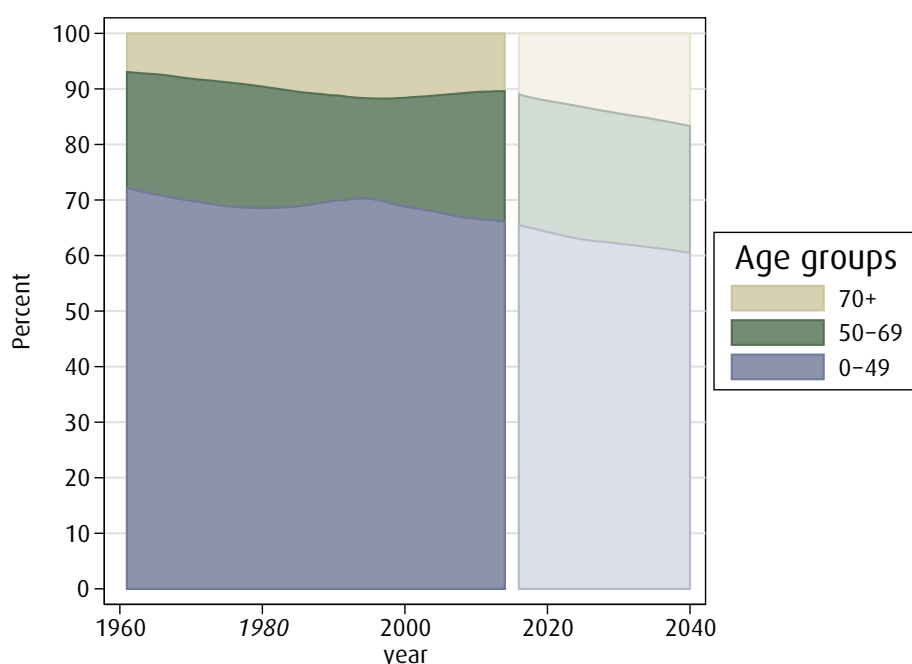
By 1st January 2015 the total number of inhabitants in Norway was nearly 5.2 million. The immigrant population (first-generation) comprises 13.0% of the total population, and an additional 2.6% are second-generation immigrants. About 49% of the first-generation immigrants are from EU/EEA, US, Canada, Australia and New Zealand, 28% from Asia (incl. Turkey), and 12% from Africa (Source: Statistics Norway).

Table 3 shows the age structure by sex for the Norwegian mid-year population in 2014, while Figure 1 shows the age structure of the Norwegian population over time from 1960 with projections up to 2040 (Source: Statistics Norway). The elderly will represent an increasingly large proportion of the population of Norway in the next decades. Long-term projections up to 2060 show that 20% of the population will be 70 years or older (Tønnessen & al, 2014). 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 44% from 1960 to 2015, largely because 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.

Table 3 Norwegian mid-year population 2014, by five-year age group and sex

Age group	Males	Females	Total	Weight (per 100 000)
00-04	159 154	151 102	310 255	6 039
05-09	160 637	152 856	313 493	6 102
10-14	157 241	150 631	307 872	5 993
15-19	168 028	158 128	326 156	6 349
20-24	176 217	167 036	343 253	6 681
25-29	176 877	170 952	347 828	6 770
30-34	177 067	166 640	343 707	6 690
35-39	176 906	165 780	342 686	6 670
40-44	193 044	181 721	374 765	7 296
45-49	191 027	179 225	370 252	7 207
50-54	171 267	162 268	333 535	6 492
55-59	159 267	154 545	313 812	6 108
60-64	144 314	142 076	286 390	5 575
65-69	137 419	138 420	275 839	5 369
70-74	91 579	98 590	190 168	3 702
75-79	61 848	74 977	136 825	2 663
80-84	44 003	61 964	105 967	2 063
85+	37 239	77 394	114 632	2 231

Figure 1. Age structure of the Norwegian population 1960–2040, considered the scenario for medium national growth



¹Considered the scenario of medium national growth

About the Cancer Registry of Norway

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).

Main objectives

The main objectives of the Cancer Registry of Norway 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

The following must be reported to the CRN:

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

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 November 1st 2015, the incidence registry contained information registered since 1953 on 1 743 361 cancer cases (including pre-malignant and some benign conditions) in 1 392 636 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.

A total of 4 381 214 notifications have been registered since 1969 (earlier notifications were not registered individually).

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 to be an empirical base for scientific studies concerning prognostic factors and treatment outcomes, as well as for evaluation of the quality of cancer care.

Several clinical registries are now established, and the ongoing and expanding activities of these clinical registries are a major focus for CRN. 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 4 shows the status of these clinical registries as of December 2015.

Table 4. Status of the clinical registries, December 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 lymphoid 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 beyond 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 the Cause of Death Registry provide the key information that enables the CRN to collect, code and store data on cancer patients in Norway. Information from clinical notifications, pathology reports and death certificates are the main sources. 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, 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 that was established in Norway in 1964.

Clinical notifications should be sent using the CRN electronical reporting service (KREMT) at the Norwegian Health Network. All hospitals are informed that this system has replaced paper forms by 1st July, 2015 (January 1st, 2016 for the primary health care). More information about KREMT can be found at <http://kreftregisteret.no/no/Registrene/Innmelding-til-Kreftregisteret/KREMT--Kreftregisterets-elektroniske-meldetjeneste/>

As of December 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 can-

cer 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

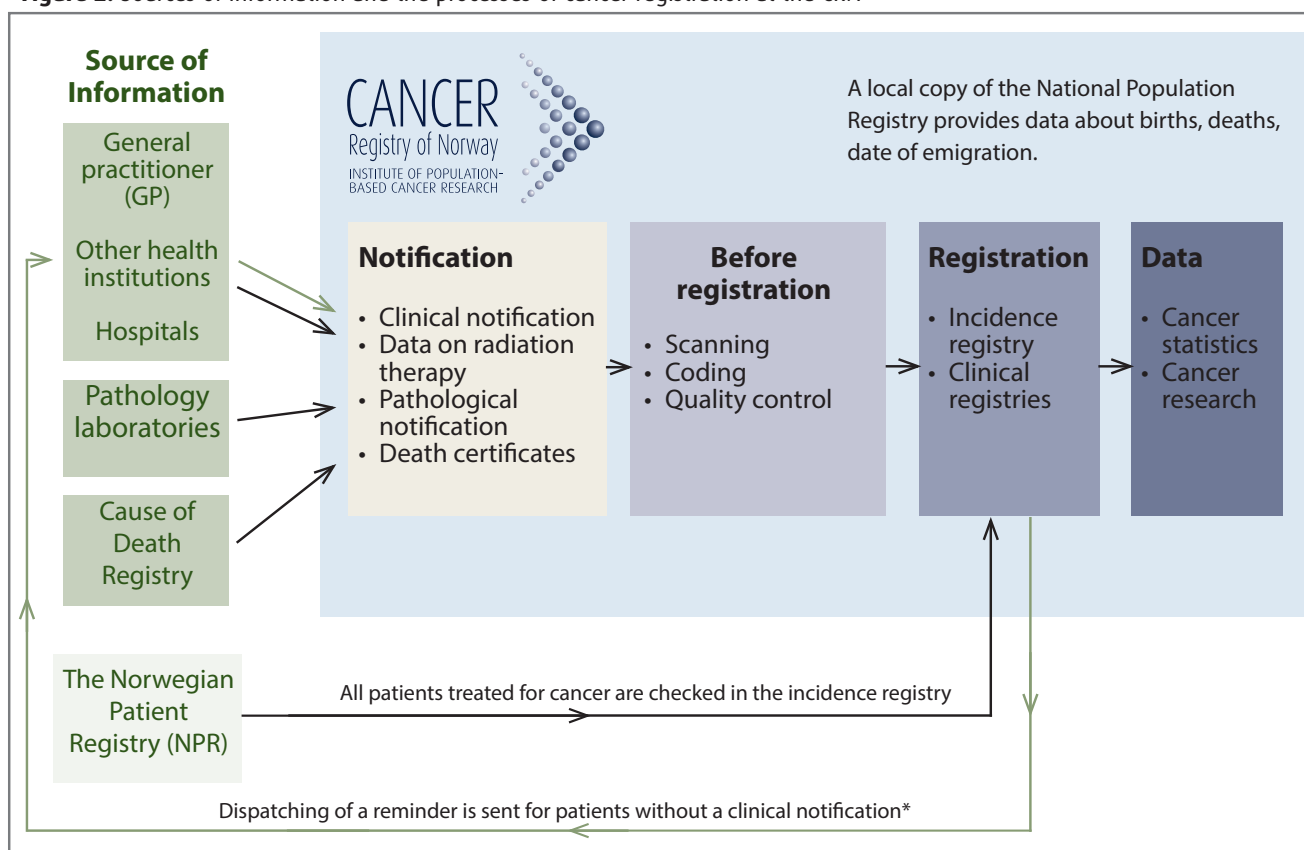
The incidence data presented in the first part of this report are based on an extraction from the incidence registry on 1st November 2015. The tables and figures in general represent either the latest year of complete incidence (2014) or the latest five-year period (2010–14).

A list of the inclusion and exclusion criteria applied to several sites with respect to morphology is shown in Table 2.

Briefly, atypical epithelial lesions are included in the lower urinary tract as well as invasive cancers. 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

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.

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 2. 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 & al, 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's sarcomas and mesotheliomas.

Metastases and changes in coding practice

For some cases, the Cancer Registry of Norway only receive histological reports and no clinical forms. In some of these cases, verified information on metastases at the time of diagnosis is missing. For patients diagnosed 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 was changed for all patients diagnosed after 01.01.2009. If a patient has major surgery and there is no clinical information that indicates metastasis, then the patient is considered to have localized disease.

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

In this report, we use four measures to describe the burden and risk of disease: incidence, mortality, survival and prevalence.

Incidence and mortality

Incidence and mortality refer to the number of new cases and deaths, 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 a group over time. The denominator is the underlying person-time at risk in which the new cases or deaths in the numerator arise. Cancer incidence and mortality are presented in this report both as numbers and rates. Several different types of rates are also used in this report. We use the mid-year population (calculated as the mean of the population as obtained by the 1st January and 31st December) as the denominator in the calculation of rates. For periods with several years, we use the sum of mid-year populations.

Age-specific rates

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

To obtain a more accurate picture of the true risk of cancer, rates can be calculated for specific 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:

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

Usually, 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 derived 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 and over time. The calculation of the ASR is an example of direct standardisation, whereby the observed age-specific rates are applied to a standard population. The population size or proportion 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.

For weight w_i in the i th age class of the standard, r_i is the age-specific rate in the i th age class. The ASR is calculated as:

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

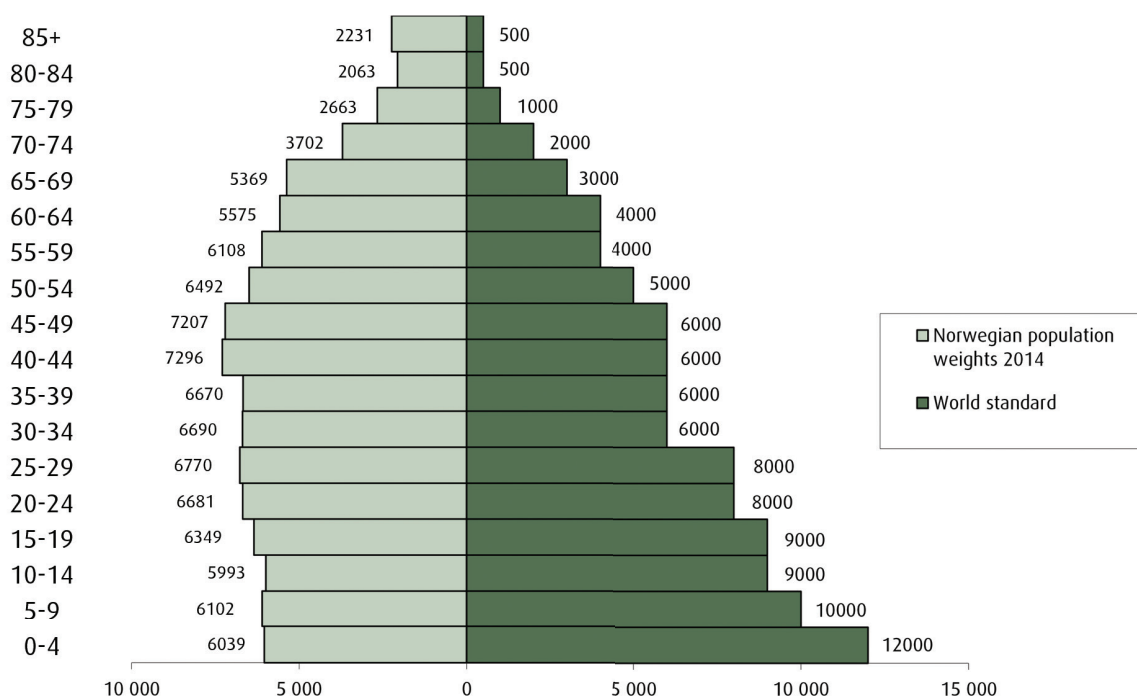
Note: In previous reports of Cancer in Norway the World Standard Population (Segi, 1960; Doll & al, 1966) has been used. Whereas in this report, the Norwegian mid-year population in 2014 is used as the reference population.

The main advantage of changing to this reference population is that we are getting age-standardised rates that resemble the crude rates for the Norwegian population. The main disadvantage is that the rates are not comparable with national rates from other countries. Table 7 shows the ASR in 2014 with different reference populations. Of notice is that the ASRs (Norway 2014) gives higher rates than the ASRs (World). In general, these changes have led to twice as high age-standardised rates. This is because the Norway 2014 reference population has higher weights for the oldest age groups. Cancers that have the highest incidence rates in the youngest age groups (e.g. testicular cancer) are less affected by the change of reference population (see Figure 4 and Table 7).

Age-standardised incidence rates (World) are available at: <http://kreftregisteret.no/no/Registrene/Kreftstatistikk/>

Figure 4 shows the age-standardised incidence rates for some selected cancers with different reference population

Figure 3. Comparison of population weights



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 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:

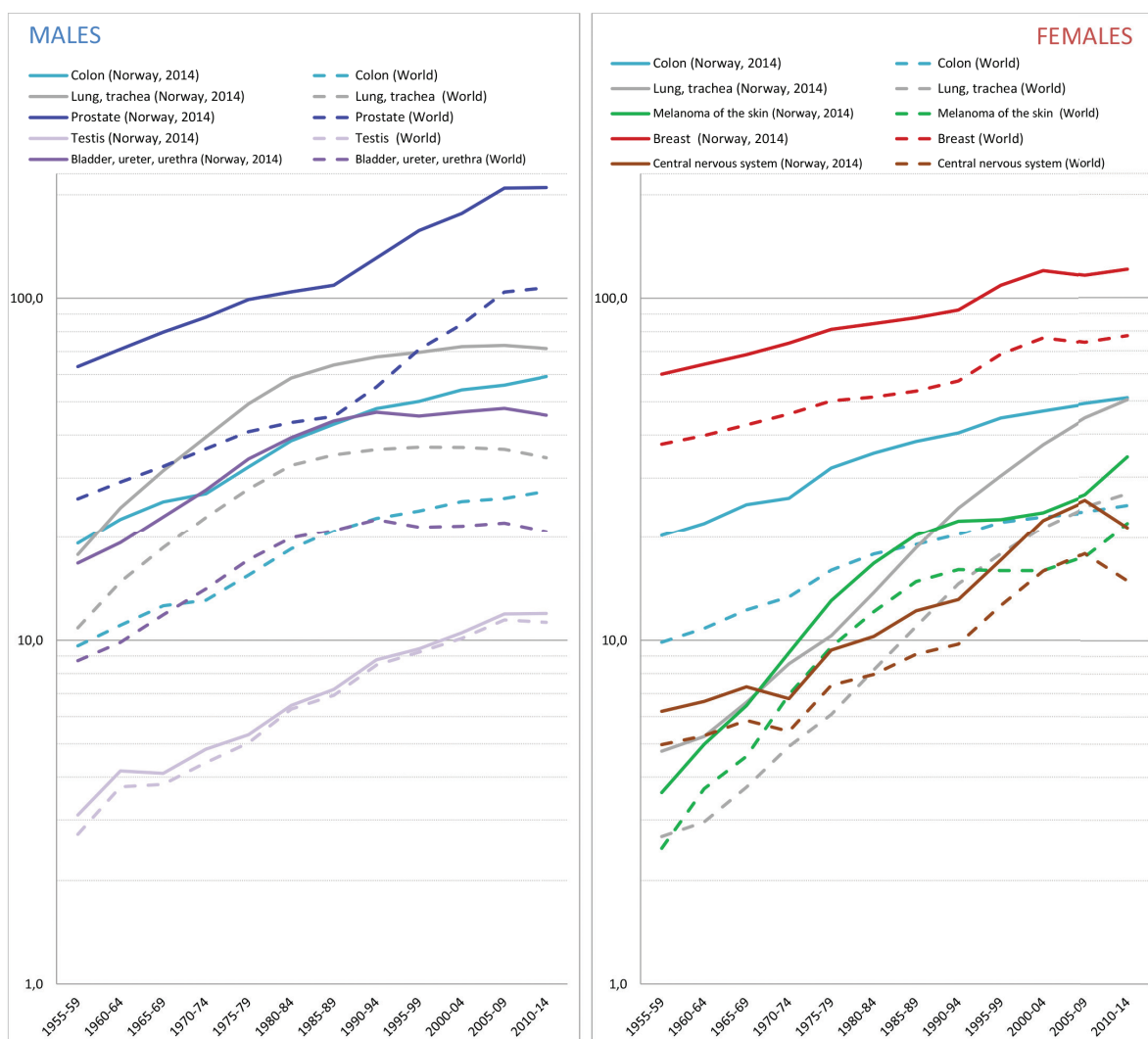
$$\text{Cumulative risk} = 1 - e^{-CR}$$

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

Figure 4. Age-standardised incidence trends in Norway for selected cancers, 1955–2014, the Norwegian mid-year population 2014 (Norway 2014) and the World Standard Population (World 1966) as reference populations.



be considered cured, that is to say they no longer have a greater risk of death. However, there may be special needs and disabilities subsequent to cancer disease and treatment, thus it is likely that the number of prevalent cancer cases also represents a useful measure.

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 data, given the registration of cases and complete follow up over many years. We provide additional estimates that may be useful for quantifying care burden. Therefore, this report shows the numbers of persons alive on 31st of December 2014 who were previously diagnosed with cancer during the last 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 elapse 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 1960–2014 were obtained from the National Population Registry and Statistics Norway through 31st of December 2014.

The 23 most common cancer sites were selected for analysis, and grouped according to their respective ICD-10 categories. About 2% 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 (Net 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 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:

$$R(t) = S_O(t) / S_E(t)$$

where $S_O(t)$ is the observed survival of cancer patients while the calculation of expected survival $S_E(t)$ 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.

Expected survival is calculated using the Ederer II method (Ederer & Heise, 1959), and the relative survival estimates are age-standardised applying the age distribution of the patients diagnosed during the most recent 5-year period. For patient cohorts with complete 5-year follow-up the cohort method is used.

With traditional cohort-based analyses, the most up-to-date estimates of long-term survival would have pertained to patients diagnosed in the distant past, with corresponding profiles of prognosis. 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 & Hakulinen, 2002).

In this report, we have used a three-year period window (2012–2014) to estimate relative survival up to 15 years. Patients diagnosed in 2011–2014 contribute with (part of) their survival experience the first year of follow up, patients diagnosed in 2010–2013 contribute to the second year of follow-up, patients diagnosed in 2009–2012 contribute to the third year of follow-up etc. Thus, the period approach consists of the pieces of survival experience observed in the period 2012–2014 for all patients who have been diagnosed up to 15 years ago.

The period-approach was also used to estimate 5-year relative survival for the most recent period (2010–2014), where full 5-year follow-up is not observed. When analysing time trends in 5-year relative survival, we used a three-year moving period window from 1965 to 2014.

Detailed description of the methods are found in supplement URL: [http://kreftregisteret.no/Global/Cancer in Norway/2014/CIN2014SupMeth.pdf](http://kreftregisteret.no/Global/Cancer%20in%20Norway/2014/CIN2014SupMeth.pdf)

Conditional relative survival

Cancer survivors want information on their current prognosis, once they have survived a certain period of time. 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 time where five-year relative survival reaches 100% is the point from where there is no excess mortality among the cancer patients, and prognosis is equivalent to that experienced in the general population. 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 less than twenty patients alive ($n < 20$).

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 were 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 5, 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 & al, 2000).

Completeness and timeliness of incidence

Table 6 shows the number of cancer cases diagnosed in 2013 as extracted on 2nd February 2015 (for CiN 2013), and on the 2nd November 2015. The number of cancer cases diagnosed in 2013 reported and appearing in this issue (CiN 2014) are 395 (1.3%) more than those reported in the previous Cancer in Norway (CiN 2013).

Common cancers such as colon, prostate and breast cancers appear to have been almost complete when CiN 2013 was published (difference $\leq 1.0\%$). The largest differences were shown for rare cancers such as C38 Mediastinum, pleura (non-mesothelioma) (30%).

Table 5 Percentage distribution of MV (morphologically verified) and DCO (death certificate only) by primary site 2010–2014

ICD10	Site	Cases	MV%	DCO%
C00–96	All sites	151621	95.1	1.1
C00–14	Mouth, pharynx	2762	99.3	0.3
C00	Lip	610	100.0	0.0
C01–02	Tongue	576	99.8	0.0
C03–06	Mouth, other	486	99.4	0.6
C07–08	Salivary glands	271	98.9	0.4
C09–14	Pharynx	819	98.7	0.5
C15–26	Digestive organs	31152	94.3	1.4
C15	Oesophagus	1292	97.9	0.9
C16	Stomach	2419	97.7	1.2
C17	Small intestine	742	97.8	1.1
C18	Colon	13510	96.4	1.0
C19–20	Rectum, rectosigmoid	6487	98.7	0.2
C21	Anus	375	98.4	0.5
C22	Liver	1108	82.0	2.9
C23–24	Gallbladder, bile ducts	887	87.5	3.3
C25	Pancreas	3646	81.9	2.7
C26	Other digestive organs	686	80.8	11.2
C30–34, C38	Respiratory organs	15512	90.8	1.8
C30–31	Nose, sinuses	230	99.1	0.4
C32	Larynx, epiglottis	617	99.5	0.0
C33–34	Lung, trachea	14590	90.3	1.9
C38	Mediastinum, pleura (non-mesothelioma)	75	82.7	9.3
C40–41	Bone	250	97.2	2.0
C43	Melanoma of the skin	8803	99.9	0.1
C44	Skin, non-melanoma	8472	99.8	0.1
C45	Mesothelioma	406	95.3	0.2
C47	Autonomic nervous system	49	98.0	0.0
C48–49	Soft tissues	769	97.8	0.5
C50	Breast	15577	99.4	0.3
C51–58	Female genital organs	8178	97.7	0.8
C53	Cervix uteri	1547	99.5	0.3
C54	Corpus uteri	3644	99.3	0.3
C55	Uterus, other	39	74.4	20.5
C56	Ovary	2195	94.6	1.5
C51–52, C57	Other female genital	738	96.7	1.9
C58	Placenta	15	80.0	0.0
C60–63	Male genital organs	25658	98.4	0.8
C61	Prostate	23899	98.3	0.8
C62	Testis	1527	99.7	0.1
C60, C63	Other male genital	232	99.1	0.0
C64–68	Urinary organs	11206	96.7	0.9
C64	Kidney excl. renal pelvis	3887	93.5	1.4
C65	Renal pelvis	472	96.4	0.0
C66–68	Bladder, ureter, urethra	6847	98.5	0.7
C69	Eye	356	59.0	0.0
C70–72, D32–33	Central nervous system	5094	65.5	1.7
C73	Thyroid gland	1610	99.6	0.1
C37, C74–75	Other endocrine glands	1128	67.7	0.6
C39, C76, C80	Other or unspecified	1596	61.3	16.0
C81–96	Lymphoid and haematopoietic tissue	13043	98.3	1.0
C81	Hodgkin lymphoma	675	99.6	0.1
C82–86, C96	Non-Hodgkin lymphoma	4870	99.0	0.5
C88	Malignant immunoproliferative diseases	326	98.8	0.9
C90	Multiple myeloma	1928	97.9	1.4
C91–95, D45–47	Leukaemia	5244	97.7	1.4

Table 6 Registered cancer cases in Norway, 2013 as obtained from the incidence registry extracted 2nd February 2015 and 1st November 2015

ICD10	Site	Cases diagnosed 2013 as of			
		02.02.2015	02.11.2015	Difference	%
C00–96	All sites	30401	30796	395	1.3
C00–14	Mouth, pharynx	536	535	-1	-0.2
C00	Lip	111	112	1	0.9
C01–02	Tongue	125	126	1	0.8
C03–06	Mouth, other	111	108	-3	-2.7
C07–08	Salivary glands	48	47	-1	-2.1
C09–14	Pharynx	141	142	1	0.7
C15–26	Digestive organs	6354	6430	76	1.2
C15	Oesophagus	255	261	6	2.4
C16	Stomach	457	464	7	1.5
C17	Small intestine	132	134	2	1.5
C18	Colon	2781	2788	7	0.3
C19–20	Rectum, rectosigmoid	1346	1377	31	2.3
C21	Anus	64	73	9	14.1
C22	Liver	249	251	2	0.8
C23–24	Gallbladder, bile ducts	193	197	4	2.1
C25	Pancreas	732	747	15	2.0
C26	Other digestive organs	145	138	-7	-4.8
C30–34, C38	Respiratory organs	3037	3098	61	2.0
C30–31	Nose, sinuses	48	51	3	6.3
C32	Larynx, epiglottis	123	126	3	2.4
C33–34	Lung, trachea	2856	2908	52	1.8
C38	Mediastinum, pleura (non-mesothelioma)	10	13	3	30.0
C40–41	Bone	43	44	1	2.3
C43	Melanoma of the skin	1719	1738	19	1.1
C44	Skin, non-melanoma	1717	1719	2	0.1
C45	Mesothelioma	89	89	0	0.0
C47	Autonomic nervous system	11	12	1	9.1
C48–49	Soft tissues	170	169	-1	-0.6
C50	Breast	3256	3244	-12	-0.4
C51–58	Female genital organs	1590	1608	18	1.1
C53	Cervix uteri	282	290	8	2.8
C54	Corpus uteri	768	768	0	0.0
C55	Uterus, other	8	8	0	0.0
C56	Ovary	388	399	11	2.8
C51–52, C57	Other female genital	143	142	-1	-0.7
C58	Placenta	1	1	0	0.0
C60–63	Male genital organs	5219	5233	14	0.3
C61	Prostate	4836	4856	20	0.4
C62	Testis	337	331	-6	-1.8
C60, C63	Other male genital	46	46	0	0.0
C64–68	Urinary organs	2304	2308	4	0.2
C64	Kidney excl. renal pelvis	760	764	4	0.5
C65	Renal pelvis	110	110	0	0.0
C66–68	Bladder, ureter, urethra	1434	1434	0	0.0
C69	Eye	78	78	0	0.0
C70–72, D32–33	Central nervous system	878	970	92	10.5
C73	Thyroid gland	349	355	6	1.7
C37, C74–75	Other endocrine glands	178	218	40	22.5
C39, C76, C80	Other or unspecified	342	330	-12	-3.5
C81–96	Lymphoid and haematopoietic tissue	2531	2618	87	3.4
C81	Hodgkin lymphoma	128	127	-1	-0.8
C82–86, C96	Non-Hodgkin lymphoma	971	968	-3	-0.3
C88	Malignant immunoproliferative diseases	55	69	14	25.5
C90	Multiple myeloma	380	393	13	3.4
C91–95, D45–47	Leukaemia	997	1061	64	6.4

Cancer incidence, prevalence, mortality and survival in Norway 2014

Incidence

In 2014, there were 31 651 new cases of cancer (in 30 996 persons) recorded in Norway, of which 17 024 occurred among men and 14 627 among women (Table 7). Cancers of the prostate, female breast, lung and colon were the most common cancers and accounted for 44% of the new cancer cases in 2014.

In men, prostate cancer continued to be the leading site for cancer incidence (4 889 cases), followed by lung (1 596 cases) and colon cancer (1 359 cases). Breast cancer remained the most frequent cancer in women, with 3 324 new cases in 2014, followed by colon and lung cancer, with 1 442 and 1 423 incident cases, respectively.

When comparing the last five-year period (2010–2014) with the previous one (2005–2009) we observe that:

- There has been an overall increase in rates for all cancers combined at about 3% for men and 4% for women.
- Prostate cancer rates appear to stabilise, while the rates for breast cancer have increased with 4%.
- The rates of malignant melanoma have increased remarkably for both men and women.
- Colon cancer rates have increased slightly, while the rates for rectum cancer have stabilised in both men and women.
- The steady rise in lung cancer rates for women are a matter of great concern. The rates did show some signs of stabilisation in the past three years, but in 2014, we observe a new peak in incidence. The rate for the last five-year period was still higher than for the previous period.
- The rates of lung and bladder cancer in men have declined slightly

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

- It is also worth mentioning that we suspect the falling rates of CNS cancer to 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 5). In men, nearly half are diagnosed at age 70 or older, while 44% of all new cases occur between the ages 50 and 69. In women, 45% are diagnosed at age 70 or older, and 40% are diagnosed between 50 and 69. A larger proportion of cancers are diagnosed in women than men at the age 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 6 shows the cancer types that are at the most common at different ages. The most commonly occurring cancers in boys and girls (0–14 years old) are tumours in the central nervous system and leukaemia. For young women (15–24) tumours in the central nervous system and Hodgkin lymphoma were the most common cancers, while testicular cancer was by far the most common one diagnosed in young men. Prostate cancer was the most frequent cancer in men above 50, while breast cancer was the lead in women from age 25 through to 69. Colon cancer was the most common cancer in women above 70.

Figure 5. Percentage distribution of cancer incidence by age, 2010–2014

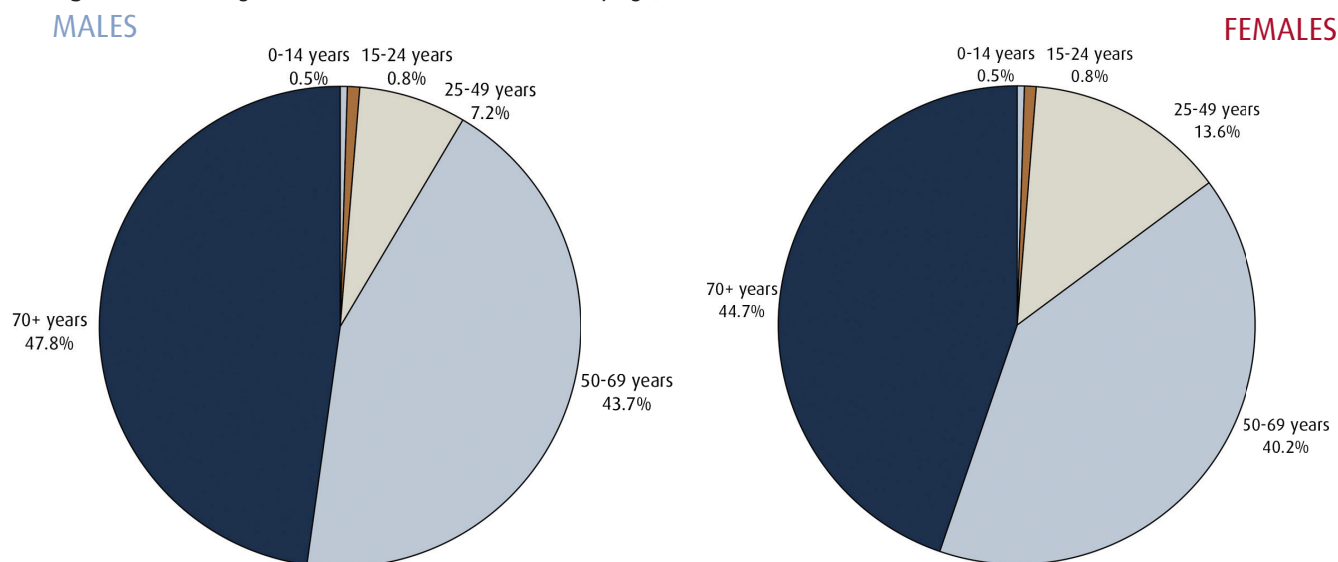


Table 7 Number of new cases by primary site and sex, 2014

ICD10	Site	Cases			Rate (Norway 2014)		Rate (world standard)	
		Males	Females	Total	Males	Females	Males	Females
C00-96	All sites	17024	14627	31651	718.0	539.5	372.2	310.7
C00-14	Mouth, pharynx	401	219	620	16.3	8.1	9.5	4.8
C00	Lip	75	48	123	3.3	1.7	1.5	0.8
C01-02	Tongue	83	49	132	3.3	1.8	2.1	1.1
C03-06	Mouth, other	60	51	111	2.4	1.8	1.4	1.0
C07-08	Salivary glands	45	26	71	1.9	1.0	1.1	0.7
C09-14	Pharynx	138	45	183	5.5	1.7	3.4	1.2
C15-26	Digestive organs	3419	3043	6462	145.9	109.1	71.4	54.5
C15	Oesophagus	220	69	289	9.2	2.5	4.7	1.3
C16	Stomach	301	187	488	12.9	6.7	6.2	3.4
C17	Small intestine	91	71	162	3.8	2.5	2.1	1.2
C18	Colon	1359	1442	2801	59.2	51.4	27.3	25.0
C19-20	Rectum, rectosigmoid	798	567	1365	33.4	20.7	17.5	11.0
C21	Anus	25	61	86	1.0	2.3	0.6	1.4
C22	Liver	136	83	219	5.6	3.0	3.0	1.5
C23-24	Gallbladder, bile ducts	74	101	175	3.0	3.6	1.6	1.7
C25	Pancreas	360	376	736	15.3	13.5	7.4	6.8
C26	Other digestive organs	55	86	141	2.4	2.9	1.1	1.2
C30-34, C38	Respiratory organs	1748	1464	3212	74.5	54.0	35.8	28.7
C30-31	Nose, sinuses	30	17	47	1.3	0.6	0.7	0.3
C32	Larynx, epiglottis	114	19	133	4.8	0.7	2.5	0.3
C33-34	Lung, trachea	1596	1423	3019	68.0	52.5	32.5	28.0
C38	Mediastinum, pleura (non-mesothelioma)	8	5	13	0.3	0.2	0.2	0.1
C40-41	Bone	27	30	57	1.0	1.2	0.9	0.9
C43	Melanoma of the skin	1015	988	2003	42.2	37.1	23.3	23.2
C44	Skin, non-melanoma	1005	917	1922	46.7	31.0	17.7	12.6
C45	Mesothelioma	55	11	66	2.3	0.4	1.1	0.2
C47	Autonomic nervous system	6	9	15	0.2	0.3	0.2	0.4
C48-49	Soft tissues	61	86	147	2.5	3.3	1.6	2.4
C50	Breast	24	3324	3348	1.0	126.5	0.5	80.7
C51-8	Female genital organs		1687	1687		63.3		39.3
C53	Cervix uteri		338	338		13.3		10.6
C54	Corpus uteri		727	727		27.1		15.3
C55	Uterus, other		12	12		0.4		0.2
C56	Ovary		424	424		15.8		9.5
C51-52, C57	Other female genital		184	184		6.7		3.6
C58	Placenta		2	2		0.1		0.1
C60-63	Male genital organs	5268		5268	218.0		117.0	
C61	Prostate	4889		4889	203.3		104.2	
C62	Testis	321		321	12.2		11.6	
C60, C63	Other male genital	58		58	2.5		1.3	
C64-68	Urinary organs	1732	638	2370	73.7	23.3	36.5	12.4
C64	Kidney excl. renal pelvis	579	235	814	23.4	8.8	13.5	5.2
C65	Renal pelvis	66	40	106	2.9	1.4	1.3	0.7
C66-68	Bladder, ureter, urethra	1087	363	1450	47.4	13.1	21.7	6.5
C69	Eye	49	43	92	2.0	1.6	1.2	1.0
C70-2, D32-33	Central nervous system	457	502	959	18.4	19.1	12.8	13.0
C73	Thyroid gland	114	239	353	4.5	9.3	3.0	7.1
C37, C74-75	Other endocrine glands	111	90	201	4.4	3.5	3.1	2.6
C39, C76, C80	Other or unspecified	155	165	320	7.0	5.6	3.1	2.2
C81-96	Lymphoid and haematopoietic tissue	1377	1172	2549	57.4	42.8	33.2	24.6
C81	Hodgkin lymphoma	76	58	134	3.0	2.3	2.5	2.1
C82-86, C96	Non-Hodgkin lymphoma	539	443	982	22.5	16.3	12.4	8.9
C88	Malignant immunoproliferative diseases	29	31	60	1.2	1.1	0.6	0.6
C90	Multiple myeloma	188	183	371	7.8	6.5	4.2	3.2
C91-95, D45-47	Leukaemia	545	457	1002	22.9	16.6	13.4	9.9

Figure 6. The most frequent types of cancer by age and sex, 2010–2014**A MALES** all ages (81 991 cases)**B FEMALE** all ages (69 630 cases)

Incidence

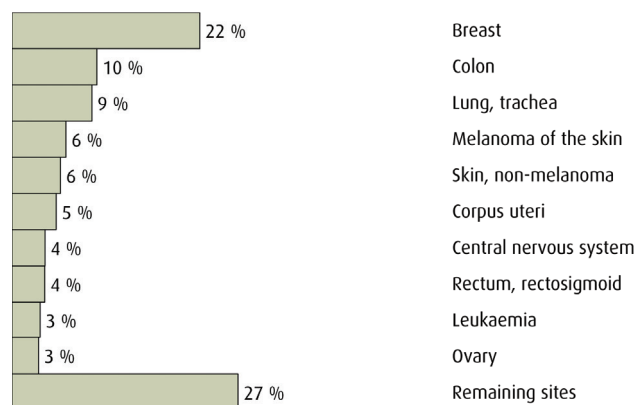
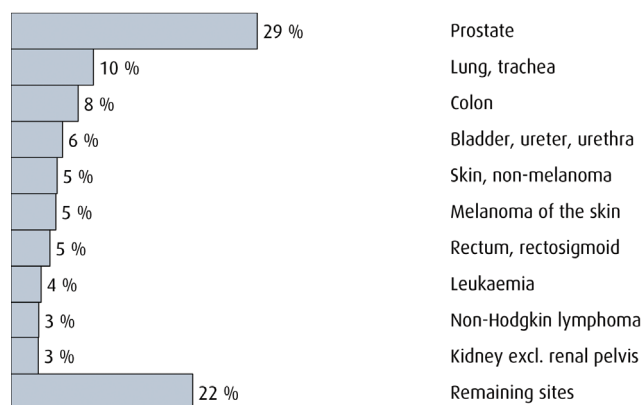
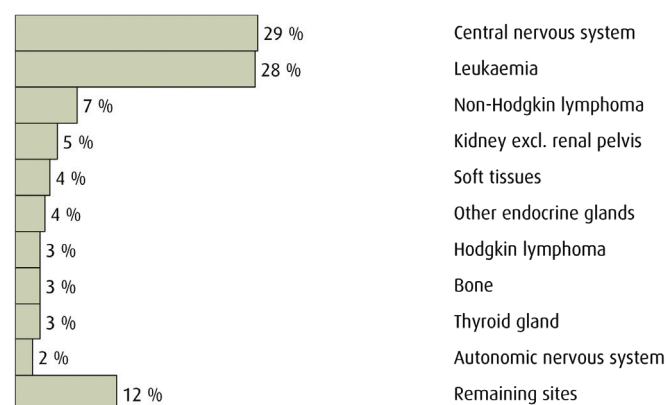
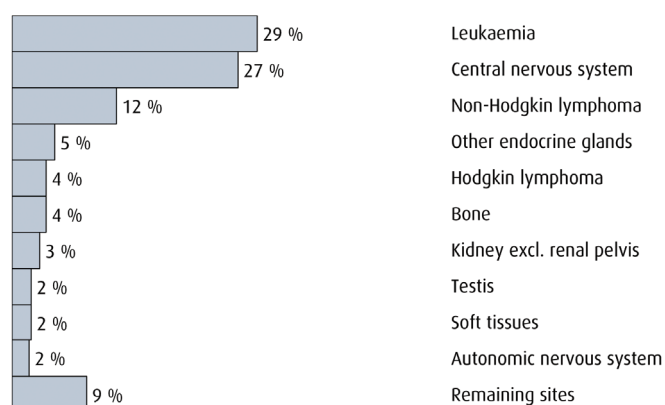
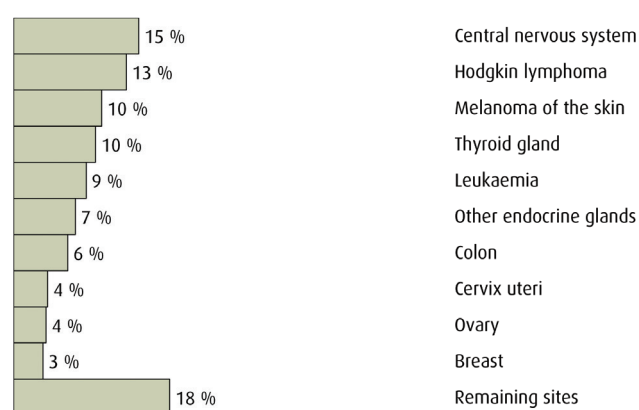
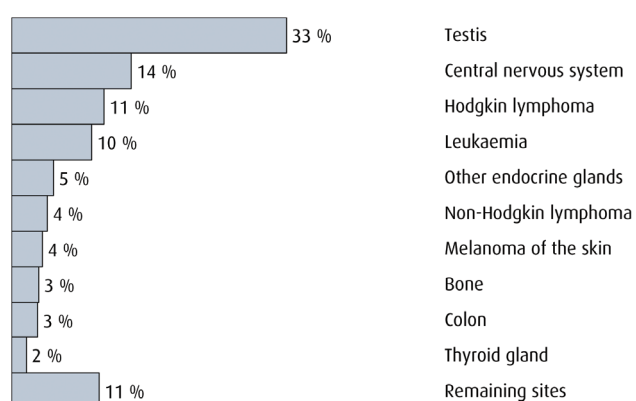
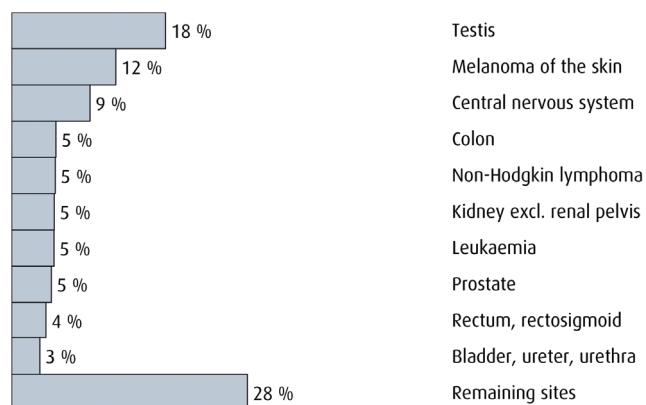
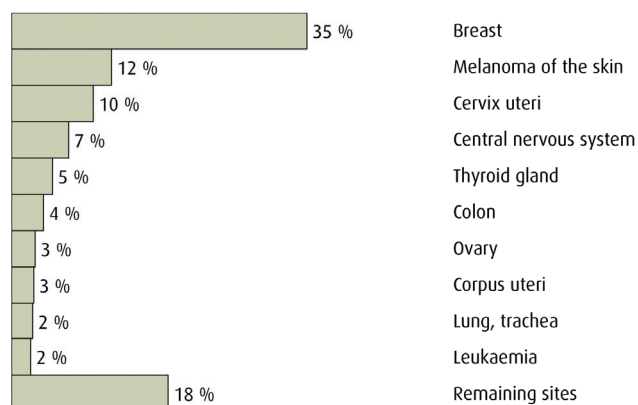
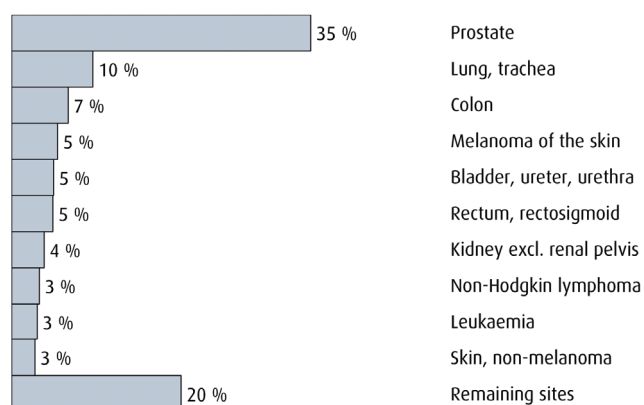
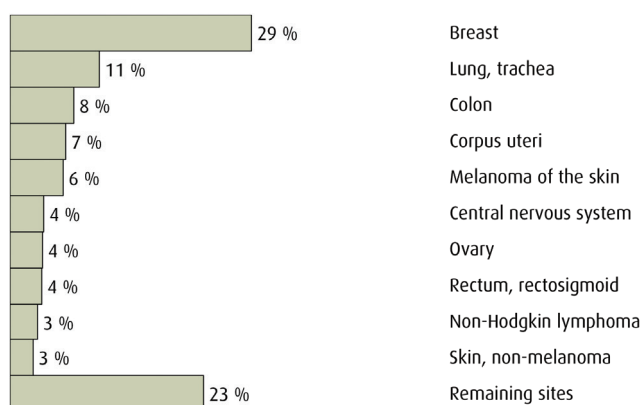
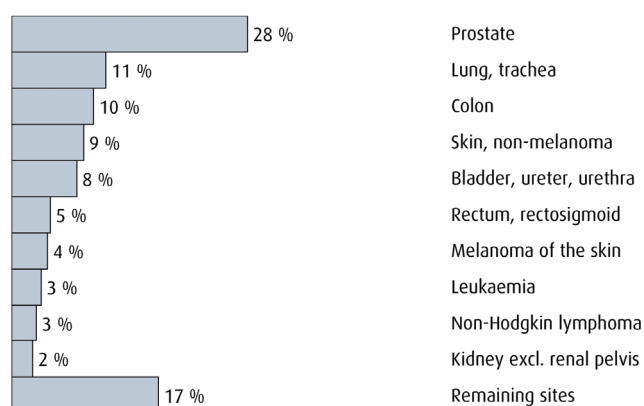
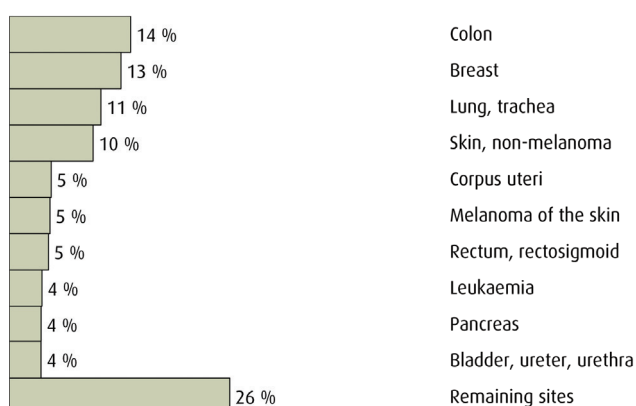
**C MALES** 0–14 years (396 cases)**D FEMALE** 0–14 years (341 cases)**E MALES** 15–24 years (674 cases)**F FEMALE** 15–24 years (549 cases)

Figure 6. The most frequent types of cancer by age and sex, 2010–2014**G MALES 25–49 years (5 912 cases)****H FEMALE 25–49 years (9 454 cases)****I MALES 50–69 years (35 827 cases)****J FEMALE 50–69 years (28 130 cases)****K MALES 70+ years (39 182 cases)****L FEMALE 70+ years (31 156 cases)**

The age-standardised rates and male to female ratio (M:F) for selected cancer types in 1980–1984 and 2010–2014 are compared in Table 8. Men tend to have higher incidence rates 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 were observed for several of the head and neck cancers.

