CANCER
Registry of Norway
INSTITUTE OF POPULATION-BASED CANCER RESEARCH

Cancer in Norway 2015

Cancer incidence, mortality, survival and prevalence in Norway

Special issue:

Yrke og kreft – forskning for forebygging

Epidemiologiske studier om yrkesrelatert kreft ved Kreftregisteret 1970-2016

Cancer in Norway 2015

Editor-in-chief: Inger Kristin Larsen

Writing group: IK Larsen, B Møller, TB Johannesen, S Larønningen, TE Robsahm, TK Grimsrud, G Ursin

Coding staff: TV Antonsen, I Asklie, I Aune, HH Brenn, ØL Carlsen, M Dahl, AH Dahlen, K Eik, L Enerstvedt, I Forberg, SEO Frøland, Y Gjelsvik, K Grape, MN Haneborg, S Hansen, I Hatle, IH Heien, I Herredsvela, M Johansen, G Kjølberg, KO Knudsen, T Kristiansen, T Lane, TL Lindvik, W Melbye, KL Nilsen, S Nymoen, T Nygård, SS Olsen, AV Owren, M Schoultz, AH Seglem, LB Skard, IB Skaaret, IB Stange, A Sørstrøm, L Thyssell, A Tysvær, K Østby

Data management and analyses: MB Jerm, S Larønningen, TÅ Myklebust, B Sæther, SE Tysvær and B Aagnes

Layout and design: Gunther Zerener

Correspondence to: Inger Kristin Larsen - inger.kristin.larsen@kreftregisteret.no

Recommended reference:
Cancer Registry of Norway. Cancer in Norway 2015 - Cancer incidence, mortality, survival and prevalence in Norway.

Oslo: Cancer Registry of Norway, 2016.

Special issue: Yrke og kreft – forskning for forebygging

Epidemiologiske studier om yrkesrelatert kreft ved Kreftregisteret 1970-2016

Kristina Kjærheim, Jan Ivar Martinsen, Hilde Langseth, Tone Eggen og Tom K. Grimsrud

Editor-in-chief: Kristina Kjærheim
Writing group: JI Martinsen, H Langseth, T Eggen og TK Grimsrud
Layout and design: Gunther Zerener

Recommended reference: Kristina Kjærheim, Jan Ivar Martinsen, Hilde Langseth, Tone Eggen og Tom K. Grimsrud. Article title. In: Cancer in Norway 2015 - Cancer incidence, mortality, survival and prevalence in Norway. Oslo: Cancer Registry of Norway, 2016

ISBN: 978-82-90343-83-0

ISSN: 0332-9631

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

Cancer in Norway 2015

Cancer incidence, mortality, survival and prevalence in Norway

Special issue
Yrke og kreft – forskning for forebygging
Epidemiologiske studier om yrkesrelatert kreft ved Kreftregisteret 1970-2016:

Foreword

The number of cancer cases in Norway increases every year. This is primarily due to an aging population, not to an increase in the cancer rate per se. It is important to acknowledge this increase. Every case represents an individual as well as a family that are affected by the disease. An increase in the total number of cancers implies that more men and women will need cancer treatment, and thus escalates the burden on cancer care in our hospitals.

Over the next decade, the number of cancer cases is likely to continue increasing, in particular among individuals above 75. Old patients often have comorbidities that complicate the treatment. The main driver of cancer costs in Norway is in-hospital stays. The cancer costs will increase, even without new cancer drugs.

This issue of Cancer in Norway will be released 6 weeks earlier than that of last year. We are very pleased to present the 2015 numbers as early as October 2016. However, because we are dependent on multiple sources for our data, the numbers of some fatal cancers may be incomplete. This is in particular true for some pancreatic and lung cancer cases that never undergo a biopsy, and which we typically identify first from death certificates, and then, following inquiries, code according to clinical reports. We have not yet received all the death certificates for 2015, and the rate of lung and pancreatic cancers may therefore be slightly underestimated. Once the Cause of Death Registry becomes fully electronic, hopefully in 2017, our reporting may be complete earlier.

The lack of some death certificates means that we need to interpret some of the incidence rates with care. However, even if some lung cancers are missing, the numbers for 2015 appear to show a continued decline in the overall age-standardised rate for men. No such decline is yet visible in women. Although there are signs of downward trends for women under 60, there is still an alarming increase at higher age. We conclude that there is an urgent need to help and inspire adult women to stop smoking.

Colorectal cancer rates seem to be stable, but there have never been more colorectal cancer cases in Norway than in 2015. Colorectal cancer has recently been estimated to be the most expensive cancer to treat in Norway, costing approximately 1.6 billion NOK/ year. The national council for priority setting in health care recommended in September 2016 that an organised screening program against colorectal cancer should be implemented. The government is expected to make a decision on a possible screening program sometime during the next year.

There may also be artefactual reasons for changes in cancer rates. The decline in central nervous system tumors is likely due to poor clinical reporting in the southeast health region. An increase in breast cancer rates over the past few years seems to involve predominantly women above 60. Increases in women above 70 may be the result if a number of women choose to continue screening privately after they leave the screening program. For women under 70, there is no major change in the organised screening program, but studies with a new, more sensitive technique (digital breast tomosynthesis) may explain some of the increase. We have no information about use of mammography screening outside the organized screening program.

Thyroid cancer is uncommon, but there is a steady increase that raises some questions. Are some physicians starting to actively screen against this cancer, or is it a result of incidental findings due to increased use of ultrasound, CT or MRI in the workup for other diseases? Screening is not recommended for thyroid cancer, and in fact, there is a concern that such screening tends to find many small indolent cancers that may not become clinically apparent.

This is the second time we use a Norwegian standard population rather than the World Standard Population to estimate age-standardised rates. This means that those who want to do international comparisons will have to use the age-specific rates and derive World standardised rates prior to the comparison. We have chosen to use a Norwegian standard because Norway, in line with other industrialised countries, has an age structure where a large part of the population is above 30 (62%) or 70 years of age (11%). This is very different from the traditional World Standard from 1960. It is important for us to provide incidence rates that are comparable with the crude cancer rates in Norway. For direct comparisons with incidence rates in other countries, we suggest that the reader consults one of several international databases created for this purpose.