Some cancers, including cancer of the bladder, kidney, liver, stomach, rectum and leukaemia, 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 declining incidence trends in men and increasing pattern trends in women for a number of cancer types. This is especially striking for lung cancer.

Table 8 Sex ratios (male:female) of age-standardised rates (Norway, 2014) in 1980–1984 and 2010–2014 by primary site, sorted in descending order in last period

ICD10	Site	1980–84			2010–14		
		M	F	M:F ratio	M	F	M:F ratio
C32	Larynx, epiglottis	5.6	0.6	9.5	4.6	0.7	6.3
C15	Oesophagus	5.2	1.6	3.3	8.5	2.4	3.5
C66–68	Bladder, ureter, urethra	39.3	11.2	3.5	45.7	13.4	3.4
C09–14	Pharynx	2.9	1.0	3.0	4.9	1.8	2.8
C64	Kidney excl. renal pelvis	14.3	7.2	2.0	22.6	9.4	2.4
C22	Liver	3.6	1.9	1.9	6.1	3.0	2.1
C16	Stomach	37.1	18.8	2.0	13.5	6.6	2.1
C00	Lip	6.4	1.0	6.3	3.4	1.7	1.9
C01–02	Tongue	2.0	1.0	2.0	3.1	1.6	1.9
C65	Renal pelvis	1.8	0.7	2.6	2.5	1.4	1.7
C19–20	Rectum, rectosigmoid	30.1	19.0	1.6	33.3	20.3	1.6
C91–95, D45–47	Leukaemia	14.1	8.7	1.6	16.2	10.5	1.5
C90	Multiple myeloma	9.3	5.9	1.6	9.5	6.3	1.5
C82–86, C96	Non-Hodgkin lymphoma	11.2	8.4	1.3	23.5	16.5	1.4
C33–34	Lung, trachea	58.6	13.8	4.3	71.4	50.4	1.4
C81	Hodgkin lymphoma	2.9	1.8	1.7	3.0	2.4	1.2
C25	Pancreas	17.8	11.8	1.5	15.9	13.7	1.2
C18	Colon	38.5	35.4	1.1	59.2	51.1	1.2
C43	Melanoma of the skin	14.0	16.8	0.8	37.7	34.3	1.1
C23–24	Gallbladder, bile ducts	2.6	3.8	0.7	3.6	3.6	1.0
C21	Anus	0.6	1.1	0.6	1.0	2.0	0.5
C73	Thyroid gland	2.7	7.4	0.4	3.9	9.1	0.4

Figure 7 depicts time trends in incidence for a number of common cancers. Of note are:

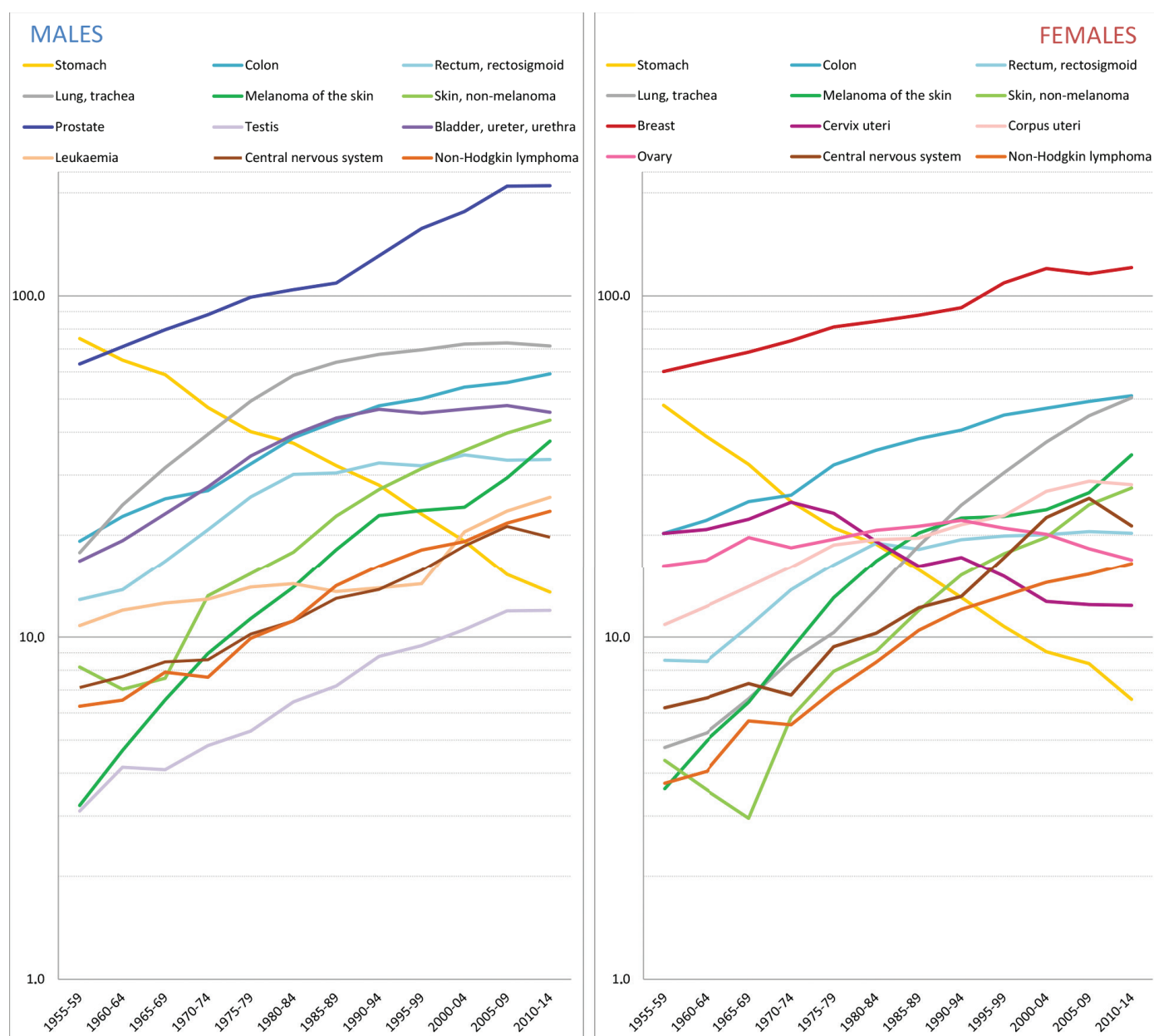
The incidence has increased for most cancer types since the first observation period in Norway (1955–59). Among common cancers, the most pronounced increases were seen for lung cancer, skin cancer (both malignant melanoma and non-melanoma), non-Hodgkin lymphoma, tumours of the central nervous system, colon and rectum cancer, prostate cancer, and testicular cancer.

Stomach cancer is one of the few that demonstrates a declining 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 monotonous drop in incidence over 6 decades illustrates the vast potential for prevention that might be ascribed to improvement in hygiene and environmental exposures. Changes in the prevalence of *Helicobacter pylori* infection and in dietary habits (refrigerators) are likely contributors to this trend.

The incidence of prostate cancer has increased fourfold over the last 60 years. A dramatic upsurge from around 1990 illustrates the influence of changes in diagnostic pressure from general practitioners' screening practice and health exams. 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 was monotonous upwards until 2005, somewhat steeper rise in the late 1990s following the implementation of the Norwegian Breast Cancer Screening Programme. During the last decade, the rate has varied from one year to another. This might be due to better diagnostic methods being used in the programme or locally in studies, but might also reflect random fluctuations.

In women, the incidence of lung cancer has increased almost tenfold since the beginning of the 1950's, and it is a highly disquieting cancer problem. The incidence of lung

Figure 7. Time trends in age-standardised incidence rates (Norway) in Norway for selected cancers (semi log-scale), 1955–2014

cancer among men has been flattening off in the last two decades, and we are now seeing a tendency toward a decline. This pattern is however not observed for women, where the overall trend is still increasing, and the incidence is currently at the same level as that of colon cancer.

Melanoma of the skin is another great concern. From being an uncommon cancer in 1953, it now ranges among the leading ones among men and women alike. After a period with levelling off 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 treatment of premalignant conditions as part of an organised screening programme. In 2009, Vaccina-

tion against human papilloma virus (HPV) was introduced as part of the Childhood Immunisation Programme in Norway for girls born in 1997 and then after. Still, we do not expect this primary prevention to affect the incidence rate for another 15 to 20 years.

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

More detailed trends in 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.

Table 9 and Figure 8 show the cumulative risk of cancer for the 15 most common cancers in men and women. The cumulative risk of 13.5% for prostate cancer ranks highest in males, indicating that, 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 24 men expected to have such a diagnosis before the age of 75.

The cumulative risk of breast cancer ranks the highest in women, with the figure of 8.4% indicating that about one in 12 Norwegian women develop this disease before she is 75. As with men, lung and colon cancers rank second and third.

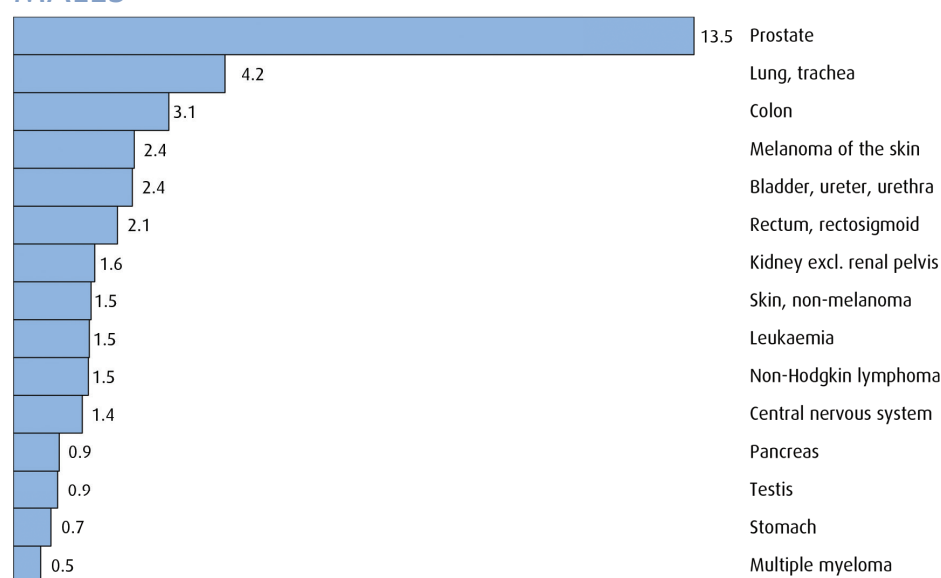
Tables 10–19 provide further information on the distribution of cancer incidence in Norway. The number of incident cases and rates are tabulated according to year of diagnosis, age group, county of residence, and stage.

Further information

This report is available online at the website for Cancer Registry of Norway.

Figure 8. Cumulative risk of developing cancer (%) by the age of 75 for selected cancers by sex, 2010–2014

MALES



FEMALES

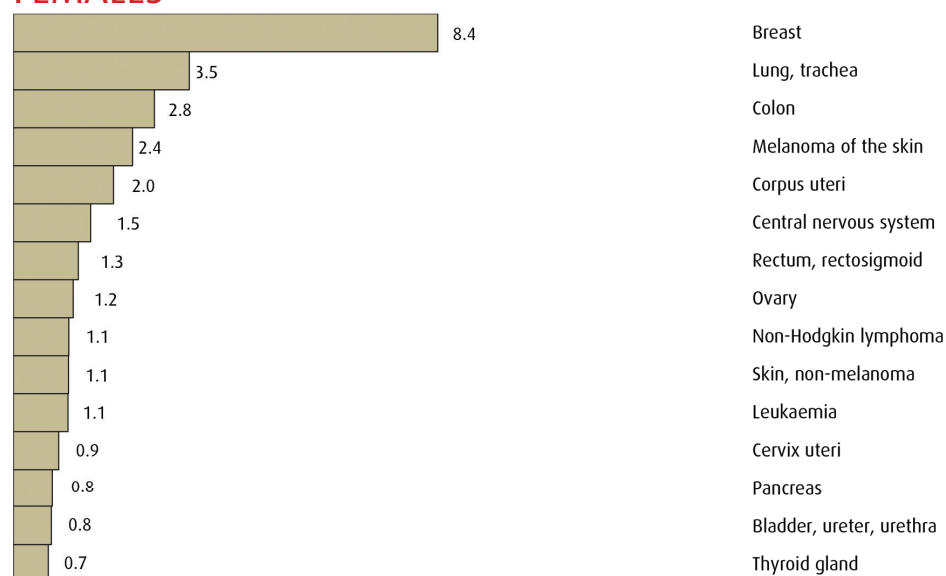


Table 9 Cumulative risk of developing cancer (%) by the age of 75 by primary site and sex, 2010–2014

ICD10	Site	Males	Females
C00–96	All sites	36.0	29.1
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	8.1	6.0
C15	Oesophagus	0.5	0.1
C16	Stomach	0.7	0.3
C17	Small intestine	0.2	0.1
C18	Colon	3.1	2.8
C19–20	Rectum, rectosigmoid	2.1	1.3
C21	Anus	0.1	0.1
C22	Liver	0.4	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	3.6
C30–31	Nose, sinuses	0.1	0.0
C32	Larynx, epiglottis	0.3	0.0
C33–34	Lung, trachea	4.2	3.5
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0
C40–41	Bone	0.1	0.1
C43	Melanoma of the skin	2.4	2.4
C44	Skin, non-melanoma	1.5	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	8.4
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	14.3	
C61	Prostate	13.5	
C62	Testis	0.9	
C60, C63	Other male genital	0.1	
C64–68	Urinary organs	4.1	1.5
C64	Kidney excl. renal pelvis	1.6	0.6
C65	Renal pelvis	0.1	0.1
C66–68	Bladder, ureter, urethra	2.4	0.8
C69	Eye	0.1	0.1
C70–72, D32–33	Central nervous system	1.4	1.5
C73	Thyroid gland	0.3	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	2.8
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	0.5	0.4
C91–95, D45–47	Leukaemia	1.5	1.1

Table 10a Number of new cases by primary site and year, 2005–2014

MALES

ICD10	Site	Year									
		2005	06	07	08	09	10	11	12	13	2014
C00–96	All sites	13376	13665	14610	14793	15181	15286	16338	16671	16672	17024
C00–14	Mouth, pharynx	252	276	279	272	349	315	330	366	340	401
C00	Lip	50	68	66	56	84	79	81	72	62	75
C01–02	Tongue	44	46	57	63	74	59	70	71	81	83
C03–06	Mouth, other	40	53	41	43	68	52	39	58	63	60
C07–08	Salivary glands	26	14	18	18	23	28	18	30	29	45
C09–14	Pharynx	92	95	97	92	100	97	122	135	105	138
C15–26	Digestive organs	2776	2729	2859	2938	2954	3237	3135	3328	3413	3419
C15	Oesophagus	133	148	132	161	149	188	182	176	198	220
C16	Stomach	304	303	337	300	263	299	324	286	302	301
C17	Small intestine	50	66	67	65	82	72	87	104	87	91
C18	Colon	1075	1076	1106	1174	1124	1300	1233	1301	1331	1359
C19–20	Rectum, rectosigmoid	670	640	636	675	731	745	695	750	798	798
C21	Anus	22	15	18	20	20	34	20	24	15	25
C22	Liver	78	89	98	99	98	129	132	136	170	136
C23–24	Gallbladder, bile ducts	85	58	59	66	74	87	58	87	96	74
C25	Pancreas	326	303	367	341	360	320	333	403	359	360
C26	Other digestive organs	33	31	39	37	53	63	71	61	57	55
C30–34, C38	Respiratory organs	1552	1612	1627	1624	1663	1684	1771	1782	1722	1748
C30–31	Nose, sinuses	23	16	27	24	23	19	22	32	32	30
C32	Larynx, epiglottis	101	116	78	113	90	106	100	98	105	114
C33–34	Lung, trachea	1418	1470	1503	1481	1542	1549	1639	1642	1577	1596
C38	Mediastinum, pleura (non-mesothelioma)	10	10	19	6	8	10	10	10	8	8
C40–41	Bone	26	24	21	23	37	27	28	33	18	27
C43	Melanoma of the skin	595	560	581	672	703	746	871	891	842	1015
C44	Skin, non-melanoma	651	749	727	774	853	822	859	887	908	1005
C45	Mesothelioma	74	56	63	64	69	79	64	65	78	55
C47	Autonomic nervous system	7	7	7	9	7	6	5	5	6	6
C48–49	Soft tissues	50	62	67	49	71	52	67	81	78	61
C50	Breast	18	14	19	21	15	13	27	28	36	24
C60–63	Male genital organs	4007	4186	4788	4784	4746	4575	5309	5273	5233	5268
C61	Prostate	3707	3897	4448	4434	4384	4262	4985	4907	4856	4889
C62	Testis	251	253	297	300	314	267	286	322	331	321
C60, C63	Other male genital	49	36	43	50	48	46	38	44	46	58
C64–68	Urinary organs	1302	1328	1448	1434	1469	1467	1528	1586	1634	1732
C64	Kidney excl. renal pelvis	366	363	400	416	427	489	524	533	536	579
C65	Renal pelvis	28	47	52	57	50	57	37	53	65	66
C66–68	Bladder, ureter, urethra	908	918	996	961	992	921	967	1000	1033	1087
C69	Eye	28	37	29	40	26	37	26	29	34	49
C70–72, D32–33	Central nervous system	464	434	506	457	462	469	487	493	460	457
C73	Thyroid gland	69	77	67	58	73	81	77	93	107	114
C37, C74–75	Other endocrine glands	102	95	140	135	147	110	117	134	103	111
C39, C76, C80	Other or unspecified	216	201	176	170	171	144	167	126	152	155
C81–96	Lymphoid and haematopoietic tissue	1187	1218	1206	1269	1366	1422	1470	1471	1508	1377
C81	Hodgkin lymphoma	63	67	68	77	81	77	67	81	74	76
C82–86, C96	Non-Hodgkin lymphoma	424	469	427	467	487	559	510	540	553	539
C88	Malignant immunoproliferative diseases	32	33	36	34	28	31	32	50	36	29
C90	Multiple myeloma	221	184	189	208	224	209	239	208	224	188
C91–95, D45–47	Leukaemia	447	465	486	483	546	546	622	592	621	545

Table 10b Number of new cases by primary site and year, 2005–2014

FEMALES

ICD10	Site	Year									
		2005	06	07	08	09	10	11	12	13	2014
C00–96	All sites	12211	12457	12539	12736	13059	13334	13833	13712	14124	14627
C00–14	Mouth, pharynx	182	194	162	192	172	210	202	184	195	219
C00	Lip	41	43	49	50	37	55	46	42	50	48
C01–02	Tongue	32	38	23	33	34	33	38	47	45	49
C03–06	Mouth, other	43	54	37	43	46	43	44	31	45	51
C07–08	Salivary glands	26	22	23	25	17	32	29	16	18	26
C09–14	Pharynx	40	37	30	41	38	47	45	48	37	45
C15–26	Digestive organs	2624	2684	2695	2747	2855	2745	2874	2941	3017	3043
C15	Oesophagus	60	45	56	59	54	65	60	71	63	69
C16	Stomach	235	218	216	212	222	177	199	182	162	187
C17	Small intestine	41	45	55	52	76	60	65	58	47	71
C18	Colon	1198	1286	1267	1281	1360	1271	1392	1424	1457	1442
C19–20	Rectum, rectosigmoid	519	516	506	518	519	529	529	497	579	567
C21	Anus	45	41	42	42	49	53	38	47	58	61
C22	Liver	58	44	54	66	66	78	80	83	81	83
C23–24	Gallbladder, bile ducts	82	78	83	82	85	92	88	103	101	101
C25	Pancreas	326	372	361	372	363	349	366	392	388	376
C26	Other digestive organs	60	39	55	63	61	71	57	84	81	86
C30–34, C38	Respiratory organs	994	1077	1164	1200	1198	1322	1282	1361	1376	1464
C30–31	Nose, sinuses	17	19	33	16	12	20	20	19	19	17
C32	Larynx, epiglottis	19	12	17	23	20	19	16	19	21	19
C33–34	Lung, trachea	951	1040	1106	1157	1158	1275	1239	1319	1331	1423
C38	Mediastinum, pleura (non-mesothelioma)	7	6	8	4	8	8	7	4	5	5
C40–41	Bone	18	20	22	23	28	25	23	13	26	30
C43	Melanoma of the skin	573	661	639	621	729	790	876	888	896	988
C44	Skin, non-melanoma	660	642	670	676	745	707	780	776	811	917
C45	Mesothelioma	9	21	14	10	12	14	13	16	11	11
C47	Autonomic nervous system	3	8	5	7	5	5	1	0	6	9
C48–49	Soft tissues	86	82	94	80	102	90	83	80	91	86
C50	Breast	2822	2728	2751	2779	2748	2851	3105	2961	3208	3324
C51–58	Female genital organs	1561	1561	1528	1596	1586	1668	1671	1544	1608	1687
C53	Cervix uteri	307	314	278	296	298	310	293	316	290	338
C54	Corpus uteri	679	660	672	720	713	758	744	647	768	727
C55	Uterus, other	6	9	3	8	11	6	6	7	8	12
C56	Ovary	433	457	445	459	429	447	486	439	399	424
C51–52, C57	Other female genital	130	118	129	113	133	144	137	131	142	184
C58	Placenta	6	3	1	0	2	3	5	4	1	2
C64–68	Urinary organs	604	588	597	615	633	643	657	647	674	638
C64	Kidney excl. renal pelvis	243	213	254	256	237	244	260	259	228	235
C65	Renal pelvis	18	26	23	28	38	33	39	37	45	40
C66–68	Bladder, ureter, urethra	343	349	320	331	358	366	358	351	401	363
C69	Eye	25	30	29	31	38	30	33	31	44	43
C70–72, D32–33	Central nervous system	596	627	635	592	630	588	558	570	510	502
C73	Thyroid gland	169	148	162	176	185	204	220	227	248	239
C37, C74–75	Other endocrine glands	107	126	124	161	131	119	123	106	115	90
C39, C76, C80	Other or unspecified	270	242	233	191	200	185	167	157	178	165
C81–96	Lymphoid and haematopoietic tissue	908	1018	1015	1039	1062	1138	1165	1210	1110	1172
C81	Hodgkin lymphoma	49	47	49	43	47	57	71	61	53	58
C82–86, C96	Non-Hodgkin lymphoma	335	388	381	374	403	406	447	458	415	443
C88	Malignant immunoproliferative diseases	22	25	19	17	27	27	26	31	33	31
C90	Multiple myeloma	158	147	170	164	163	182	145	181	169	183
C91–95, D45–47	Leukaemia	344	411	396	441	422	466	476	479	440	457

Table 11a Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and year, 2005–2014**MALES**

ICD10	Site	Year									
		2005	06	07	08	09	10	11	12	13	2014
C00–96	All sites	687.6	686.6	719.9	713.6	720.6	709.2	739.7	737.1	719.2	718.0
C00–14	Mouth, pharynx	12.7	13.4	13.3	12.5	16.0	14.2	14.6	15.7	14.2	16.3
C00	Lip	2.7	3.5	3.4	2.7	4.1	3.8	3.8	3.3	2.7	3.3
C01–02	Tongue	2.2	2.3	2.7	2.9	3.3	2.6	3.0	3.1	3.4	3.3
C03–06	Mouth, other	1.9	2.5	1.9	2.0	3.2	2.4	1.9	2.5	2.6	2.4
C07–08	Salivary glands	1.4	0.7	0.8	0.8	1.1	1.3	0.8	1.3	1.3	1.9
C09–14	Pharynx	4.5	4.4	4.5	4.1	4.3	4.2	5.1	5.5	4.2	5.5
C15–26	Digestive organs	144.4	138.9	142.8	143.5	142.5	151.9	143.9	148.9	148.8	145.9
C15	Oesophagus	6.7	7.5	6.5	7.8	7.0	8.8	8.1	7.7	8.6	9.2
C16	Stomach	16.3	15.8	16.8	14.7	12.9	14.0	14.9	12.8	13.2	12.9
C17	Small intestine	2.4	3.2	3.2	3.1	3.7	3.3	3.9	4.5	3.7	3.8
C18	Colon	55.9	55.0	55.8	57.6	55.0	61.8	57.5	58.8	59.0	59.2
C19–20	Rectum, rectosigmoid	34.8	32.1	31.4	32.7	34.7	34.3	31.5	33.5	34.0	33.4
C21	Anus	1.1	0.7	0.9	1.0	0.9	1.5	0.8	1.1	0.7	1.0
C22	Liver	3.9	4.5	4.7	4.6	4.7	6.1	5.9	5.9	7.3	5.6
C23–24	Gallbladder, bile ducts	4.4	2.9	3.0	3.3	3.7	4.0	2.6	4.0	4.2	3.0
C25	Pancreas	17.0	15.4	18.5	16.7	17.4	15.3	15.2	18.0	15.7	15.3
C26	Other digestive organs	1.8	1.8	2.1	1.9	2.6	3.0	3.4	2.8	2.5	2.4
C30–34, C38	Respiratory organs	79.3	80.5	79.4	78.4	79.0	78.4	80.6	79.6	74.8	74.5
C30–31	Nose, sinuses	1.2	0.8	1.3	1.2	1.1	0.8	1.0	1.4	1.4	1.3
C32	Larynx, epiglottis	5.1	5.7	3.7	5.3	4.2	4.9	4.4	4.3	4.5	4.8
C33–34	Lung, trachea	72.4	73.5	73.5	71.7	73.4	72.1	74.8	73.4	68.6	68.0
C38	Mediastinum, pleura (non-meso-thelioma)	0.5	0.5	0.9	0.3	0.4	0.4	0.5	0.5	0.3	0.3
C40–41	Bone	1.2	1.1	0.9	1.0	1.6	1.1	1.1	1.3	0.7	1.0
C43	Melanoma of the skin	29.4	26.8	27.5	31.1	32.1	33.2	38.3	38.6	35.7	42.2
C44	Skin, non-melanoma	35.4	40.0	38.4	40.7	43.8	41.5	42.5	42.8	43.2	46.7
C45	Mesothelioma	3.9	2.9	3.1	3.2	3.2	3.9	3.0	3.0	3.5	2.3
C47	Autonomic nervous system	0.3	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2
C48–49	Soft tissues	2.4	2.9	3.1	2.2	3.4	2.3	2.8	3.4	3.2	2.5
C50	Breast	1.0	0.7	0.9	1.0	0.7	0.6	1.2	1.3	1.6	1.0
C60–63	Male genital organs	208.7	212.2	237.9	231.1	224.3	210.8	238.1	229.4	222.1	218.0
C61	Prostate	195.5	199.6	223.2	216.3	209.2	197.9	225.0	215.0	207.2	203.3
C62	Testis	10.8	10.9	12.6	12.5	12.8	10.8	11.4	12.6	12.8	12.2
C60, C63	Other male genital	2.4	1.8	2.1	2.3	2.3	2.1	1.7	1.9	2.0	2.5
C64–68	Urinary organs	66.8	67.0	71.2	69.5	70.1	68.9	69.6	70.8	71.0	73.7
C64	Kidney excl. renal pelvis	18.0	17.8	19.1	19.3	19.6	21.8	22.9	22.6	22.3	23.4
C65	Renal pelvis	1.5	2.3	2.6	2.7	2.4	2.7	1.6	2.4	2.8	2.9
C66–68	Bladder, ureter, urethra	47.3	46.8	49.5	47.4	48.1	44.4	45.0	45.7	45.9	47.4
C69	Eye	1.4	1.8	1.3	1.9	1.2	1.7	1.2	1.2	1.4	2.0
C70–72, D32–33	Central nervous system	21.9	20.0	23.3	20.4	20.5	20.6	20.6	20.6	18.7	18.4
C73	Thyroid gland	3.1	3.6	3.0	2.5	3.2	3.4	3.2	3.9	4.3	4.5
C37, C74–75	Other endocrine glands	4.7	4.3	6.3	6.0	6.4	4.7	4.9	5.5	4.2	4.4
C39, C76, C80	Other or unspecified	11.8	10.5	9.2	8.8	8.7	7.0	8.0	6.0	7.1	7.0
C81–96	Lymphoid and haematopoietic tissue	59.3	59.6	58.1	59.6	63.5	64.8	65.9	65.0	64.4	57.4
C81	Hodgkin lymphoma	2.7	2.9	2.9	3.4	3.5	3.2	2.7	3.3	2.9	3.0
C82–86, C96	Non-Hodgkin lymphoma	21.1	22.7	20.3	21.7	22.6	25.2	22.7	23.7	23.4	22.5
C88	Malignant immunoproliferative diseases	1.5	1.7	1.8	1.7	1.3	1.5	1.5	2.2	1.5	1.2
C90	Multiple myeloma	11.4	9.3	9.3	9.9	10.6	9.7	10.8	9.5	10.0	7.8
C91–95, D45–47	Leukaemia	22.6	23.0	23.8	22.9	25.5	25.2	28.2	26.3	26.6	22.9

Table 11b Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and year, 2005–2014**FEMALES**

ICD10	Site	Year									
		2005	06	07	08	09	10	11	12	13	2014
C00–96	All sites	503.1	509.2	507.0	509.0	514.9	521.0	532.0	520.8	528.3	539.5
C00–14	Mouth, pharynx	7.5	8.1	6.6	7.5	6.9	8.3	7.8	6.8	7.3	8.1
C00	Lip	1.5	1.8	1.9	1.9	1.4	2.0	1.7	1.5	1.8	1.7
C01–02	Tongue	1.3	1.6	0.9	1.3	1.4	1.3	1.4	1.8	1.7	1.8
C03–06	Mouth, other	1.7	2.3	1.5	1.6	1.8	1.7	1.7	1.1	1.7	1.8
C07–08	Salivary glands	1.1	0.9	1.0	1.0	0.7	1.3	1.2	0.6	0.7	1.0
C09–14	Pharynx	1.8	1.6	1.3	1.7	1.6	2.0	1.8	1.9	1.5	1.7
C15–26	Digestive organs	103.1	105.2	104.5	105.1	108.6	103.3	107.2	108.5	109.6	109.1
C15	Oesophagus	2.4	1.8	2.1	2.3	2.1	2.4	2.3	2.6	2.3	2.5
C16	Stomach	9.1	8.4	8.3	7.9	8.2	6.5	7.2	6.7	5.9	6.7
C17	Small intestine	1.7	1.9	2.2	2.2	3.0	2.3	2.5	2.2	1.7	2.5
C18	Colon	46.9	50.0	48.8	49.1	51.2	47.7	51.8	52.5	52.3	51.4
C19–20	Rectum, rectosigmoid	20.8	20.9	20.6	20.1	20.2	20.2	20.1	18.6	21.5	20.7
C21	Anus	1.9	1.6	1.7	1.7	2.1	2.1	1.5	1.8	2.2	2.3
C22	Liver	2.4	1.6	2.1	2.4	2.5	2.9	2.9	3.0	3.0	3.0
C23–24	Gallbladder, bile ducts	3.2	3.0	3.2	3.2	3.2	3.6	3.3	3.8	3.7	3.6
C25	Pancreas	12.6	14.6	13.6	14.1	13.8	13.0	13.5	14.3	14.1	13.5
C26	Other digestive organs	2.3	1.4	2.0	2.2	2.3	2.6	2.1	3.0	2.9	2.9
C30–34, C38	Respiratory organs	42.3	45.2	48.1	49.1	47.6	52.4	49.9	52.0	51.8	54.0
C30–31	Nose, sinuses	0.7	0.8	1.3	0.6	0.5	0.8	0.8	0.7	0.7	0.6
C32	Larynx, epiglottis	0.9	0.5	0.7	0.9	0.8	0.8	0.6	0.7	0.8	0.7
C33–34	Lung, trachea	40.4	43.7	45.8	47.4	46.1	50.6	48.2	50.4	50.1	52.5
C38	Mediastinum, pleura (non-meso-thelioma)	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.2
C40–41	Bone	0.8	0.9	0.9	1.0	1.1	1.0	0.9	0.5	1.0	1.2
C43	Melanoma of the skin	24.4	27.8	26.2	25.3	29.5	31.6	34.2	34.6	34.2	37.1
C44	Skin, non-melanoma	24.2	23.4	24.3	24.6	26.3	24.9	26.9	26.9	27.6	31.0
C45	Mesothelioma	0.4	0.8	0.5	0.4	0.5	0.5	0.5	0.6	0.4	0.4
C47	Autonomic nervous system	0.1	0.3	0.2	0.3	0.2	0.2	0.0	0.0	0.2	0.3
C48–49	Soft tissues	3.7	3.4	4.0	3.3	4.1	3.6	3.2	3.1	3.5	3.3
C50	Breast	121.7	116.3	115.1	115.2	112.6	115.1	123.6	115.8	123.7	126.5
C51–58	Female genital organs	65.7	64.9	63.5	65.2	64.1	66.6	65.5	59.7	61.5	63.3
C53	Cervix uteri	13.0	13.1	11.7	12.0	12.3	12.6	11.9	12.6	11.5	13.3
C54	Corpus uteri	28.8	27.6	28.1	30.0	29.1	30.3	29.1	24.9	29.3	27.1
C55	Uterus, other	0.2	0.3	0.1	0.3	0.4	0.3	0.2	0.2	0.3	0.4
C56	Ovary	18.1	18.9	18.5	18.6	17.1	17.9	18.9	16.9	15.2	15.8
C51–52, C57	Other female genital	5.3	4.7	5.0	4.2	5.2	5.4	5.2	4.9	5.2	6.7
C58	Placenta	0.3	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.1
C64–68	Urinary organs	24.4	23.6	23.7	24.1	24.6	24.6	24.8	24.0	24.7	23.3
C64	Kidney excl. renal pelvis	10.0	8.8	10.2	10.2	9.5	9.5	10.1	9.9	8.6	8.8
C65	Renal pelvis	0.7	1.0	0.9	1.1	1.5	1.3	1.5	1.3	1.7	1.4
C66–68	Bladder, ureter, urethra	13.7	13.8	12.7	12.9	13.6	13.8	13.2	12.7	14.4	13.1
C69	Eye	1.0	1.2	1.2	1.3	1.5	1.2	1.2	1.2	1.7	1.6
C70–72, D32–33	Central nervous system	25.6	26.2	26.5	24.5	25.5	23.6	22.1	22.4	19.6	19.1
C73	Thyroid gland	7.1	6.3	6.8	7.4	7.6	8.3	8.9	9.1	9.8	9.3
C37, C74–75	Other endocrine glands	4.6	5.5	5.3	6.8	5.5	4.9	5.0	4.2	4.5	3.5
C39, C76, C80	Other or unspecified	10.0	9.1	8.4	7.0	7.1	6.6	5.6	5.5	6.1	5.6
C81–96	Lymphoid and haematopoietic tissue	36.6	41.0	41.2	41.0	41.6	44.2	44.5	45.9	41.2	42.8
C81	Hodgkin lymphoma	2.2	2.0	2.1	1.8	2.0	2.4	2.9	2.5	2.1	2.3
C82–86, C96	Non-Hodgkin lymphoma	13.8	15.8	15.6	15.2	16.0	15.9	17.3	17.5	15.5	16.3
C88	Malignant immunoproliferative diseases	0.9	1.0	0.7	0.7	1.0	1.1	1.0	1.1	1.2	1.1
C90	Multiple myeloma	6.4	5.7	6.8	6.3	6.4	6.9	5.4	6.8	6.1	6.5
C91–95, D45–47	Leukaemia	13.4	16.5	16.0	17.0	16.2	17.9	18.0	18.0	16.2	16.6

Table 12a Average annual number of new cases by primary site and five-year age group, 2010–2014

ICD10	Site	0–4	5–9	10–14	15–19	20–24	25–29
C00–96	All sites	33	24	22	51	83	101
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	0	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	2
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	0	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	0	0	1
C38	Mediastinum, pleura (non-mesothelioma)	0	0	0	0	0	0
C40–41	Bone	0	1	2	2	2	1
C43	Melanoma of the skin	0	0	0	1	4	6
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	1	0	0
C48–49	Soft tissues	1	0	0	1	1	1
C50	Breast	0	0	0	0	0	0
C60–63	Male genital organs	1	0	1	10	35	43
C61	Prostate	0	0	0	0	0	0
C62	Testis	1	0	1	10	35	43
C60, C63	Other male genital	0	0	0	0	0	0
C64–68	Urinary organs	2	0	1	1	1	4
C64	Kidney excl. renal pelvis	2	0	0	0	0	2
C65	Renal pelvis	0	0	0	0	0	0
C66–68	Bladder, ureter, urethra	0	0	0	1	1	2
C69	Eye	0	1	0	0	0	0
C70–72, D32–33	Central nervous system	7	7	7	10	9	12
C73	Thyroid gland	0	0	0	1	2	3
C37, C74–75	Other endocrine glands	2	1	1	2	4	2
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81–96	Lymphoid and haematopoietic tissue	16	12	8	16	17	17
C81	Hodgkin lymphoma	0	2	1	7	8	7
C82–86, C96	Non-Hodgkin lymphoma	3	4	3	3	3	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	13	6	4	7	6	6

MALES

Age											
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
155	196	289	441	759	1360	2169	2877	2470	2122	1805	1439
2	4	9	14	35	44	55	58	43	35	24	21
0	0	1	2	3	6	7	10	13	12	10	10
1	2	2	4	10	8	10	13	8	6	5	3
1	0	1	1	4	5	10	11	8	5	3	4
1	1	1	1	2	3	2	5	3	3	3	3
0	0	3	6	17	22	26	20	11	9	3	2
14	29	51	83	154	277	401	549	489	479	436	329
1	1	4	5	10	19	27	38	25	24	21	16
1	4	4	8	16	28	35	44	43	40	46	32
0	1	2	3	5	10	14	15	12	9	9	6
5	8	19	26	47	90	139	204	201	204	199	155
5	9	12	21	41	71	102	137	115	107	80	56
0	0	1	1	3	3	3	4	3	3	1	2
1	2	3	6	9	17	21	20	15	18	16	12
0	1	1	2	5	8	10	14	13	9	9	8
0	2	5	8	17	27	43	63	54	54	45	35
1	1	0	2	2	4	6	10	7	11	9	8
2	5	11	27	67	129	237	328	298	267	227	142
0	1	1	1	3	3	3	5	3	2	3	3
0	0	1	2	4	11	18	22	16	14	10	6
1	4	9	24	59	114	216	300	277	250	213	132
0	0	0	1	1	1	0	2	2	0	1	1
1	1	1	1	2	2	2	3	2	1	1	1
15	25	46	53	65	82	107	136	105	87	80	60
3	6	7	10	16	27	54	102	122	153	176	217
0	0	0	1	1	3	7	13	14	13	9	7
0	0	0	0	0	0	1	1	0	0	0	0
2	2	2	7	6	6	10	8	7	5	5	4
0	0	1	0	2	2	3	4	5	4	2	2
55	51	47	79	185	465	827	1119	854	599	436	322
0	0	8	48	162	450	818	1108	848	592	429	316
54	50	38	29	19	11	4	5	2	2	1	1
0	1	1	3	4	4	5	6	5	6	6	4
6	11	29	51	78	123	202	248	252	238	186	156
4	7	18	28	46	59	82	88	80	58	35	20
0	0	0	2	2	3	6	9	9	10	10	5
2	4	11	21	30	62	114	150	163	170	141	131
1	1	3	2	3	4	5	5	3	4	2	2
20	20	24	32	39	48	55	54	44	38	26	19
5	7	8	8	8	10	8	11	7	7	6	2
4	7	8	9	11	13	12	12	10	8	5	3
0	1	2	3	6	8	13	22	22	19	21	31
23	27	38	61	81	117	170	205	194	165	163	121
6	5	5	7	4	5	5	4	5	2	1	1
8	11	16	22	34	44	68	89	73	60	57	38
0	0	0	1	1	4	3	7	6	6	6	2
1	2	4	8	12	19	26	30	32	28	30	22
8	8	13	24	29	45	68	75	78	68	70	57

Table 12b Average annual number of new cases by primary site and five-year age group, 2010–2014

ICD10	Site	0–4	5–9	10–14	15–19	20–24	25–29
C00–96	All sites	30	15	23	42	68	123
C00–14	Mouth, pharynx	0	0	1	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	1	0	0	1
C09–14	Pharynx	0	0	0	0	0	0
C15–26	Digestive organs	1	0	1	4	6	8
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	1	3	4	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	0	0	0	1	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	1	2	1
C43	Melanoma of the skin	0	0	0	2	9	19
C44	Skin, non-melanoma	0	1	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	2	2
C50	Breast	0	0	0	1	3	17
C51–58	Female genital organs	0	0	1	2	7	27
C53	Cervix uteri	0	0	0	0	4	22
C54	Corpus uteri	0	0	0	0	0	1
C55	Uterus, other	0	0	0	0	0	0
C56	Ovary	0	0	1	2	2	3
C51–52, C57	Other female genital	0	0	0	0	0	0
C58	Placenta	0	0	0	0	0	1
C64–68	Urinary organs	3	1	0	1	1	1
C64	Kidney excl. renal pelvis	3	1	0	0	0	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	7	6	6	7	9	10
C73	Thyroid gland	0	0	2	3	8	10
C37, C74–75	Other endocrine glands	1	0	1	4	4	7
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81–96	Lymphoid and haematopoietic tissue	12	5	9	15	13	14
C81	Hodgkin lymphoma	0	0	2	8	7	7
C82–86, C96	Non-Hodgkin lymphoma	2	1	2	2	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	10	4	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+
187	334	516	730	965	1219	1556	1886	1530	1469	1447	1785
1	4	7	9	16	21	23	27	20	17	20	30
0	1	1	1	2	3	4	5	6	5	8	12
1	1	1	2	4	4	6	6	3	4	5	5
0	0	1	1	3	4	4	7	6	4	5	8
1	2	1	1	2	2	2	3	2	2	2	3
0	1	3	3	6	8	6	6	3	3	1	3
15	28	43	76	122	190	270	388	390	419	441	526
0	0	1	1	2	4	7	13	8	9	7	14
0	4	2	6	10	9	13	22	19	25	29	40
1	0	2	3	3	5	7	8	7	8	8	8
8	10	16	32	51	80	114	181	191	211	233	258
3	6	12	18	29	48	60	75	76	70	66	76
0	1	2	4	4	6	7	7	5	5	5	5
1	1	0	3	3	5	8	9	10	10	13	16
0	1	1	2	4	7	10	14	14	13	15	16
2	3	6	5	13	23	37	50	51	56	56	71
0	0	1	2	2	3	6	9	9	11	11	21
3	5	11	31	60	118	186	249	231	195	157	111
0	1	0	1	1	2	3	1	3	1	2	2
0	1	1	0	1	3	2	3	2	3	2	1
3	4	10	30	57	113	182	243	225	191	152	106
0	0	0	0	1	0	1	1	1	0	1	1
2	1	2	1	0	1	2	2	1	1	1	2
23	43	66	72	70	86	87	110	81	64	67	87
2	3	8	10	16	28	42	67	83	108	134	292
0	0	0	0	1	0	2	2	2	2	1	2
0	0	0	0	0	0	1	0	0	0	0	0
2	2	4	4	5	7	13	13	8	6	7	6
38	102	198	302	368	370	432	437	220	199	183	219
41	64	72	96	134	169	198	230	173	151	127	143
32	47	41	39	24	20	20	18	13	10	9	10
3	6	13	27	54	86	104	126	96	87	67	59
0	0	0	0	1	0	0	1	1	0	2	2
4	9	14	23	45	50	57	64	47	41	34	44
1	2	4	7	10	13	17	21	16	13	15	29
1	0	0	0	0	0	0	0	0	0	0	0
2	5	13	16	26	49	69	92	90	93	94	96
1	4	9	8	15	19	31	38	34	32	26	23
0	0	0	0	1	4	4	5	5	8	8	4
1	1	3	8	11	27	34	49	50	53	61	69
1	0	2	1	3	4	3	8	3	3	3	2
18	25	34	40	46	53	63	62	48	35	36	40
14	23	21	23	25	20	21	18	17	10	6	7
6	9	10	10	10	9	10	10	6	6	5	3
1	0	1	2	5	7	12	13	14	23	30	62
19	21	26	36	58	85	121	157	140	137	135	157
7	5	4	3	2	1	2	4	3	3	3	1
5	8	10	13	27	40	54	62	55	52	47	48
0	0	0	1	1	2	5	5	5	5	4	3
0	1	2	3	8	13	18	25	20	28	25	29
7	6	10	15	21	29	42	61	58	49	57	76

Table 13a Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2010–2014

ICD10	Site	0–4	5–9	10–14	15–19	20–24	25–29
C00–96	All sites	20.9	15.2	14.1	30.7	49.3	60.6
C00–14	Mouth, pharynx	0.1	0.3	0.3	1.0	0.5	0.5
C00	Lip	0.0	0.0	0.0	0.0	0.1	0.0
C01–02	Tongue	0.0	0.0	0.0	0.0	0.2	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	0.1	0.1	0.2
C09–14	Pharynx	0.1	0.3	0.0	0.7	0.0	0.0
C15–26	Digestive organs	0.4	0.0	0.4	1.3	2.5	4.8
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	0.5
C17	Small intestine	0.0	0.0	0.0	0.1	0.0	0.5
C18	Colon	0.0	0.0	0.1	0.8	1.7	1.8
C19–20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.5	1.1
C21	Anus	0.0	0.0	0.0	0.0	0.0	0.0
C22	Liver	0.4	0.0	0.1	0.1	0.0	0.1
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	0.7
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	0.5	0.2	0.4
C30–31	Nose, sinuses	0.0	0.0	0.0	0.1	0.1	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	0.2	0.1	0.4
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.0	0.1	0.0	0.0
C40–41	Bone	0.0	0.5	1.5	1.4	1.2	0.5
C43	Melanoma of the skin	0.0	0.1	0.3	0.5	2.5	3.7
C44	Skin, non-melanoma	0.4	0.1	0.1	0.6	0.5	0.8
C45	Mesothelioma	0.0	0.0	0.0	0.0	0.0	0.0
C47	Autonomic nervous system	0.8	0.3	0.0	0.4	0.2	0.1
C48–49	Soft tissues	0.8	0.1	0.3	0.5	0.8	0.7
C50	Breast	0.0	0.0	0.0	0.0	0.0	0.0
C60–63	Male genital organs	0.5	0.3	0.8	6.1	20.6	26.0
C61	Prostate	0.1	0.0	0.0	0.2	0.0	0.0
C62	Testis	0.4	0.1	0.6	5.8	20.6	26.0
C60, C63	Other male genital	0.0	0.1	0.1	0.0	0.0	0.0
C64–68	Urinary organs	1.4	0.3	0.4	0.6	0.7	2.2
C64	Kidney excl. renal pelvis	1.1	0.3	0.3	0.2	0.1	1.2
C65	Renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66–68	Bladder, ureter, urethra	0.3	0.0	0.1	0.4	0.6	1.0
C69	Eye	0.3	0.4	0.0	0.1	0.1	0.0
C70–72, D32–33	Central nervous system	4.5	4.5	4.4	6.0	5.6	7.4
C73	Thyroid gland	0.0	0.0	0.1	0.5	0.9	2.0
C37, C74–75	Other endocrine glands	1.5	0.6	0.4	1.4	2.6	1.3
C39, C76, C80	Other or unspecified	0.3	0.0	0.0	0.1	0.1	0.1
C81–96	Lymphoid and haematopoietic tissue	9.8	7.7	5.3	9.8	10.3	10.0
C81	Hodgkin lymphoma	0.1	1.2	0.8	4.1	4.8	4.2
C82–86, C96	Non-Hodgkin lymphoma	1.6	2.8	1.8	1.7	1.8	2.0
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	8.0	3.7	2.8	4.1	3.7	3.7

MALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
91.3	109.1	150.7	241.2	454.9	877.4	1493.8	2303.4	2997.9	3585.3	4101.9	4009.1	
1.4	2.1	4.6	7.9	21.1	28.5	38.0	46.7	52.2	59.5	55.4	59.0	
0.1	0.2	0.5	1.1	1.7	4.0	4.7	7.7	15.5	21.0	22.3	26.7	
0.5	0.9	1.3	2.1	5.9	5.3	7.0	10.7	10.0	10.5	10.5	7.8	
0.4	0.2	0.6	0.7	2.4	3.5	6.9	8.6	9.7	8.1	7.7	11.7	
0.4	0.6	0.7	0.8	1.2	1.7	1.7	3.8	4.1	5.4	7.7	7.8	
0.1	0.2	1.5	3.3	10.0	14.1	17.8	15.9	12.9	14.5	7.3	5.0	
8.5	16.0	26.7	45.3	92.6	178.6	275.9	439.6	592.9	808.8	991.3	916.9	
0.5	0.7	2.0	3.0	6.2	12.5	18.7	30.7	30.8	40.2	47.3	45.1	
0.5	2.1	2.2	4.6	9.5	17.8	24.0	35.4	52.4	67.9	105.0	88.0	
0.2	0.4	1.1	1.7	2.9	6.3	9.9	12.2	14.3	15.2	21.4	17.3	
3.2	4.7	9.7	14.4	28.4	57.8	96.0	163.0	243.7	344.4	451.8	432.3	
2.7	4.8	6.1	11.5	24.5	45.7	70.1	109.5	139.8	180.1	182.7	156.5	
0.0	0.1	0.4	0.8	1.7	1.8	1.9	3.4	3.2	4.7	3.2	5.0	
0.8	1.0	1.5	3.1	5.3	11.1	14.7	15.9	18.7	29.7	36.4	32.3	
0.0	0.6	0.7	1.0	2.8	5.3	6.6	11.4	15.8	15.9	20.9	22.3	
0.1	1.1	2.7	4.2	10.1	17.4	29.8	50.6	65.5	91.6	102.7	96.9	
0.5	0.6	0.2	1.1	1.3	2.8	4.1	7.7	8.7	18.9	20.0	21.2	
1.2	2.6	5.9	14.9	40.2	83.2	163.5	262.2	361.4	450.5	515.0	395.5	
0.2	0.4	0.6	0.7	1.7	1.9	1.9	3.7	3.4	3.0	5.9	7.2	
0.0	0.1	0.5	0.9	2.6	6.8	12.5	17.5	19.2	24.3	23.2	17.8	
0.8	2.0	4.6	13.0	35.5	73.5	148.9	239.8	336.6	422.5	484.0	367.7	
0.1	0.0	0.2	0.3	0.4	0.9	0.1	1.3	2.2	0.7	1.8	2.8	
0.5	0.4	0.7	0.8	1.0	1.3	1.7	2.6	2.4	2.4	1.4	1.7	
9.1	13.7	24.0	29.1	39.1	53.0	73.4	108.7	127.2	147.7	182.3	166.6	
1.9	3.2	3.8	5.7	9.5	17.2	36.9	81.3	147.8	258.6	400.4	603.8	
0.0	0.0	0.0	0.3	0.7	1.9	5.1	10.7	16.7	21.6	20.5	19.5	
0.2	0.0	0.0	0.0	0.2	0.0	0.4	0.8	0.2	0.0	0.0	0.6	
1.2	1.3	0.9	3.6	3.4	3.9	6.9	6.2	8.5	8.4	10.5	10.6	
0.0	0.1	0.7	0.1	1.0	1.3	2.3	3.4	5.6	6.1	4.5	6.7	
32.3	28.4	24.4	43.3	111.0	300.1	569.7	895.8	1036.8	1012.9	991.7	897.4	
0.0	0.1	4.0	26.0	97.2	290.4	563.3	886.6	1029.3	1000.4	975.4	881.3	
32.0	27.7	19.9	15.9	11.1	7.1	2.8	4.2	1.9	2.7	1.8	3.9	
0.2	0.6	0.5	1.4	2.6	2.6	3.6	5.0	5.6	9.8	14.5	12.3	
3.7	6.3	15.1	27.8	46.6	79.6	139.3	198.5	306.1	401.5	422.2	434.5	
2.5	3.9	9.4	15.4	27.8	37.9	56.5	70.6	97.3	98.7	80.4	56.3	
0.0	0.1	0.2	0.9	1.0	1.9	4.4	7.5	11.2	16.2	21.8	12.8	
1.2	2.3	5.5	11.5	17.9	39.7	78.4	120.4	197.6	286.6	320.0	365.4	
0.4	0.3	1.4	1.0	2.0	2.3	3.2	3.8	4.1	6.8	5.0	5.6	
11.9	11.4	12.7	17.5	23.6	31.2	38.0	43.2	52.9	63.9	58.6	52.9	
3.1	4.0	4.4	4.2	4.8	6.6	5.8	8.6	8.7	12.5	12.7	6.7	
2.6	3.8	4.3	4.9	6.4	8.1	8.0	9.4	12.6	14.2	11.8	8.4	
0.0	0.4	1.1	1.6	3.4	5.3	9.0	17.8	26.5	31.8	48.2	86.3	
13.5	14.9	20.0	33.3	48.4	75.3	116.8	163.8	235.2	278.2	370.4	336.5	
3.5	3.0	2.5	3.7	2.3	3.1	3.4	3.5	5.6	3.4	2.7	2.8	
4.7	6.1	8.5	12.0	20.6	28.5	46.8	70.9	88.8	102.1	129.1	106.4	
0.0	0.0	0.2	0.5	0.7	2.3	1.9	5.6	7.3	9.5	12.7	6.7	
0.6	1.1	2.0	4.2	7.3	12.4	18.0	23.7	38.8	48.0	67.3	61.3	
4.7	4.7	6.8	12.9	17.5	29.0	46.6	60.0	94.7	115.3	158.6	159.3	

Table 13b Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2010–2014

ICD10	Site	0–4	5–9	10–14	15–19	20–24	25–29
C00–96	All sites	20.0	10.3	14.9	26.8	41.7	76.2
C00–14	Mouth, pharynx	0.3	0.0	0.5	0.1	0.7	2.0
C00	Lip	0.1	0.0	0.0	0.0	0.0	0.1
C01–02	Tongue	0.0	0.0	0.0	0.0	0.1	0.5
C03–06	Mouth, other	0.0	0.0	0.1	0.1	0.1	0.2
C07–08	Salivary glands	0.0	0.0	0.4	0.0	0.2	0.9
C09–14	Pharynx	0.1	0.0	0.0	0.0	0.2	0.2
C15–26	Digestive organs	0.5	0.3	0.8	2.4	3.5	4.7
C15	Oesophagus	0.0	0.0	0.0	0.0	0.1	0.0
C16	Stomach	0.0	0.0	0.0	0.0	0.2	0.2
C17	Small intestine	0.0	0.0	0.0	0.1	0.1	0.1
C18	Colon	0.0	0.1	0.7	2.0	2.3	3.4
C19–20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.0	0.7
C21	Anus	0.0	0.0	0.0	0.0	0.0	0.0
C22	Liver	0.5	0.1	0.1	0.1	0.4	0.1
C23–24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.0	0.0
C25	Pancreas	0.0	0.0	0.0	0.1	0.2	0.0
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.1
C30–34, C38	Respiratory organs	0.1	0.0	0.0	0.1	0.9	1.0
C30–31	Nose, sinuses	0.0	0.0	0.0	0.0	0.2	0.2
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0
C33–34	Lung, trachea	0.1	0.0	0.0	0.1	0.6	0.7
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.0	0.0	0.0	0.0
C40–41	Bone	0.3	0.5	0.5	0.9	1.4	0.9
C43	Melanoma of the skin	0.1	0.1	0.3	1.5	5.6	11.5
C44	Skin, non-melanoma	0.3	0.4	0.1	0.6	0.6	0.9
C45	Mesothelioma	0.0	0.0	0.0	0.1	0.0	0.0
C47	Autonomic nervous system	0.9	0.0	0.0	0.0	0.0	0.0
C48–49	Soft tissues	0.9	0.4	0.5	0.6	1.0	1.0
C50	Breast	0.0	0.0	0.0	0.4	2.0	10.6
C51–58	Female genital organs	0.3	0.0	0.5	1.5	4.6	16.9
C53	Cervix uteri	0.0	0.0	0.0	0.1	2.6	13.8
C54	Corpus uteri	0.0	0.0	0.0	0.1	0.2	0.4
C55	Uterus, other	0.0	0.0	0.0	0.0	0.0	0.0
C56	Ovary	0.1	0.0	0.4	1.3	1.4	1.9
C51–52, C57	Other female genital	0.1	0.0	0.1	0.0	0.1	0.1
C58	Placenta	0.0	0.0	0.0	0.0	0.2	0.7
C64–68	Urinary organs	1.7	0.4	0.1	0.4	0.4	0.6
C64	Kidney excl. renal pelvis	1.7	0.4	0.1	0.3	0.2	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	0.1	0.2
C69	Eye	0.7	0.0	0.0	0.0	0.1	0.6
C70–72, D32–33	Central nervous system	4.9	4.2	4.0	4.4	5.7	6.3
C73	Thyroid gland	0.0	0.3	1.1	1.9	4.7	6.2
C37, C74–75	Other endocrine glands	0.9	0.3	0.4	2.3	2.7	4.1
C39, C76, C80	Other or unspecified	0.0	0.1	0.0	0.0	0.1	0.1
C81–96	Lymphoid and haematopoietic tissue	8.1	3.4	6.1	9.4	7.9	8.8
C81	Hodgkin lymphoma	0.0	0.0	1.3	4.8	4.3	4.1
C82–86, C96	Non-Hodgkin lymphoma	1.5	0.7	1.2	1.1	1.0	2.0
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	6.6	2.7	3.6	3.3	2.6	2.7

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+	
116.1	196.9	284.7	424.7	607.2	807.2	1093.1	1487.3	1684.4	2007.6	2271.9	2304.6	
0.9	2.2	3.6	5.4	10.3	14.0	16.4	21.0	21.8	23.2	32.0	39.3	
0.1	0.4	0.7	0.8	1.1	2.3	3.1	3.9	6.2	6.6	11.9	15.2	
0.4	0.5	0.3	1.4	2.6	2.8	4.5	4.4	3.7	4.9	7.2	6.5	
0.0	0.0	0.8	0.6	1.6	2.4	2.7	5.2	6.4	5.2	7.8	10.6	
0.4	0.9	0.4	0.6	1.4	1.2	1.7	2.4	2.0	2.2	3.5	3.6	
0.0	0.5	1.4	2.0	3.5	5.4	4.5	5.0	3.5	4.4	1.6	3.4	
9.1	16.3	23.7	44.1	76.5	125.7	189.4	305.6	429.2	571.9	692.2	678.7	
0.0	0.0	0.6	0.8	1.4	2.9	4.6	9.9	8.8	12.0	10.7	17.6	
0.2	2.5	1.3	3.7	6.3	6.0	9.4	17.2	21.1	34.2	44.9	51.9	
0.4	0.1	0.9	1.6	1.9	3.6	5.1	6.6	7.3	10.7	12.6	10.3	
4.8	5.8	8.9	18.5	32.0	52.9	79.8	142.4	210.8	288.6	365.1	333.1	
1.7	3.8	6.5	10.7	18.0	31.5	42.4	59.0	83.5	95.9	103.3	98.6	
0.1	0.7	1.1	2.2	2.6	3.8	4.6	5.5	5.1	7.4	8.2	7.0	
0.4	0.7	0.2	1.6	2.0	3.4	5.6	7.3	10.8	13.7	19.8	20.4	
0.2	0.7	0.6	1.0	2.5	4.4	7.0	11.2	15.9	17.8	22.9	20.4	
1.1	1.8	3.1	2.9	8.3	15.2	26.3	39.7	55.7	76.8	88.2	91.9	
0.0	0.2	0.6	0.9	1.5	2.0	4.5	6.8	10.4	15.0	16.6	27.4	
1.9	2.9	5.8	18.0	37.9	78.3	130.9	196.2	254.2	267.0	246.1	143.8	
0.1	0.4	0.1	0.5	0.6	1.6	1.8	1.1	3.1	1.9	3.8	3.1	
0.1	0.4	0.3	0.2	0.8	1.9	1.1	2.5	2.2	4.1	3.1	1.5	
1.6	2.2	5.4	17.2	35.9	74.7	127.6	191.9	248.2	260.7	238.0	137.4	
0.0	0.0	0.0	0.1	0.6	0.1	0.4	0.6	0.7	0.3	1.3	1.8	
1.2	0.4	0.9	0.8	0.3	0.7	1.5	1.6	1.3	1.4	2.2	2.1	
14.5	25.1	36.2	42.0	44.3	56.8	61.3	86.9	89.6	87.7	105.2	112.1	
1.2	1.9	4.6	5.7	9.9	18.5	29.8	53.1	91.2	147.6	209.7	377.3	
0.0	0.1	0.1	0.1	0.5	0.3	1.4	1.9	1.8	3.3	1.6	2.1	
0.2	0.1	0.2	0.0	0.0	0.1	0.4	0.2	0.4	0.0	0.0	0.5	
1.0	1.3	2.1	2.4	3.3	4.9	9.0	10.4	9.2	8.7	11.6	8.3	
23.7	60.1	109.1	175.9	231.9	244.9	303.2	344.7	242.7	272.2	287.9	282.3	
25.2	37.8	39.7	55.7	84.2	112.1	139.1	181.2	190.9	205.8	198.7	185.2	
20.0	27.9	22.7	22.6	15.1	13.4	13.8	14.2	13.9	13.7	14.4	12.4	
2.1	3.4	7.1	15.6	34.0	57.0	73.1	99.7	106.2	118.3	104.5	75.9	
0.0	0.0	0.0	0.1	0.5	0.1	0.1	0.6	1.3	0.3	3.5	2.6	
2.4	5.2	7.6	13.5	28.3	33.0	40.0	50.5	51.8	55.5	53.4	56.8	
0.4	1.1	2.3	3.8	6.2	8.6	12.1	16.2	17.8	18.0	22.9	37.4	
0.4	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1.0	2.9	7.1	9.4	16.6	32.7	48.3	72.9	99.3	126.8	148.2	124.2	
0.6	2.4	5.2	4.9	9.4	12.3	21.5	30.1	37.9	43.2	40.8	30.0	
0.0	0.0	0.1	0.1	0.4	2.4	2.7	4.3	5.9	10.9	12.2	4.9	
0.4	0.6	1.8	4.4	6.8	18.0	24.2	38.5	55.5	72.7	95.1	89.4	
0.6	0.2	0.9	0.6	1.6	2.4	2.4	6.5	3.7	4.4	5.0	3.1	
10.9	14.5	19.0	23.5	28.7	35.1	44.3	49.2	53.1	47.8	56.2	51.1	
8.9	13.7	11.4	13.4	15.5	13.5	15.0	14.0	18.9	13.4	9.1	8.8	
3.5	5.1	5.4	5.7	6.5	6.2	7.0	8.0	6.4	8.5	7.2	4.1	
0.5	0.2	0.6	0.9	2.9	4.8	8.4	10.4	15.9	31.4	47.1	79.5	
11.8	12.1	14.3	21.1	36.3	56.2	85.3	123.5	154.6	186.6	211.9	202.2	
4.2	2.9	2.0	2.0	1.1	0.9	1.5	3.0	2.9	3.6	4.1	1.3	
3.4	4.9	5.5	7.8	16.9	26.4	38.1	49.2	60.6	70.8	73.5	62.2	
0.0	0.0	0.0	0.6	0.5	1.1	3.8	3.8	5.3	6.3	5.7	3.9	
0.1	0.6	1.2	2.0	4.8	8.9	12.4	19.6	21.8	38.5	39.2	36.9	
4.1	3.7	5.6	8.7	13.0	18.9	29.5	47.9	64.1	67.5	89.5	97.9	

Table 14a Average annual number of new cases by primary site and five-year period, 1955–2014

ICD10	Site	1955–59	1960–64	1965–69	1970–74
C00–96	All sites	3841	4471	5226	6105
C00–14	Mouth, pharynx	182	192	194	244
C00	Lip	100	95	99	124
C01–02	Tongue	16	21	20	25
C03–06	Mouth, other	21	24	29	29
C07–08	Salivary glands	11	12	13	16
C09–14	Pharynx	34	40	32	50
C15–26	Digestive organs	1621	1702	1841	1931
C15	Oesophagus	72	80	78	79
C16	Stomach	858	802	786	674
C17	Small intestine	12	10	15	15
C18	Colon	221	281	349	388
C19–20	Rectum, rectosigmoid	148	174	228	308
C21	Anus	3	8	6	5
C22	Liver	17	24	32	50
C23–24	Gallbladder, bile ducts	15	22	25	27
C25	Pancreas	138	159	214	249
C26	Other digestive organs	136	142	108	136
C30–34, C38	Respiratory organs	296	430	587	754
C30–31	Nose, sinuses	20	20	22	21
C32	Larynx, epiglottis	27	43	62	71
C33–34	Lung, trachea	238	356	489	646
C38	Mediastinum, pleura (non-mesothelioma)	11	11	14	15
C40–41	Bone	15	14	18	18
C43	Melanoma of the skin	45	69	101	145
C44	Skin, non-melanoma	81	76	84	162
C45	Mesothelioma	0	2	1	8
C47	Autonomic nervous system	20	16	16	12
C48–49	Soft tissues	20	29	36	46
C50	Breast	8	7	9	8
C60–63	Male genital organs	707	887	1061	1295
C61	Prostate	638	798	971	1186
C62	Testis	51	68	69	86
C60, C63	Other male genital	18	22	21	23
C64–68	Urinary organs	293	378	490	602
C64	Kidney excl. renal pelvis	88	119	149	166
C65	Renal pelvis	7	11	16	22
C66–68	Bladder, ureter, urethra	198	248	325	413
C69	Eye	18	18	22	19
C70–72, D32–33	Central nervous system	115	131	148	153
C73	Thyroid gland	17	24	33	34
C37, C74–75	Other endocrine glands	6	9	13	24
C39, C76, C80	Other or unspecified	51	82	114	138
C81–96	Lymphoid and haematopoietic tissue	346	405	455	510
C81	Hodgkin lymphoma	42	52	56	63
C82–86, C96	Non-Hodgkin lymphoma	87	96	121	122
C88	Malignant immunoproliferative diseases	0	0	2	5
C90	Multiple myeloma	66	79	84	113
C91–95, D45–47	Leukaemia	151	177	192	207

Period							
1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
7243	8281	9061	10124	11053	12264	14325	16398
239	248	256	255	260	258	286	350
114	104	95	83	64	52	65	74
28	34	38	39	46	50	57	73
32	47	47	52	53	49	49	54
14	14	15	21	18	21	20	30
50	50	62	60	78	86	95	119
2110	2318	2371	2456	2511	2669	2851	3306
91	86	93	104	123	127	145	193
614	598	533	482	409	354	301	302
21	26	26	31	40	52	66	88
492	625	722	827	896	1004	1111	1305
399	493	521	567	573	642	670	757
9	10	13	14	19	18	19	24
52	61	63	61	65	79	92	141
38	42	48	54	56	59	68	80
258	287	306	275	279	296	339	355
136	90	47	40	50	37	39	61
969	1166	1280	1354	1418	1520	1616	1741
24	23	24	21	21	23	23	27
88	98	108	103	106	108	100	105
838	1029	1141	1216	1277	1374	1483	1601
19	17	7	14	14	15	11	9
24	22	21	21	22	24	26	27
192	245	327	422	455	479	622	873
205	266	352	452	532	627	751	896
17	20	38	38	53	63	65	68
9	8	7	7	7	5	7	6
57	50	41	47	49	55	60	68
11	12	11	15	14	15	17	26
1571	1806	1996	2480	3007	3491	4502	5132
1443	1647	1812	2250	2756	3208	4174	4780
101	134	157	199	219	247	283	305
27	25	26	31	32	36	45	46
768	938	1025	1134	1129	1238	1396	1589
200	246	260	285	281	331	394	532
27	30	27	35	36	39	47	56
540	663	737	814	813	869	955	1002
24	27	23	26	28	32	32	35
189	207	245	262	314	387	465	473
42	48	47	44	47	53	69	94
27	42	45	47	61	84	124	115
179	206	267	289	297	237	187	149
609	650	708	775	850	1027	1249	1450
67	56	49	52	56	66	71	75
163	193	250	301	340	375	455	540
7	8	9	14	20	28	33	36
145	151	161	157	168	169	205	214
227	241	238	251	266	389	485	585

Table 14b Average annual number of new cases by primary site and five-year period, 1955–2014

ICD10	Site	1955–59	1960–64	1965–69	1970–74
C00–96	All sites	4083	4479	5140	5852
C00–14	Mouth, pharynx	61	60	77	79
C00	Lip	8	7	12	10
C01–02	Tongue	12	12	17	17
C03–06	Mouth, other	12	11	16	17
C07–08	Salivary glands	8	11	15	15
C09–14	Pharynx	22	19	17	20
C15–26	Digestive organs	1393	1422	1529	1676
C15	Oesophagus	23	28	30	30
C16	Stomach	613	546	508	443
C17	Small intestine	10	9	12	18
C18	Colon	267	324	408	472
C19–20	Rectum, rectosigmoid	118	127	179	248
C21	Anus	3	10	11	13
C22	Liver	11	14	16	31
C23–24	Gallbladder, bile ducts	46	50	58	52
C25	Pancreas	92	117	142	181
C26	Other digestive organs	210	197	166	187
C30–34, C38	Respiratory organs	87	106	140	185
C30–31	Nose, sinuses	14	12	13	14
C32	Larynx, epiglottis	2	3	6	7
C33–34	Lung, trachea	68	83	115	158
C38	Mediastinum, pleura (non-mesothelioma)	4	7	6	6
C40–41	Bone	10	10	11	14
C43	Melanoma of the skin	54	82	108	161
C44	Skin, non-melanoma	56	48	44	95
C45	Mesothelioma	0	1	1	2
C47	Autonomic nervous system	18	12	13	13
C48–49	Soft tissues	17	24	29	36
C50	Breast	901	1027	1172	1327
C51–58	Female genital organs	834	928	1067	1204
C53	Cervix uteri	333	351	385	438
C54	Corpus uteri	167	207	250	303
C55	Uterus, other	23	22	15	11
C56	Ovary	249	278	349	339
C51–52, C57	Other female genital	61	66	65	111
C58	Placenta	2	3	4	4
C64–68	Urinary organs	189	212	245	306
C64	Kidney excl. renal pelvis	74	88	100	114
C65	Renal pelvis	6	5	10	13
C66–68	Bladder, ureter, urethra	109	119	135	179
C69	Eye	13	19	16	17
C70–72, D32–33	Central nervous system	102	116	133	128
C73	Thyroid gland	52	59	79	99
C37, C74–75	Other endocrine glands	7	6	9	15
C39, C76, C80	Other or unspecified	46	63	91	98
C81–96	Lymphoid and haematopoietic tissue	241	283	378	397
C81	Hodgkin lymphoma	30	35	48	40
C82–86, C96	Non-Hodgkin lymphoma	57	65	98	101
C88	Malignant immunoproliferative diseases	0	0	0	3
C90	Multiple myeloma	38	50	77	96
C91–95, D45–47	Leukaemia	116	132	154	157

FEMALES

Period							
1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
6854	7636	8320	9189	10187	11399	12600	13926
82	100	111	118	131	132	180	202
13	20	24	30	27	26	44	48
18	20	25	22	25	27	32	42
18	25	29	33	36	33	45	43
12	14	12	17	19	19	23	24
21	20	20	17	24	27	37	44
1926	2120	2199	2294	2434	2538	2721	2924
32	33	36	42	44	53	55	66
407	401	358	313	267	229	221	181
20	26	26	32	36	50	54	60
626	745	861	947	1086	1169	1278	1397
318	397	405	444	470	487	516	540
18	22	26	35	36	41	44	51
30	39	44	47	41	46	58	81
65	81	81	72	80	76	82	97
213	253	287	300	312	336	359	374
197	122	75	61	64	50	56	76
232	313	427	561	708	889	1127	1361
12	13	16	16	16	16	19	19
8	13	11	17	19	18	18	19
204	283	395	523	666	847	1082	1317
7	5	4	5	7	7	7	6
13	13	15	17	18	19	22	23
240	326	410	476	500	547	645	888
143	185	269	363	443	520	679	798
3	4	6	8	10	10	13	13
7	5	8	8	7	5	6	4
44	48	45	45	52	73	89	86
1532	1666	1813	1974	2357	2687	2766	3090
1283	1283	1270	1388	1403	1495	1566	1636
422	369	327	363	328	292	299	309
361	384	395	444	488	611	689	729
6	7	6	7	8	11	7	8
372	405	437	466	460	464	445	439
120	114	101	102	114	114	125	148
2	4	4	6	4	3	2	3
363	406	457	477	510	551	607	652
135	152	179	194	192	200	241	245
17	15	17	18	27	28	27	39
211	239	261	265	291	324	340	368
22	23	21	28	31	31	31	36
182	206	248	280	380	513	616	546
123	147	135	137	120	145	168	228
25	45	40	47	57	83	130	111
153	207	254	315	308	299	227	170
480	540	593	652	716	863	1008	1159
44	38	36	33	36	48	47	60
137	176	225	269	302	342	376	434
3	6	7	12	11	17	22	30
123	127	138	137	146	153	160	172
173	192	187	200	222	303	403	464

Table 15a Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and five-year period, 1955–2014

ICD10	Site	1955–59	1960–64	1965–69	1970–74
C00–96	All sites	326.6	348.8	378.9	412.1
C00–14	Mouth, pharynx	15.7	15.1	14.4	16.3
C00	Lip	8.8	7.7	7.7	8.4
C01–02	Tongue	1.3	1.6	1.5	1.7
C03–06	Mouth, other	1.8	2.0	2.1	2.0
C07–08	Salivary glands	0.9	0.9	0.9	1.0
C09–14	Pharynx	2.9	2.9	2.2	3.2
C15–26	Digestive organs	140.9	137.0	136.2	133.1
C15	Oesophagus	6.5	6.8	5.7	5.4
C16	Stomach	75.1	64.9	58.9	47.2
C17	Small intestine	1.0	0.7	1.0	1.0
C18	Colon	19.2	22.7	25.6	27.0
C19–20	Rectum, rectosigmoid	12.9	13.8	16.8	20.8
C21	Anus	0.2	0.6	0.4	0.4
C22	Liver	1.3	1.7	2.2	3.1
C23–24	Gallbladder, bile ducts	1.2	1.7	1.8	1.9
C25	Pancreas	11.3	11.9	15.2	16.3
C26	Other digestive organs	12.3	12.2	8.5	10.0
C30–34, C38	Respiratory organs	22.4	29.9	38.0	46.1
C30–31	Nose, sinuses	1.6	1.6	1.6	1.3
C32	Larynx, epiglottis	2.1	3.0	4.0	4.4
C33–34	Lung, trachea	17.8	24.5	31.5	39.4
C38	Mediastinum, pleura (non-mesothelioma)	0.9	0.8	0.9	0.9
C40–41	Bone	0.9	0.8	1.0	0.9
C43	Melanoma of the skin	3.2	4.7	6.6	9.0
C44	Skin, non-melanoma	8.2	7.0	7.6	13.2
C45	Mesothelioma	0.0	0.2	0.1	0.5
C47	Autonomic nervous system	1.5	1.0	1.0	0.6
C48–49	Soft tissues	1.6	2.0	2.4	3.0
C50	Breast	0.7	0.6	0.7	0.6
C60–63	Male genital organs	68.0	77.2	85.4	94.6
C61	Prostate	63.3	71.1	79.7	88.1
C62	Testis	3.1	4.2	4.1	4.8
C60, C63	Other male genital	1.6	1.9	1.6	1.7
C64–68	Urinary organs	24.0	28.6	34.3	39.5
C64	Kidney excl. renal pelvis	6.7	8.5	10.1	10.3
C65	Renal pelvis	0.5	0.8	1.1	1.5
C66–68	Bladder, ureter, urethra	16.8	19.3	23.1	27.7
C69	Eye	1.3	1.2	1.3	1.1
C70–72, D32–33	Central nervous system	7.1	7.7	8.5	8.6
C73	Thyroid gland	1.3	1.7	2.2	2.1
C37, C74–75	Other endocrine glands	0.4	0.5	0.8	1.3
C39, C76, C80	Other or unspecified	4.3	6.0	8.4	9.6
C81–96	Lymphoid and haematopoietic tissue	25.3	27.7	30.2	32.0
C81	Hodgkin lymphoma	2.8	3.3	3.4	3.6
C82–86, C96	Non-Hodgkin lymphoma	6.3	6.5	7.9	7.6
C88	Malignant immunoproliferative diseases	0.0	0.0	0.1	0.3
C90	Multiple myeloma	5.4	5.8	6.2	7.5
C91–95, D45–47	Leukaemia	10.8	12.0	12.6	12.9

Period							
1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
461.7	499.8	529.0	573.6	610.8	652.5	706.2	724.7
15.1	14.9	14.9	14.4	14.3	13.4	13.6	15.0
7.4	6.4	5.7	4.7	3.6	2.8	3.3	3.4
1.7	2.0	2.1	2.1	2.5	2.5	2.7	3.1
2.1	2.8	2.8	3.0	3.0	2.6	2.3	2.4
1.0	0.8	0.8	1.2	1.1	1.1	1.0	1.3
3.0	2.9	3.5	3.5	4.2	4.4	4.4	4.9
137.7	143.6	140.7	141.8	140.4	143.7	142.4	147.8
5.9	5.2	5.5	6.0	6.8	6.9	7.1	8.5
40.1	37.1	31.9	28.0	23.0	19.2	15.3	13.5
1.3	1.7	1.5	1.7	2.1	2.8	3.1	3.8
32.3	38.5	43.0	47.8	50.1	54.2	55.9	59.2
25.9	30.1	30.4	32.5	31.9	34.3	33.1	33.3
0.5	0.6	0.7	0.8	1.1	0.9	0.9	1.0
3.2	3.6	3.7	3.4	3.5	4.1	4.5	6.1
2.4	2.6	2.8	3.1	3.2	3.2	3.5	3.6
16.3	17.8	18.0	15.9	15.6	15.9	17.0	15.9
9.7	6.3	3.2	2.5	3.1	2.1	2.0	2.8
57.0	66.6	71.9	75.2	77.3	79.9	79.3	77.5
1.4	1.4	1.4	1.2	1.1	1.2	1.1	1.2
5.1	5.6	6.1	5.8	5.8	5.7	4.8	4.6
49.3	58.6	64.0	67.5	69.6	72.3	72.9	71.4
1.1	1.0	0.4	0.8	0.8	0.8	0.5	0.4
1.3	1.1	1.0	1.0	1.0	1.1	1.1	1.1
11.3	14.0	18.1	22.8	23.6	24.2	29.4	37.7
15.4	17.8	22.7	27.2	31.3	35.4	39.8	43.4
1.0	1.2	2.2	2.1	2.9	3.3	3.3	3.1
0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.2
3.5	2.9	2.2	2.5	2.6	2.7	2.8	2.9
0.7	0.9	0.7	0.9	0.8	0.8	0.9	1.1
106.2	112.4	117.8	141.5	168.6	188.9	223.2	223.8
99.1	104.3	109.0	131.0	157.4	176.4	209.1	209.8
5.3	6.5	7.2	8.8	9.4	10.5	11.9	12.0
1.8	1.6	1.6	1.8	1.8	2.0	2.2	2.0
47.6	55.4	60.5	64.4	62.6	65.8	69.0	70.9
11.9	14.3	15.0	15.8	15.2	17.1	18.8	22.6
1.6	1.8	1.5	2.0	1.9	2.0	2.3	2.5
34.1	39.3	44.0	46.6	45.5	46.7	47.8	45.7
1.4	1.6	1.3	1.4	1.5	1.6	1.5	1.5
10.2	11.1	13.0	13.8	15.7	18.6	21.2	19.7
2.5	2.7	2.6	2.3	2.4	2.5	3.1	3.9
1.4	2.2	2.3	2.4	3.0	4.0	5.6	4.7
11.4	12.9	16.3	17.0	16.9	13.1	9.8	7.0
37.5	38.2	40.5	42.5	45.4	53.3	60.0	63.4
3.7	2.9	2.4	2.4	2.5	3.0	3.1	3.0
9.9	11.2	14.1	16.2	18.1	19.2	21.7	23.5
0.5	0.5	0.6	0.8	1.1	1.6	1.6	1.6
9.4	9.3	9.7	9.1	9.3	9.0	10.1	9.5
14.0	14.3	13.6	13.9	14.3	20.5	23.5	25.8

Table 15b Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and five-year period, 1955–2014