This year we proudly present a special report on the research on occupational cancer that has been undertaken at the Cancer Registry since the early 1970s. A large thank you to Kristina Kjærheim, Tom Kristian Grimsrud, Hilde Langseth, Jan Ivar Martinsen and Tone Eggen who have contributed to the report. Knowledge of risk factors and causes of cancer is a prerequisite for cancer prevention.

Reporting of cancer is done by our colleagues in hospitals across the country. We are grateful for all their efforts. We also extend our thanks to the staff at the Cancer Registry who code the cancers and assist with the development of our descriptive statistics. We thank everyone involved for their efforts in continuing to improve coding and the contents of this report.

Oslo, October 2016

Giske Ursin
MD PhD
Director

Cancer in Norway 2015

Table of contents

List of tables

List of figures

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 32 592 new cancer cases were reported in 2015: 53.7 per cent were among men and 46.3 percent among women. Cancer in prostate, lung, colon and bladder and urinary tract 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 females breast cancer was most common, and among the oldest females (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 2015 might be slightly underreported due to delayed notification of cancer cases. The present report is published before the complete numbers for 2015 was received from the Cause of Death Registry. Thus, the possible underreporting might be slightly higher for cancers with the highest percentage of cases registered based on a death certificate only (DCO).

The incidence rate for all sites combined has increased by 3.1 per cent in men and 4.9 per cent in women when we compare the two most recent five-year periods (from 2006–2010 to 2011–2015).

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

For the most common cancers in females, the strongest increase occurred in incidence rates of thyroid cancer, malignant melanoma, non-melanoma skin cancer, bladder and urinary tract and lung cancer . A reduction in rates was seen for cancer in ovary and corpus uteri.

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 underreporting of cases.

The probability of being diagnosed with a cancer before the age of 75 is 36 per cent in men and 30 per cent in women.

Prevalence

At the end of 2014 more than 252 000 Norwegians were alive after having had at least one cancer diagnosis at an earlier point in time.

Mortality

The mortality data is obtained from the Cause of Death Registry. The data for 2015 was not complete when this report was published, and we therefore reports figures for 2014.

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 2006–2010 to 2011–2015 the estimated five-year relative survival changed from:

- 91 to 93 per cent for prostate cancer
- 88 to 89 per cent for breast cancer in women

- 12 to 14 per cent for lung cancer in men
- 17 to 21 per cent for lung cancer in women

- 60 to 60 per cent for colon cancer in men
- 63 to 66 per cent for colon cancer in women

- 66 to 68 per cent for rectal cancer in men
- 66 to 68 per cent for rectal cancer in women

Table 1. Summary of cancer statistics for selected cancers

ICD10	Site	Sex	Number of new cases, 2015	Age-standardised incidence rates per 100 000 person-years, 2011–15	Percent change in age-standardised incidence rate from the previous five-year period, 2006–10	Percent diagnosed with localized disease, 2011–15*	Age-standardised mortality rates per 100 000 person-years, 2014**	Five-year relative survival (%), 2006–10	Five-year relative survival (%), 2011–15
C00-96	All sites	M	17 498	730.3	3.1	…	…	68.0	71.1
		F	15 094	537.1	4.9	…	…	67.8	70.5
C18	Colon	M	1 400	58.7	2.8	16.7	24.8	59.9	60.6
		F	1 535	52.5	6.5	16.3	20.3	63.3	66.2
C19–20	Rectum, rectosigmoid	M	771	32.9	-0.4	21.0	10.4	65.8	68.2
		F	562	20.3	-0.1	24.3	6.2	65.8	67.7
C33–34	Lung, trachea	M	1 564	70.0	-3.8	20.0	51.8	12.2	14.4
		F	1 471	51.1	9.5	23.0	35	17.4	20.9
C43	Melanoma of the skin	M	1 018	39.5	30.4	84.7	7.7	77.1	81.6
		F	983	35.5	26.0	89.2	5.2	87.8	89.4
C44	Skin, non-melanoma	M	1 044	44.6	9.1	…	…	…	…
		F	840	28.2	14.1	…	…	…	…
C50	Breast	F	3 415	123.3	8.0	41.3	23.5	87.8	89.0
C53	Cervix uteri	F	370	12.8	3.7	65.2	2.3	77.4	80.6
C54	Corpus uteri	F	779	27.9	-4.2	74.3	2.9	82.9	83.4
C56, C57.0–4	Ovary etc.	F	504	18.3	-4.9	21.8	10.6	45.0	48.1
C61	Prostate	M	5 061	211.2	1.1	49.1	54.6	90.7	92.9
C62	Testis	M	291	12.0	0.5	82.6	0.2	98.1	98.1
C65–68	Urinary tract	M	1 262	50.4	6.1	82.1	12.2	73.5	76.1
		F	469	15.5	12.2	76.3	3.8	64.8	68.2
C70–72, D32–33	Central nervous system	M	435	20.0	-8.6	51.1	…	61.7	61.2
		F	502	21.3	-18.6	69.5	…	77.6	76.5
C73	Thyroid gland	M	101	4.0	25.1	51.6	…	84.4	89.8
		F	262	9.5	30.6	63.3	…	92.3	92.9
C82–86, C96	Non-Hodgkin lymphoma	M	602	23.1	2.8	…	6.7	64.8	70.8
		F	451	16.6	5.8	…	4.6	71.2	75.1
C91–95, D45–47	Leukaemia	M	614	26.1	8.0	…	7.3	58.9	60.3
		F	525	17.7	5.6	…	5.7	63.7	65.1

*For breast cancer it refers to Stage I, and for central nervous system it refers to non-malignant cases.
**The mortality rates are presented for 2014, as complete numbers for 2015 is not yet received from the Cause of Death Registry

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. Referred to in the text as Norwegian standard.