ICD10	Site	1955–59	1960–64	1965–69	1970–74
C00–96	All sites	286.3	288.6	305.5	324.6
C00–14	Mouth, pharynx	4.7	4.0	4.8	4.5
C00	Lip	0.6	0.5	0.8	0.6
C01–02	Tongue	0.9	0.8	1.1	1.0
C03–06	Mouth, other	1.0	0.8	1.1	0.9
C07–08	Salivary glands	0.6	0.7	0.9	0.8
C09–14	Pharynx	1.6	1.2	1.0	1.2
C15–26	Digestive organs	107.1	99.0	95.4	93.8
C15	Oesophagus	1.9	2.0	1.9	1.6
C16	Stomach	47.9	38.9	32.2	25.1
C17	Small intestine	0.7	0.6	0.7	1.0
C18	Colon	20.2	22.1	25.1	26.2
C19–20	Rectum, rectosigmoid	8.5	8.5	10.7	13.8
C21	Anus	0.3	0.6	0.7	0.7
C22	Liver	0.8	0.9	1.0	1.6
C23–24	Gallbladder, bile ducts	3.3	3.3	3.5	2.9
C25	Pancreas	6.6	7.6	8.5	10.0
C26	Other digestive organs	16.7	14.6	11.1	10.9
C30–34, C38	Respiratory organs	6.3	6.8	8.2	10.0
C30–31	Nose, sinuses	1.1	0.9	0.9	0.8
C32	Larynx, epiglottis	0.1	0.2	0.3	0.4
C33–34	Lung, trachea	4.8	5.2	6.6	8.5
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.5	0.3	0.4
C40–41	Bone	0.6	0.6	0.6	0.7
C43	Melanoma of the skin	3.6	5.0	6.5	9.2
C44	Skin, non-melanoma	4.4	3.6	3.0	5.8
C45	Mesothelioma	0.0	0.1	0.0	0.1
C47	Autonomic nervous system	1.1	0.7	0.7	0.7
C48–49	Soft tissues	1.1	1.5	1.7	2.0
C50	Breast	60.2	64.3	68.6	74.0
C51–58	Female genital organs	53.9	56.0	61.3	66.3
C53	Cervix uteri	20.2	20.8	22.3	25.0
C54	Corpus uteri	10.9	12.3	14.1	16.1
C55	Uterus, other	1.9	1.5	1.1	0.7
C56	Ovary	16.2	16.9	19.7	18.4
C51–52, C57	Other female genital	4.5	4.4	3.9	6.0
C58	Placenta	0.1	0.2	0.2	0.2
C64–68	Urinary organs	13.4	13.9	14.6	16.6
C64	Kidney excl. renal pelvis	5.0	5.5	5.8	6.0
C65	Renal pelvis	0.5	0.3	0.6	0.7
C66–68	Bladder, ureter, urethra	8.0	8.1	8.2	9.9
C69	Eye	0.9	1.1	0.9	0.9
C70–72, D32–33	Central nervous system	6.2	6.6	7.3	6.8
C73	Thyroid gland	3.5	3.8	4.7	5.6
C37, C74–75	Other endocrine glands	0.4	0.4	0.5	0.8
C39, C76, C80	Other or unspecified	3.2	4.2	5.5	5.5
C81–96	Lymphoid and haematopoietic tissue	15.7	17.2	21.5	21.3
C81	Hodgkin lymphoma	1.8	2.1	2.7	2.1
C82–86, C96	Non-Hodgkin lymphoma	3.7	4.1	5.7	5.5
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.1
C90	Multiple myeloma	2.7	3.2	4.5	5.1
C91–95, D45–47	Leukaemia	7.5	7.8	8.6	8.4

FEMALES

Period							
1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
357.7	374.9	388.7	414.3	446.9	483.4	508.6	528.3
4.3	4.9	5.2	5.4	5.8	5.6	7.3	7.6
0.7	1.0	1.1	1.3	1.1	1.1	1.7	1.7
0.9	1.0	1.2	1.0	1.1	1.1	1.3	1.6
1.0	1.2	1.3	1.5	1.5	1.4	1.8	1.6
0.6	0.7	0.6	0.8	0.8	0.8	0.9	0.9
1.1	1.0	1.0	0.8	1.1	1.2	1.6	1.8
99.2	100.5	97.8	97.9	100.4	102.2	105.3	107.6
1.6	1.6	1.6	1.8	1.8	2.2	2.1	2.4
21.0	18.8	15.8	13.1	10.7	9.1	8.4	6.6
1.0	1.2	1.2	1.4	1.5	2.2	2.2	2.3
32.1	35.4	38.3	40.6	44.9	47.0	49.2	51.1
16.4	19.0	18.2	19.4	19.9	20.1	20.5	20.3
0.9	1.1	1.3	1.7	1.5	1.7	1.8	2.0
1.5	1.9	1.9	2.0	1.7	1.9	2.2	3.0
3.2	3.8	3.5	3.0	3.2	3.0	3.2	3.6
10.6	11.8	12.6	12.5	12.6	13.3	13.7	13.7
10.8	6.0	3.4	2.5	2.5	1.8	2.0	2.7
11.7	15.2	20.1	26.2	32.3	39.2	46.5	52.1
0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.7
0.4	0.6	0.5	0.8	0.9	0.8	0.8	0.7
10.3	13.8	18.6	24.5	30.5	37.5	44.7	50.4
0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2
0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9
13.0	16.8	20.3	22.5	22.7	23.8	26.6	34.3
7.9	9.1	12.0	15.2	17.6	19.7	24.6	27.5
0.1	0.2	0.3	0.3	0.5	0.4	0.5	0.5
0.3	0.3	0.4	0.4	0.3	0.2	0.2	0.2
2.3	2.3	2.1	2.1	2.3	3.1	3.7	3.3
81.2	84.3	87.8	92.4	109.1	120.3	116.1	121.0
67.9	65.3	62.1	65.8	64.2	64.9	64.7	63.3
23.2	19.2	16.2	17.2	15.1	12.7	12.4	12.4
18.7	19.4	19.6	21.5	22.8	26.9	28.8	28.1
0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3
19.5	20.7	21.2	22.1	21.0	20.1	18.2	16.9
6.1	5.5	4.6	4.5	4.8	4.7	4.9	5.5
0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
18.4	19.1	20.4	20.5	21.3	22.4	24.1	24.2
6.8	7.2	8.1	8.4	8.2	8.2	9.7	9.4
0.8	0.7	0.7	0.7	1.1	1.2	1.1	1.4
10.7	11.2	11.6	11.3	12.0	13.0	13.3	13.4
1.1	1.1	1.0	1.3	1.4	1.3	1.3	1.4
9.4	10.3	12.2	13.1	17.2	22.5	25.6	21.3
6.7	7.4	6.5	6.4	5.3	6.3	7.1	9.1
1.3	2.3	1.9	2.3	2.6	3.7	5.6	4.4
7.8	9.8	11.2	13.3	12.5	11.3	8.3	5.9
24.3	25.4	26.9	28.4	30.6	35.6	40.3	43.7
2.2	1.8	1.6	1.5	1.6	2.0	2.0	2.4
7.0	8.4	10.5	12.0	13.2	14.5	15.3	16.5
0.2	0.3	0.3	0.5	0.5	0.7	0.9	1.1
6.1	5.9	6.1	5.7	6.0	6.2	6.3	6.3
8.8	9.0	8.4	8.6	9.4	12.3	15.8	17.3

Table 16a Average annual number of new cases by primary site and county, 2010–2014

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00–96	All sites	16398	1064	1704	1458	695	686	937
C00–14	Mouth, pharynx	350	23	34	43	14	14	22
C00	Lip	74	6	6	5	3	4	6
C01–02	Tongue	73	4	7	10	2	3	3
C03–06	Mouth, other	54	3	6	6	2	3	3
C07–08	Salivary glands	30	3	3	4	2	1	1
C09–14	Pharynx	119	8	12	18	6	4	9
C15–26	Digestive organs	3306	207	336	305	141	140	178
C15	Oesophagus	193	11	19	16	10	11	10
C16	Stomach	302	16	24	26	13	12	16
C17	Small intestine	88	5	10	5	3	4	4
C18	Colon	1305	88	133	111	53	57	71
C19–20	Rectum, rectosigmoid	757	49	82	68	32	30	42
C21	Anus	24	1	3	4	1	1	1
C22	Liver	141	8	15	20	8	4	6
C23–24	Gallbladder, bile ducts	80	6	9	9	5	5	5
C25	Pancreas	355	18	33	37	15	14	20
C26	Other digestive organs	61	5	7	8	2	2	3
C30–34, C38	Respiratory organs	1741	120	153	136	77	81	88
C30–31	Nose, sinuses	27	1	2	2	1	1	2
C32	Larynx, epiglottis	105	6	9	10	5	6	5
C33–34	Lung, trachea	1601	112	142	124	70	73	81
C38	Mediastinum, pleura (non-mesothelioma)	9	1	1	0	1	0	0
C40–41	Bone	27	2	2	3	1	2	0
C43	Melanoma of the skin	873	54	115	91	37	29	55
C44	Skin, non-melanoma	896	58	90	75	32	30	62
C45	Mesothelioma	68	4	7	7	3	3	5
C47	Autonomic nervous system	6	0	1	0	0	0	0
C48–49	Soft tissues	68	3	8	8	3	3	4
C50	Breast	26	1	3	3	1	1	1
C60–63	Male genital organs	5132	369	546	414	202	216	297
C61	Prostate	4780	354	513	366	190	202	284
C62	Testis	305	14	29	41	10	12	11
C60, C63	Other male genital	46	2	3	6	1	2	2
C64–68	Urinary organs	1589	99	160	140	77	68	97
C64	Kidney excl. renal pelvis	532	30	55	48	25	22	36
C65	Renal pelvis	56	5	5	5	2	3	3
C66–68	Bladder, ureter, urethra	1002	64	100	87	49	43	59
C69	Eye	35	3	2	4	1	1	2
C70–72, D32–33	Central nervous system	473	28	48	43	20	15	25
C73	Thyroid gland	94	5	10	14	3	3	6
C37, C74–75	Other endocrine glands	115	7	11	11	4	4	5
C39, C76, C80	Other or unspecified	149	9	11	13	7	8	11
C81–96	Lymphoid and haematopoietic tissue	1450	71	166	148	72	67	81
C81	Hodgkin lymphoma	75	3	8	8	6	3	4
C82–86, C96	Non-Hodgkin lymphoma	540	28	58	54	25	29	24
C88	Malignant immunoproliferative diseases	36	1	6	3	1	1	3
C90	Multiple myeloma	214	10	24	23	12	10	12
C91–95, D45–47	Leukaemia	585	27	69	62	27	25	37

MALES

Finmark	Troms	Nordland	Nord-Trøndelag	Sør-Trøndelag	Møre og Romsdal	Sogn og Fjordane	Hordaland	Rogaland	Vest-Agder	Aust-Agder	Telemark	Vestfold
231	528	828	477	910	952	403	1640	1382	536	426	619	923
5	9	18	8	19	18	8	33	27	11	7	16	20
0	2	4	2	4	5	1	7	9	2	2	4	3
2	2	4	1	5	5	1	8	6	2	1	3	6
1	0	3	1	3	2	2	6	5	1	2	2	3
0	1	2	1	1	2	0	3	2	1	0	2	2
2	5	5	3	7	5	3	9	5	5	2	5	7
46	115	190	106	195	195	85	332	259	104	81	116	176
3	6	13	5	10	10	5	19	14	6	5	7	12
7	12	20	10	18	18	9	33	25	10	8	12	12
1	3	3	3	7	4	2	11	11	4	1	3	5
15	41	73	44	77	84	35	132	105	39	31	45	71
9	32	40	24	43	46	20	76	57	25	18	22	42
1	0	1	1	2	1	1	2	1	0	0	1	1
1	6	9	3	9	6	3	12	11	3	3	7	7
1	2	4	2	6	4	2	6	5	2	3	3	2
6	12	22	11	21	19	7	37	28	12	10	15	17
1	2	5	1	3	3	2	3	3	3	1	2	6
38	60	97	54	100	100	41	162	154	63	49	65	104
1	1	2	1	1	2	1	3	3	0	0	2	1
1	4	7	3	5	9	2	10	11	2	1	4	5
36	54	87	49	94	88	38	149	139	61	48	58	97
0	0	1	0	0	1	0	1	1	0	0	1	0
1	0	2	1	1	2	1	3	2	1	0	1	1
5	17	28	25	51	31	16	86	83	26	22	34	68
8	22	34	25	41	34	19	98	79	52	32	48	58
1	1	2	1	1	4	2	9	5	3	2	3	5
0	0	0	0	0	1	0	0	1	1	0	0	0
0	2	4	3	4	3	1	6	4	2	2	2	5
0	1	1	0	1	1	0	3	3	1	0	2	2
69	177	238	139	272	351	131	524	449	144	132	191	273
63	166	218	130	246	331	124	487	412	132	125	180	255
5	9	15	7	23	18	6	32	33	11	6	8	14
1	1	5	1	2	2	1	5	3	1	1	2	3
24	56	89	49	86	99	38	157	115	49	38	57	90
8	16	24	17	33	31	13	48	40	21	11	21	31
1	3	2	2	3	3	1	5	3	1	2	4	2
14	37	62	29	50	66	24	104	72	27	25	32	57
1	1	2	1	2	3	1	2	3	1	1	1	2
7	16	26	16	32	20	13	45	48	16	11	20	25
2	3	5	3	5	6	1	10	5	4	1	3	3
1	4	6	4	8	3	4	16	9	5	3	6	5
4	6	8	4	9	8	3	16	10	5	5	4	7
19	37	77	38	82	75	38	138	126	49	39	51	78
1	3	4	2	4	5	1	8	6	3	2	1	3
8	15	31	14	34	35	14	49	46	18	15	19	25
0	1	2	0	1	1	1	5	2	1	0	1	4
3	4	15	6	11	11	8	19	17	5	5	8	11
7	13	25	17	32	22	14	57	54	23	17	22	34

Table 16b Average annual number of new cases by primary site and county, 2010–2014

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00–96	All sites	13926	870	1491	1511	604	573	812
C00–14	Mouth, pharynx	202	12	21	26	11	10	9
C00	Lip	48	3	5	4	3	2	3
C01–02	Tongue	42	3	5	6	3	2	1
C03–06	Mouth, other	43	2	5	5	2	3	2
C07–08	Salivary glands	24	2	3	3	1	2	0
C09–14	Pharynx	44	2	4	8	2	1	2
C15–26	Digestive organs	2924	188	298	285	128	119	159
C15	Oesophagus	66	3	7	11	3	3	4
C16	Stomach	181	8	12	16	8	7	9
C17	Small intestine	60	4	6	6	4	1	3
C18	Colon	1397	96	137	135	58	52	81
C19–20	Rectum, rectosigmoid	540	36	64	48	22	26	29
C21	Anus	51	2	8	6	2	3	3
C22	Liver	81	5	8	10	5	3	3
C23–24	Gallbladder, bile ducts	97	5	11	10	5	5	6
C25	Pancreas	374	24	41	35	17	16	18
C26	Other digestive organs	76	5	5	10	4	2	5
C30–34, C38	Respiratory organs	1361	99	149	135	66	55	73
C30–31	Nose, sinuses	19	1	2	1	1	2	2
C32	Larynx, epiglottis	19	2	1	2	1	1	1
C33–34	Lung, trachea	1317	96	146	130	64	52	70
C38	Mediastinum, pleura (non-mesothelioma)	6	1	0	1	0	0	0
C40–41	Bone	23	1	2	4	1	1	0
C43	Melanoma of the skin	888	53	108	99	34	34	54
C44	Skin, non-melanoma	798	50	78	74	29	22	65
C45	Mesothelioma	13	1	2	1	1	0	1
C47	Autonomic nervous system	4	0	1	0	0	0	0
C48–49	Soft tissues	86	4	9	9	5	4	5
C50	Breast	3090	187	355	380	122	125	176
C51–58	Female genital organs	1636	107	171	186	78	81	97
C53	Cervix uteri	309	19	34	42	15	13	16
C54	Corpus uteri	729	45	73	79	37	37	45
C55	Uterus, other	8	0	1	1	0	0	1
C56	Ovary	439	34	49	49	19	23	26
C51–52, C57	Other female genital	148	9	14	15	7	8	10
C58	Placenta	3	0	0	1	0	0	0
C64–68	Urinary organs	652	44	63	67	27	33	39
C64	Kidney excl. renal pelvis	245	18	26	21	10	13	18
C65	Renal pelvis	39	2	4	6	1	1	2
C66–68	Bladder, ureter, urethra	368	24	33	40	17	19	19
C69	Eye	36	3	2	4	2	2	2
C70–72, D32–33	Central nervous system	546	29	56	48	24	21	32
C73	Thyroid gland	228	10	22	39	9	7	11
C37, C74–75	Other endocrine glands	111	6	10	10	4	2	7
C39, C76, C80	Other or unspecified	170	10	17	20	8	8	9
C81–96	Lymphoid and haematopoietic tissue	1159	67	128	124	55	48	72
C81	Hodgkin lymphoma	60	4	6	8	3	1	5
C82–86, C96	Non-Hodgkin lymphoma	434	26	45	46	21	17	22
C88	Malignant immunoproliferative diseases	30	1	4	2	2	1	3
C90	Multiple myeloma	172	10	20	17	10	9	11
C91–95, D45–47	Leukaemia	464	26	54	51	19	20	31

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finmark
732	523	332	503	1152	1357	304	701	801	379	690	414	176
12	9	4	6	17	17	5	10	9	5	12	6	2
3	1	1	1	7	4	2	2	2	1	3	1	0
3	2	1	1	3	3	1	2	2	1	2	1	1
2	3	1	1	2	5	1	3	2	0	2	1	0
1	0	0	1	2	3	0	1	2	1	1	1	0
3	2	1	2	3	3	0	2	2	1	4	1	1
146	100	62	100	241	291	77	173	175	83	159	98	41
4	3	1	1	4	5	1	2	3	1	5	2	1
9	7	2	5	16	23	7	14	11	5	12	7	4
1	2	1	2	4	7	2	2	8	2	2	2	1
65	46	31	51	124	142	37	86	80	38	77	46	16
34	19	10	19	40	58	14	31	28	16	26	14	6
2	1	1	2	4	5	1	2	2	2	3	2	1
4	2	1	2	5	7	1	4	8	2	4	5	2
4	4	2	3	8	8	4	5	6	3	4	2	1
18	13	9	13	30	30	8	22	24	11	21	16	7
3	4	3	3	5	6	2	4	4	3	4	2	0
76	50	37	59	109	121	22	67	74	36	70	41	23
1	1	0	1	2	1	0	1	1	0	1	1	0
1	1	0	0	2	2	0	1	1	0	1	1	0
74	47	36	58	105	117	21	65	71	36	68	39	22
0	0	0	0	1	0	0	0	0	0	1	0	1
1	1	1	1	3	3	0	1	1	1	2	0	0
61	34	24	32	91	85	16	33	60	22	24	17	5
42	41	31	52	77	82	14	31	35	19	33	18	6
1	0	0	0	1	1	0	0	1	0	0	1	0
0	0	0	0	1	1	0	0	0	0	0	0	0
4	4	2	2	5	6	2	4	6	2	5	5	1
154	108	71	104	255	293	64	164	177	89	143	85	37
84	65	37	52	125	162	32	73	90	42	81	53	18
18	12	6	8	19	30	6	15	15	8	18	11	5
37	27	17	25	58	75	14	33	42	20	35	25	6
0	0	0	0	0	1	0	0	0	1	0	1	0
20	18	10	16	39	41	9	17	24	8	21	11	6
8	7	4	4	8	15	3	9	9	4	8	5	1
1	0	0	0	0	0	0	0	0	0	0	0	0
29	22	15	18	48	67	15	37	42	17	37	22	10
10	8	5	6	15	22	6	13	17	8	16	10	4
3	1	1	1	2	5	1	2	3	1	2	1	0
17	13	9	12	32	39	8	22	22	8	19	11	6
2	1	1	1	4	5	1	2	2	0	2	2	0
34	21	12	17	52	56	15	22	30	19	30	17	9
13	10	4	9	11	20	4	11	16	3	16	12	3
6	3	2	4	6	18	5	5	7	4	6	3	1
8	9	3	6	12	13	4	8	9	7	11	4	4
59	46	26	38	93	117	27	60	67	31	57	30	15
2	3	2	2	4	5	1	4	4	2	2	2	0
20	15	9	16	34	47	8	24	27	12	26	13	7
1	1	1	1	2	5	1	1	2	1	1	0	1
9	7	5	5	10	16	4	9	10	5	9	4	2
26	21	10	15	42	46	12	22	23	11	19	11	5

Table 17a Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and county, 2010–2014

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00–96	All sites	724.7	780.8	713.8	669.4	656.8	682.2	742.6
C00–14	Mouth, pharynx	15.0	16.5	13.8	18.7	13.1	14.3	16.5
C00	Lip	3.4	4.1	2.7	2.5	2.9	3.8	4.5
C01–02	Tongue	3.1	2.6	3.0	4.0	1.5	2.8	2.4
C03–06	Mouth, other	2.4	2.3	2.4	2.9	1.7	3.0	2.2
C07–08	Salivary glands	1.3	1.9	1.1	1.8	1.7	1.0	0.8
C09–14	Pharynx	4.9	5.6	4.6	7.5	5.4	3.6	6.6
C15–26	Digestive organs	147.8	153.3	141.5	143.5	133.0	138.5	142.0
C15	Oesophagus	8.5	8.1	8.0	7.6	9.2	11.3	7.8
C16	Stomach	13.5	12.2	9.7	12.1	12.4	12.2	12.8
C17	Small intestine	3.8	3.6	4.1	2.1	2.8	3.6	3.1
C18	Colon	59.2	65.9	57.1	53.3	49.9	56.4	57.4
C19–20	Rectum, rectosigmoid	33.3	35.3	34.2	31.6	29.9	29.6	33.1
C21	Anus	1.0	1.0	1.0	2.1	0.7	0.6	1.2
C22	Liver	6.1	5.9	6.3	9.0	7.2	4.3	4.3
C23–24	Gallbladder, bile ducts	3.6	4.2	3.8	4.0	4.4	4.8	3.6
C25	Pancreas	15.9	13.2	14.1	18.0	14.4	13.6	16.3
C26	Other digestive organs	2.8	3.9	3.3	3.7	2.1	2.1	2.2
C30–34, C38	Respiratory organs	77.5	87.6	66.1	65.4	71.0	80.0	70.3
C30–31	Nose, sinuses	1.2	0.5	0.8	0.8	1.3	1.4	1.2
C32	Larynx, epiglottis	4.6	4.6	3.5	4.9	4.6	5.8	4.0
C33–34	Lung, trachea	71.4	81.8	61.4	59.6	64.6	72.4	64.9
C38	Mediastinum, pleura (non-mesothelioma)	0.4	0.7	0.4	0.1	0.6	0.5	0.2
C40–41	Bone	1.1	1.7	0.9	1.1	0.9	1.7	0.3
C43	Melanoma of the skin	37.7	38.8	46.1	39.7	35.2	28.2	42.5
C44	Skin, non-melanoma	43.4	47.8	43.2	39.2	31.8	31.6	54.3
C45	Mesothelioma	3.1	3.0	2.7	3.6	2.7	3.1	3.8
C47	Autonomic nervous system	0.2	0.0	0.2	0.0	0.4	0.0	0.3
C48–49	Soft tissues	2.9	2.0	3.2	3.3	2.9	2.6	2.9
C50	Breast	1.1	0.9	1.3	1.3	1.4	1.0	0.7
C60–63	Male genital organs	223.8	267.3	226.1	187.3	188.5	214.0	231.4
C61	Prostate	209.8	256.2	214.3	173.2	175.9	198.4	221.2
C62	Testis	12.0	10.0	10.3	11.2	11.5	13.9	8.4
C60, C63	Other male genital	2.0	1.1	1.5	2.9	1.1	1.6	1.9
C64–68	Urinary organs	70.9	73.8	67.8	66.6	72.4	67.6	77.1
C64	Kidney excl. renal pelvis	22.6	21.7	21.9	21.1	24.0	21.5	26.9
C65	Renal pelvis	2.5	3.4	2.1	2.3	2.1	3.0	2.1
C66–68	Bladder, ureter, urethra	45.7	48.6	43.8	43.2	46.3	43.2	48.1
C69	Eye	1.5	2.0	0.9	1.7	1.3	1.1	1.2
C70–72, D32–33	Central nervous system	19.7	20.1	18.6	16.1	20.1	15.6	18.9
C73	Thyroid gland	3.9	3.5	3.7	5.1	3.3	2.6	4.4
C37, C74–75	Other endocrine glands	4.7	4.9	4.2	4.3	3.8	4.0	3.5
C39, C76, C80	Other or unspecified	7.0	6.8	5.4	6.4	6.6	8.6	8.9
C81–96	Lymphoid and haematopoietic tissue	63.4	50.9	68.2	66.0	68.3	67.6	63.8
C81	Hodgkin lymphoma	3.0	2.3	2.8	2.6	6.1	3.2	2.9
C82–86, C96	Non-Hodgkin lymphoma	23.5	20.1	23.6	23.3	23.8	28.6	19.0
C88	Malignant immunoproliferative diseases	1.6	0.9	2.6	1.2	1.0	0.8	2.6
C90	Multiple myeloma	9.5	7.5	10.3	10.9	11.7	9.6	9.5
C91–95, D45–47	Leukaemia	25.8	20.1	29.0	28.1	25.7	25.4	29.9

MALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finnmark
808.1	717.9	804.6	703.4	788.0	769.1	720.5	741.2	689.2	695.3	670.9	708.7	653.6
17.1	18.4	13.2	13.9	15.1	15.1	13.4	14.2	13.9	11.3	14.6	12.0	12.1
2.8	4.8	3.6	3.2	5.3	3.4	2.2	3.7	3.0	2.6	3.1	2.4	0.4
4.8	3.1	1.4	2.2	3.1	3.5	2.1	3.5	3.4	1.7	3.3	2.5	5.8
2.3	2.5	3.5	1.6	2.7	2.8	3.2	1.9	1.9	1.4	2.6	0.5	2.1
1.3	2.0	0.9	1.3	1.4	1.3	0.8	1.4	0.8	1.4	1.7	1.0	0.0
5.9	5.9	3.9	5.7	2.6	4.0	5.2	3.6	4.8	4.2	3.9	5.6	3.8
155.7	135.3	152.8	138.2	150.9	157.9	153.0	153.1	150.7	154.4	153.1	156.8	131.1
10.0	8.0	8.7	8.3	7.8	9.1	9.7	7.4	7.9	7.8	10.7	7.9	8.4
10.9	13.8	15.9	12.7	14.7	16.0	16.9	14.3	14.4	14.2	16.3	16.5	18.1
4.5	3.2	2.0	5.1	6.3	5.2	3.2	2.9	5.2	5.0	2.0	4.0	3.0
64.1	52.7	59.0	53.2	62.2	63.5	63.3	66.2	60.7	65.7	59.3	57.8	44.6
36.7	24.8	34.4	31.9	32.7	35.6	36.1	36.2	32.0	34.7	31.4	40.5	26.8
0.6	1.2	0.4	0.2	0.7	1.0	1.0	0.9	1.5	0.8	0.7	0.5	2.5
6.4	8.1	4.8	4.7	6.0	5.4	4.6	4.5	6.8	4.5	7.6	7.2	3.2
2.0	3.8	5.5	2.9	2.6	2.9	3.5	3.4	4.4	3.5	3.2	3.5	1.6
15.6	17.7	19.3	15.8	16.1	17.7	11.7	14.7	15.7	16.6	17.9	16.4	18.5
5.0	1.9	3.0	3.4	1.8	1.5	3.0	2.6	2.0	1.6	4.0	2.4	4.3
90.3	74.7	92.6	83.2	89.5	76.8	72.6	78.0	76.9	79.4	77.3	81.3	107.4
1.3	2.0	0.4	0.0	1.7	1.4	1.4	1.3	0.7	2.0	1.7	1.7	2.1
4.4	4.7	2.6	2.5	6.0	4.4	3.1	7.1	3.4	4.8	5.2	5.5	1.8
84.3	66.9	89.6	80.2	81.4	70.5	68.1	69.1	72.7	72.3	69.8	73.6	102.4
0.4	1.2	0.0	0.5	0.3	0.4	0.0	0.4	0.1	0.3	0.5	0.5	1.1
1.1	1.7	0.9	0.7	0.7	1.4	1.0	1.2	0.8	0.8	1.6	0.5	1.5
58.8	39.1	42.5	33.2	45.8	39.4	29.3	23.9	37.1	37.0	23.5	22.0	13.1
54.6	58.4	64.8	73.8	50.2	49.6	34.8	28.0	33.9	38.8	30.1	32.1	24.9
4.8	3.5	3.6	4.2	2.9	4.6	3.4	3.1	1.1	2.2	1.6	1.3	2.1
0.4	0.6	0.4	0.7	0.3	0.2	0.0	0.4	0.0	0.3	0.3	0.3	0.0
4.3	2.6	3.5	3.0	2.0	2.5	2.1	2.2	2.6	4.5	3.6	3.4	0.6
1.9	2.2	0.8	1.0	1.5	1.3	0.3	0.6	0.9	0.3	0.6	1.0	0.9
236.1	218.1	242.0	185.4	251.7	242.6	234.4	270.0	202.7	198.4	191.1	231.1	194.9
221.1	204.7	229.4	171.1	235.9	227.8	220.5	254.4	186.4	184.7	173.4	217.9	179.0
12.2	10.6	11.2	12.5	14.1	12.5	12.5	14.0	14.7	11.5	13.5	11.5	13.5
2.9	2.9	1.5	1.8	1.8	2.4	1.4	1.6	1.7	2.2	4.3	1.7	2.3
78.6	65.9	74.1	65.3	67.4	74.0	68.4	77.0	65.8	71.0	72.8	78.9	72.0
26.4	23.3	19.9	27.4	21.8	22.0	23.2	23.3	23.9	24.4	19.2	21.3	22.6
1.9	4.6	4.3	1.9	1.7	2.3	2.5	2.0	2.6	3.5	1.6	4.5	3.3
50.3	38.0	50.0	36.1	44.0	49.8	42.7	51.7	39.3	43.1	52.0	53.1	46.1
1.7	1.2	2.6	1.0	1.9	0.9	1.4	2.0	1.8	2.1	1.9	0.8	2.8
21.2	23.1	20.4	19.4	24.5	19.5	22.9	15.5	23.1	22.8	20.7	19.5	17.2
3.0	3.6	1.5	5.3	2.8	4.5	2.5	4.8	3.6	3.8	4.2	4.7	6.1
3.9	6.4	5.3	5.4	4.6	6.8	7.0	2.2	5.9	5.7	5.1	5.2	2.6
6.8	4.8	9.8	6.4	6.6	8.2	6.0	6.3	7.5	6.0	6.9	9.1	11.7
67.8	58.4	73.9	63.3	69.6	63.9	68.1	58.8	60.7	56.6	62.0	48.9	52.4
2.9	1.6	3.0	2.8	3.0	3.2	1.8	4.1	2.7	2.6	2.9	4.5	3.7
21.8	21.6	28.2	22.9	25.2	22.7	25.6	27.0	25.4	20.5	24.6	19.0	21.3
3.3	1.4	0.9	0.8	1.4	2.6	1.8	1.1	1.0	0.3	1.5	1.6	0.0
9.6	8.7	9.7	6.9	9.8	9.0	14.0	8.8	8.2	8.1	12.2	5.9	7.2
30.1	25.0	32.0	29.9	30.2	26.4	25.0	17.7	23.5	25.1	20.7	18.0	20.2

Table 17b Age-standardised (Norway, 2014) incidence rates per 100 000 person-years by primary site and county, 2010–2014

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00–96	All sites	528.3	545.7	530.0	540.9	502.2	504.7	554.8
C00–14	Mouth, pharynx	7.6	7.6	7.5	9.5	9.4	8.0	6.1
C00	Lip	1.7	1.9	1.6	1.3	2.3	1.8	1.9
C01–02	Tongue	1.6	1.6	1.8	2.2	2.1	1.5	1.0
C03–06	Mouth, other	1.6	1.5	1.7	2.0	1.9	2.1	1.6
C07–08	Salivary glands	0.9	1.3	1.0	1.1	1.1	1.9	0.0
C09–14	Pharynx	1.8	1.3	1.4	2.9	2.0	0.8	1.6
C15–26	Digestive organs	107.6	113.4	106.0	101.5	99.1	98.4	105.7
C15	Oesophagus	2.4	1.8	2.3	3.9	2.7	2.9	2.3
C16	Stomach	6.6	4.7	4.4	5.5	6.4	5.3	5.9
C17	Small intestine	2.3	2.3	2.2	2.1	2.7	1.3	2.1
C18	Colon	51.1	57.9	48.6	47.5	44.5	42.4	53.1
C19–20	Rectum, rectosigmoid	20.3	22.2	22.7	17.1	18.2	22.1	19.5
C21	Anus	2.0	1.3	2.7	2.1	1.5	2.6	1.8
C22	Liver	3.0	3.2	3.0	3.6	3.8	2.3	1.9
C23–24	Gallbladder, bile ducts	3.6	2.8	3.9	3.7	3.9	4.6	4.1
C25	Pancreas	13.7	13.9	14.4	12.5	12.6	13.1	11.7
C26	Other digestive organs	2.7	3.2	1.7	3.5	2.9	1.9	3.4
C30–34, C38	Respiratory organs	52.1	61.6	53.6	50.7	53.2	47.5	49.5
C30–31	Nose, sinuses	0.7	0.3	0.8	0.5	0.7	1.6	1.4
C32	Larynx, epiglottis	0.7	1.0	0.4	0.9	0.9	0.7	0.4
C33–34	Lung, trachea	50.4	59.9	52.3	49.1	51.6	44.9	47.7
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.3	0.1	0.3	0.1	0.3	0.0
C40–41	Bone	0.9	0.5	0.8	1.2	1.0	0.7	0.3
C43	Melanoma of the skin	34.3	34.2	38.6	34.8	29.5	31.7	37.7
C44	Skin, non-melanoma	27.5	28.2	27.0	23.8	20.6	16.7	41.3
C45	Mesothelioma	0.5	0.6	0.7	0.5	0.5	0.3	1.0
C47	Autonomic nervous system	0.2	0.2	0.2	0.1	0.0	0.0	0.3
C48–49	Soft tissues	3.3	2.7	3.3	3.3	4.6	3.7	3.5
C50	Breast	121.0	121.2	125.4	140.3	106.6	116.8	123.6
C51–58	Female genital organs	63.3	69.5	61.0	66.4	67.7	73.9	67.5
C53	Cervix uteri	12.4	13.1	12.1	13.3	15.6	14.4	11.9
C54	Corpus uteri	28.1	28.6	26.3	29.7	31.0	31.1	30.9
C55	Uterus, other	0.3	0.1	0.3	0.2	0.2	0.3	0.7
C56	Ovary	16.9	21.9	17.3	17.9	15.4	20.9	17.6
C51–52, C57	Other female genital	5.5	5.7	4.8	5.1	5.5	6.8	6.4
C58	Placenta	0.1	0.0	0.1	0.2	0.0	0.3	0.1
C64–68	Urinary organs	24.2	26.8	22.3	23.8	22.3	28.0	26.4
C64	Kidney excl. renal pelvis	9.4	10.7	9.2	7.8	8.1	11.1	12.2
C65	Renal pelvis	1.4	1.4	1.4	2.1	0.6	1.2	1.4
C66–68	Bladder, ureter, urethra	13.4	14.7	11.8	13.9	13.6	15.7	12.8
C69	Eye	1.4	1.7	0.8	1.5	1.5	1.5	1.3
C70–72, D32–33	Central nervous system	21.3	19.4	19.8	16.8	21.4	19.8	22.5
C73	Thyroid gland	9.1	6.7	7.7	13.1	8.3	7.6	8.1
C37, C74–75	Other endocrine glands	4.4	4.1	3.8	3.3	4.5	2.2	4.6
C39, C76, C80	Other or unspecified	5.9	5.9	5.8	6.7	6.1	5.9	5.7
C81–96	Lymphoid and haematopoietic tissue	43.7	41.5	45.6	43.8	45.9	42.0	49.7
C81	Hodgkin lymphoma	2.4	2.4	2.2	2.4	3.1	1.6	3.9
C82–86, C96	Non-Hodgkin lymphoma	16.5	16.0	15.9	16.6	17.5	15.3	15.5
C88	Malignant immunoproliferative diseases	1.1	0.9	1.4	0.8	1.5	0.8	1.7
C90	Multiple myeloma	6.3	5.7	7.0	5.9	8.1	7.3	7.6
C91–95, D45–47	Leukaemia	17.3	16.6	19.1	18.2	15.7	17.0	21.0

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finmark
542.2	518.4	556.6	555.0	562.3	540.3	501.3	485.7	526.1	499.7	502.5	496.6	466.4
8.5	9.1	7.2	6.4	8.3	6.7	7.9	6.8	6.2	5.8	8.7	7.3	4.8
2.1	0.9	1.9	1.4	3.2	1.6	4.0	1.4	1.1	1.5	1.8	0.9	0.0
2.0	2.3	1.6	1.0	1.5	1.0	1.8	1.5	1.3	1.0	1.6	1.7	2.2
1.6	3.0	1.5	1.4	1.2	1.8	0.8	1.7	1.1	0.5	1.2	1.7	0.0
0.7	0.4	0.7	0.6	0.8	1.1	0.7	0.6	1.1	1.0	0.9	1.5	1.1
2.2	2.5	1.4	1.9	1.5	1.3	0.6	1.5	1.7	1.7	3.1	1.5	1.5
103.6	93.5	101.2	107.4	117.6	111.3	118.3	112.7	112.4	103.9	109.7	113.9	106.8
3.1	2.7	1.6	0.8	2.2	1.7	2.0	1.6	2.2	1.5	3.7	2.1	3.2
6.0	6.4	3.3	5.1	7.5	8.5	10.4	9.3	7.2	6.6	8.5	7.7	11.3
1.0	1.7	2.3	1.8	1.9	2.6	3.6	1.7	5.1	2.2	1.8	2.1	3.6
45.8	42.1	50.8	54.4	60.1	54.2	57.2	55.1	51.5	46.4	52.6	53.3	41.8
24.7	17.6	16.5	21.1	19.8	22.8	21.2	20.2	18.3	21.2	19.0	17.2	15.5
1.4	1.3	1.9	1.7	2.1	2.0	2.5	1.6	1.6	2.3	1.9	2.3	3.2
3.0	1.6	1.9	1.8	2.3	2.8	1.6	2.6	4.8	2.5	2.8	5.7	6.1
3.1	3.9	2.9	3.2	4.1	3.1	4.9	3.5	4.0	4.0	2.9	2.1	1.6
13.1	13.0	15.2	14.7	15.0	11.5	11.8	14.7	14.9	13.5	14.1	18.7	19.5
2.5	3.2	4.8	2.9	2.5	2.1	3.2	2.4	2.8	3.7	2.5	2.7	1.0
56.1	48.8	61.6	65.9	55.0	48.7	37.7	46.8	49.2	46.7	49.8	48.9	60.9
0.8	1.2	0.4	0.7	0.7	0.4	0.6	0.5	0.7	0.6	0.6	0.9	0.0
0.6	1.0	0.7	0.5	0.9	0.9	0.8	0.9	0.6	0.3	0.5	1.0	1.1
54.7	46.3	60.6	64.5	53.0	47.2	36.1	45.2	47.7	45.8	48.2	47.0	58.3
0.0	0.2	0.0	0.2	0.3	0.2	0.2	0.3	0.1	0.0	0.4	0.0	1.5
0.8	0.8	1.8	0.7	1.2	1.1	0.8	0.9	0.6	1.0	1.8	0.5	0.0
47.1	35.8	41.1	36.2	44.0	34.8	29.1	23.5	40.5	31.4	18.4	21.0	13.3
28.1	35.1	47.7	52.7	35.8	29.0	19.4	18.5	21.4	22.0	21.4	20.4	16.1
0.4	0.2	0.4	0.2	0.6	0.5	0.6	0.1	0.4	0.0	0.3	1.0	0.5
0.2	0.3	0.0	0.2	0.3	0.2	0.7	0.2	0.1	0.0	0.0	0.0	0.5
3.3	3.6	3.5	2.6	2.5	2.4	3.2	2.6	4.2	2.8	4.1	6.3	3.3
118.2	112.9	123.1	119.5	125.4	121.4	113.0	120.2	119.0	123.2	109.7	104.2	98.8
63.6	67.8	63.1	58.9	61.6	66.5	57.0	52.6	59.8	56.2	61.6	64.9	47.9
15.0	14.5	11.1	9.1	8.7	12.6	12.4	11.5	10.0	11.8	15.2	13.5	13.4
27.2	27.4	27.9	28.0	29.2	30.6	24.7	22.8	28.1	27.4	25.4	30.3	15.2
0.3	0.4	0.3	0.0	0.2	0.4	0.0	0.0	0.3	0.6	0.1	0.7	0.6
15.0	18.6	17.7	17.8	19.6	16.7	14.7	11.9	15.6	10.6	15.5	13.8	16.0
5.6	6.9	6.0	4.0	3.8	6.3	5.2	6.4	5.7	5.0	5.4	6.3	2.7
0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.7	0.0	0.3	0.0
20.9	21.1	25.4	19.7	24.0	25.9	22.0	24.6	26.9	22.0	25.4	25.8	27.2
7.6	8.0	9.4	6.8	7.3	9.0	9.6	9.2	11.4	11.0	11.1	11.6	11.7
1.8	0.9	1.6	0.8	1.1	2.0	0.8	1.6	1.7	0.9	1.6	1.7	0.5
11.5	12.2	14.4	12.1	15.6	14.9	11.6	13.8	13.8	10.1	12.7	12.5	14.9
1.9	0.6	1.0	1.3	2.0	2.0	1.2	1.1	1.2	0.5	1.6	2.1	0.6
26.1	21.9	20.6	19.7	25.1	22.9	26.2	16.5	20.4	26.7	23.8	21.2	24.9
10.2	11.3	6.3	10.7	5.4	8.5	7.3	8.0	10.6	4.4	12.8	14.6	7.5
5.1	3.9	3.2	5.1	3.1	7.4	9.2	4.2	4.9	6.4	4.8	3.8	3.9
5.2	7.6	5.2	6.1	5.7	4.8	4.6	4.9	5.2	7.4	7.0	4.9	9.6
42.9	44.2	44.2	41.6	44.9	46.1	43.2	41.5	43.2	39.3	41.9	35.9	39.9
1.9	3.2	4.3	2.0	1.9	2.0	2.4	3.4	2.8	2.3	1.6	2.8	1.1
14.8	14.2	14.5	17.8	16.6	18.6	13.9	16.8	17.3	15.8	19.1	15.5	17.8
0.8	0.6	1.0	1.1	1.0	1.9	1.4	0.5	1.3	0.8	1.0	0.5	1.6
6.4	6.3	7.8	4.7	4.8	6.2	6.5	5.7	6.7	6.9	6.4	4.9	5.4
19.1	19.9	16.6	15.9	20.5	17.5	19.0	15.1	15.1	13.4	13.9	12.3	14.0

Table 18a Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1955–2014

ICD10	Site	Stage	1955–59	1960–64	1965–69
C00–14	Mouth, pharynx	Total	182	192	194
		Localized	126	132	131
		Regional	44	46	44
		Distant	2	7	8
		Unknown	11	7	11
C15	Oesophagus	Total	72	80	78
		Localized	44	49	45
		Regional	9	12	10
		Distant	14	15	19
		Unknown	6	4	4
C16	Stomach	Total	858	802	786
		Localized	242	218	211
		Regional	189	174	155
		Distant	336	352	342
		Unknown	91	58	78
C18	Colon	Total	221	281	349
		Localized	87	114	139
		Regional	57	72	80
		Distant	66	81	113
		Unknown	12	14	17
C19–20	Rectum, rectosigmoid	Total	148	174	228
		Localized	72	84	106
		Regional	37	43	63
		Distant	26	38	50
		Unknown	13	8	9
C22	Liver	Total	17	24	32
		Localized	8	11	17
		Regional	1	1	1
		Distant	6	11	12
		Unknown	2	1	1
C23–24	Gallbladder, bile ducts	Total	15	22	25
		Localized	8	8	8
		Regional	2	3	5
		Distant	5	9	11
		Unknown	1	1	1
C25	Pancreas	Total	138	159	214
		Localized	41	47	58
		Regional	13	18	27
		Distant	72	85	117
		Unknown	13	9	12
C33–34	Lung, trachea	Total	238	356	489
		Localized	71	115	168
		Regional	48	77	93
		Distant	98	140	205
		Unknown	21	23	23
C43	Melanoma of the skin	Total	45	69	101
		Localized	27	43	64
		Regional	9	10	13
		Distant	6	14	17
		Unknown	3	1	7
C61	Prostate	Total	638	798	971
		Localized	378	497	644
		Regional	30	33	31
		Distant	167	207	219
		Unknown	63	61	77
C62	Testis	Total	51	68	69
		Localized	35	44	48
		Regional	2	3	4
		Distant	12	18	16
		Unknown	1	2	1
C64	Kidney except renal pelvis	Total	88	119	149
		Localized	48	62	75
		Regional	6	16	19
		Distant	30	37	51
		Unknown	4	4	4
C66–68	Bladder, ureter, urethra	Total	198	248	325
		Localized	153	207	271
		Regional	15	19	30
		Distant	19	14	15
		Unknown	11	7	9
C70–72, D32–33	Central nervous system	Total	115	131	148
		Non-malignant	25	40	39
		Malignant	90	90	110
C73	Thyroid gland	Total	17	24	33
		Localized	7	5	10
		Regional	7	12	14
		Distant	3	7	8
		Unknown		1	1

MALES

Period									% 2010–14
1970–74	1975–79	1980–84	1985–89	1990–94	1995–99	2000–04	2005–09	2010–14	
244	239	248	256	255	260	258	286	350	100.0
160	153	153	161	149	116	84	104	161	45.9
59	70	86	83	88	94	113	134	169	48.2
10	9	5	8	11	11	13	14	15	4.3
15	7	4	4	7	39	48	34	6	1.6
79	91	86	93	104	123	127	145	193	100.0
36	43	43	40	44	37	24	36	82	42.4
17	18	19	24	24	25	31	41	51	26.3
20	24	20	27	28	34	41	44	55	28.7
6	5	4	2	8	26	31	23	5	2.5
674	614	598	533	482	409	354	301	302	100.0
164	178	186	178	168	93	62	68	111	36.7
152	141	166	148	136	122	107	85	89	29.3
303	257	218	185	153	138	126	102	96	31.7
54	39	29	22	25	57	58	47	7	2.3
388	492	625	722	827	896	1004	1111	1305	100.0
132	156	183	222	273	186	176	187	256	19.7
112	170	257	282	302	428	489	578	681	52.2
127	148	163	194	217	236	263	287	337	25.8
17	17	22	24	35	45	76	59	30	2.3
308	399	493	521	567	573	642	670	757	100.0
144	182	226	221	250	198	167	155	214	28.3
84	129	163	198	204	227	267	327	390	51.5
69	80	91	94	99	110	133	138	146	19.2
12	8	13	8	15	38	75	51	8	1.1
50	52	61	63	61	65	79	92	141	100.0
23	24	32	34	38	26	27	34	69	48.8
3	5	5	5	3	4	5	11	16	11.5
19	20	16	15	10	14	20	22	34	23.9
5	3	8	9	10	21	26	26	22	15.8
27	38	42	48	54	56	59	68	80	100.0
8	11	14	19	17	9	12	14	13	16.4
5	9	10	10	10	11	17	22	38	47.0
12	17	15	14	16	16	16	20	22	27.4
2	1	4	5	11	20	15	12	7	9.2
249	258	287	306	275	279	296	339	355	100.0
50	43	53	68	53	28	22	30	45	12.7
34	34	38	36	27	35	59	76	76	21.4
141	154	163	159	137	129	157	186	191	53.7
24	28	34	42	58	87	58	47	43	12.2
646	838	1029	1141	1216	1277	1374	1483	1601	100.0
205	278	339	379	406	270	189	210	357	22.3
127	143	193	241	228	308	374	435	456	28.5
266	359	425	448	469	531	645	698	706	44.1
48	58	72	73	113	167	165	140	82	5.1
145	192	245	327	422	455	479	622	873	100.0
108	157	203	280	360	337	281	336	761	87.2
16	16	17	16	18	13	20	28	54	6.2
14	16	15	20	26	26	34	31	29	3.4
7	3	9	11	18	79	145	227	28	3.2
1186	1443	1647	1812	2250	2756	3208	4174	4780	100.0
771	965	1111	1207	1564	1227	1273	2053	3058	64.0
59	75	63	56	85	114	177	525	1235	25.8
255	307	385	487	411	419	400	403	383	8.0
101	96	88	61	191	997	1357	1193	105	2.2
86	101	134	157	199	219	247	283	305	100.0
45	59	69	102	136	135	138	179	254	83.3
14	21	38	31	36	34	44	42	28	9.3
25	21	24	23	23	29	27	30	22	7.1
3	1	3	2	4	21	38	32	1	0.3
166	200	246	260	285	281	331	394	532	100.0
71	81	109	121	150	115	144	190	387	72.6
32	50	46	51	38	44	42	38	45	8.4
59	65	81	78	75	74	75	88	83	15.7
5	4	10	10	22	48	69	78	17	3.3
413	540	663	737	814	813	869	955	1002	100.0
324	449	558	642	730	541	470	580	845	84.4
47	51	61	54	40	40	60	74	62	6.2
25	30	29	28	26	29	36	36	34	3.4
17	10	15	14	18	202	302	265	60	6.0
153	189	207	245	262	314	387	465	473	100.0
44	56	65	72	105	135	195	243	236	49.9
108	133	142	173	157	178	192	221	237	50.1
34	42	48	47	44	47	53	69	94	100.0
14	20	21	26	22	20	19	20	50	53.0
13	16	18	13	12	15	21	33	37	39.6
6	5	8	8	8	8	7	9	5	5.5
1	0	1	1	2	4	6	7	2	1.9

Table 18b Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1955–2014

ICD10	Site	Stage	1955–59	1960–64	1965–69
C00–14	Mouth, pharynx	Total	61	60	77
		Localized	38	35	44
		Regional	18	19	29
		Distant	2	3	2
		Unknown	2	3	2
C15	Oesophagus	Total	23	28	30
		Localized	15	19	18
		Regional	3	4	3
		Distant	3	3	6
		Unknown	3	2	2
C16	Stomach	Total	613	546	508
		Localized	176	152	128
		Regional	107	98	94
		Distant	232	229	221
		Unknown	97	67	64
C18	Colon	Total	267	324	408
		Localized	107	130	166
		Regional	64	79	96
		Distant	73	97	125
		Unknown	22	18	20
C19–20	Rectum, rectosigmoid	Total	118	127	179
		Localized	57	58	84
		Regional	29	32	47
		Distant	24	30	39
		Unknown	8	7	9
C22	Liver	Total	11	14	16
		Localized	5	6	7
		Regional	0	0	1
		Distant	4	6	8
		Unknown	2	1	0
C23–24	Gallbladder, bile ducts	Total	46	50	58
		Localized	12	16	14
		Regional	8	8	9
		Distant	23	24	34
		Unknown	3	2	1
C25	Pancreas	Total	92	117	142
		Localized	29	36	42
		Regional	8	12	14
		Distant	45	61	75
		Unknown	9	9	11
C33–34	Lung, trachea	Total	68	83	115
		Localized	17	25	35
		Regional	7	11	17
		Distant	34	41	57
		Unknown	10	6	6
C43	Melanoma of the skin	Total	54	82	108
		Localized	42	67	81
		Regional	6	6	7
		Distant	5	6	12
		Unknown	1	3	8
C50	Breast	Total	901	1027	1172
		Pagets stage 0		1	0
		I	396	467	569
		II	340	355	369
		III	43	80	83
C53	Cervix uteri	IV	93	96	115
		Unknown	29	27	36
		Total	333	351	385
		I	139	147	185
		II	106	119	134
C54	Corpus uteri	III	57	54	40
		IV	23	24	20
		Unknown	8	7	6
		Total	167	207	250
		Localized	133	171	199
C56	Ovary	Regional	10	11	13
		Distant	17	21	35
		Unknown	7	4	3
		Total	249	278	349
		Localized	79	89	110
C64	Kidney except renal pelvis	Regional	23	17	18
		Distant	137	160	215
		Unknown	10	13	6
		Total	74	88	100
		Localized	43	52	54
C66–68	Bladder, ureter, urethra	Regional	7	10	11
		Distant	20	25	32
		Unknown	4	2	3
		Total	109	119	135
		Localized	68	73	93
C70–72, D32–33	Central nervous system	Regional	12	17	19
		Distant	19	19	17
		Unknown	11	9	6
		Total	102	116	133
		Non-malignant	38	51	62
C73	Thyroid gland	Malignant	63	65	71
		Total	52	59	79
		Localized	23	25	44
		Regional	15	22	24
		Distant	10	11	9
		Unknown	3	2	2

FEMALES

Period									% 2010-14
1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	
79	82	100	111	118	131	132	180	202	100.0
43	47	55	70	78	70	48	75	115	57.0
26	28	38	35	33	39	48	71	79	38.9
6	3	3	4	4	6	5	6	5	2.7
4	5	3	2	4	16	32	28	3	1.4
30	32	33	36	42	44	53	55	66	100.0
15	18	16	20	24	14	13	14	35	53.4
5	6	8	8	7	8	12	12	14	21.6
7	6	6	6	8	9	12	12	14	20.7
3	2	3	1	3	13	16	16	3	4.3
443	407	401	358	313	267	229	221	181	100.0
102	109	128	138	112	69	44	55	75	41.3
86	96	104	92	78	66	64	51	42	22.9
212	167	135	112	106	85	77	80	57	31.4
43	36	34	16	18	47	44	35	8	4.3
472	626	745	861	947	1086	1169	1278	1397	100.0
159	193	223	251	314	225	210	226	266	19.1
145	228	301	360	364	523	577	674	766	54.8
144	182	186	215	216	255	282	306	319	22.8
24	23	35	36	52	82	101	73	46	3.3
248	318	397	405	444	470	487	516	540	100.0
113	141	187	178	213	167	135	130	177	32.8
69	100	129	142	139	180	203	243	257	47.6
58	68	68	72	77	86	89	98	98	18.1
8	10	13	13	15	37	61	45	8	1.5
31	30	39	44	47	41	46	58	81	100.0
15	14	18	22	24	12	11	19	38	46.9
1	1	2	2	3	3	5	8	9	11.6
12	13	15	11	10	9	8	13	19	23.5
3	2	5	8	11	16	20	17	15	18.0
52	65	81	81	72	80	76	82	97	100.0
14	17	26	28	22	14	11	18	14	14.8
9	11	16	15	13	15	16	20	36	37.5
26	34	33	25	24	24	26	30	37	37.7
3	4	6	12	14	27	23	14	10	9.9
181	213	253	287	300	312	336	359	374	100.0
43	45	50	72	72	27	28	44	63	16.7
23	27	33	36	27	36	57	75	76	20.2
95	120	134	138	121	139	163	176	181	48.3
21	21	36	41	80	111	88	65	55	14.8
158	204	283	395	523	666	847	1082	1317	100.0
50	62	77	124	157	125	122	190	329	25.0
25	29	46	71	103	148	208	287	341	25.9
71	96	134	173	211	279	422	504	576	43.7
11	17	25	27	52	114	96	102	72	5.5
161	240	326	410	476	500	547	645	888	100.0
132	216	288	380	435	382	341	373	813	91.6
10	8	16	10	12	11	13	20	38	4.3
10	13	12	11	15	20	22	19	16	1.8
10	3	10	9	14	87	171	233	20	2.3
1327	1532	1666	1813	1974	2357	2687	2766	3090	100.0
16	23	33	37	25	18	20	21	14	0.5
640	794	885	449	343	662	928	1117	1216	39.4
411	435	474	644	742	869	1079	1071	1022	33.1
94	109	90	118	110	135	168	219	354	11.5
111	117	105	118	135	124	135	110	103	3.3
55	54	78	447	620	549	356	229	380	12.3
438	422	369	327	363	328	292	299	309	100.0
231	238	213	180	223	195	171	164	187	60.3
117	98	73	71	65	65	53	66	63	20.4
63	56	52	49	41	36	34	26	21	6.7
23	23	23	23	29	27	25	32	27	8.7
4	7	8	5	5	5	9	11	12	3.9
303	361	384	395	444	488	611	689	729	100.0
251	289	284	304	333	343	381	464	583	80.0
19	37	49	41	50	56	66	74	44	6.0
28	31	37	44	53	65	79	94	91	12.5
5	3	13	6	8	24	84	56	11	1.5
339	372	405	437	466	460	464	445	439	100.0
139	116	108	117	131	97	85	83	99	22.5
23	25	40	25	16	13	13	13	14	3.2
171	226	246	283	299	307	308	307	294	66.9
6	5	11	12	20	43	59	42	33	7.4
114	135	152	179	194	192	200	241	245	100.0
58	67	69	88	107	85	83	123	179	73.0
23	25	34	29	22	22	21	21	17	6.9
29	40	43	51	45	47	47	38	36	14.6
4	3	7	11	19	38	48	59	13	5.5
179	211	239	261	265	291	324	340	368	100.0
117	152	184	219	223	170	159	191	296	80.5
27	26	24	21	16	19	28	32	24	6.6
22	21	18	14	15	20	23	23	18	4.9
12	12	12	8	11	83	114	95	29	7.9
128	182	206	248	280	380	513	616	546	100.0
52	80	90	124	159	234	360	450	378	69.2
75	102	116	125	121	146	153	166	168	30.8
99	123	147	135	137	120	145	168	228	100.0
55	77	98	91	89	61	71	81	144	63.3
29	30	34	31	34	38	44	53	73	31.9
12	14	11	10	11	9	10	8	8	3.7
4	2	4	4	4	12	21	27	3	1.1

Table 19a Age-standardised (Norway, 2014) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1955–2014

ICD10	Site	Stage	1955–59	1960–64	1965–69
C00–14	Mouth, pharynx	Total	15.7	15.1	14.4
		Localized	10.6	10.5	9.9
		Regional	3.7	3.4	3.2
		Distant	0.2	0.6	0.5
		Unknown	1.2	0.6	0.8
C15	Oesophagus	Total	6.5	6.8	5.7
		Localized	4.1	4.4	3.4
		Regional	0.7	0.8	0.6
		Distant	1.0	1.0	1.3
		Unknown	0.6	0.5	0.4
C16	Stomach	Total	75.1	64.9	58.9
		Localized	22.5	18.7	17.0
		Regional	14.7	12.5	10.5
		Distant	28.0	27.4	24.1
		Unknown	9.9	6.3	7.3
C18	Colon	Total	19.2	22.7	25.6
		Localized	7.7	9.6	10.3
		Regional	4.6	5.3	5.6
		Distant	5.6	6.3	8.1
		Unknown	1.3	1.5	1.6
C19–20	Rectum, rectosigmoid	Total	12.9	13.8	16.8
		Localized	6.5	6.8	8.0
		Regional	2.9	3.3	4.3
		Distant	2.3	2.8	3.6
		Unknown	1.2	0.9	0.9
C22	Liver	Total	1.3	1.7	2.2
		Localized	0.6	0.8	1.2
		Regional	0.1	0.1	0.1
		Distant	0.5	0.7	0.8
		Unknown	0.1	0.1	0.1
C23–24	Gallbladder, bile ducts	Total	1.2	1.7	1.8
		Localized	0.6	0.6	0.6
		Regional	0.1	0.3	0.3
		Distant	0.4	0.7	0.8
		Unknown	0.1	0.1	0.1
C25	Pancreas	Total	11.3	11.9	15.2
		Localized	3.3	3.6	4.3
		Regional	1.0	1.3	1.9
		Distant	5.8	6.2	8.1
		Unknown	1.1	0.7	0.9
C33–34	Lung, trachea	Total	17.8	24.5	31.5
		Localized	5.4	7.9	11.1
		Regional	3.4	5.1	5.7
		Distant	7.2	9.7	13.1
		Unknown	1.7	1.8	1.6
C43	Melanoma of the skin	Total	3.2	4.7	6.6
		Localized	2.0	3.0	4.2
		Regional	0.6	0.6	0.8
		Distant	0.4	1.0	1.1
		Unknown	0.2	0.1	0.5
C61	Prostate	Total	63.3	71.1	79.7
		Localized	37.8	44.1	52.6
		Regional	2.9	3.1	2.7
		Distant	15.8	18.0	17.4
		Unknown	6.7	5.9	7.1
C62	Testis	Total	3.1	4.2	4.1
		Localized	2.1	2.7	2.8
		Regional	0.1	0.2	0.2
		Distant	0.8	1.1	1.0
		Unknown	0.1	0.1	0.1
C64	Kidney except renal pelvis	Total	6.7	8.5	10.1
		Localized	3.5	4.4	5.3
		Regional	0.5	1.1	1.2
		Distant	2.3	2.7	3.4
		Unknown	0.3	0.3	0.3
C66–68	Bladder, ureter, urethra	Total	16.8	19.3	23.1
		Localized	12.9	16.1	19.1
		Regional	1.3	1.5	2.2
		Distant	1.6	1.1	1.1
		Unknown	1.0	0.6	0.7
C70–72, D32–33	Central nervous system	Total	7.1	7.7	8.5
		Non-malignant	1.6	2.4	2.3
		Malignant	5.5	5.2	6.2
C73	Thyroid gland	Total	1.3	1.7	2.2
		Localized	0.5	0.4	0.6
		Regional	0.5	0.8	0.9
		Distant	0.2	0.5	0.6
		Unknown	0.0	0.0	0.1

MALES

Period								
1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
16.3	15.1	14.9	14.9	14.4	14.3	13.4	13.6	15.0
10.7	9.8	9.3	9.5	8.5	6.5	4.4	5.1	7.0
3.9	4.3	5.0	4.8	4.9	5.0	5.8	6.2	7.1
0.7	0.6	0.3	0.4	0.6	0.6	0.6	0.6	0.7
1.0	0.5	0.3	0.2	0.5	2.2	2.6	1.7	0.2
5.4	5.9	5.2	5.5	6.0	6.8	6.9	7.1	8.5
2.5	3.0	2.7	2.5	2.6	2.1	1.3	1.8	3.7
1.1	1.1	1.1	1.4	1.4	1.4	1.7	2.0	2.2
1.4	1.5	1.1	1.5	1.6	1.8	2.2	2.1	2.4
0.4	0.4	0.3	0.1	0.6	1.5	1.7	1.2	0.2
47.2	40.1	37.1	31.9	28.0	23.0	19.2	15.3	13.5
12.3	12.2	12.4	11.4	10.3	5.3	3.4	3.5	5.1
9.9	8.8	9.6	8.4	7.4	6.7	5.7	4.2	3.9
20.0	16.0	12.9	10.7	8.6	7.6	6.7	5.0	4.2
4.9	3.1	2.1	1.5	1.6	3.5	3.4	2.5	0.4
27.0	32.3	38.5	43.0	47.8	50.1	54.2	55.9	59.2
9.4	10.4	11.5	13.2	15.7	10.2	9.6	9.4	11.7
7.3	11.0	15.4	16.6	17.3	24.0	26.0	29.2	30.8
8.8	9.6	9.9	11.4	12.3	13.0	14.1	14.2	15.1
1.5	1.4	1.7	1.8	2.4	2.8	4.4	3.1	1.6
20.8	25.9	30.1	30.4	32.5	31.9	34.3	33.1	33.3
9.9	12.0	14.2	13.2	14.5	11.0	9.0	7.7	9.5
5.5	8.0	9.4	11.2	11.4	12.5	14.1	16.0	17.1
4.4	5.1	5.4	5.4	5.6	6.1	7.1	6.8	6.3
1.0	0.7	1.1	0.6	1.0	2.3	4.2	2.6	0.4
3.1	3.2	3.6	3.7	3.4	3.5	4.1	4.5	6.1
1.5	1.5	1.8	2.0	2.1	1.4	1.4	1.6	3.0
0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.5	0.7
1.2	1.2	1.0	0.9	0.6	0.7	1.0	1.0	1.4
0.3	0.2	0.5	0.5	0.6	1.1	1.4	1.3	1.0
1.9	2.4	2.6	2.8	3.1	3.2	3.2	3.5	3.6
0.5	0.7	0.9	1.2	1.0	0.5	0.6	0.7	0.6
0.3	0.5	0.5	0.5	0.6	0.6	0.9	1.1	1.6
0.9	1.1	0.9	0.8	0.9	0.9	0.9	1.0	1.0
0.2	0.1	0.2	0.3	0.6	1.2	0.8	0.6	0.4
16.3	16.3	17.8	18.0	15.9	15.6	15.9	17.0	15.9
3.4	2.9	3.6	4.2	3.2	1.5	1.2	1.6	2.0
2.2	2.1	2.2	2.1	1.5	1.9	3.2	3.8	3.4
9.1	9.5	9.6	9.1	7.6	7.1	8.3	9.2	8.4
1.6	1.8	2.3	2.7	3.6	5.1	3.3	2.5	2.1
39.4	49.3	58.6	64.0	67.5	69.6	72.3	72.9	71.4
12.5	16.4	19.4	21.2	22.3	14.5	9.9	10.4	15.9
7.4	8.1	10.8	13.3	12.5	16.5	19.4	21.3	20.1
16.3	20.9	24.0	25.1	26.0	28.9	33.8	34.1	31.3
3.1	3.8	4.5	4.4	6.8	9.6	9.2	7.1	4.1
9.0	11.3	14.0	18.1	22.8	23.6	24.2	29.4	37.7
6.7	9.2	11.6	15.4	19.4	17.5	14.1	15.8	32.7
0.9	1.0	1.0	0.9	1.0	0.7	1.0	1.4	2.4
0.9	1.0	0.9	1.1	1.4	1.4	1.7	1.5	1.3
0.5	0.2	0.5	0.6	1.0	4.1	7.3	10.8	1.2
88.1	99.1	104.3	109.0	131.0	157.4	176.4	209.1	209.8
56.6	65.5	69.3	72.2	89.6	68.7	69.1	101.2	131.3
4.6	5.1	3.9	3.3	4.9	6.7	9.8	26.3	54.7
18.6	20.9	24.8	29.2	24.0	23.9	22.3	20.9	18.0
8.4	7.5	6.3	4.4	12.5	58.1	75.2	60.7	5.7
4.8	5.3	6.5	7.2	8.8	9.4	10.5	11.9	12.0
2.5	3.1	3.4	4.6	6.0	5.7	5.8	7.5	10.0
0.8	1.1	1.8	1.4	1.6	1.5	1.9	1.8	1.1
1.3	1.1	1.1	1.0	1.0	1.3	1.2	1.3	0.9
0.2	0.0	0.2	0.1	0.2	0.9	1.7	1.4	0.0
10.3	11.9	14.3	15.0	15.8	15.2	17.1	18.8	22.6
4.5	4.9	6.4	6.9	8.3	6.1	7.3	8.9	16.3
1.9	2.9	2.7	2.9	2.1	2.3	2.1	1.8	1.9
3.6	3.9	4.6	4.5	4.1	4.0	3.9	4.3	3.6
0.3	0.3	0.6	0.6	1.2	2.8	3.7	3.8	0.9
27.7	34.1	39.3	44.0	46.6	45.5	46.7	47.8	45.7
21.6	28.2	33.0	38.3	41.7	30.1	25.1	28.9	38.6
3.1	3.1	3.5	3.1	2.3	2.2	3.2	3.6	2.8
1.7	2.0	1.7	1.6	1.5	1.6	1.9	1.9	1.6
1.2	0.7	1.1	0.9	1.1	11.5	16.5	13.5	2.8
8.6	10.2	11.1	13.0	13.8	15.7	18.6	21.2	19.7
2.6	3.1	3.6	3.9	5.6	6.8	9.3	11.0	9.8
6.0	7.1	7.5	9.1	8.2	9.0	9.3	10.2	9.9
2.1	2.5	2.7	2.6	2.3	2.4	2.5	3.1	3.9
0.9	1.2	1.2	1.4	1.1	1.0	0.9	0.9	2.0
0.8	0.9	1.0	0.7	0.6	0.7	1.0	1.5	1.6
0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.2
0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.1

Table 19b Age-standardised (Norway, 2014) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1955–2014

ICD10	Site	Stage	1955–59	1960–64	1965–69
C00–14	Mouth, pharynx	Total	4.7	4.0	4.8
		Localized	2.8	2.2	2.8
		Regional	1.5	1.4	1.8
		Distant	0.2	0.2	0.1
		Unknown	0.2	0.2	0.1
C15	Oesophagus	Total	1.9	2.0	1.9
		Localized	1.2	1.4	1.1
		Regional	0.2	0.2	0.2
		Distant	0.3	0.2	0.4
		Unknown	0.2	0.2	0.2
C16	Stomach	Total	47.9	38.9	32.2
		Localized	14.3	11.2	8.5
		Regional	7.3	6.1	5.4
		Distant	17.1	15.6	13.4
		Unknown	9.3	6.0	4.9
C18	Colon	Total	20.2	22.1	25.1
		Localized	8.2	9.0	10.4
		Regional	4.5	5.0	5.6
		Distant	5.4	6.4	7.5
		Unknown	2.1	1.6	1.6
C19–20	Rectum, rectosigmoid	Total	8.5	8.5	10.7
		Localized	4.2	3.9	5.1
		Regional	2.1	2.1	2.7
		Distant	1.6	2.0	2.2
		Unknown	0.7	0.6	0.6
C22	Liver	Total	0.8	0.9	1.0
		Localized	0.3	0.4	0.4
		Regional	0.0	0.0	0.0
		Distant	0.3	0.4	0.5
		Unknown	0.1	0.1	0.0
C23–24	Gallbladder, bile ducts	Total	3.3	3.3	3.5
		Localized	0.8	1.1	0.9
		Regional	0.6	0.5	0.6
		Distant	1.6	1.6	2.0
		Unknown	0.2	0.1	0.1
C25	Pancreas	Total	6.6	7.6	8.5
		Localized	2.1	2.4	2.5
		Regional	0.6	0.7	0.8
		Distant	3.2	3.9	4.4
		Unknown	0.7	0.6	0.7
C33–34	Lung, trachea	Total	4.8	5.2	6.6
		Localized	1.2	1.6	2.1
		Regional	0.5	0.6	0.9
		Distant	2.4	2.6	3.2
		Unknown	0.7	0.4	0.4
C43	Melanoma of the skin	Total	3.6	5.0	6.5
		Localized	2.8	4.0	4.9
		Regional	0.4	0.4	0.4
		Distant	0.4	0.4	0.7
		Unknown	0.1	0.2	0.5
C50	Breast	Total	60.2	64.3	68.6
		Pageets stage 0	0.0	0.0	0.0
		I	26.3	29.2	33.3
		II	21.9	21.4	20.9
		III	3.2	5.4	5.0
		IV	6.6	6.3	6.9
C53	Cervix uteri	Unknown	2.2	1.9	2.3
		Total	20.2	20.8	22.3
		I	8.2	8.6	10.8
		II	6.5	7.0	7.7
		III	3.6	3.3	2.3
		IV	1.5	1.4	1.1
C54	Corpus uteri	Unknown	0.5	0.5	0.4
		Total	10.9	12.3	14.1
		Localized	8.5	10.1	11.1
		Regional	0.7	0.7	0.8
		Distant	1.1	1.3	2.0
		Unknown	0.5	0.3	0.2
C56	Ovary	Total	16.2	16.9	19.7
		Localized	5.1	5.3	6.2
		Regional	1.5	1.0	1.0
		Distant	8.9	9.7	12.1
		Unknown	0.7	0.8	0.4
C64	Kidney except renal pelvis	Total	5.0	5.5	5.8
		Localized	3.0	3.2	3.2
		Regional	0.4	0.6	0.6
		Distant	1.3	1.5	1.8
		Unknown	0.3	0.1	0.2
C66–68	Bladder, ureter, urethra	Total	8.0	8.1	8.2
		Localized	4.9	5.0	5.5
		Regional	0.9	1.1	1.1
		Distant	1.3	1.2	1.1
		Unknown	0.9	0.7	0.4
C70–72, D32–33	Central nervous system	Total	6.2	6.6	7.3
		Non-malignant	2.5	3.0	3.5
		Malignant	3.7	3.6	3.9
C73	Thyroid gland	Total	3.5	3.8	4.7
		Localized	1.6	1.6	2.6
		Regional	1.0	1.4	1.4
		Distant	0.7	0.7	0.5
		Unknown	0.2	0.1	0.1

FEMALES

Period								
1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14
4.5	4.3	4.9	5.2	5.4	5.8	5.6	7.3	7.6
2.5	2.4	2.7	3.3	3.5	3.0	2.0	3.0	4.3
1.4	1.5	1.9	1.6	1.5	1.7	2.1	2.9	3.0
0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2
0.3	0.3	0.2	0.1	0.2	0.7	1.3	1.1	0.1
1.6	1.6	1.6	1.6	1.8	1.8	2.2	2.1	2.4
0.8	1.0	0.8	0.9	1.0	0.6	0.5	0.5	1.3
0.3	0.3	0.4	0.4	0.3	0.4	0.5	0.5	0.5
0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5
0.2	0.1	0.2	0.1	0.1	0.5	0.6	0.6	0.1
25.1	21.0	18.8	15.8	13.1	10.7	9.1	8.4	6.6
6.0	5.9	6.1	6.0	4.7	2.7	1.7	2.1	2.7
4.6	4.7	4.7	4.1	3.3	2.7	2.6	1.9	1.5
11.7	8.4	6.2	4.9	4.4	3.6	3.1	3.1	2.1
2.8	2.0	1.8	0.7	0.7	1.8	1.6	1.2	0.3
26.2	32.1	35.4	38.3	40.6	44.9	47.0	49.2	51.1
9.0	10.0	10.6	11.1	13.4	9.3	8.4	8.7	9.7
7.7	11.5	14.2	15.9	15.6	21.7	23.2	26.0	28.1
7.8	9.2	8.8	9.7	9.4	10.7	11.5	12.0	11.8
1.7	1.4	1.8	1.6	2.2	3.2	3.8	2.5	1.4
13.8	16.4	19.0	18.2	19.4	19.9	20.1	20.5	20.3
6.4	7.3	9.1	8.1	9.2	7.0	5.6	5.2	6.6
3.7	5.0	6.0	6.4	6.2	7.8	8.4	9.7	9.7
3.2	3.5	3.2	3.2	3.4	3.6	3.7	4.0	3.7
0.5	0.6	0.6	0.6	0.6	1.5	2.4	1.7	0.3
1.6	1.5	1.9	1.9	2.0	1.7	1.9	2.2	3.0
0.8	0.7	0.9	1.0	1.0	0.5	0.5	0.7	1.4
0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4
0.6	0.7	0.7	0.5	0.4	0.4	0.3	0.5	0.7
0.1	0.1	0.2	0.3	0.5	0.7	0.8	0.6	0.5
2.9	3.2	3.8	3.5	3.0	3.2	3.0	3.2	3.6
0.8	0.9	1.2	1.2	0.9	0.5	0.4	0.7	0.5
0.5	0.5	0.7	0.7	0.6	0.7	0.7	0.8	1.4
1.4	1.7	1.5	1.1	1.0	1.0	1.1	1.2	1.4
0.2	0.2	0.3	0.5	0.5	1.0	0.8	0.5	0.3
10.0	10.6	11.8	12.6	12.5	12.6	13.3	13.7	13.7
2.3	2.3	2.3	3.1	2.9	1.1	1.1	1.6	2.3
1.2	1.3	1.5	1.6	1.2	1.5	2.3	3.0	2.8
5.2	5.9	6.2	6.1	5.2	5.8	6.7	6.9	6.7
1.3	1.1	1.7	1.8	3.1	4.2	3.2	2.2	1.8
8.5	10.3	13.8	18.6	24.5	30.5	37.5	44.7	50.4
2.7	3.1	3.7	5.7	7.2	5.7	5.4	7.9	12.7
1.3	1.5	2.3	3.5	5.0	6.9	9.2	12.0	13.1
3.8	4.9	6.6	8.3	10.2	13.0	19.0	20.8	22.1
0.7	0.9	1.2	1.2	2.2	4.8	4.0	4.0	2.4
9.2	13.0	16.8	20.3	22.5	22.7	23.8	26.6	34.3
7.5	11.8	14.9	18.9	20.6	17.4	14.9	15.5	31.6
0.6	0.4	0.8	0.4	0.5	0.5	0.5	0.7	1.4
0.6	0.7	0.6	0.5	0.7	0.8	1.0	0.8	0.6
0.6	0.1	0.5	0.4	0.6	4.0	7.3	9.7	0.7
74.0	81.2	84.3	87.8	92.4	109.1	120.3	116.1	121.0
0.9	1.2	1.6	1.8	1.2	0.8	0.8	0.8	0.5
35.8	41.9	44.4	21.6	16.5	31.8	44.0	48.6	48.8
22.6	23.1	24.2	31.7	35.1	40.3	48.4	45.0	40.1
5.2	5.7	4.5	5.6	4.9	5.9	7.0	8.9	13.8
6.2	6.0	5.2	5.6	6.3	5.6	5.7	4.5	4.0
3.4	3.2	4.3	21.5	28.3	24.7	14.3	8.3	13.8
25.0	23.2	19.2	16.2	17.2	15.1	12.7	12.4	12.4
13.6	13.4	11.2	8.9	10.6	9.0	7.5	6.9	7.5
6.5	5.2	3.8	3.6	3.1	3.0	2.3	2.8	2.5
3.4	2.9	2.6	2.4	1.9	1.7	1.4	1.1	0.8
1.2	1.2	1.1	1.1	1.4	1.2	1.1	1.3	1.1
0.2	0.4	0.4	0.2	0.2	0.2	0.4	0.4	0.5
16.1	18.7	19.4	19.6	21.5	22.8	26.9	28.8	28.1
13.3	15.1	14.6	15.2	16.3	16.2	16.9	19.5	22.5
1.0	1.9	2.4	2.0	2.4	2.6	2.9	3.1	1.7
1.5	1.6	1.7	2.1	2.5	3.0	3.5	3.9	3.5
0.2	0.2	0.6	0.3	0.4	1.0	3.6	2.3	0.4
18.4	19.5	20.7	21.2	22.1	21.0	20.1	18.2	16.9
7.5	6.2	5.6	5.8	6.3	4.6	3.8	3.5	3.9
1.2	1.3	2.1	1.2	0.8	0.6	0.5	0.5	0.5
9.2	11.7	12.5	13.7	14.2	14.0	13.4	12.7	11.4
0.4	0.2	0.6	0.5	0.9	1.8	2.4	1.6	1.1
6.0	6.8	7.2	8.1	8.4	8.2	8.2	9.7	9.4
3.1	3.4	3.3	4.0	4.7	3.8	3.6	5.1	7.0
1.2	1.2	1.6	1.3	1.0	1.0	0.9	0.9	0.6
1.5	2.0	2.0	2.3	1.9	2.0	1.9	1.5	1.3
0.2	0.2	0.3	0.5	0.7	1.5	1.9	2.3	0.4
9.9	10.7	11.2	11.6	11.3	12.0	13.0	13.3	13.4
6.4	7.8	8.6	9.7	9.5	7.1	6.5	7.5	10.9
1.5	1.3	1.1	0.9	0.7	0.8	1.1	1.3	0.9
1.3	1.0	0.9	0.6	0.7	0.8	0.9	0.9	0.7
0.8	0.6	0.6	0.3	0.5	3.3	4.5	3.6	1.0
6.8	9.4	10.3	12.2	13.1	17.2	22.5	25.6	21.3
2.8	4.2	4.5	6.1	7.5	10.5	15.9	18.7	14.8
3.9	5.2	5.7	6.1	5.7	6.6	6.7	6.9	6.5
5.6	6.7	7.4	6.5	6.4	5.3	6.3	7.1	9.1
3.1	4.3	5.0	4.5	4.3	2.8	3.1	3.4	5.8
1.6	1.5	1.7	1.4	1.6	1.7	1.9	2.2	2.9
0.6	0.7	0.5	0.4	0.5	0.4	0.4	0.3	0.3
0.3	0.1	0.2	0.2	0.2	0.5	0.9	1.1	0.1

Prevalence

As of December 31st 2014, more than 242 000 persons were alive and previously diagnosed with cancer in Norway. The cancer prevalence in Table 20 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 (18 769) followed by melanoma of the skin (10 372), prostate (7 851) and colon cancer (6 221).

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, and median age at diagnosis explain much of the site-specific variability in prevalence.

Table 20 Prevalence of cancer 31.12.2004 and 31.12.2014, both sexes

ICD10	Site	Total no. of persons alive		Years after diagnosis			
		31.12.04	31.12.14	<1	1–4	5–9	10+
C00–96	All sites	165474	242398	22933	68777	58132	92556
C00–14	Mouth, pharynx	3245	4590	554	1429	1073	1534
C00	Lip	1194	1360	117	384	333	526
C01–02	Tongue	516	880	123	315	187	255
C03–06	Mouth, other	571	740	91	217	189	243
C07–08	Salivary glands	423	558	66	134	111	247
C09–14	Pharynx	570	1122	169	417	268	268
C15–26	Digestive organs	26184	36106	4783	11621	8466	11236
C15	Oesophagus	273	552	196	216	78	62
C16	Stomach	2059	1982	327	539	393	723
C17	Small intestine	532	992	125	356	266	245
C18	Colon	14284	19783	2354	6419	4789	6221
C19–20	Rectum, rectosigmoid	8126	11089	1245	3481	2701	3662
C21	Anus	506	675	75	198	165	237
C22	Liver	172	448	119	185	70	74
C23–24	Gallbladder, bile ducts	274	439	107	164	77	91
C25	Pancreas	506	841	327	317	110	87
C26	Other digestive organs	105	177	52	53	23	49
C30–34, C38	Respiratory organs	5275	8111	1976	3019	1569	1547
C30–31	Nose, sinuses	272	343	39	112	89	103
C32	Larynx, epiglottis	1085	1142	119	328	277	418
C33–34	Lung, trachea	3889	6619	1830	2595	1197	997
C38	Mediastinum, pleura (non-mesothelioma)	59	62	5	12	11	34
C40–41	Bone	551	753	49	136	138	430
C43	Melanoma of the skin	14775	22261	1931	5721	4237	10372
C44	Skin, non-melanoma	9315	14131	1823	4893	3529	3886
C45	Mesothelioma	104	121	48	56	7	10
C47	Autonomic nervous system	228	252	11	21	36	184
C48–49	Soft tissues	1101	1511	127	404	306	674
C50	Breast	30519	42786	3248	10752	10017	18769
C51–58	Female genital organs	19034	22031	1491	4594	4255	11691
C53	Cervix uteri	6731	6972	317	1000	1011	4644
C54	Corpus uteri	7561	9804	688	2356	2317	4443
C55	Uterus, other	42	46	6	9	6	25
C56	Ovary	3978	4203	345	971	705	2182
C51–52, C57	Other female genital	894	1200	159	327	276	438
C58	Placenta	137	153	2	13	11	127
C60–63	Male genital organs	25499	49199	5016	17501	14452	12230
C61	Prostate	20387	41841	4673	16268	13049	7851
C62	Testis	4846	7049	319	1176	1328	4226
C60, C63	Other male genital	326	479	56	121	131	171
C64–68	Urinary organs	13296	18357	2018	5750	4534	6055
C64	Kidney excl. renal pelvis	3580	6006	689	2056	1498	1763
C65	Renal pelvis	467	622	93	205	136	188
C66–68	Bladder, ureter, urethra	9483	12042	1284	3606	2978	4174
C69	Eye	849	1040	90	232	176	542
C70–72, D32–33	Central nervous system	7433	11940	782	2693	3119	5346
C73	Thyroid gland	3721	5202	312	1076	912	2902
C37, C74–75	Other endocrine glands	2038	3642	188	838	1015	1601
C39, C76, C80	Other or unspecified	505	585	108	176	110	191
C81–96	Lymphoid and haematopoietic tissue	12330	21056	2103	6803	5196	6954
C81	Hodgkin lymphoma	1824	2547	126	477	473	1471
C82–86, C96	Non-Hodgkin lymphoma	5149	8770	848	2778	2221	2923
C88	Malignant immunoproliferative diseases	303	555	58	231	161	105
C90	Multiple myeloma	1245	1845	294	839	437	275
C91–95, D45–47	Leukaemia	3851	7528	813	2581	1943	2191

Table 21 shows the number of patients with metastasis or local recurrence, alive at specific time points. 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 21 Prevalence of patients diagnosed with a metastasis during lifetime, by health region, both sexes

Health region	Alive by 31st of december					
	Alive by 31st of december 1989	Alive by 31st of december 1994	Alive by 31st of december 1999	Alive by 31st of december 2004	Alive by 31st of december 2009	Alive by 31st of december 2014
South East	3 802	4 622	5 746	7 239	9 165	10 762
West	1 275	1 608	2 004	2 517	3 048	3 729
Middle	1 003	1 164	1 411	1 807	2 164	2 484
North	0 630	0 742	0 924	1 168	1 425	1 749
Total	6 710	8 136	10 085	12 731	15 802	18 724

Mortality

Mortality data is obtained from the Cause of Death Registry

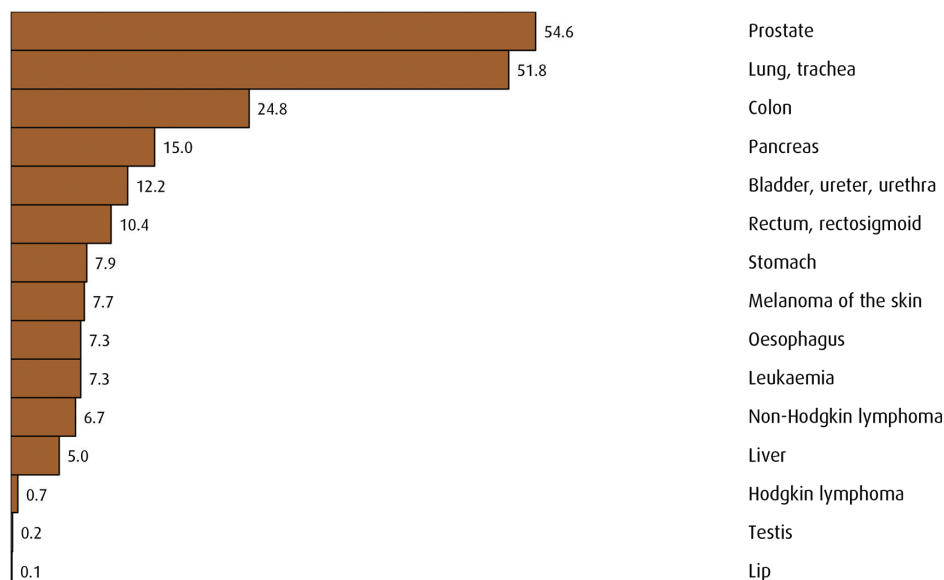
There were 10 971 deaths from cancer in Norway in 2014, of which 5 833 were among men and 5 138 among women (Table 22). Cancers of the lung, colon, rectum, prostate and female breast account for half of the total cancer mortality. In 2014, we see that mortality numbers for prostate cancer and lung cancer are almost equal: Lung cancer is responsible for 1 198 deaths and the corresponding number for prostate cancer is 1 093 deaths. Colon cancer (543 deaths) and pancreas cancer (349 deaths) represent the third and fourth most frequent cause of cancer deaths among men.