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	Heart, mediastinum and pleura	Excludes mesotheliomas (which are included in C45)
C50	Breast	Excludes pagets disease
C56, C57.0-4	Ovary etc.	Excludes borderline tumours. Includes the following sites: Neoplasms in fallopian tube (C57.0), broad ligament (C57.1), round ligament (C57.2), parametrium (C57.3) and uterine adnexa, unspecified (C57.4)
C64	Kidney except renal pelvis	Excludes non-invasive tumours
C65	Renal pelvis	Includes non-invasive papillary tumours, dysplasia and carcinoma in situ
C66	Ureter	Includes non-invasive papillary tumours, dysplasia and carcinoma in situ
C67	Bladder	Includes non-invasive papillary tumours, dysplasia and carcinoma in situ
C68	Other and unspecified urinary organs	Includes non-invasive papillary tumours, dysplasia and carcinoma in situ
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	Includes benign tumours (D32–33, D42–43)
C72	Spinal cord, cranial nerves and other parts of central nervous system	Includes benign tumours (D35.2–35.4, D44.3–44.5)
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 labels for subsequent tables and figures due to lack of space

Changes from the previous version

Changed rules for reporting of multiple primary cancers. Previous reports of Cancer in Norway have reported the multiple primary neoplasms following the rules of the International Association of Research on Cancer – IARC (Fritz & al, 2000). These rules have 12 groups of malignant neoplasms that are considered to be histologically different for the purpose of defining multiple tumours. The present report follow the rules published by the IARC/ENCR/IACR Working group in 2004. Here, there are 17 groups considered histologically different, and the groups of topography codes considered to be one site in the definition of multiple cancers are updated. The rules are followed with one exception: non-specific groups are considered as separate morphology groups and we thus do not ignore the non-specific diagnosis (as described in table 24, page 25, World health Organization International Classification of Diseases for Oncology, third edition, first revision, 2013). I.e. reporting of the numerical highest/ most specific morphology code, or the collective topography code given simultaneous diagnosis, within reported cases. For these cases, we report the case with the first date of diagnosis as is. If the date of diagnosis is at the same time, we report the case with the most severe metastasis status, if the metastasis status is equal; we report the case that is registered first. The changes result in 1492 (0.3%) fewer cases in men and 516 (0.1%) fewer cases in women for the period 1953-2015.

- Pagets disease is no longer included in breast cancer (C50). Pagets disease has previously been included in C50, but is excluded in the present report.

- **The site "Ovary" has been extended.** Neoplasms in fallopian tube (C57.0), broad ligament (C57.1), round ligament (C57.2), parametrium (C57.3) and uterine adnexa, unspecified (C57.4) have previously been reported together with C51-C52 (other female genital). They are now reported together with C56, C57.0-4, Ovary etc. The reason for this is the resent change in coding practice. Findings of malignant tumours in the ovary and/or fallopian tube with concurrent findings of precancerous lesions in the fallopian tube are now interpreted as tumours with their point of origin in the oviduct with metastasis to the ovaries. Previously, most of these cancers were believed to have originated from the ovaries.

The site "Bladder" has been extended. Malignant neoplasms of renal pelvis (C65) are now reported together with bladder cancer. We are now also including flat lesions with dysplasia in these sites (C65-C68).

Plasmacytomas (C90.2-3) are reported under C90. These cases have previously been reported under lymphomas.

- **Registration and reporting of metastases.** These changes are reported in the data sources and methods section.

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

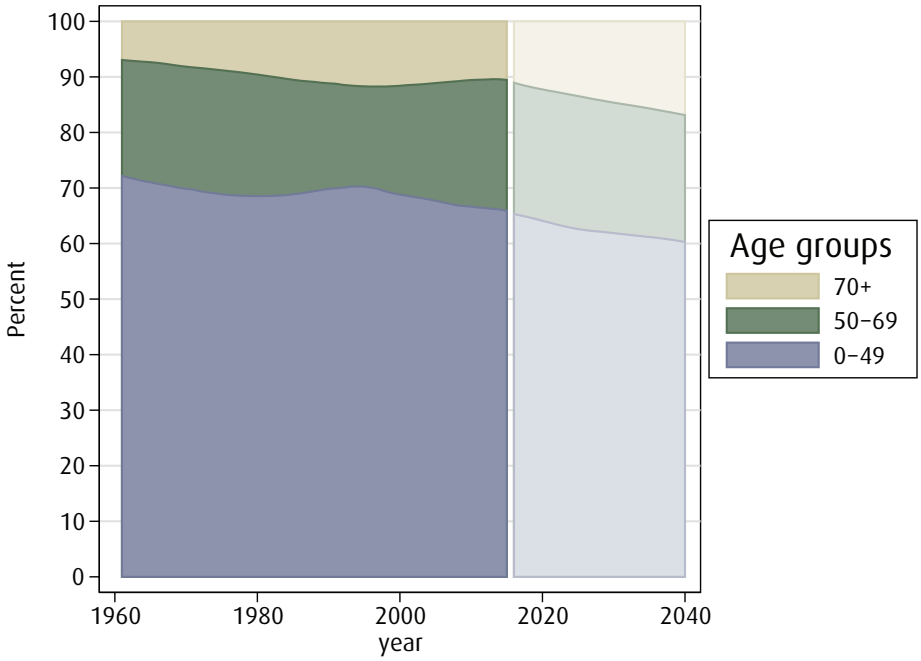
By January 1st 2016 the total number of inhabitants in Norway was 5 213 985. The immigrant population (first-generation) comprises 13.4% of the total population, and an additional 2.9% are second-generation immigrants. About 50% of the first-generation immigrants are from EU/EEA, US, Canada, Australia 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 2015, 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 over the next decades. Long-term projections up to 2060 show that 19% of the population will be 70 years or older (Syse & al, 2016). When the first census in Norway took place in 1769, the number of inhabitants was 739 180. The population has increased remarkably since then, and the growth is expected to continue the next few decades. The total number of inhabitants in Norway has increased by 46% from 1960 to 2016, largely because of rising life expectancy and, more recently, due to increases in net immigration. By 2032, the size of the population is expected to reach 6 million, and by 2059 it will reach 7 million[1].