Lung cancer mortality also ranks highest among women (960 deaths). Breast cancer (663 deaths) and colon cancer (595 deaths), respectively, represent the second and third most frequent cause of cancer deaths among women. Figure 9 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 four 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 9. Age-standardised (Norway, 2014) mortality rates per 100 000 person-years for selected cancers in Norway, 2014

Males



Females

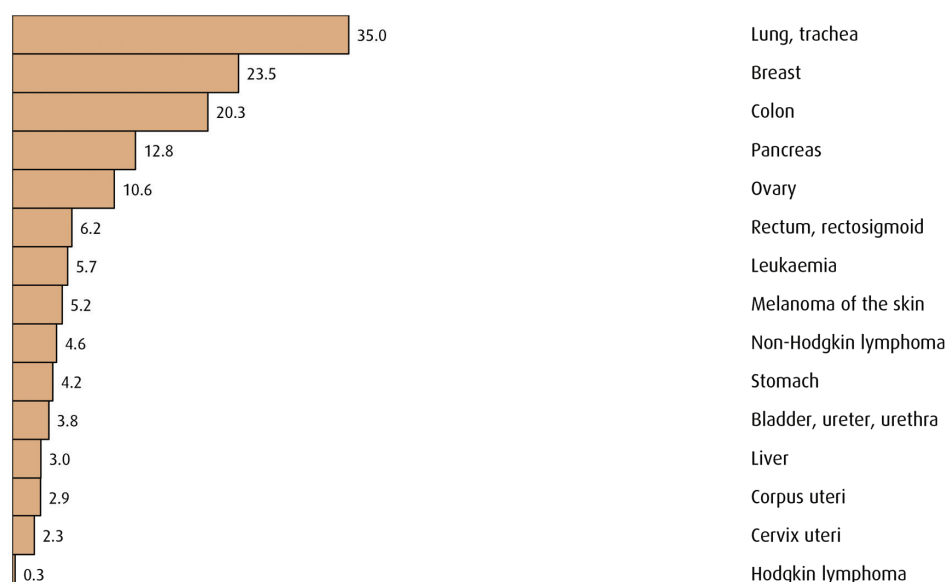


Table 22 Number of cancer deaths in Norway by primary site and sex, 2014 (Source: Cause of Death Registry)

ICD10	Site	Males	Females	Total
C00-96	All sites	5833	5138	10971
C00-14	Mouth, pharynx	69	41	110
C00	Lip	2		2
C01-02	Tongue	18	5	23
C03-06	Mouth, other	16	15	31
C07-08	Salivary glands	4	8	12
C09-14	Pharynx	29	13	42
C15-26	Digestive organs	1691	1530	3221
C15	Oesophagus	170	56	226
C16	Stomach	179	122	301
C17	Small intestine	29	30	59
C18	Colon	543	595	1138
C19-20	Rectum, rectosigmoid	231	177	408
C21	Anus	9	8	17
C22	Liver	120	84	204
C23-24	Gallbladder, bile ducts	25	53	78
C25	Pancreas	349	364	713
C26	Other digestive organs	36	41	77
C30-34, C38	Respiratory organs	1247	977	2224
C30-31	Nose, sinuses	9	4	13
C32	Larynx, epiglottis	32	7	39
C33-34	Lung, trachea	1198	960	2158
C38	Mediastinum, pleura (non-mesothelioma)	8	6	14
C40-41	Bone	16	9	25
C43	Melanoma of the skin	178	144	322
C44	Skin, non-melanoma	28	24	52
C45	Mesothelioma	51	5	56
C47	Autonomic nervous system	3	3	6
C48-49	Soft tissues	40	37	77
C50	Breast	6	663	669
C51-58	Female genital organs		579	579
C53	Cervix uteri		63	63
C54	Corpus uteri		81	81
C55	Uterus, other		85	85
C56	Ovary		292	292
C51-52, C57	Other female genital		58	58
C58	Placenta			
C60-63	Male genital organs	1107		1107
C61	Prostate	1093		1093
C62	Testis	4		4
C60, C63	Other male genital	10		10
C64-68	Urinary organs	446	213	659
C64	Kidney excl. renal pelvis	195	91	286
C65	Renal pelvis	5	7	12
C66-68	Bladder, ureter, urethra	246	115	361
C69	Eye	3	5	8
C70-72, D32-33	Central nervous system	231	159	390
C73	Thyroid gland	14	35	49
C37, C74-75	Other endocrine glands	11	11	22
C39, C76, C80	Other or unspecified	186	257	443
C81-96	Lymphoid and haematopoietic tissue	506	445	951
C81	Hodgkin lymphoma	16	8	24
C82-86, C96	Non-Hodgkin lymphoma	151	134	285
C88	Malignant immunoproliferative diseases	7	3	10
C90	Multiple myeloma	122	130	252
C91-95, D45-47	Leukaemia	210	170	380

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 2012–2014 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 10-A to 10-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 10-A to 10-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 10-A. 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 10-B to 10-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 10-Q) compared to patients with pancreatic cancer (Figure 10-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 10-E) relative to, for example, cervix cancer (Figure 10-M) or non-Hodgkin lymphoma (Figure 10-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% 1 year after diagnosis (Figure 10-L) and slowly increases to about 93% 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 23 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 18 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 23 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 23a Five-year relative survival by primary site, stage and period of diagnosis, 1975–2014

ICD10	Site	Stage*	Relative survival (%)							
			1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14**
C00-96	All sites	Total	38.3	42.1	44.3	49.8	54.7	60.1	66.5	68.9
C00-14	Mouth, pharynx	Total	61.2	59.4	56.7	55.4	56.0	55.0	60.4	64.8
		Localized	80.7	79.9	75.1	75.6	76.9	79.5	79.6	78.0
		Regional	27.1	27.4	27.6	27.1	35.5	42.7	46.9	56.8
		Distant	-	-	-	10.9	9.6	9.7	11.8	11.3
		Unknown	-	-	-	-	56.9	55.2	78.7	51.2
C15	Oesophagus	Total	3.4	4.7	4.0	4.3	7.9	7.3	10.6	13.8
		Localized	3.9	6.0	5.8	8.1	16.8	15.2	24.3	23.1
		Regional	-	6.0	4.6	2.6	7.9	11.4	11.7	14.3
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	-	3.4	3.6	-
C16	Stomach	Total	16.3	16.4	18.8	18.1	17.6	19.7	23.3	23.4
		Localized	37.6	35.5	38.7	36.8	45.5	54.8	49.4	38.5
		Regional	19.3	18.2	20.8	18.7	18.2	21.4	23.4	26.8
		Distant	1.6	1.7	1.1	0.4	1.7	1.5	3.2	3.4
		Unknown	-	-	-	-	14.2	16.6	29.6	0.1
C18	Colon	Total	40.2	46.5	46.1	49.2	53.6	55.0	58.7	58.9
		Localized	66.3	76.5	72.6	77.6	87.6	86.2	86.5	77.9
		Regional	47.6	54.0	56.3	59.0	67.0	69.7	74.5	76.8
		Distant	7.0	4.2	4.8	3.5	5.8	7.8	9.6	11.8
		Unknown	8.6	8.2	4.8	6.8	17.1	32.2	49.7	16.7
C19-20	Rectum, rectosigmoid	Total	36.6	42.9	44.9	49.8	55.9	58.1	63.5	66.2
		Localized	55.7	62.8	64.1	71.4	79.3	83.5	84.5	77.1
		Regional	31.8	39.5	44.2	47.3	61.8	67.6	76.2	79.5
		Distant	2.6	3.4	2.5	3.1	9.1	9.8	14.4	18.1
		Unknown	-	13.4	-	18.9	22.4	53.1	31.2	14.7
C22	Liver	Total	5.4	-	3.8	7.2	5.4	7.6	14.1	14.4
		Localized	8.0	-	6.2	9.9	12.3	16.7	24.4	23.8
		Regional	-	-	-	-	-	-	-	-
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	-	-	15.1	16.5
C23-24	Gallbladder, bile ducts	Total	8.0	9.7	13.3	8.1	15.6	14.6	16.7	19.7
		Localized	-	13.1	14.5	14.7	-	31.6	24.5	25.8
		Regional	-	-	-	8.4	27.6	15.6	22.8	30.0
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	8.6	-	-	-
C25	Pancreas	Total	1.6	1.5	1.7	2.3	3.0	3.8	4.4	5.5
		Localized	3.8	2.2	4.7	3.0	5.0	18.4	18.3	23.2
		Regional	3.2	3.6	-	10.7	5.5	5.2	7.1	7.8
		Distant	-	-	0.8	0.6	1.9	1.9	1.4	2.0
		Unknown	20.1	-	-	-	1.5	-	-	-
C33-34	Lung, trachea	Total	5.7	7.0	7.2	7.6	8.4	9.1	11.8	13.2
		Localized	11.5	15.7	14.6	14.1	24.7	34.2	39.2	38.3
		Regional	6.0	6.2	9.3	9.9	8.4	10.1	14.7	15.9
		Distant	0.7	0.7	0.6	0.6	0.5	0.9	1.7	1.9
		Unknown	2.9	1.7	1.5	5.9	4.3	7.7	10.8	8.7
C43	Melanoma of the skin	Total	59.5	66.7	68.0	73.6	75.7	75.3	75.6	79.0
		Localized	68.6	75.2	75.9	81.4	83.5	87.2	82.4	85.7
		Regional	15.9	29.3	26.5	38.9	28.8	44.4	37.0	41.5
		Distant	12.5	-	5.3	11.1	8.6	9.9	10.1	12.0
		Unknown	-	-	44.4	46.8	70.9	71.7	77.8	53.2
C61	Prostate	Total	54.6	57.7	56.4	64.4	75.3	82.9	88.9	90.8
		Localized	69.6	73.9	71.7	76.0	88.5	96.4	97.9	98.9
		Regional	41.0	39.0	45.5	61.2	67.0	74.9	88.0	90.4
		Distant	18.7	18.4	24.5	22.2	23.2	27.5	32.4	33.8
		Unknown	28.0	39.1	46.6	50.8	70.0	76.3	79.7	71.0
C62	Testis	Total	80.6	91.1	92.9	96.0	95.8	97.1	97.5	98.2
		Localized	93.4	98.4	98.3	99.1	98.9	98.9	99.9	99.5
		Regional	80.1	93.5	95.1	96.0	97.0	96.3	94.9	96.0
		Distant	43.2	64.8	69.1	78.9	77.6	87.1	84.8	89.5
		Unknown	-	-	-	-	-	-	-	-
C64	Kidney except renal pelvis	Total	38.6	39.9	41.7	51.4	48.5	57.7	63.3	67.6
		Localized	71.9	69.3	67.3	74.6	75.0	84.6	84.1	85.3
		Regional	41.0	44.1	44.5	54.8	52.1	51.6	57.6	55.0
		Distant	4.7	5.0	5.8	6.2	6.8	6.1	10.7	8.2
		Unknown	-	-	-	26.5	43.7	56.1	67.6	73.9
C66-68	Bladder, ureter, urethra	Total	59.9	60.4	66.6	69.1	69.5	71.5	72.4	73.1
		Localized	68.4	68.3	72.6	74.2	77.9	83.6	81.8	79.9
		Regional	24.7	22.7	27.2	25.6	22.3	25.3	27.6	26.9
		Distant	-	-	7.0	4.5	8.6	6.1	5.0	5.0
		Unknown	-	30.3	53.9	47.7	66.5	69.7	74.2	79.2
C70-72, D32-33	Central nervous system	Total	29.0	31.5	37.2	42.2	48.2	55.3	59.3	58.4
		Non-malignant	56.5	67.3	76.1	75.8	87.0	91.3	91.4	92.2
		Malignant	16.2	16.4	22.3	22.5	20.1	19.6	25.6	24.3
C73	Thyroid gland	Total	74.5	81.9	73.3	74.4	81.6	82.1	84.6	89.2
		Localized	90.1	97.7	88.7	93.9	101.8	95.9	99.7	95.8
		Regional	76.7	84.8	84.1	84.4	84.2	87.3	89.0	93.8
		Distant	-	-	-	-	-	-	-	20.0
		Unknown	-	-	-	-	-	-	-	92.6
C81	Hodgkin lymphoma	Total	55.6	69.4	72.2	77.3	85.8	88.3	85.5	85.3
C82-86, C96	Non-Hodgkin lymphoma	Total	37.9	40.4	44.4	45.1	48.2	56.1	63.7	68.5
C91-95	Leukaemia	Total	21.7	25.2	29.8	38.3	44.2	51.3	58.7	59.8

‘-’: Not estimated due to few patients in the group (<50 patients at start of interval 0-1, or <5 at start of later intervals).

* 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.

** For 2010-2014 the 5-year relative survival estimates are based on the period approach (observation window 2010-2014).

Table 23b Five-year relative survival by primary site, stage and period of diagnosis, 1975–2014**FEMALES**

ICD10	Site	Stage*	Relative survival (%)							
			1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14**
C00-96	All sites	Total	48.7	51.4	54.0	57.4	60.4	63.5	67.1	68.5
C00-14	Mouth, pharynx	Total	61.4	56.0	56.3	67.0	60.6	61.9	68.4	70.5
		Localized	75.8	72.1	66.5	79.0	81.5	78.5	85.1	82.3
		Regional	41.8	35.6	40.8	46.5	36.0	50.8	54.2	58.1
		Unknown	-	-	-	-	-	61.9	60.2	52.4
C15	Oesophagus	Total	6.9	13.1	6.0	10.5	8.9	10.1	10.2	15.8
		Localized	9.1	14.9	10.4	14.1	15.9	22.1	20.9	24.1
		Regional	-	-	-	-	-	10.1	13.9	22.1
		Distant	-	-	-	-	-	-	-	-
C16	Stomach	Total	14.4	17.8	21.6	20.8	24.0	22.3	23.2	22.1
		Localized	35.5	40.6	38.6	39.0	52.1	56.4	49.2	38.6
		Regional	17.7	15.0	24.1	26.2	33.7	22.8	22.6	22.6
		Distant	2.0	0.8	1.0	1.2	2.1	4.6	3.7	2.8
C18	Colon	Total	40.3	44.7	49.9	51.9	55.9	58.1	61.5	62.8
		Localized	65.1	70.9	79.3	78.8	87.5	91.7	89.6	83.5
		Regional	50.4	53.7	59.9	59.7	69.2	70.9	75.7	78.4
		Distant	4.0	4.2	4.1	4.8	8.1	8.4	13.3	13.6
C19-20	Rectum, rectosigmoid	Total	42.0	45.6	49.5	53.7	58.0	63.7	64.6	66.0
		Localized	62.8	66.3	69.1	72.3	82.9	91.2	88.2	79.9
		Regional	35.9	37.3	49.1	53.4	63.2	71.5	72.8	77.2
		Distant	6.8	3.8	2.7	4.9	6.8	9.6	14.9	18.7
C22	Liver	Total	-	3.4	7.7	6.8	9.7	12.4	14.5	19.5
		Localized	-	7.3	11.5	10.7	17.6	25.7	23.7	30.1
		Regional	-	-	-	-	-	-	-	-
		Distant	-	-	-	-	-	-	-	-
C23-24	Gallbladder, bile ducts	Total	8.1	11.2	11.8	8.5	12.2	10.2	14.8	14.2
		Localized	30.3	22.6	15.3	15.8	22.4	20.3	25.3	24.1
		Regional	-	8.9	21.8	-	23.4	20.0	26.0	22.4
		Distant	-	-	-	-	-	-	-	-
C25	Pancreas	Total	1.8	1.7	2.2	3.1	2.8	3.8	5.6	6.8
		Localized	4.4	3.7	5.3	9.2	9.6	21.0	20.5	21.7
		Regional	4.1	4.8	4.3	4.3	3.6	5.2	5.5	9.1
		Distant	-	1.1	-	-	-	1.3	2.2	2.1
C33-34	Lung, trachea	Total	11.4	7.3	7.8	11.0	11.7	12.9	16.8	19.2
		Localized	26.9	19.1	18.0	24.2	35.2	49.0	49.5	51.7
		Regional	12.0	6.7	8.5	13.0	12.8	12.8	19.6	21.5
		Distant	1.3	-	1.1	1.2	1.2	1.8	2.7	2.6
C43	Melanoma of the skin	Total	78.9	80.3	86.0	87.5	87.8	87.2	87.0	87.5
		Localized	85.4	87.3	90.2	92.2	93.6	94.1	92.5	91.9
		Regional	-	34.9	47.0	40.0	56.2	51.9	46.2	53.0
		Distant	18.2	-	13.4	15.1	15.3	23.0	29.8	24.7
C50	Breast	Total	69.8	73.6	74.8	77.1	83.1	85.9	87.8	88.0
		Pagets stage 0	75.7	75.3	75.3	87.4	96.9	94.5	97.5	102.5
		I	85.7	86.4	91.2	94.4	97.2	98.6	99.3	99.4
		II	60.0	65.0	72.0	76.3	82.9	86.9	90.0	91.1
C53	Cervix uteri	Total	74.8	70.6	68.8	71.4	73.5	77.3	77.1	80.4
		I	90.8	86.1	86.5	86.2	90.5	93.1	93.5	92.3
		II	64.5	59.9	54.9	59.4	59.9	72.1	72.0	77.8
		III	35.5	33.9	28.2	33.4	38.1	41.5	51.6	56.1
C54	Corpus uteri	Total	72.4	69.6	71.6	75.2	78.0	81.4	81.6	82.2
		Localized	81.2	82.3	81.6	85.4	89.4	92.4	92.3	92.6
		Regional	60.9	52.1	58.4	63.5	69.9	72.7	70.5	66.5
		Distant	16.7	21.7	22.8	28.2	33.0	36.1	39.5	35.5
C56	Ovary	Total	36.4	35.6	34.5	37.6	40.0	43.1	43.0	44.5
		Localized	78.3	79.5	80.4	82.4	90.6	89.4	88.5	88.9
		Regional	39.5	41.8	44.1	49.3	54.7	66.5	65.4	58.8
		Distant	15.8	16.4	15.8	18.9	24.1	27.1	29.4	30.7
C64	Kidney except renal pelvis	Total	38.4	44.5	48.4	53.7	54.0	57.2	69.8	69.9
		Localized	67.7	73.0	76.3	75.9	80.0	84.2	88.7	87.7
		Regional	37.6	45.6	46.5	51.1	46.4	45.3	44.1	45.7
		Distant	3.2	4.4	6.5	5.4	9.6	9.3	12.3	8.8
C66-68	Bladder, ureter, urethra	Total	47.4	52.8	59.8	60.1	59.0	60.1	63.2	65.1
		Localized	61.4	64.6	67.9	68.1	71.8	79.8	74.6	72.6
		Regional	9.3	14.8	13.6	15.0	24.6	19.7	23.5	23.9
		Distant	8.3	-	-	-	-	-	8.6	6.5
C70-72, D32-33	Central nervous system	Total	41.8	45.4	52.0	60.4	63.4	73.2	76.3	75.1
		Non-malignant	75.3	80.4	81.8	85.0	88.6	92.2	94.0	94.3
		Malignant	14.9	19.4	24.1	29.0	24.3	27.9	27.5	28.8
C73	Thyroid gland	Total	85.5	86.3	87.8	89.8	87.5	90.1	91.5	92.9
		Localized	95.0	94.3	95.8	97.6	97.9	103.9	100.9	99.0
		Regional	87.3	84.5	87.4	88.8	84.2	88.1	92.7	92.2
		Distant	21.1	19.3	-	23.2	-	-	-	25.2
C81	Hodgkin lymphoma	Total	70.7	69.9	70.5	83.4	84.0	85.0	86.2	87.6
C82-86, C96	Non-Hodgkin lymphoma	Total	38.8	48.0	49.4	52.7	53.9	58.7	70.6	72.6
C91-95	Leukaemia	Total	22.2	26.2	28.2	41.4	46.0	54.3	62.7	63.2

Table 24 1-, 5-, 10-, and 15-year relative survival proportion (95% confidence interval) by cancer site and sex, period approach follow-up, 2012–2014

ICD10	Site	Sex	1-year		5-year		10-year		15-year	
C00-14	Mouth, pharynx	M	85.2	(83.3, 87.0)	64.8	(61.8, 67.6)	51.2	(47.3, 54.9)	43.1	(37.9, 48.3)
		F	87.2	(84.7, 89.4)	70.5	(66.8, 74.0)	59.6	(54.4, 64.3)	47.2	(41.3, 52.8)
C15	Oesophagus	M	42.0	(38.9, 45.1)	13.8	(11.4, 16.4)	11.8	(9.2, 14.8)	10.7	(7.2, 15.0)
		F	44.6	(39.3, 49.8)	15.8	(11.5, 20.8)	12.2	(7.7, 17.8)	-	-
C16	Stomach	M	51.2	(48.7, 53.7)	23.4	(21.1, 25.8)	19.6	(17.0, 22.3)	16.3	(13.5, 19.3)
		F	45.9	(42.7, 49.2)	22.1	(19.3, 25.0)	19.9	(16.9, 23.2)	18.1	(14.0, 22.6)
C18	Colon	M	78.3	(77.2, 79.4)	58.9	(57.3, 60.5)	52.6	(50.2, 55.0)	44.6	(40.7, 48.5)
		F	79.4	(78.4, 80.4)	62.8	(61.3, 64.3)	56.4	(54.1, 58.5)	48.6	(44.6, 52.4)
C19-20	Rectum, rectosigmoid	M	86.9	(85.7, 88.1)	66.2	(64.2, 68.2)	54.7	(51.9, 57.4)	50.7	(46.5, 54.7)
		F	86.0	(84.5, 87.3)	66.0	(63.7, 68.1)	59.8	(56.8, 62.6)	54.7	(50.3, 58.9)
C22	Liver	M	35.1	(31.3, 39.0)	14.4	(11.3, 17.8)	11.4	(8.3, 14.9)	8.8	(4.9, 14.5)
		F	38.3	(33.5, 43.0)	19.5	(15.0, 24.3)	15.7	(10.6, 21.7)	10.4	(5.7, 16.9)
C23-24	Gallbladder, bile ducts	M	53.3	(47.9, 58.3)	19.7	(15.0, 25.0)	16.2	(11.1, 22.1)	11.9	(6.3, 19.5)
		F	40.1	(35.9, 44.3)	14.2	(11.0, 17.9)	12.0	(8.8, 15.8)	9.4	(6.1, 13.7)
C25	Pancreas	M	24.8	(22.9, 26.8)	5.5	(4.4, 6.7)	3.9	(2.9, 5.2)	2.7	(1.7, 4.2)
		F	23.6	(21.8, 25.5)	6.8	(5.6, 8.2)	4.8	(3.6, 6.3)	3.2	(2.0, 4.7)
C33-34	Lung, trachea	M	37.8	(36.7, 38.9)	13.2	(12.4, 14.0)	7.9	(7.1, 8.7)	5.5	(4.6, 6.4)
		F	45.9	(44.7, 47.1)	19.2	(18.1, 20.3)	12.9	(11.8, 14.1)	9.9	(8.4, 11.6)
C43	Melanoma of the skin	M	94.5	(93.6, 95.3)	79.0	(77.2, 80.8)	72.0	(69.1, 74.7)	64.1	(59.4, 68.3)
		F	97.3	(96.6, 97.9)	87.5	(86.0, 88.9)	82.8	(80.4, 84.9)	80.7	(77.1, 83.8)
C50	Breast	F	97.4	(97.1, 97.7)	88.0	(87.3, 88.7)	79.3	(78.3, 80.3)	72.4	(71.1, 73.7)
C53	Cervix uteri	F	92.3	(90.9, 93.5)	80.4	(78.2, 82.3)	75.7	(73.3, 77.9)	70.9	(68.3, 73.3)
C54	Corpus uteri	F	93.0	(92.0, 93.9)	82.2	(80.5, 83.8)	76.8	(74.4, 79.0)	69.9	(66.2, 73.2)
C56	Ovary	F	76.4	(74.6, 78.1)	44.5	(42.4, 46.7)	35.1	(32.8, 37.3)	31.1	(28.6, 33.6)
C61	Prostate	M	98.6	(98.3, 98.8)	90.8	(90.1, 91.4)	78.5	(77.3, 79.5)	65.1	(63.3, 66.8)
C62	Testis	M	98.9	(98.1, 99.3)	98.2	(97.1, 98.9)	97.5	(95.8, 98.4)	96.8	(94.6, 98.1)
C64	Kidney except renal pelvis	M	83.9	(82.3, 85.4)	67.6	(65.2, 69.9)	55.5	(52.3, 58.7)	49.3	(44.4, 54.0)
		F	82.8	(80.4, 84.9)	69.9	(66.8, 72.8)	61.3	(57.5, 64.9)	51.9	(46.4, 57.1)
C66-68	Bladder, ureter, urethra	M	88.1	(87.0, 89.1)	73.1	(71.2, 74.9)	62.0	(59.3, 64.6)	54.5	(49.3, 59.5)
		F	81.0	(78.9, 82.9)	65.1	(62.1, 67.9)	59.9	(55.3, 64.2)	46.9	(38.9, 54.5)
C70-72, D32-33	Central nervous system	M	76.4	(74.7, 78.1)	58.4	(56.3, 60.5)	53.6	(51.1, 56.0)	48.6	(45.4, 51.8)
		F	85.8	(84.3, 87.0)	75.1	(73.3, 76.9)	71.4	(69.2, 73.5)	67.0	(64.0, 69.7)
C73	Thyroid gland	M	93.5	(90.4, 95.7)	89.2	(84.1, 92.7)	85.0	(77.2, 90.3)	81.4	(68.7, 89.3)
		F	95.5	(94.0, 96.7)	92.9	(90.6, 94.7)	88.9	(85.4, 91.6)	84.4	(79.5, 88.2)
C81	Hodgkin lymphoma	M	91.2	(87.9, 93.6)	85.3	(81.2, 88.6)	82.1	(77.5, 85.9)	80.2	(74.5, 84.7)
		F	95.8	(92.7, 97.6)	87.6	(83.0, 91.0)	84.7	(79.0, 88.9)	83.6	(76.7, 88.5)
C82-86, C96	Non-Hodgkin lymphoma	M	82.1	(80.5, 83.6)	68.5	(66.3, 70.6)	55.9	(52.7, 59.0)	47.1	(42.1, 52.0)
		F	83.2	(81.5, 84.7)	72.6	(70.4, 74.8)	62.2	(59.3, 65.1)	53.8	(48.9, 58.4)
C91-95	Leukaemia	M	79.8	(78.2, 81.3)	59.8	(57.6, 61.9)	46.4	(43.6, 49.1)	39.5	(34.2, 44.8)
		F	77.9	(76.1, 79.7)	63.2	(60.8, 65.4)	48.9	(46.0, 51.8)	41.8	(37.5, 46.1)

‘-’: Not estimated due to few patients in the group (<50 patients at start of interval 0-1, or <5 at start of later intervals).

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

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

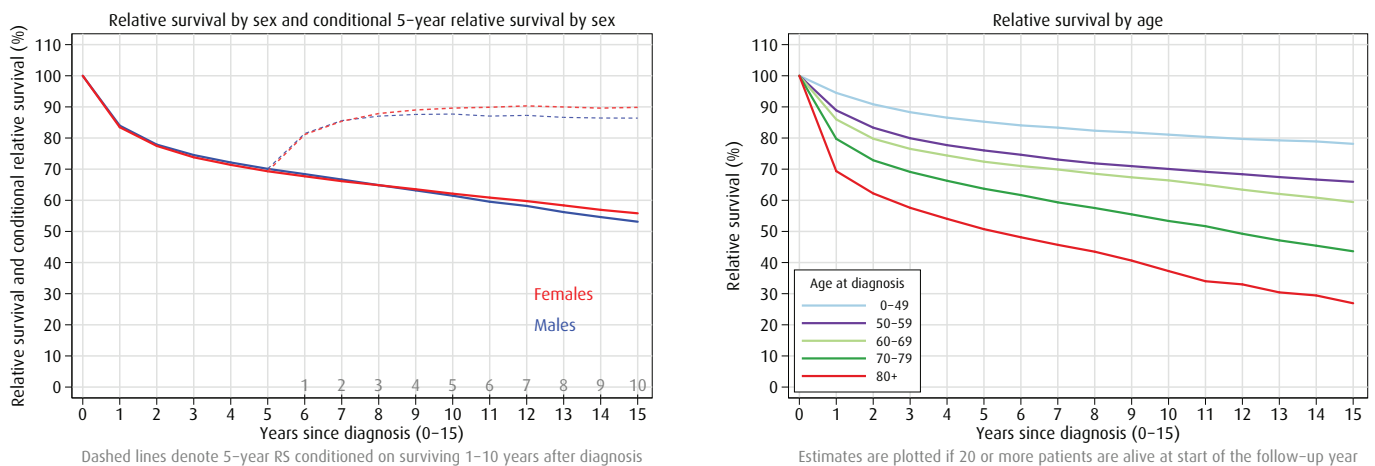


Figure 10B: Mouth, pharynx (ICD-10 C00–14)

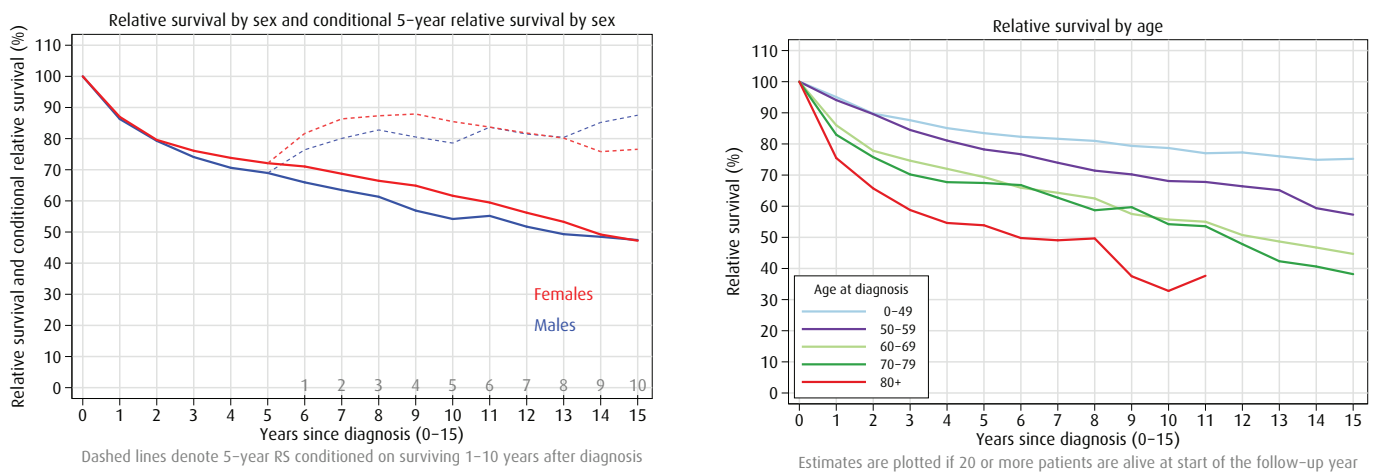


Figure 10C: Oesophagus (ICD-10 C15)

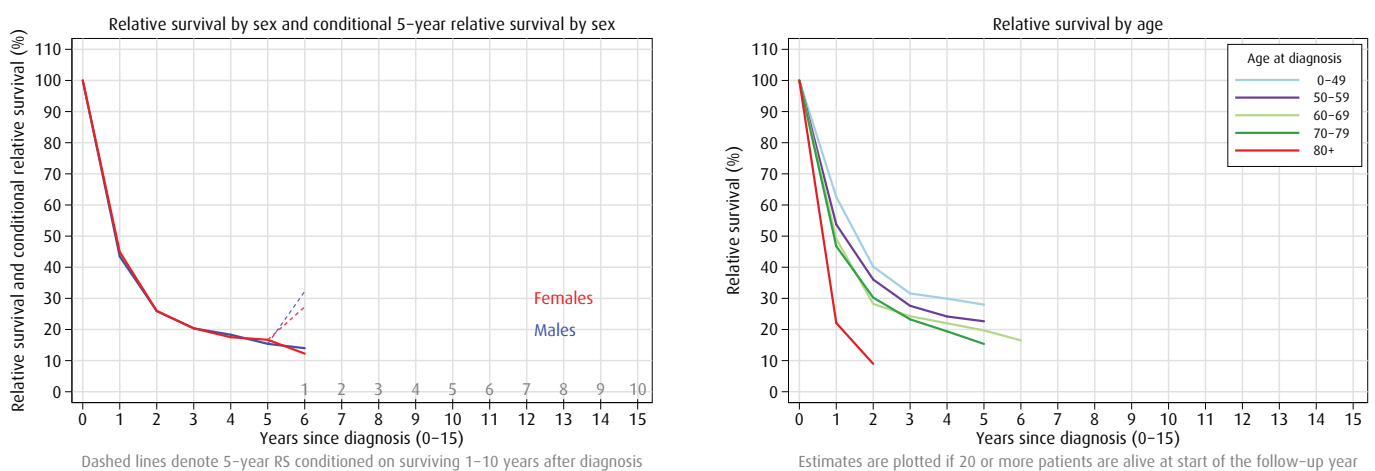


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

Figure 10D: Stomach (ICD-10 C16)

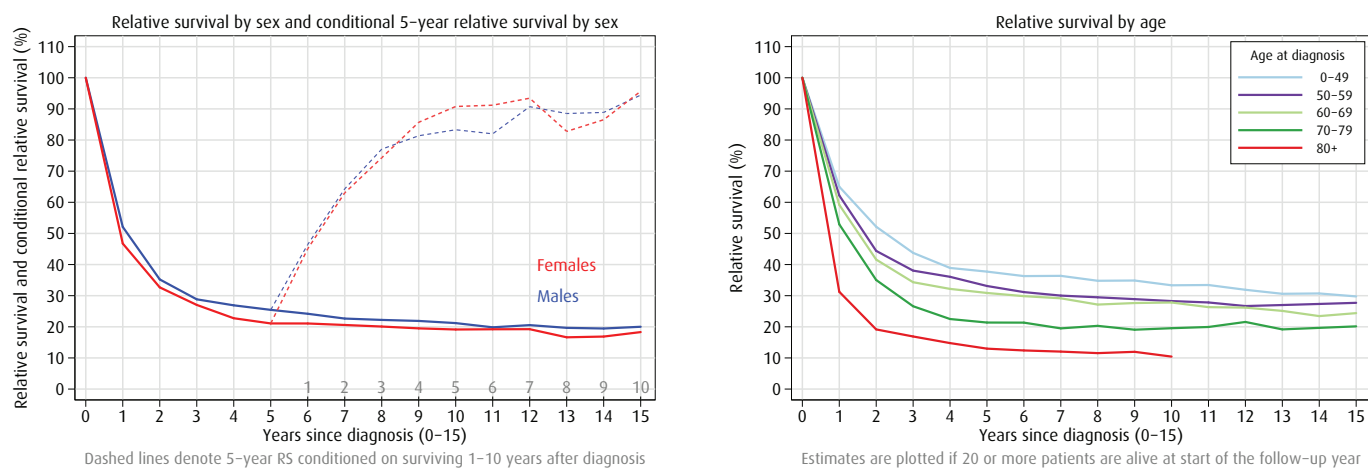


Figure 10E: Colon (ICD-10 C18)

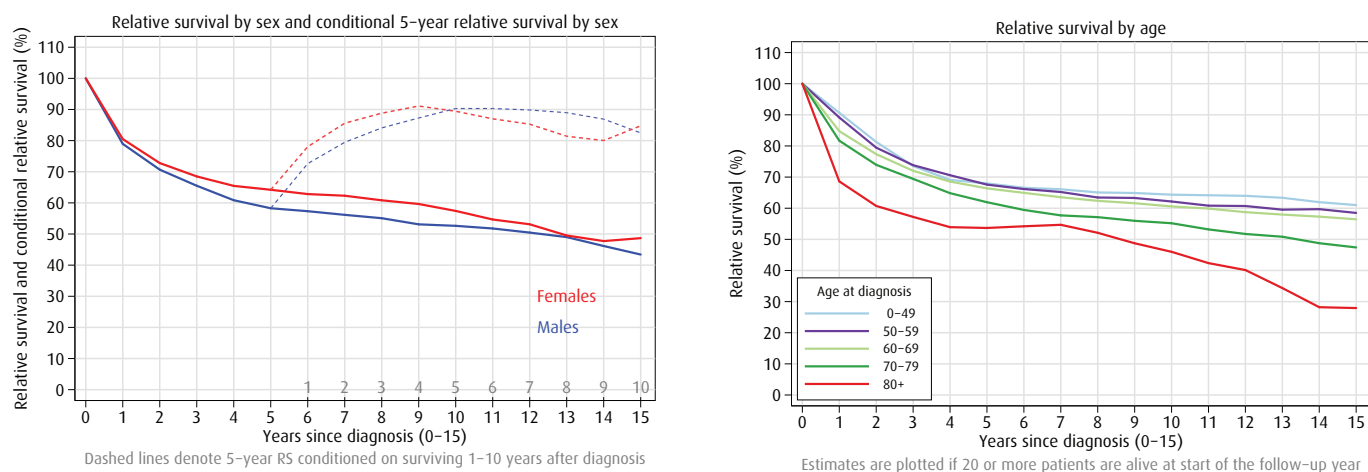


Figure 10F: Rectum, rectosigmoid (ICD-10 C19–20)

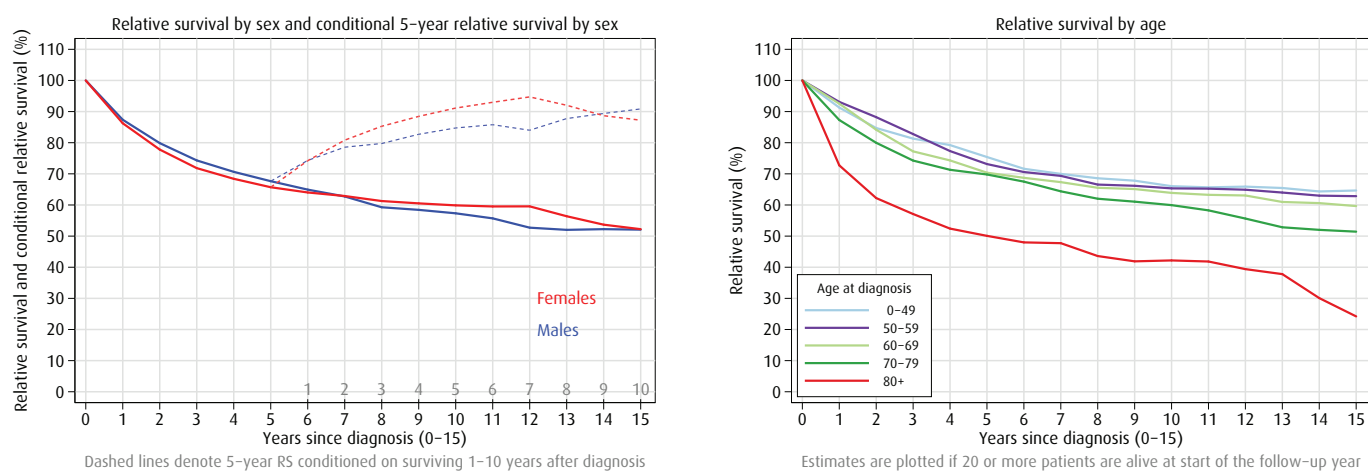


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

Figure 10G: Liver (ICD-10 C22)

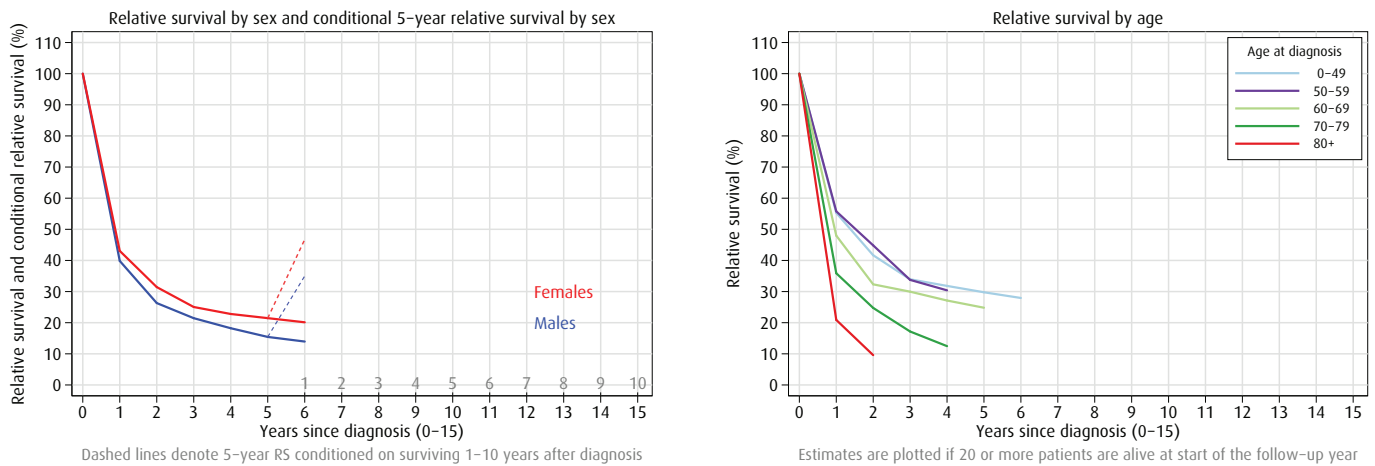


Figure 10H: Gallbladder, bile ducts (ICD-10 C23–24)

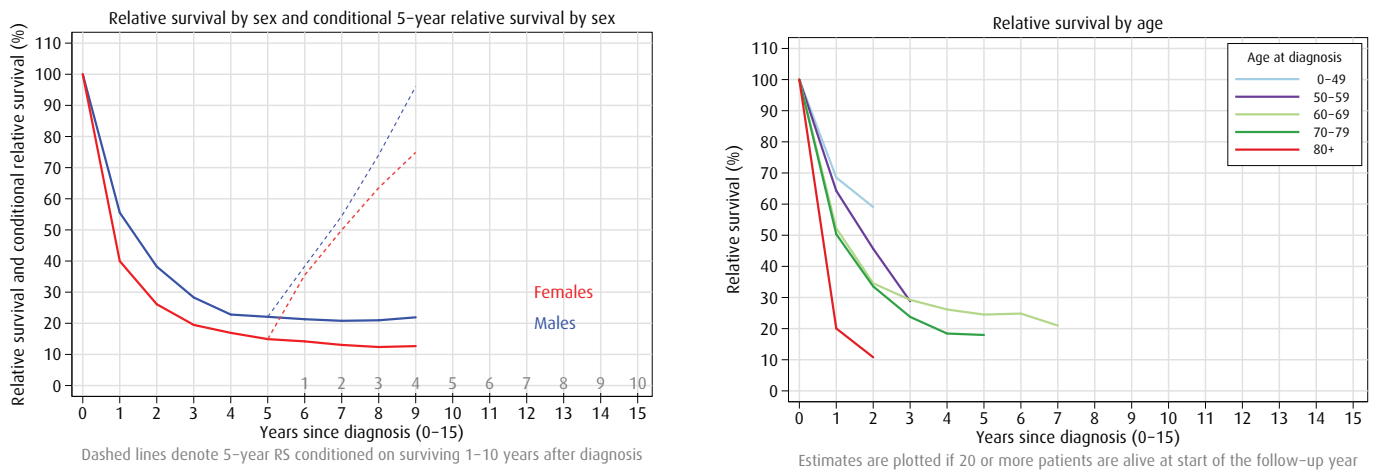


Figure 10I: Pancreas (ICD-10 C25)

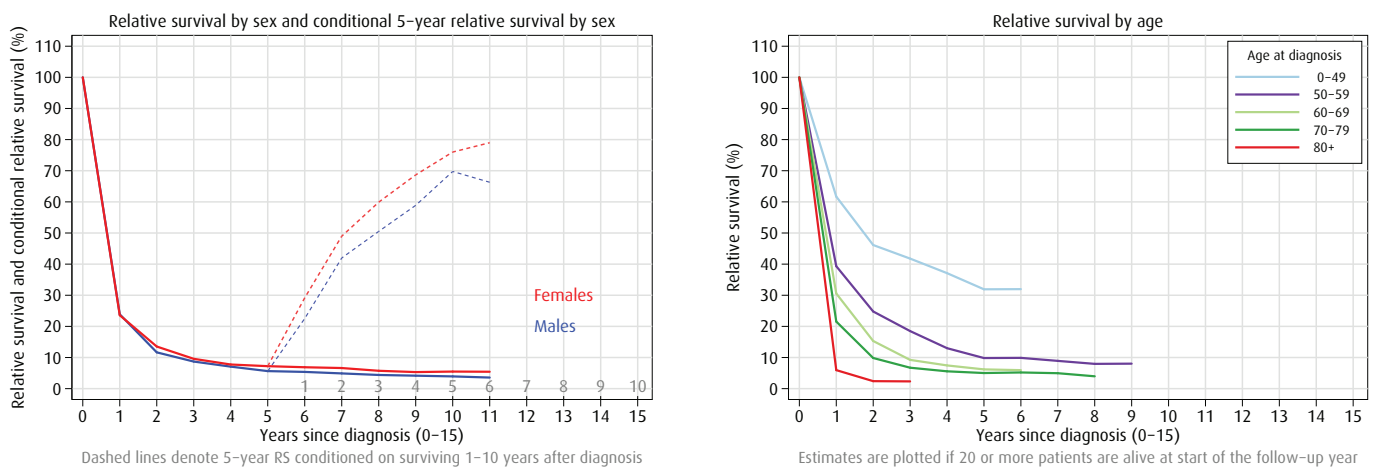


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

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

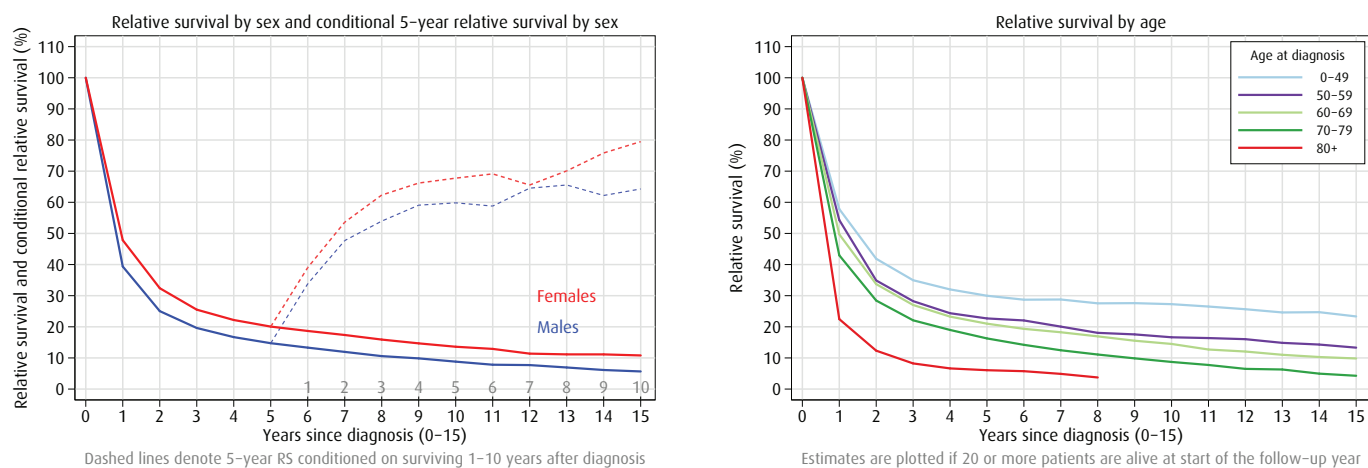


Figure 10K: Melanoma of the skin (ICD-10 C43)

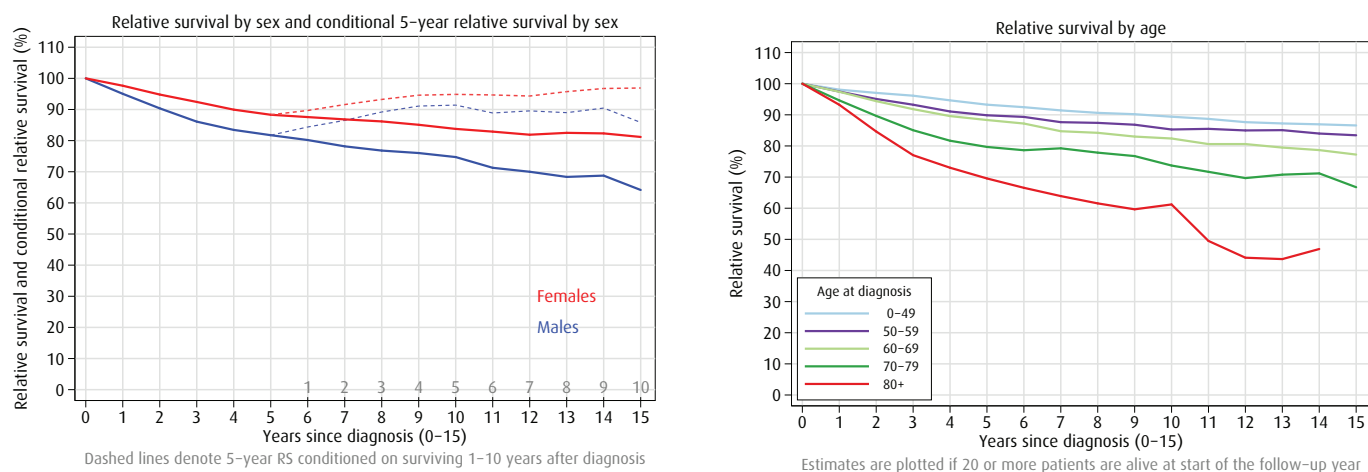


Figure 10L: Breast (ICD-10 C50)

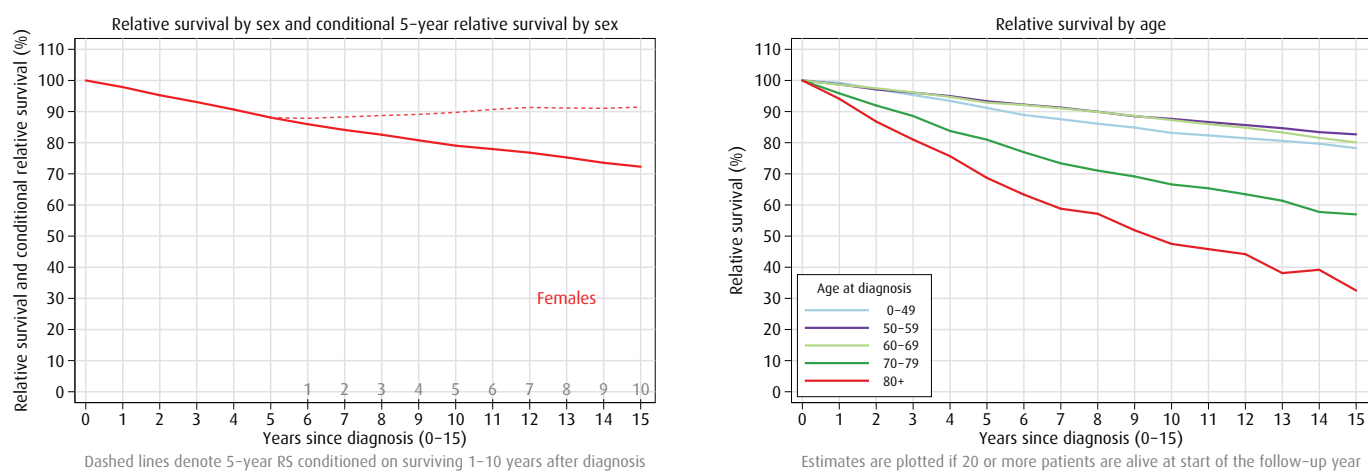


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

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

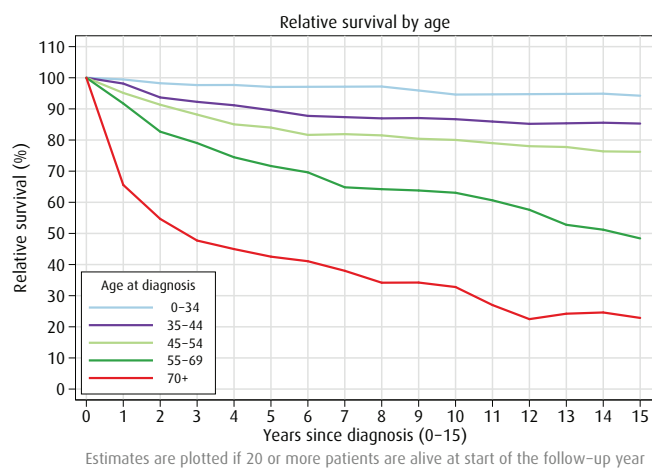
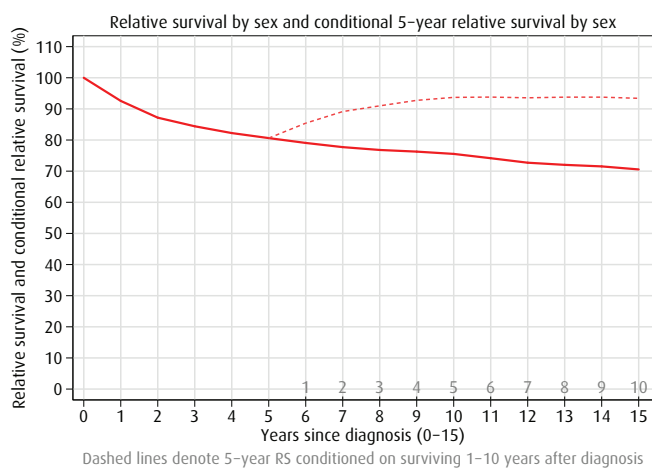


Figure 10N: Corpus uteri (ICD-10 C54)

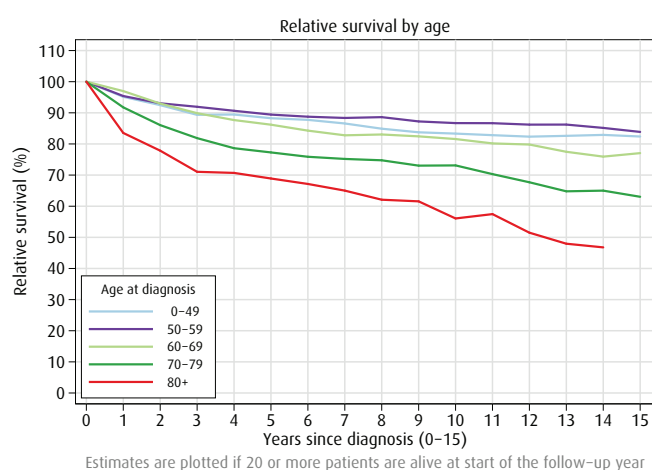
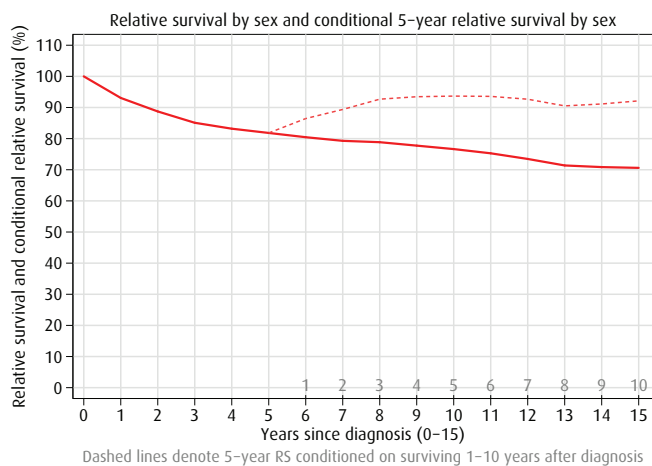


Figure 10O: Ovary (ICD-10 C56)

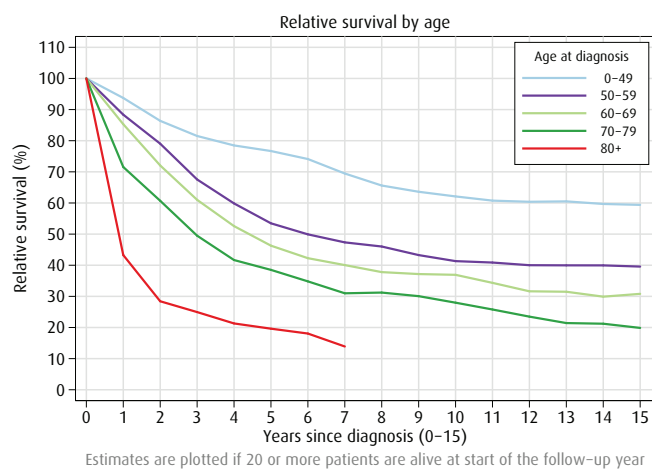
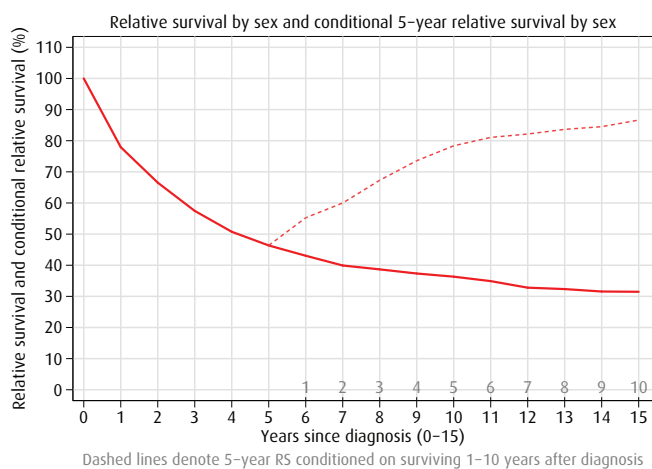


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

Figure 10P: Prostate (ICD-10 C61)

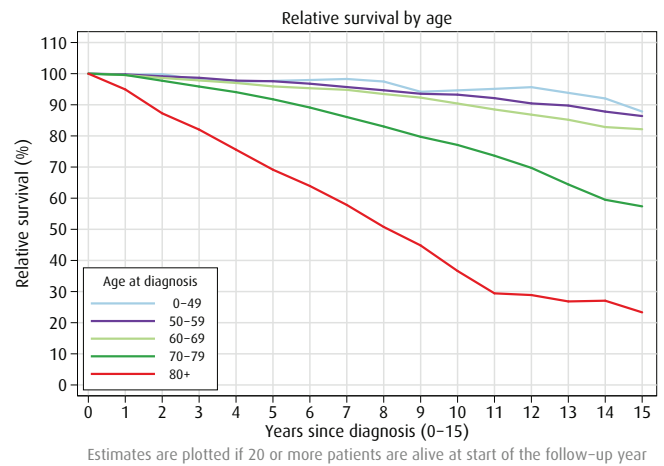
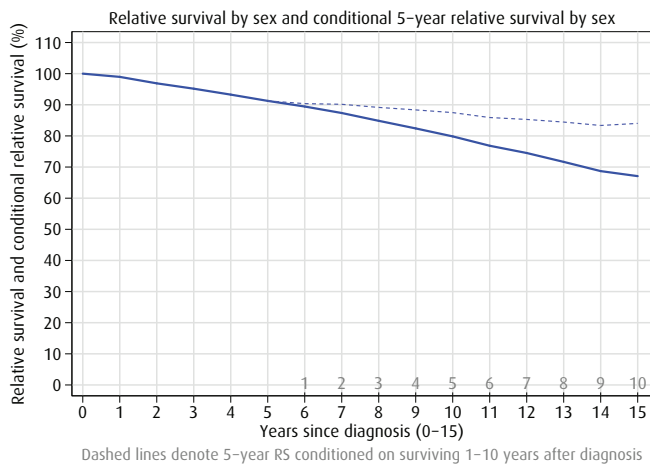


Figure 10Q: Testis (ICD-10 C62)

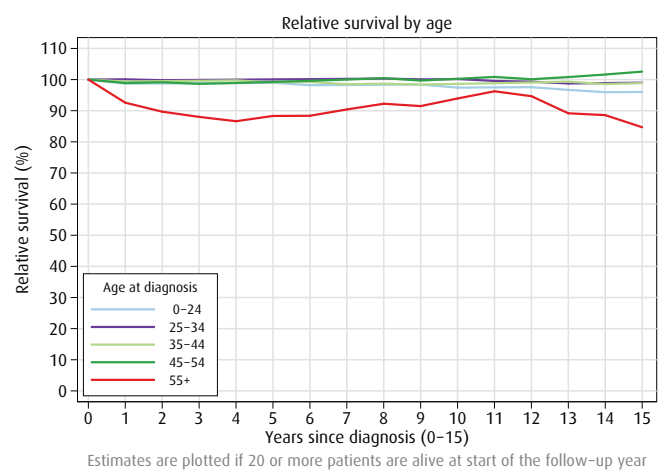
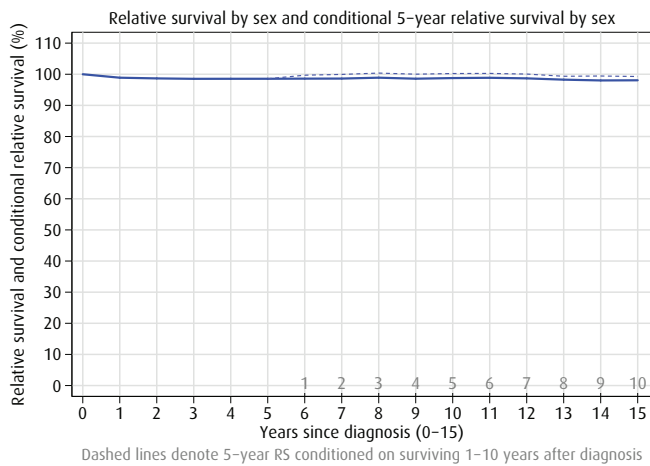


Figure 10R: Kidney excluding renal pelvis (ICD-10 C64)

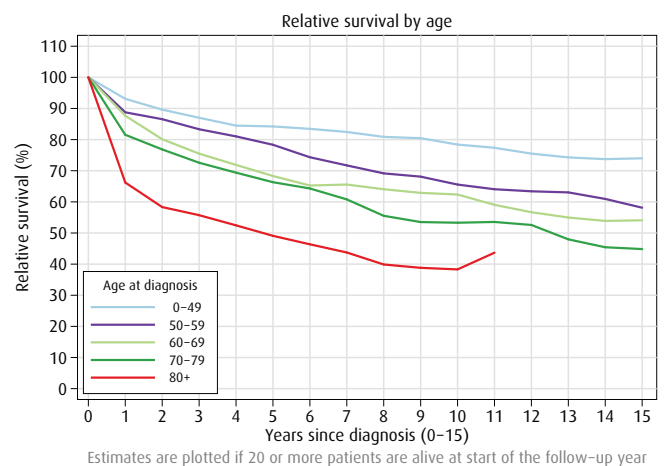
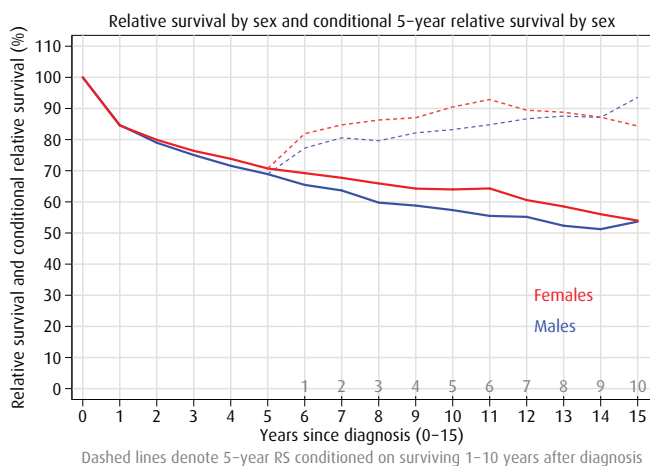


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

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

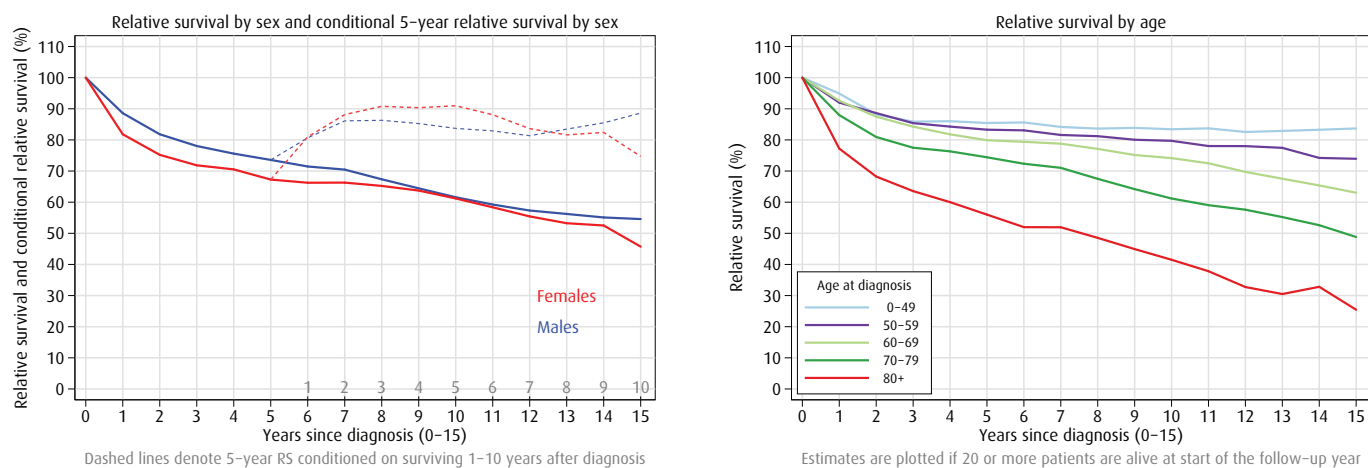


Figure 10T: Central nervous system (ICD-10 C70–72, D32–33, D42–43)

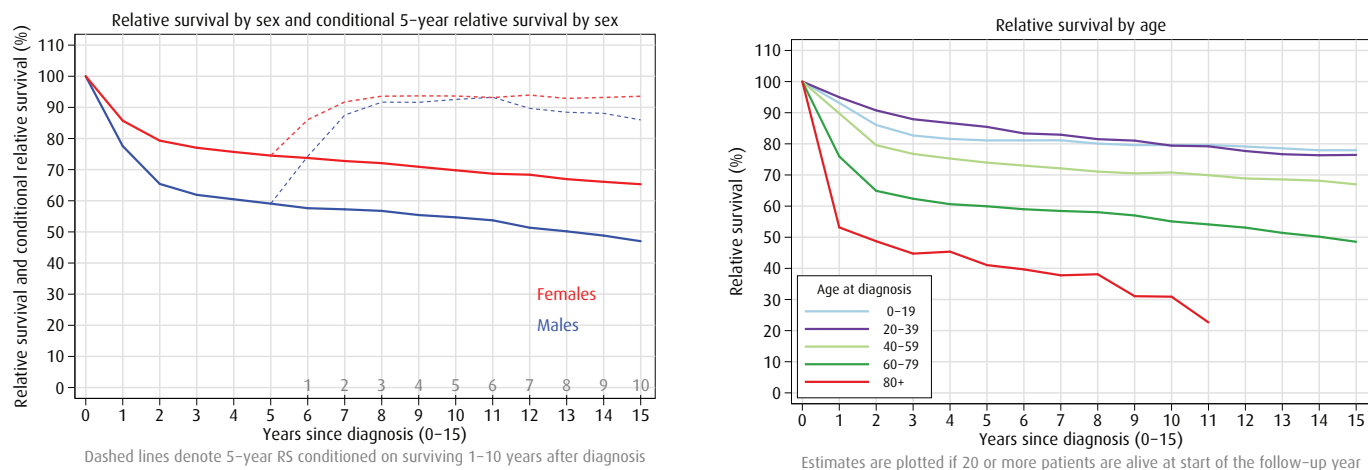


Figure 10U: Thyroid gland (ICD-10 C73)

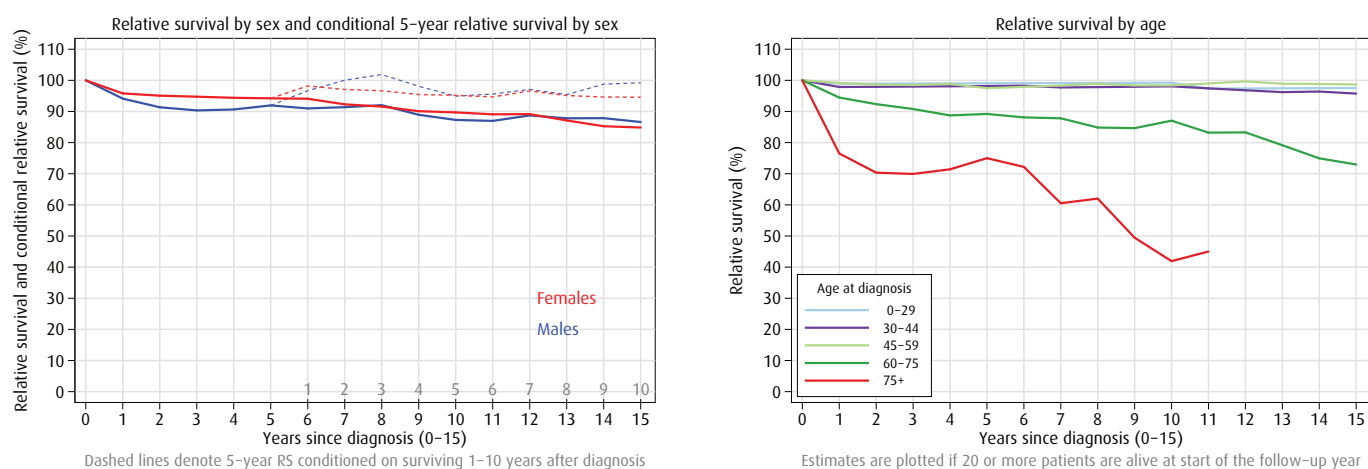


Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2012–14)

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

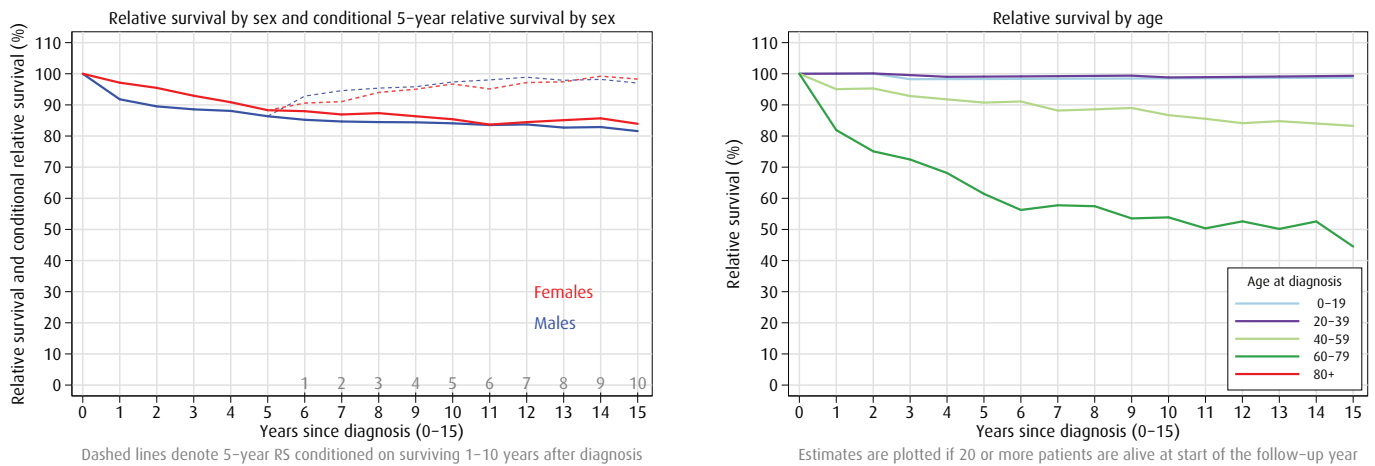


Figure 10W: Non-Hodgkin lymphoma (ICD-10 C82–86, C96)

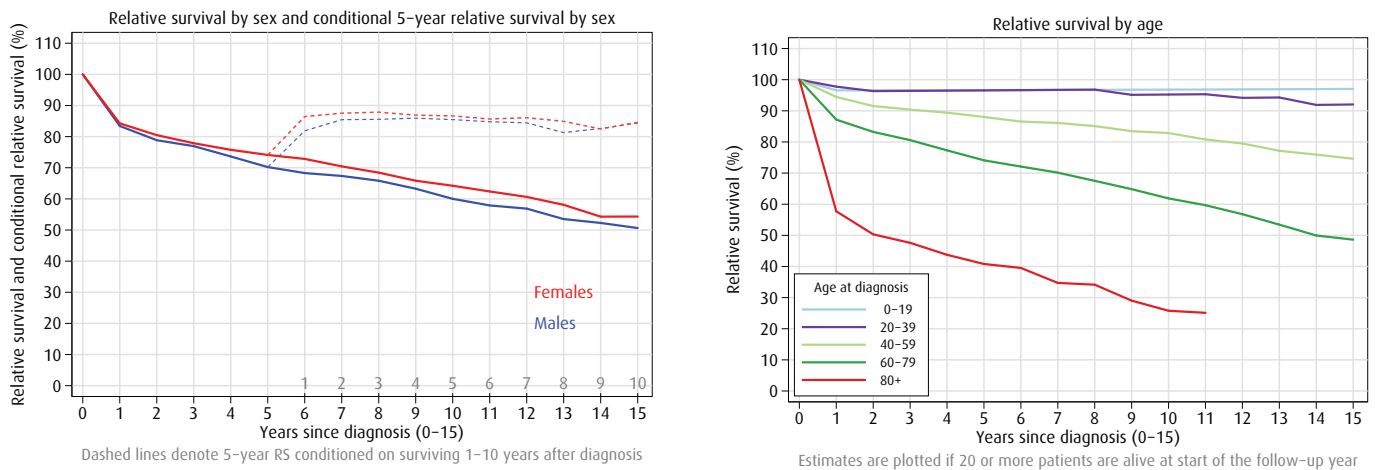
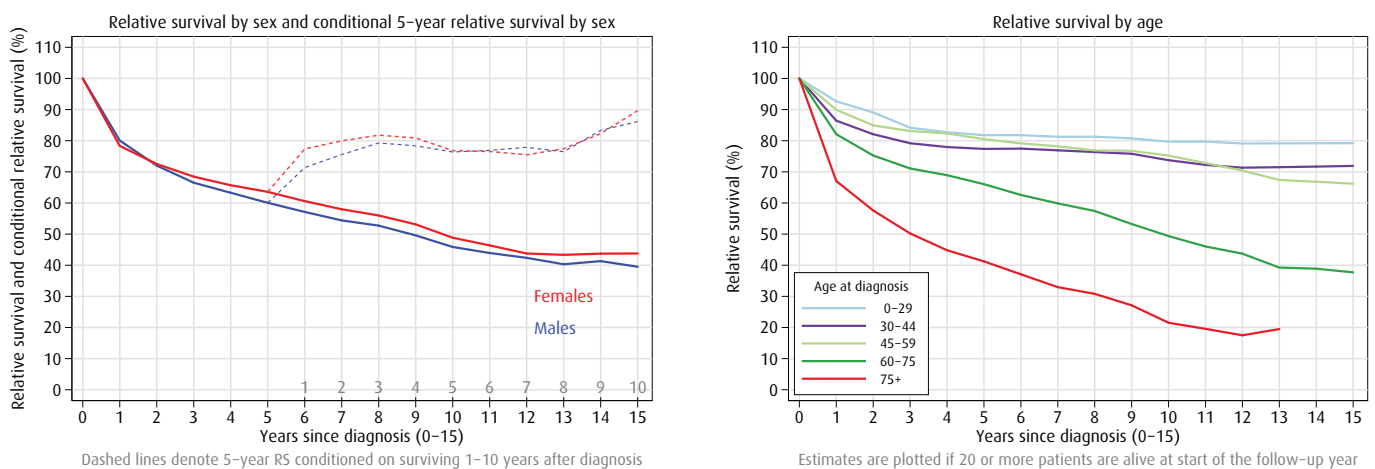


Figure 10X: Leukaemia (ICD-10 C91–95, D45–47)



Trends in incidence, mortality and survival, Norway 1965–2014

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, and the impact of interventions and screening 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, more effective therapies or 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 may be affected by 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 11-A to 11-X present time trends during 1965–2014 for age-standardised incidence and mortality rates and five-year relative survival estimates based on a moving three-year observation (period) window. 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 11-A is a persistent increase in cancer incidence and survival in Norway over the last four to five 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.

Among men, nearly 30% of all cancers diagnosed in 2014 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 main 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 has been a monotonous increase in incidence rates up to 2005 with a steeper increase in the mid-1990s followed by a notable decline 2005 and 2009 (Figure 11-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.

During the last decade, there have been some fluctuations in the breast cancer rates, but no clear picture emerges when we examine the trends in age-specific rates. The fluctuations probably represent a combination of new diagnostic methods being used in the program, or locally in studies, and random variation. The breast cancer mortality was almost stable from

1965 up to the mid-1990s when it began declining (Figure 11-M). These good news most likely reflect improved diagnostics, better treatment, and 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 11-J). Overall, lung cancer incidence and mortality rates among males began to level off in the early 1990s and declined the past three years. This is in contrast to the continuing increase in women. It is worth noting that the age-standardised lung cancer rates conceal a stabilisation in younger women (< 60 years). During the last two decades lung cancer has surpassed breast cancer as the most frequent cause of cancer death among women, and the incidence is now surpassing that of colon cancer. The lung cancer trends 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 trends year by year seemed to stabilise after 2010 for women, but the rate for 2014 suggests a slight increase.

Both colon and rectal cancer incidence have been increasing for many decades, but the rectal cancer rates have levelled off since the 1990s (Figure 11-E and 11-F). Of particular note is the increasing survival and declining mortality from rectal cancer in both sexes, and the mortality is nearly half of what it used to be. The most important determinants are 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 better hygiene and increased intake of fresh or frozen food, which have reduced the prevalence of *Helicobacter pylori* infections. The survival of stomach cancer has increased moderately over time (Figure 11-D).

In contrast, the incidence rate of testicular cancer increased gradually during the last decades (Figure 11-Q). An improvement in 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. This cancer now has the highest five-year relative survival.

Finally, a remarkable increase in incidence rates has been seen during the last years for liver cancer, thyroid gland malignant melanoma in both genders. The increase in incidence rates for malignant melanoma is probably best explained by sun tanning. It could also be caused by more frequent check-ups at the general practitioners' offices or in pharmacies. However, 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 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. The increase in Norway may be due to an increased use of ultrasound, CT or MRI for other indications, resulting in incidental findings of tumours in the thyroid. We suspect that the increased rate of liver cancer is due to immigration from areas with higher incidence of this disease.

In summary, the overall trends in cancer survival probably reflect both artefacts, such as screening and improved diagnostics, and 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 11-A to 11-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 11-E, and cases of topography ICD10 D45-47 are not included in the mortality rates in figure 11-X.

Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-A: All sites (ICD10 C00-96, D32-33, D35.2-35.4, D42-43, D44.3-44.5, D45-47)

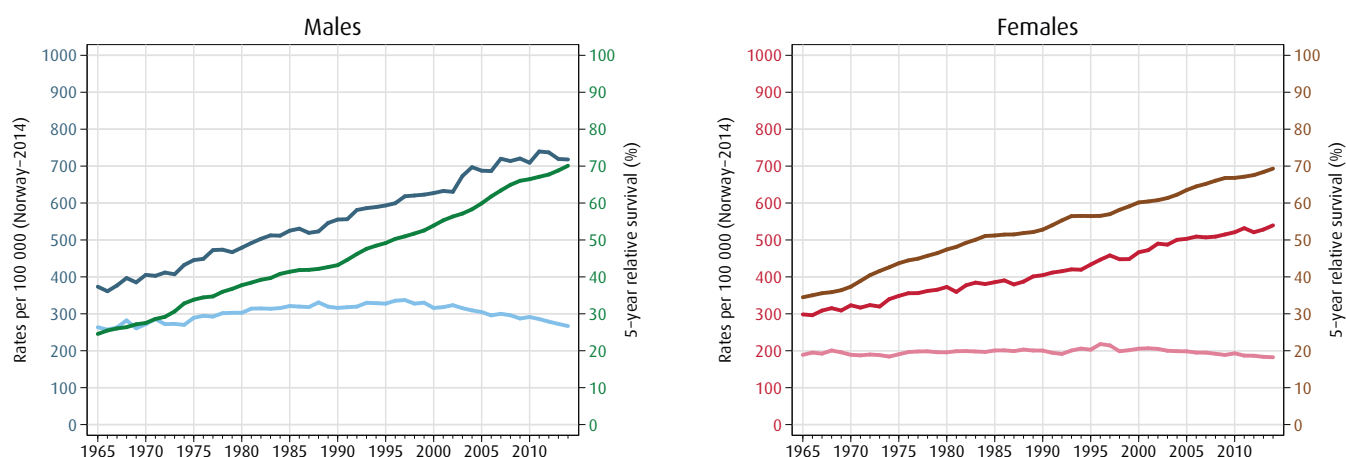


Figure 11-B: Mouth, pharynx (ICD-10 C00-14)

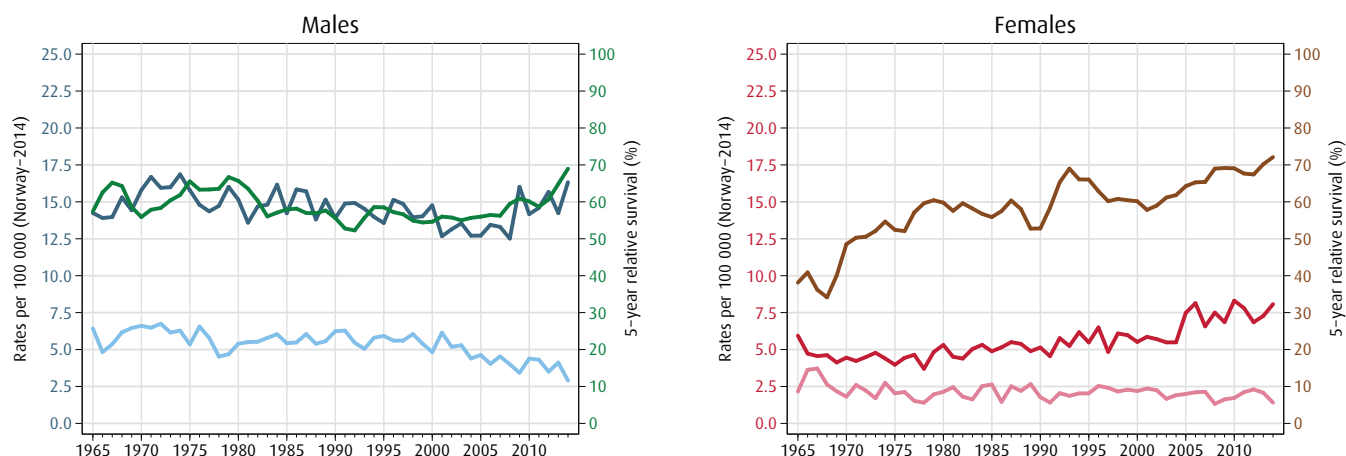


Figure 11-C: Oesophagus (ICD-10 C15)

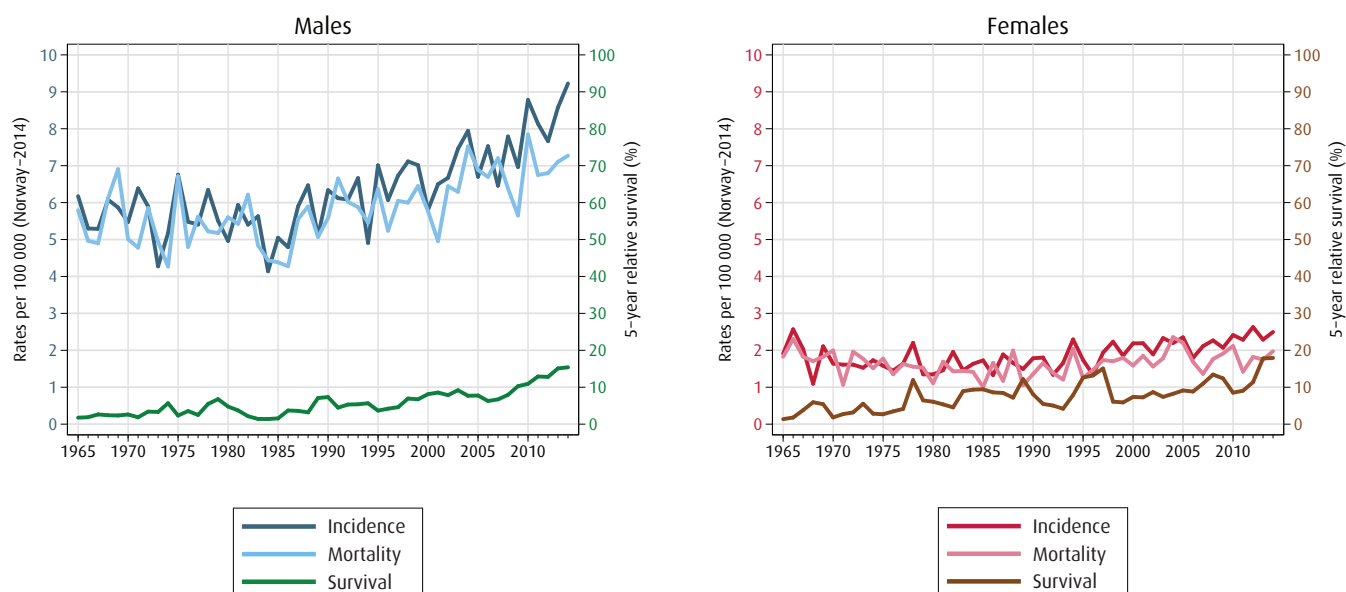


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-D: Stomach (ICD-10 C16)

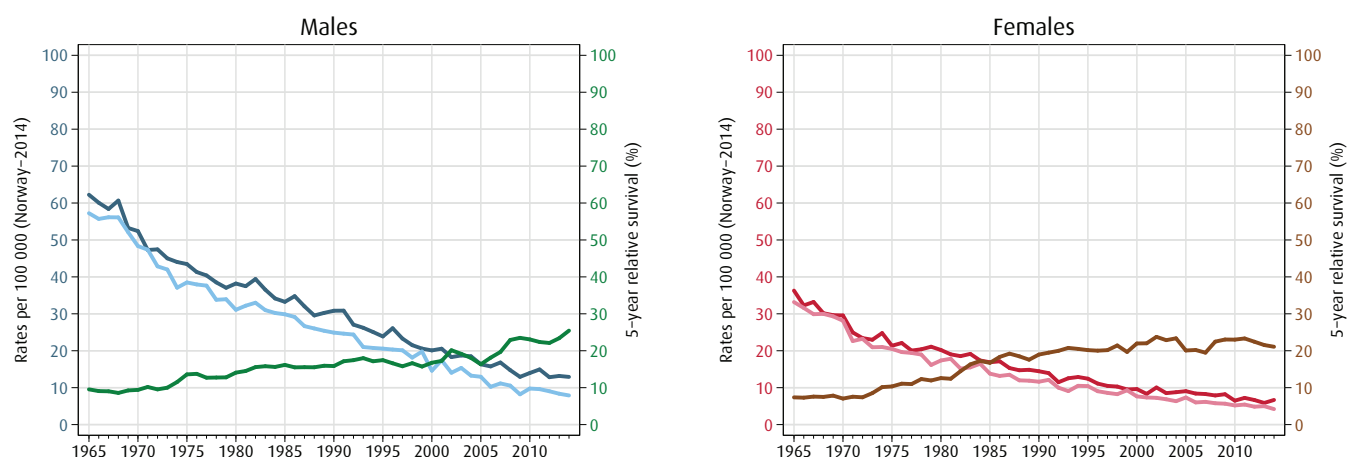


Figure 11-E: Colon (ICD-10 C18)

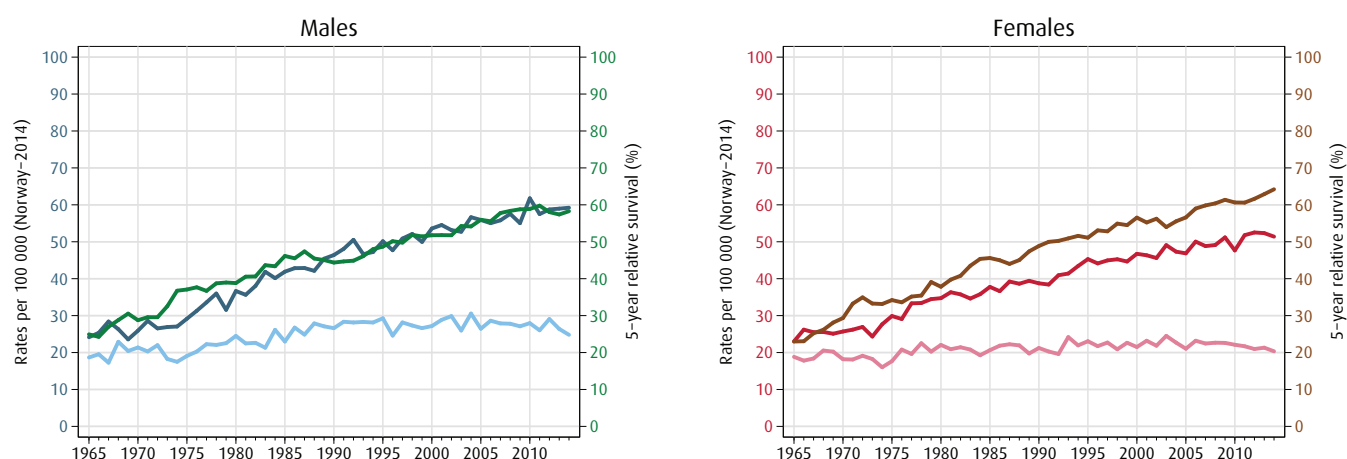
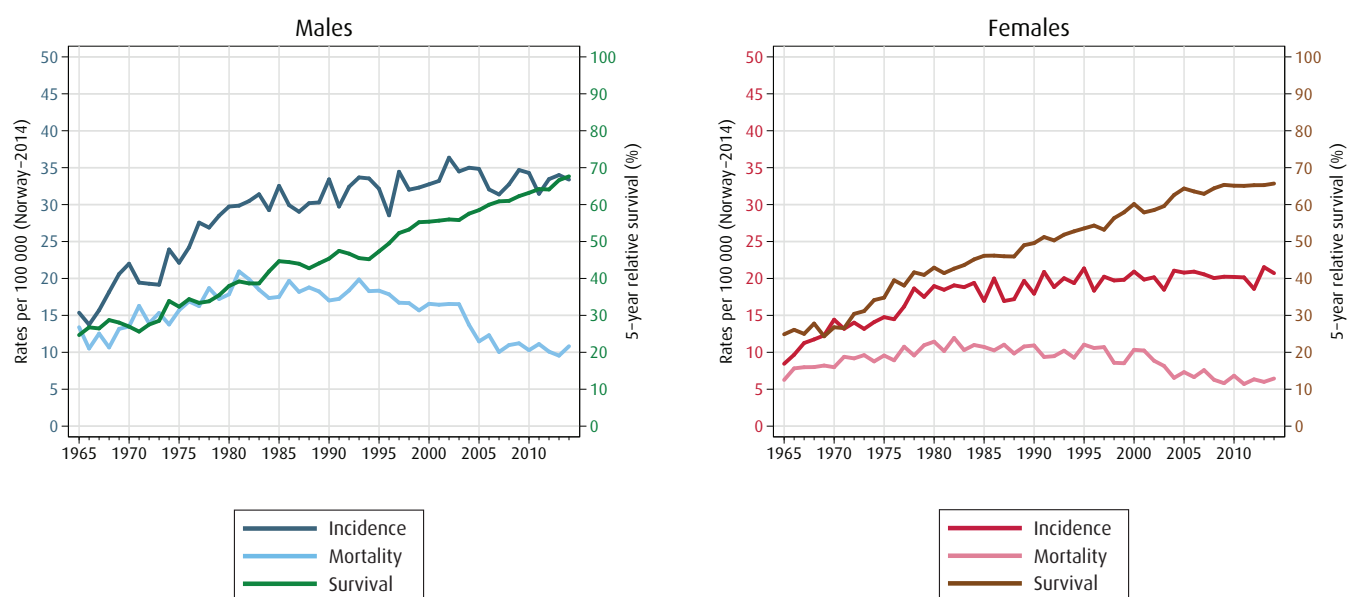


Figure 11-F: Rectum, rectosigmoid (ICD-10 C19-20)



Incidence
Mortality
Survival

Incidence
Mortality
Survival

Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-G: Liver (ICD-10 C22)

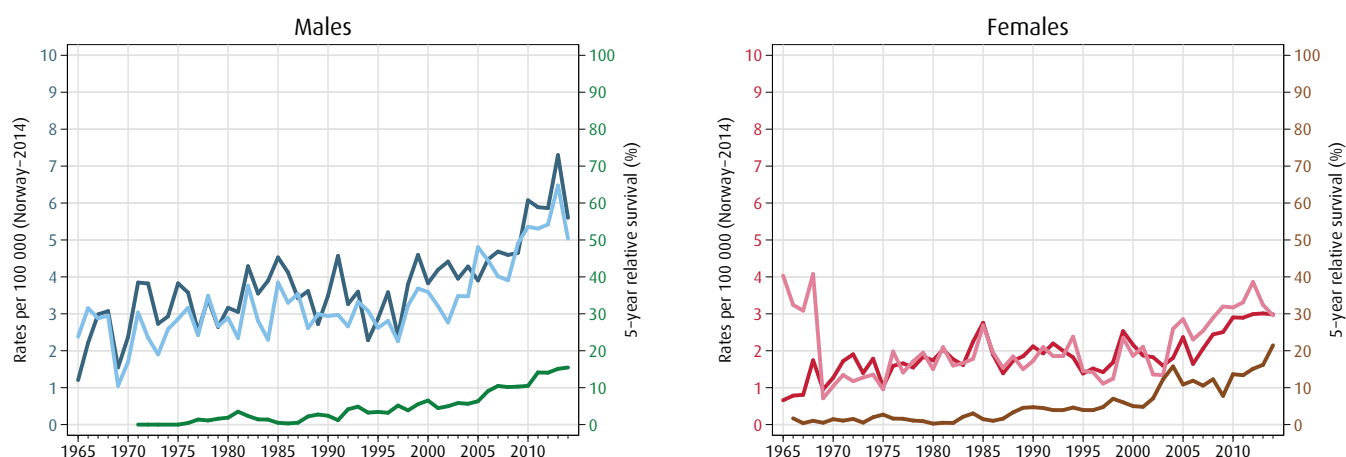


Figure 11-H: Gallbladder, bile ducts (ICD-10 C23-24)

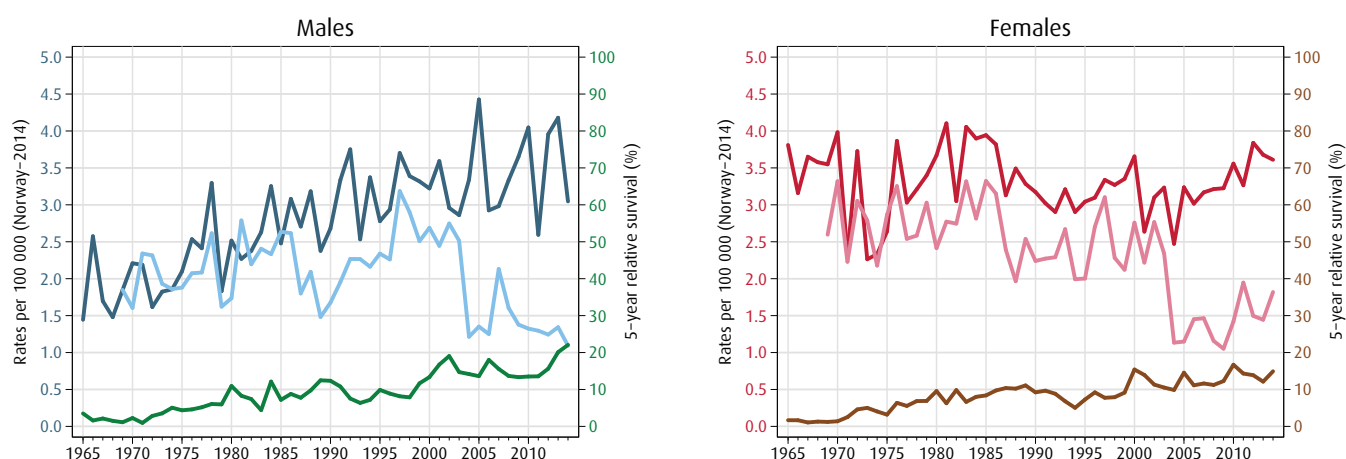


Figure 11-I: Pancreas (ICD-10 C25)

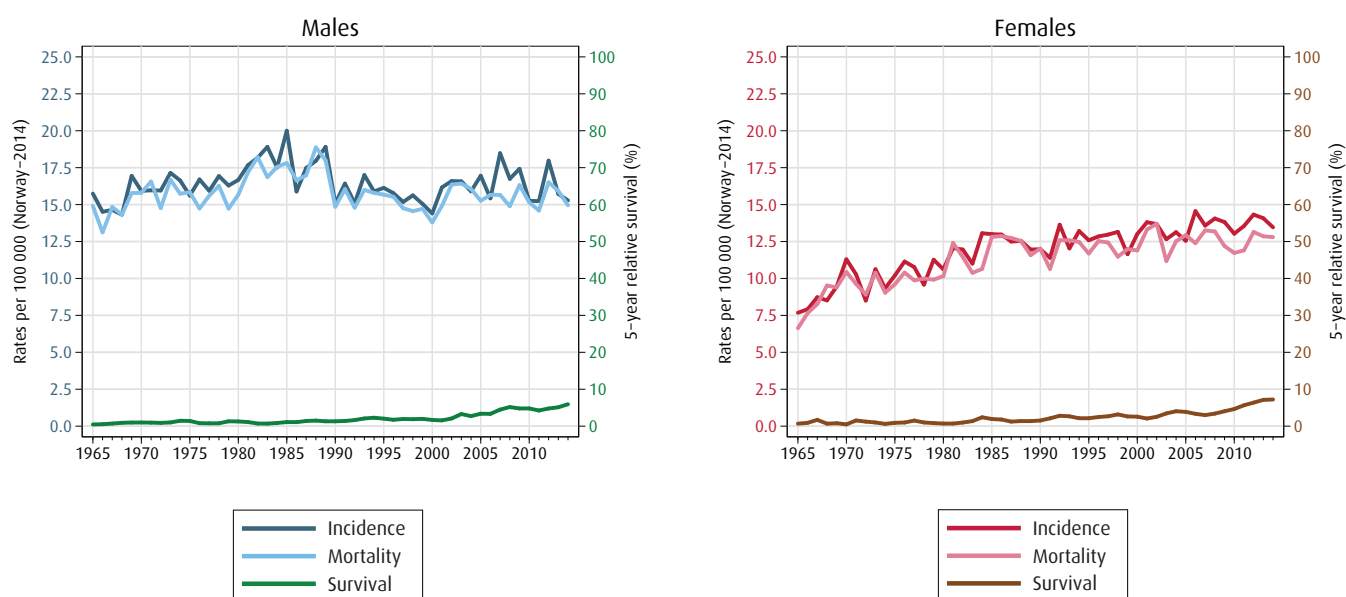


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-J: Lung, trachea (ICD-10 C33-34)

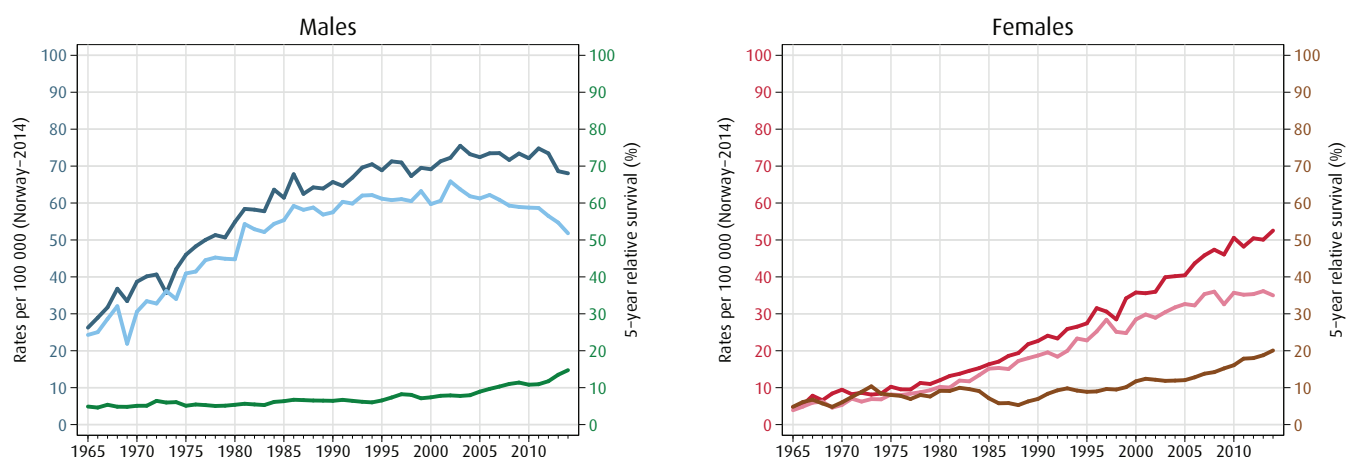


Figure 11-K: Melanoma of the skin (ICD-10 C43)

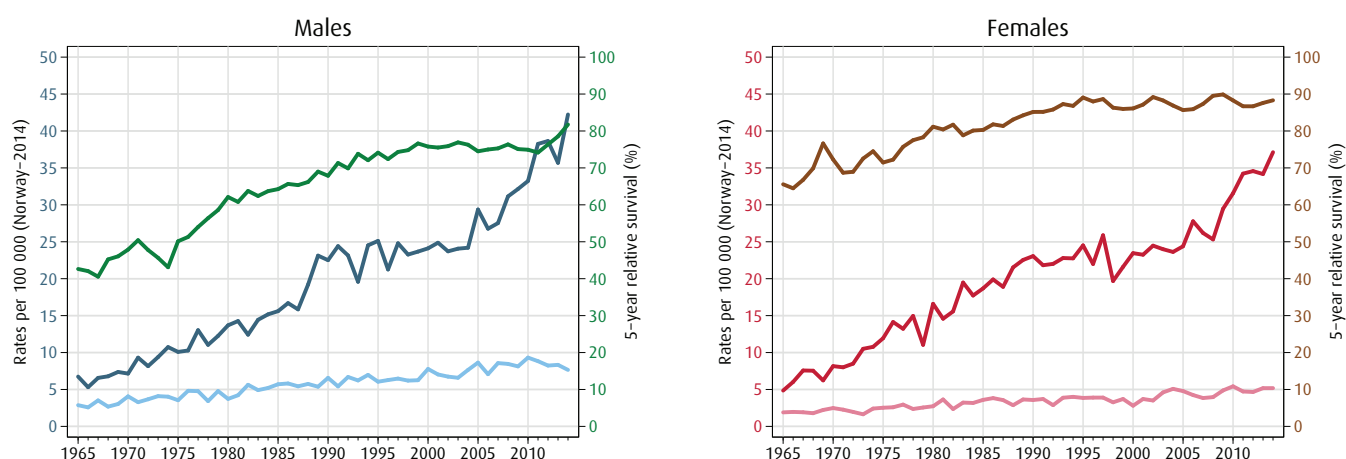
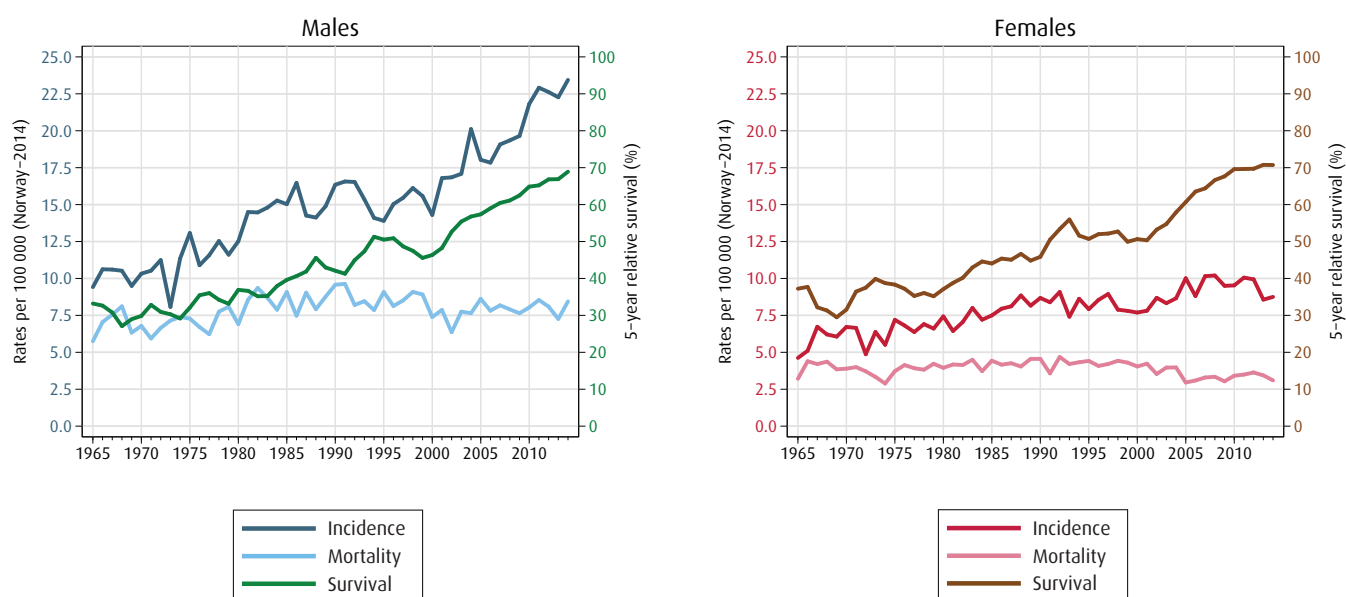


Figure 11-L: Kidney excluding renal pelvis (ICD-10 C64)



Incidence
Mortality
Survival

Incidence
Mortality
Survival

Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-M: Breast (ICD-10 C50)

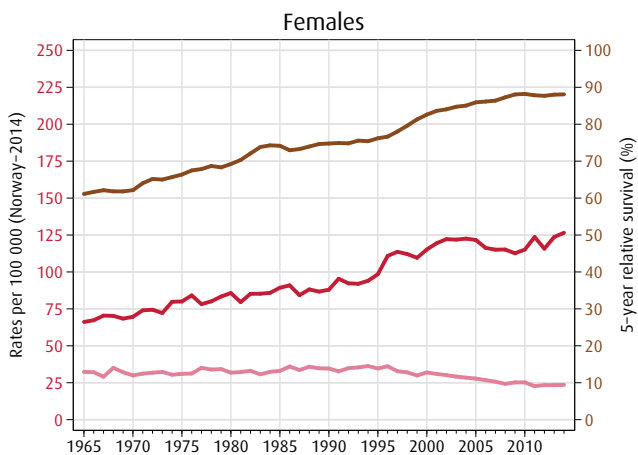


Figure 11-N: Cervix uteri (ICD-10 C53)

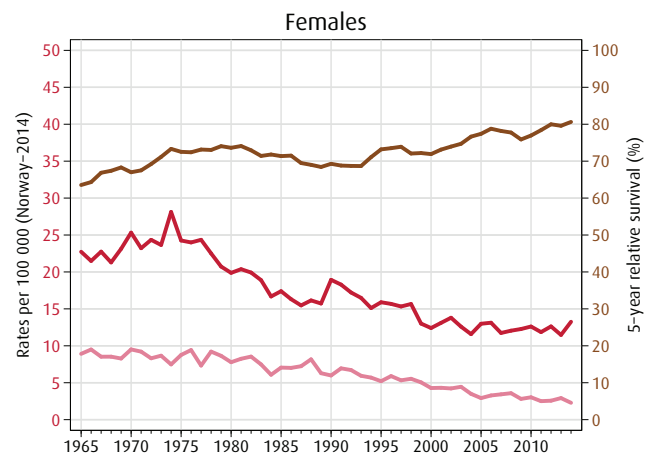


Figure 11-O: Prostate (ICD-10 C61)

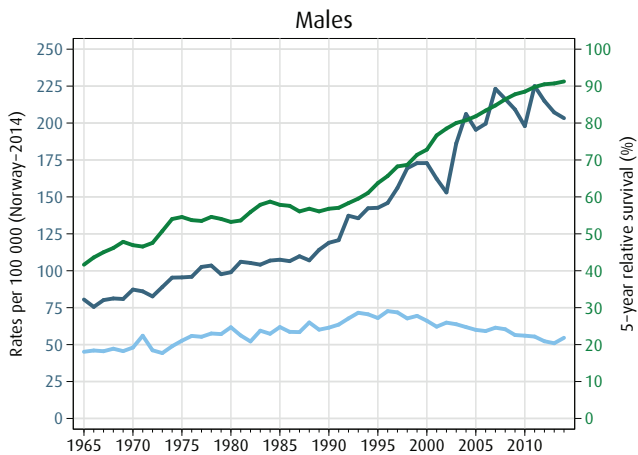


Figure 11-P: Corpus uteri (ICD-10 C54)

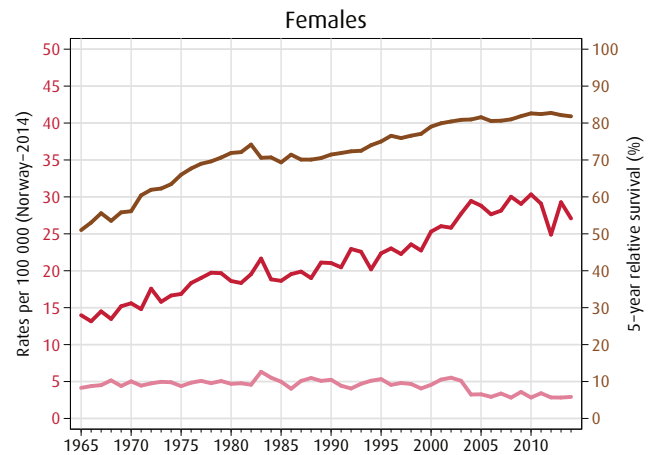


Figure 11-Q: Testis (ICD-10 C62)

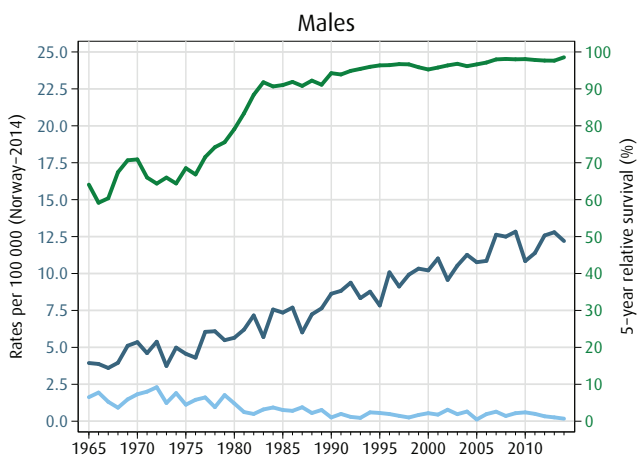
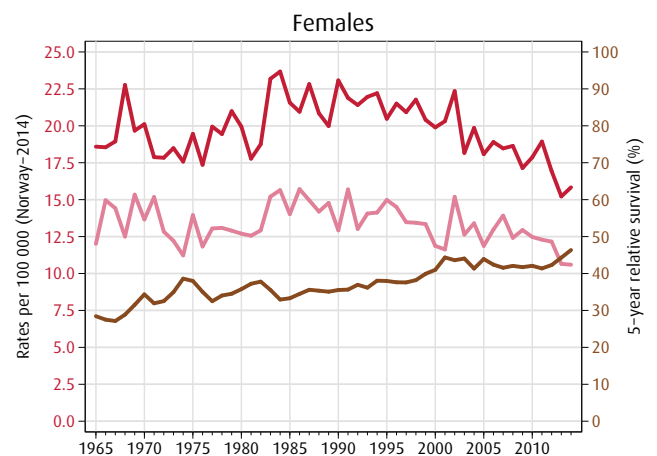


Figure 11-R: Ovary (ICD-10 C56)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-S: Bladder, ureter, urethra (ICD-10 C66-68)

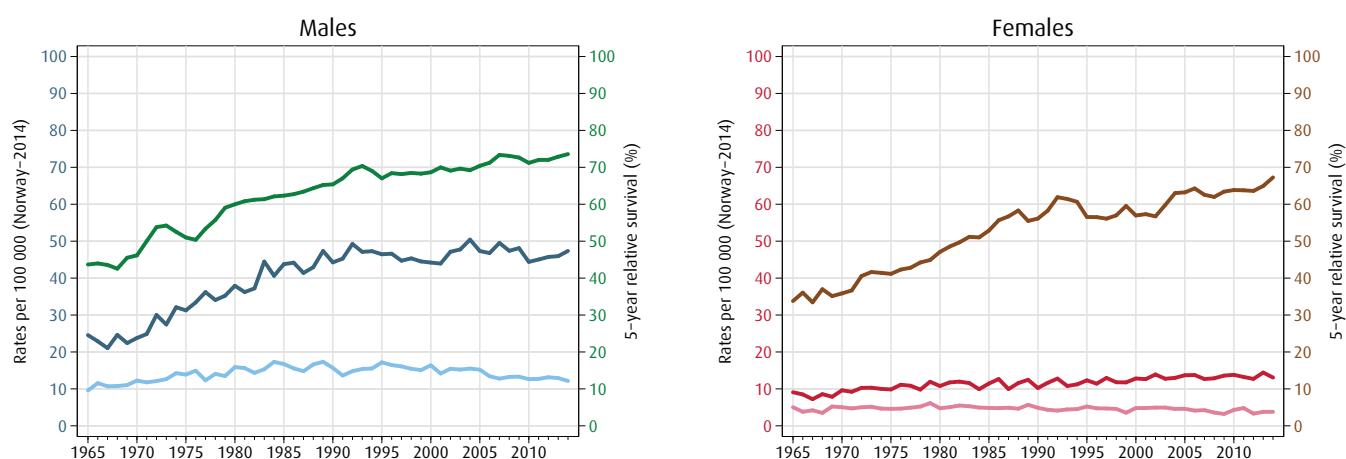


Figure 11-T: Central nervous system (ICD-10 C70-72, D32-33, D42-43)

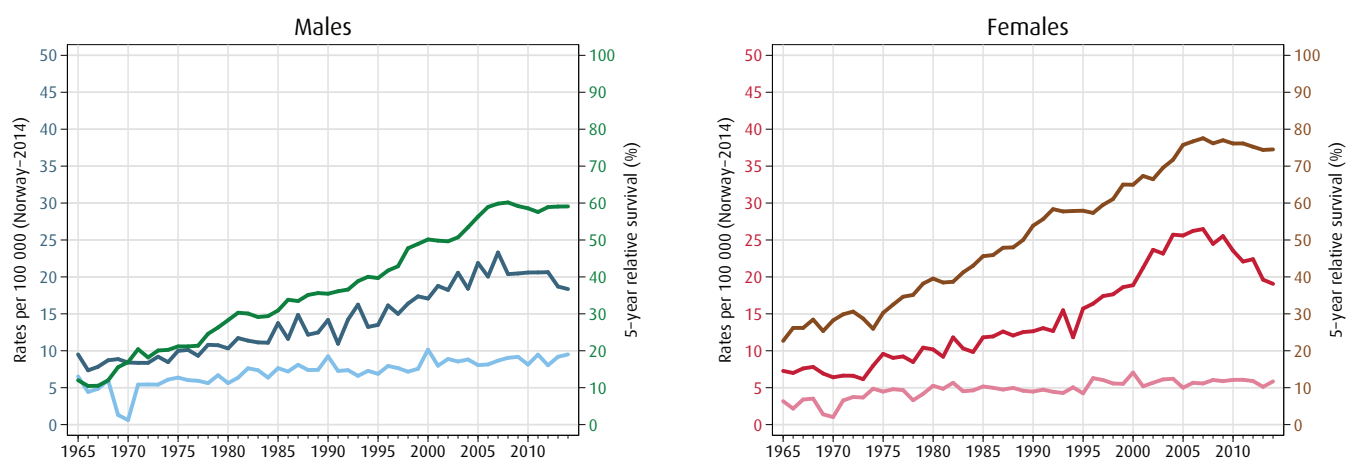
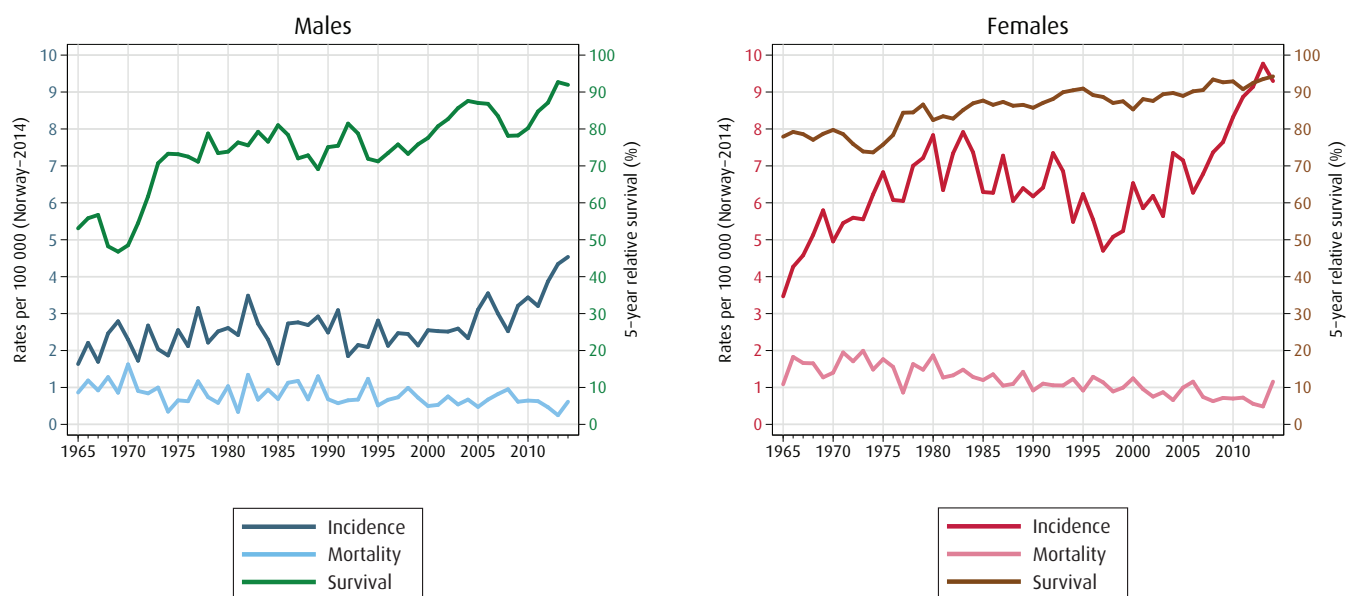


Figure 11-U: Thyroid gland (ICD-10 C73)



— Incidence
— Mortality
— Survival

— Incidence
— Mortality
— Survival

Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-V: Hodgkin lymphoma (ICD-10 C81)

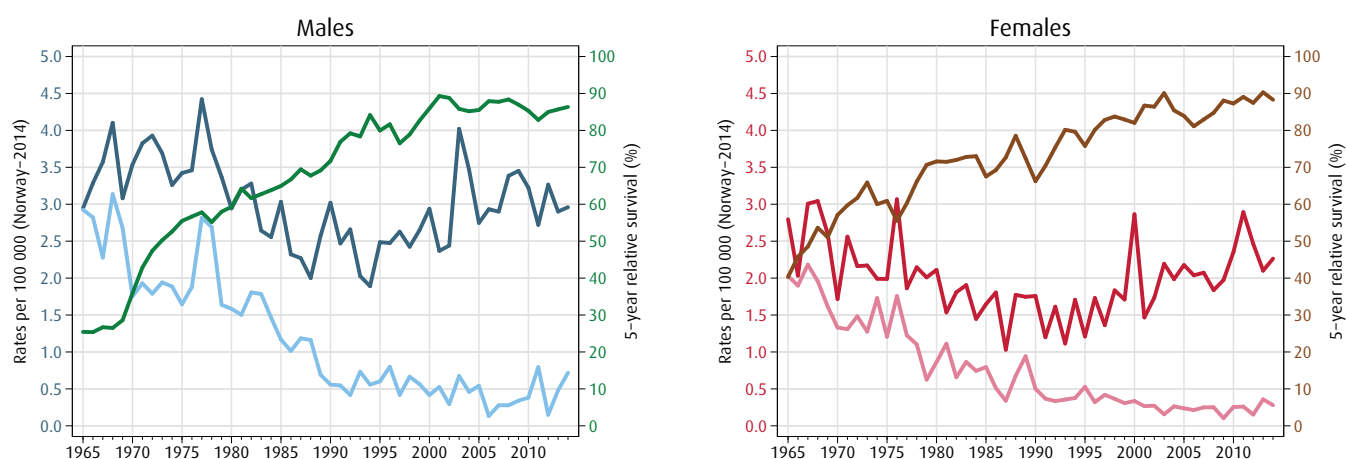


Figure 11-W: Non-Hodgkin lymphoma (ICD-10 C82-86, C96)

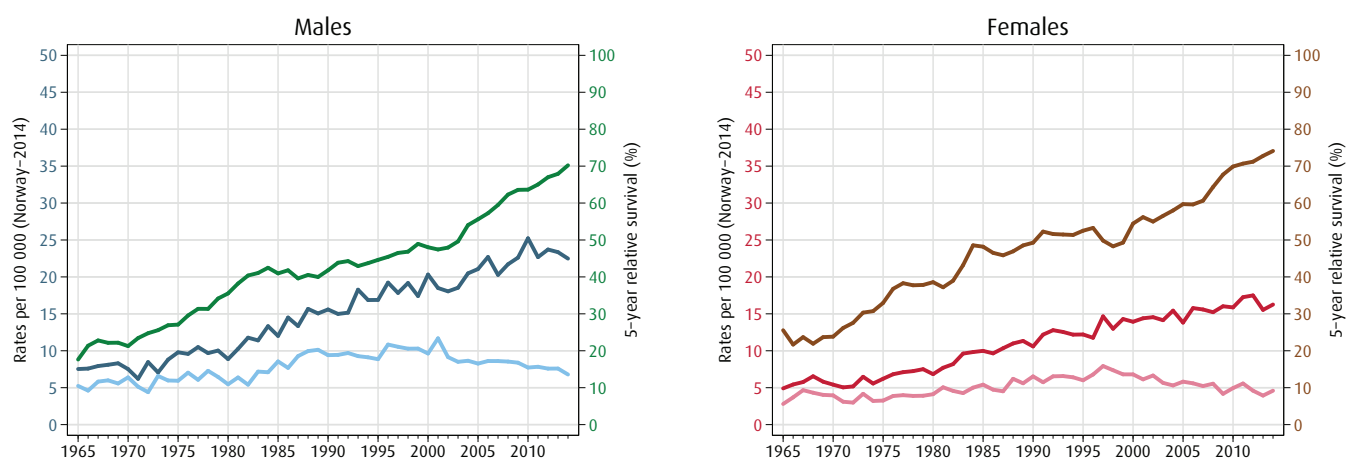
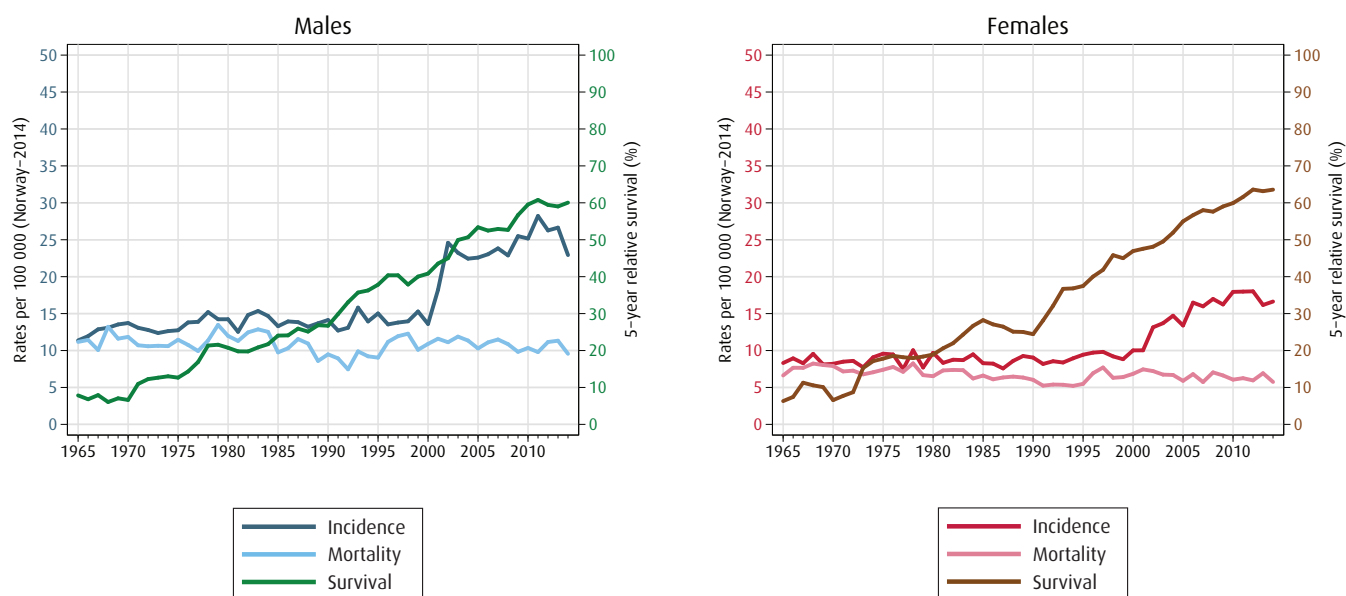


Figure 11-X: Leukaemia (ICD-10 C91-95, D45-47)



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