Table 3 Norwegian mid-year population 2015 by five-year age group and sex

Age group	Males	Females	Total
00-04	157 505	149 492	306 997
05-09	163 425	155 284	318 708
10-14	156 950	150 520	307 470
15-19	168 295	158 371	326 665
20-24	176 820	166 636	343 456
25-29	182 053	175 861	357 914
30-34	179 320	168 927	348 246
35-39	177 360	165 425	342 784
40-44	191 522	180 348	371 870
45-49	193 092	181 682	374 774
50-54	174 853	165 426	340 279
55-59	161 099	155 646	316 744
60-64	145 574	143 715	289 289
65-69	138 895	139 570	278 465
70-74	98 700	105 200	203 899
75-79	64 731	77 376	142 107
80-84	43 811	61 083	104 894
85+	37 969	77 369	115 338

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



[1]Considered 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, natural course of the disease, and 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 October 1st 2016, the incidence registry contained information registered since 1953 on 1 789 340 cancer cases (including pre-malignant and some benign conditions) in 1 425 470 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 4 505 051 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 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 activities of each clinical registry, and its strategic direction. Registries are integrated in the CRN coding and registration activities. Table 4 shows the status of these clinical registries as of October 2016.

Table 4. Status of the clinical registries, October 2016

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	***
Central nervous system	Yes	No	Yes	No	***
Oesophagus and stomach cancer	Yes	Yes	Yes	Yes	***
Testicular cancer	Yes	No	Yes	No	***
Sarcoma	Yes	No	No	No	***

* 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.
*** It has been applied for funding, but the establishment of new clinical registries in the South-Eastern health region is currently stopped in order to evaluate the ongoing registries and to discuss a better model of funding.

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. Reporting should be done as soon as possible after end of diagnostics or treatment. 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. More information about KREMT can be found at https://www.kreftregisteret.no/Registrene/Innrapportering/KREMT---Kreftregisterets-elektroniske-meldetjeneste/

The amount of electronical pathology reports have increased over the past two years, but more than half of the pathology departments still send paper copies. A major focus for the future is to have more pathology departments send electronical and structured pathology reports to the CRN.

Death certificates

The CRN receives monthly updates on patients' vital status from the National Population Registry. In addition the Cause of Death Registry, run by the Norwegian Institute of Public Health, send information on cause of death and death certificates in several batches each 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 pre-malignant 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 are matched with current information in the CRN database. Reminders are sent to clinicians for those cases where no information about the diagnosis exists in the CRN (Figure 2).

Dispatching of reminders to clinicians

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

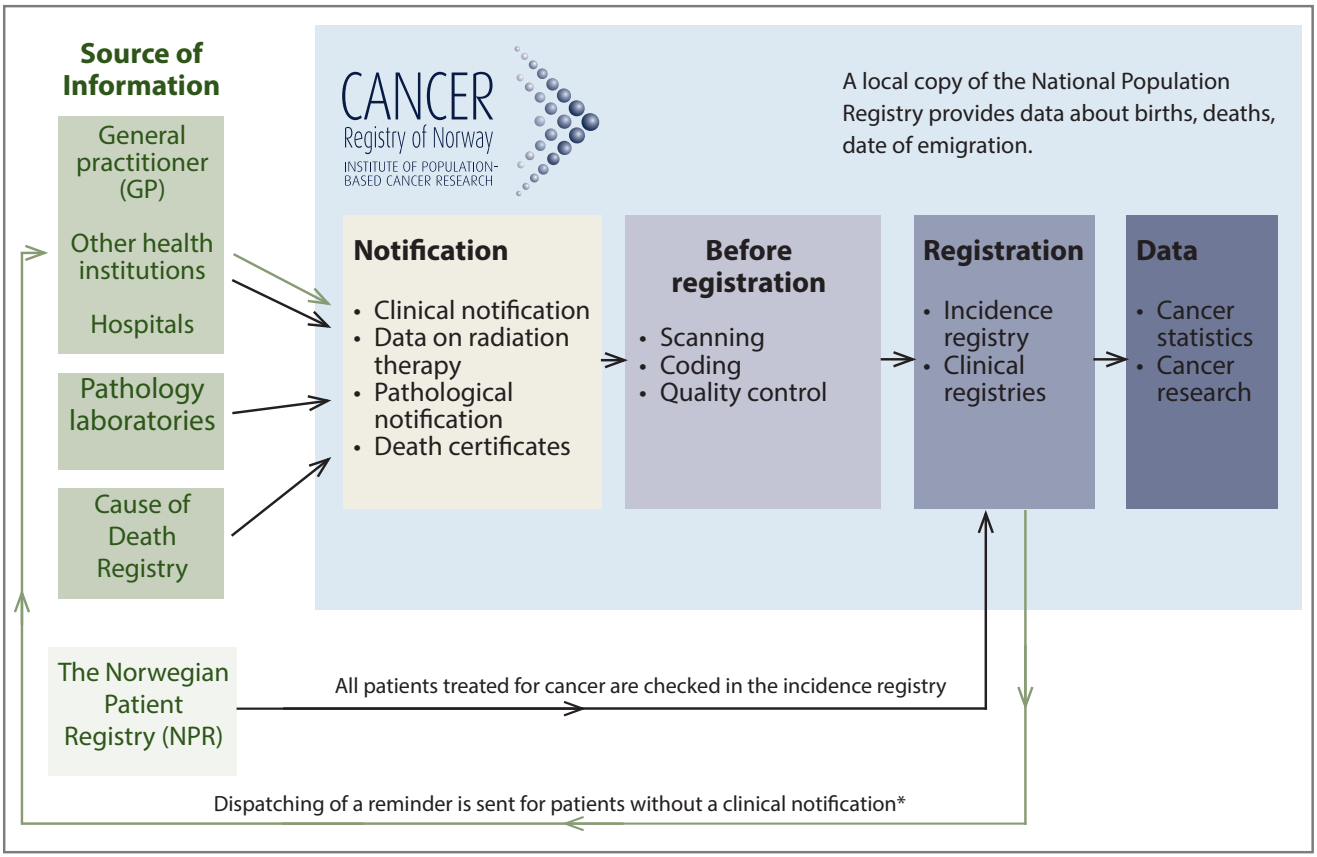
Incidence and mortality data

The incidence data presented in the first part of this report are based on an extraction from the incidence registry on October 1st 2016. The tables and figures in general represent either the latest year of complete incidence (2015) or the latest five-year period (2011–15).

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

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

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.

Multiple primary neoplasms

The coding and classification of multiple primary neoplasms follow the rules of published by the IARC/ WHO/ENCR/IACR Working group in 2004. The rules are followed with one exception: non-specific groups are considered as separate morphology groups and we thus do not ignore the non-specific diagnosis (as described in table 24, page 25, World health Organization International Classification of Diseases for Oncology, third edition, first revision, 2013). I.e. reporting of the numerical highest/ most specific morphology code, or the collective topography code given simultaneous diagnosis, within reported cases. For these cases, we report the case with the first date of diagnosis as is. If the date of diagnosis is at the same time, we report the case with the most severe metastasis status, if the metastasis status is equal; we report the case that is registered first.

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 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 tumours are counted only once. This is also the case for the systemic cancers lymphomas, leukaemias, kaposi's sarcomas and mesotheliomas.

Metastases and changes in coding practice

The coding and registration of stages has varied over time. For some cases, the Cancer Registry of Norway only receive histological reports and no clinical notifications, thus, a large proportion of these cases will not have verified information on metastases at the time of diagnosis. 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. However, this practice might have led to misclassification of stage for some patients who were not properly examined/diagnosed due to e.g. poor health or severe comorbidity.

In the present report, we have therefore classified stage as following:

Localized stage: All cases with a verified stage. Cases where the stage is registered on the basis of a cytology or biopsy notification only, are not considered as a verified stage, and these cases are categorised as cases with unknown stage.

Regional stage: All cases with a clinical or pathological verified stage.

Distant stage: All cases with a clinical or pathological verified stage.

Unknown: All cases reported with unknown stage, or cases with insufficient information to set the stage.

Change in coding practice over time may however influence trends in incidence and survival of localized 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 January 1st and December 31st) 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, it's 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.

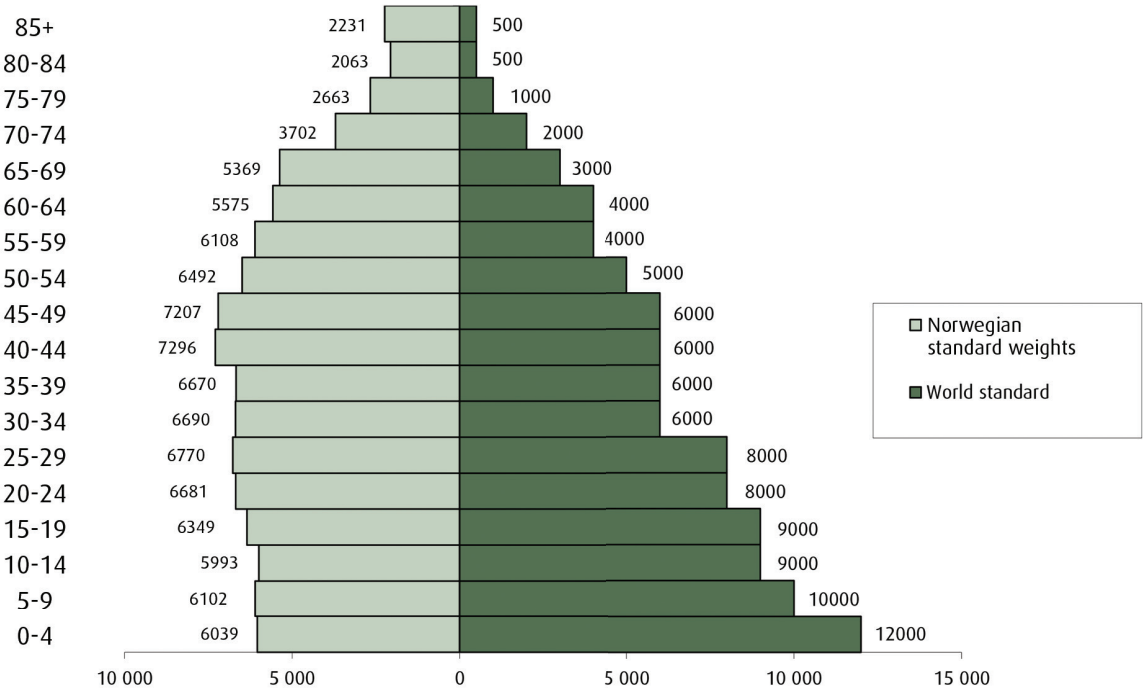
For weight w_i in the ith age class of the standard, r_i is the age-specific rate in the ith age class. The ASR is calculated as:

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

The World Standard Population (Segi, 1960; Doll & all, 1966) has been used in several previous report of Cancer in Norway. Last year we started to use the Norwegian mid-year population in 2014 as the reference population, and this is the reference population in the current report. This standard is referred to as the Norwegian standard.

The main advantage of using 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 2015 with different reference populations. Of notice is that the ASRs (Norwegian standard) gives higher rates than the ASRs (World standard). 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 (Figure 3). Cancers that

Figure 3. Comparison of population weights



have the highest incidence rates in the youngest age groups (e.g. testicular cancer) are less affected by the change of reference population (see Table 7 and Figure 4).

Age-standardised incidence rates (World) are available at: https://www.kreftregisteret.no/Registrene/Kreftstatistikk/

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

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.

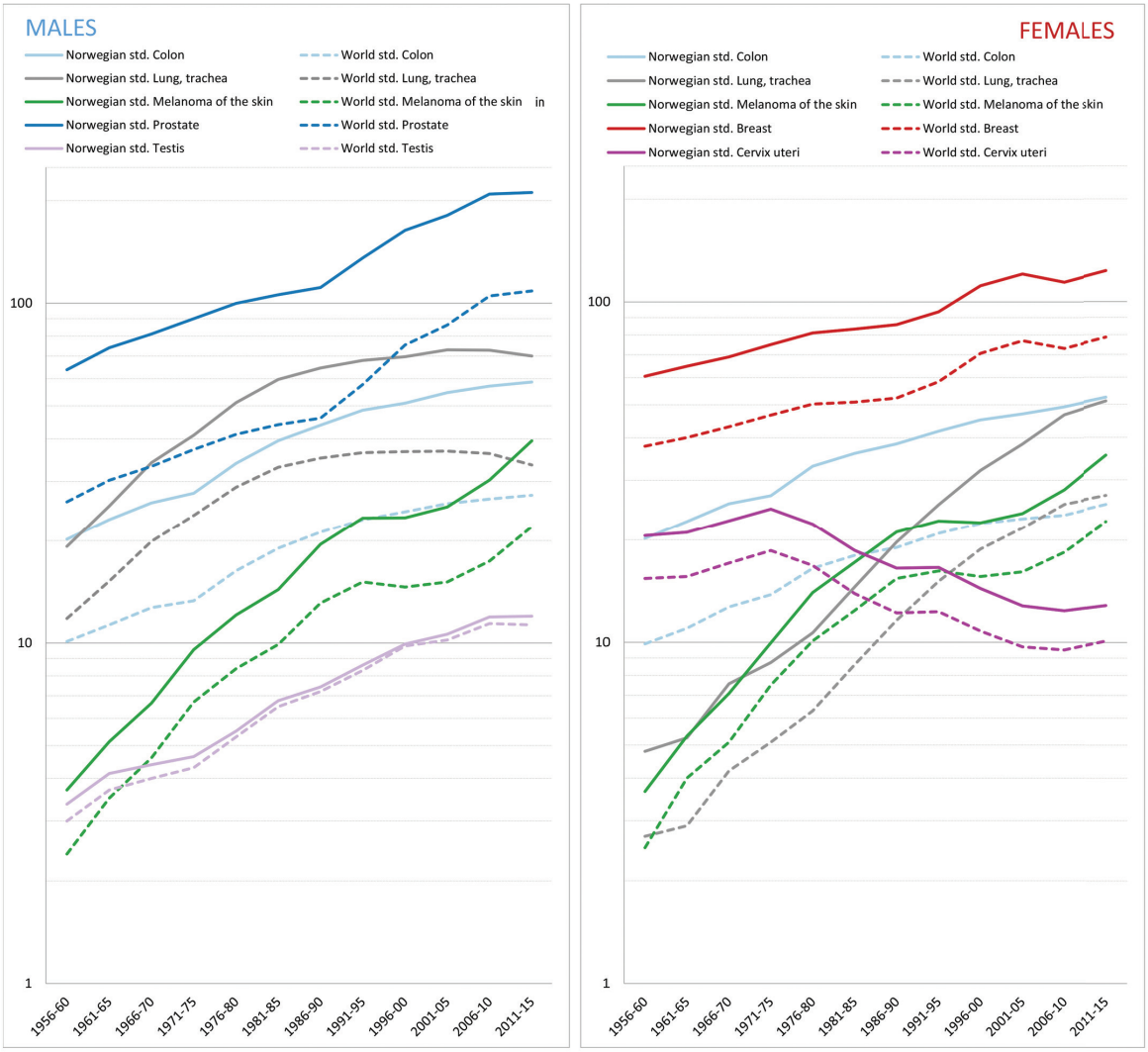
The cumulative rate (CR) is the summation of the agespecific rates over each year of age from birth to a defined upper age limit. As age-specific incidence rates are computed according to five-year age groups, the cumulative rate is five times the sum of the age-specific rates calculated over the five-year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

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

Figure 4. Age-standardised incidence trends in Norway for selected cancers, 1956–2015, the Norwegian mid-year population 2014 (Norwegian standard) and the World Standard Population (World standard) as reference populations.



Prevalence

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

Prevalence is a useful measure of the number of persons requiring care for chronic illnesses such as hypertension and diabetes. For cancer, on the other hand, many patients diagnosed in the past may now be considered cured, that is to say they no longer have a greater risk of death. However, 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 2015 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 1961–2015 were obtained from the National Population Registry and Statistics Norway through 31st of December 2015.

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 five-year period window (2011–2015) to estimate relative survival up to 15 years. Patients diagnosed in 2010–2015 contribute with (part of) their survival experience the first year of follow up, patients diagnosed in 2009–2014 contribute to the second year of follow-up, patients diagnosed in 2008–2013 contribute to the third year of follow-up etc. Thus, the period approach consists of the pieces of survival experience observed in the period 2011–2015 for all patients who have been diagnosed up to 15 years ago.

The period-approach was also used to estimate five-year relative survival for the most recent period (2011-2015), where full five-year follow-up is not observed. When analyzing time trends in five-year relative survival rolling five-year cohorts was used to obtain smoother curves. This means that estimates for e.g. 2010 is based on patients diagnosed in 2006-2010. Estimates were obtained using the cohort method when follow-up was complete. Estimates for the last year were obtained using the most recent five-year period window, while estimates for the years where only part of the cohort had complete follow-up (2011-2014) were obtained using a combination of the cohort and period approach, ensuring that only a minimum of survival experience from patients diagnosed in the past was used.

Detailed description of the methods are found in supplement URL: https://www.kreftregisteret.no/globalassets/cancer-in-norway/2015/cin2015supmeth.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 (IACR/IARC, 2004).

Of notice is that that the present report is published before the mortality data for 2015 was complete. The DCO% is however at the same level as reported in Cancer in Norway 2014.

Completeness and timeliness of incidence

Table 6 shows the number of cancer cases diagnosed in 2014 as extracted on November 2nd 2015 (for CiN 2014), and on the September 31st 2016. The number of cancer cases diagnosed in 2014 reported and appearing in this issue (CiN 2015) are 408 (1.3%) more than those reported in the previous Cancer in Norway (CiN 2014) if the coding rules for multiple primaries, applied in this issue, had also been applied in CIN 2014.

Common cancers such as colon, prostate and breast cancers appear to have been almost complete when CiN 2014 was published (difference ≤1.0%).

Table 5 Table 5 Percentage distribution of MV (morphologically verified) and DCO (death certificate only) cases by primary site 2011-2015

ICD10	Site	Cases	MV %	DCO %
C00-96	**All sites**	**156 414**	**95.1**	**1.2**
C00-14	**Mouth, pharynx**	**2 839**	**99.3**	**0.4**
C00	Lip	591	100.0	0.0
C01-02	Tongue	623	99.7	0.2
C03-06	Mouth, other	472	99.4	0.6
C07-08	Salivary glands	286	97.9	1.0
C09-14	Pharynx	867	98.8	0.6
C15-26	**Digestive organs**	**31 950**	**94.3**	**1.6**
C15	Oesophagus	1 334	97.9	0.8
C16	Stomach	2 397	97.7	1.3
C17	Small intestine	794	97.7	1.4
C18	Colon	13 891	96.4	1.2
C19-20	Rectum, rectosigmoid	6 575	98.9	0.3
C21	Anus	369	98.4	0.8
C22	Liver	1 180	83.1	2.6
C23-24	Gallbladder, bile ducts	869	87.2	3.8
C25	Pancreas	3 844	81.9	2.9
C26	Other digestive organs	697	80.6	13.2
C30-34, C38	**Respiratory organs**	**15 744**	**90.8**	**2.0**
C30-31	Nose, sinuses	234	99.1	0.4
C32	Larynx, epiglottis	599	99.0	0.3
C33-34	Lung, trachea	14 841	90.4	2.1
C38	Heart, mediastinum and pleura	070	82.9	8.6
C40-41	**Bone**	**252**	**97.6**	**1.6**
C43	**Melanoma of the skin**	**9 310**	**99.9**	**0.1**
C44	**Skin, non-melanoma**	**8 845**	**99.9**	**0.1**
C45	**Mesothelioma**	**394**	**95.9**	**0.3**
C47	**Autonomic nervous system**	**050**	**96.0**	**2.0**
C48-49	**Soft tissues**	**762**	**98.0**	**0.4**
C50	**Breast**	**16 109**	**99.4**	**0.4**
C51-58	**Female genital organs**	**8 314**	**97.9**	**0.8**
C53	Cervix uteri	1 621	99.4	0.4
C54	Corpus uteri	3 675	99.2	0.4
C55	Uterus, other	040	72.5	25.0
C56, C57.0-4	Ovary etc.	2 398	95.6	1.3
C51-52, C57.7-9	Other female genital	566	96.3	1.9
C58	Placenta	014	71.4	0.0
C60-63	**Male genital organs**	**26 550**	**98.3**	**0.8**
C61	Prostate	24 753	98.2	0.9
C62	Testis	1 552	99.7	0.1
C60, C63	Other male genital	245	99.2	0.4
C64-68	**Urinary organs**	**11 827**	**97.2**	**1.0**
C64	Kidney excl. renal pelvis	4 019	94.5	1.6
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	7 808	98.5	0.7
C69	**Eye**	**374**	**58.0**	**0.0**
C70-72, D32-33	**Central nervous system**	**5 206**	**66.7**	**2.0**
C73	**Thyroid gland**	**1 693**	**99.3**	**0.5**
C37, C74-75	**Other endocrine glands**	**1 196**	**62.0**	**1.0**
C39, C76, C80	**Other or unspecified**	**1 581**	**60.1**	**19.4**
C81-96	**Lymphoid and haematopoietic tissue**	**13 418**	**98.3**	**1.1**
C81	Hodgkin lymphoma	731	99.6	0.1
C82-86, C96	Non-Hodgkin lymphoma	4 935	99.1	0.5
C88	Malignant immunoproliferative diseases	331	98.5	1.2
C90	Multiple myeloma	1 993	98.1	1.4
C91-95, D45-47	Leukaemia	5 428	97.6	1.6

Table 6 Registered cancer cases in Norway, 2014 as obtained from the incidence registry extracted 2nd February 2015 and 1st November 2015

		Cases diagnosed 2014 as of			
ICD10	Site	02.11.2015	30.09.2016	Difference	%
C00-96	**All sites**	**31771**	**32179**	**408**	**1.3**
C00-14	**Mouth, pharynx**	**608**	**616**	**8**	**1.3**
C00	Lip	118	121	3	2.5
C01-02	Tongue	132	133	1	0.8
C03-06	Mouth, other	106	108	2	1.9
C07-08	Salivary glands	71	71		0.0
C09-14	Pharynx	181	183	2	1.1
C15-26	**Digestive organs**	**6462**	**6576**	**114**	**1.8**
C15	Oesophagus	289	295	6	2.1
C16	Stomach	488	492	4	0.8
C17	Small intestine	162	172	10	6.2
C18	Colon	2801	2823	22	0.8
C19-20	Rectum, rectosigmoid	1365	1381	16	1.2
C21	Anus	86	92	6	7.0
C22	Liver	219	228	9	4.1
C23-24	Gallbladder, bile ducts	175	179	4	2.3
C25	Pancreas	736	770	34	4.6
C26	Other digestive organs	141	144	3	2.1
C30-34, C38	**Respiratory organs**	**3212**	**3261**	**49**	**1.5**
C30-31	Nose, sinuses	47	48	1	2.1
C32	Larynx, epiglottis	133	134	1	0.8
C33-34	Lung, trachea	3019	3064	45	1.5
C38	Mediastinum, pleura (non-mesothelioma)	13	15	2	15.4
C40-41	**Bone**	**57**	**58**	**1**	**1.8**
C43	**Melanoma of the skin**	**2003**	**2031**	**28**	**1.4**
C44	**Skin, non-melanoma**	**1922**	**1935**	**13**	**0.7**
C45	**Mesothelioma**	**66**	**69**	**3**	**4.5**
C47	**Autonomic nervous system**	**15**	**16**	**1**	**6.7**
C48-49	**Soft tissues**	**147**	**148**	**1**	**0.7**
C50	**Breast**	**3343**	**3352**	**9**	**0.3**
C51-58	**Female genital organs**	**1686**	**1720**	**34**	**2.0**
C53	Cervix uteri	338	357	19	5.6
C54	Corpus uteri	727	734	7	1.0
C55	Uterus, other	12	13	1	8.3
C56, C57.0-4	Ovary etc.	484	487	3	0.6
C51-52, C57.7-9	Other female genital	123	127	4	3.3
C58	Placenta	2	2		0.0
C60-63	**Male genital organs**	**5268**	**5311**	**43**	**0.8**
C61	Prostate	4889	4931	42	0.9
C62	Testis	321	322	1	0.3
C60, C63	Other male genital	58	58		0.0
C64-68	**Urinary organs**	**2452**	**2440**	**-12**	**-0.5**
C64	Kidney excl. renal pelvis	814	811	-3	-0.4
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	1638	1629	-9	-0.5
C69	**Eye**	**92**	**94**	**2**	**2.2**
C70-72, D32-33	**Central nervous system**	**1012**	**1031**	**19**	**1.9**
C73	**Thyroid gland**	**353**	**360**	**7**	**2.0**
C37, C74-75	**Other endocrine glands**	**201**	**233**	**32**	**15.9**
C39, C76, C80	**Other or unspecified**	**320**	**323**	**3**	**0.9**
C81-96	**Lymphoid and haematopoietic tissue**	**2552**	**2605**	**53**	**2.1**
C81	Hodgkin lymphoma	140	144	4	2.9
C82-86, C96	Non-Hodgkin lymphoma	985	981	-4	-0.4
C88	Malignant immunoproliferative diseases	56	66	10	17.9
C90	Multiple myeloma	369	384	15	4.1
C91-95, D45-47	Leukaemia	1002	1030	28	2.8

Cancer incidence, prevalence, mortality and survival in Norway 2015

Incidence

In 2015, there were 32 592 new cases of cancer (in 31 838 individuals) recorded in Norway, of which 17 498 occurred among men and 15 094 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 2015.

In men, prostate cancer continued to be the leading site for cancer incidence (5 061 cases), followed by lung (1 564 cases) and colon cancer (1 400 cases). Breast cancer remained the most frequent cancer in women, with 3 415 new cases in 2015, followed by colon and lung cancer, with 1 535 and 1 471 incident cases, respectively.

Of notice is that we have not received complete data for 2015 from the Cause of Death Registry. For some cancers, especially those with poor survival, the incidence numbers for 2015 might be underreported.

When comparing the rates in the last five-year period (2011–2015) with the previous one (2006–2010) (Table 15 a and b) we observe that:

- There has been an overall increase in rates for all cancers combined at about 3% for men and 5% for women.
- Prostate cancer rates appear to stabilise, while the rates for breast cancer have increased with 8%.
- 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 rate of lung cancer for women is 10% higher in the last five-year period compared to the previous one, and is a matter of great concern. The rate of lung cancer in men has declined slightly.
- Among more uncommon cancer sites, there has been a notable increase in the rates for liver and thyroid cancer in both genders.
- We are informed that some hospitals have not reported clinical notifications for the last couple of years as they are waiting for a technical solution for exporting data electronically. The falling rates of CNS cancer may thus be due to an under-reporting of cases which are not histologically verified, especially benign 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 most common cancer types 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 69. Colon cancer was the most common cancer in women above 70.

Figure 5. Percentage distribution of cancer incidence by age, 2011–2015

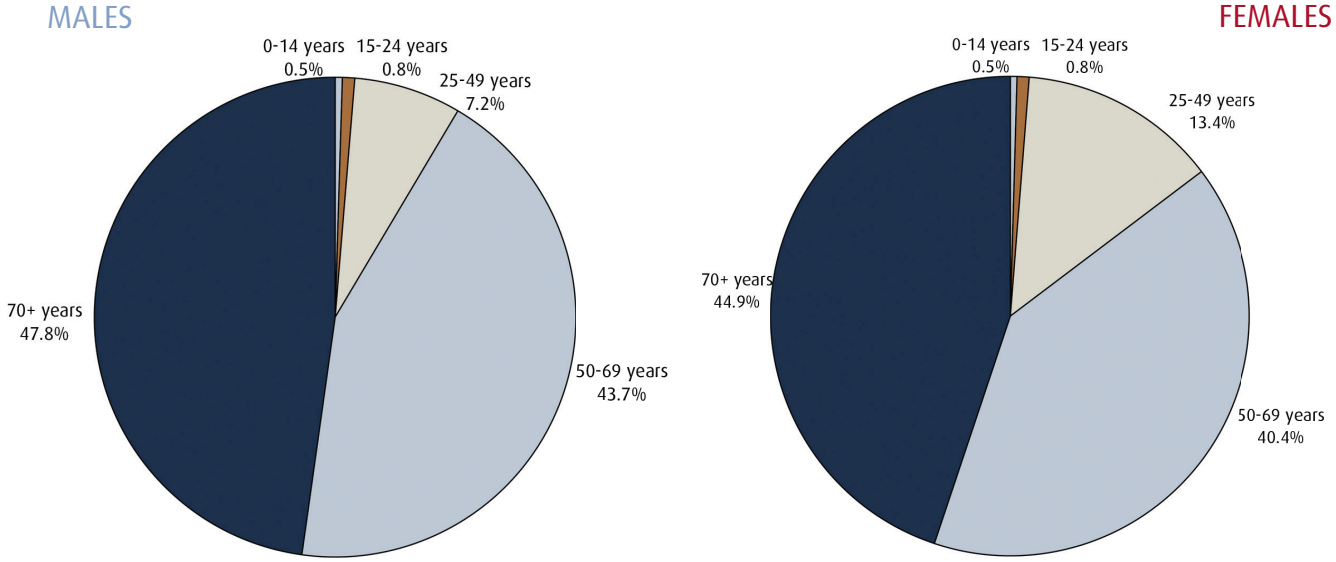


Table 7 Number and rates of new cases by primary site and sex, 2015

		Cases			Rate (Norwegian standard)		Rate (World standard)	
ICD10	Site	Males	Females	Total	Males	Females	Males	Females
C00-96	**All sites**	**17498**	**15094**	**32592**	**720.4**	**548.8**	**371.9**	**316.0**
C00-14	**Mouth, pharynx**	**403**	**225**	**628**	**16.1**	**8.1**	**9.0**	**4.4**
C00	Lip	68	54	122	2.9	1.9	1.3	0.9
C01-02	Tongue	86	51	137	3.3	1.8	2.1	1.0
C03-06	Mouth, other	60	39	99	2.4	1.4	1.3	0.7
C07-08	Salivary glands	36	40	76	1.5	1.5	0.8	0.9
C09-14	Pharynx	153	41	194	6.0	1.6	3.6	1.0
C15-26	**Digestive organs**	**3519**	**3119**	**6638**	**146.5**	**110.0**	**71.5**	**54.3**
C15	Oesophagus	214	74	288	8.7	2.6	4.6	1.2
C16	Stomach	286	161	447	12.2	5.6	5.6	2.7
C17	Small intestine	98	71	169	4.0	2.6	2.2	1.5
C18	Colon	1400	1535	2935	59.0	53.7	27.5	25.7
C19-20	Rectum, rectosigmoid	771	562	1333	31.7	20.3	16.1	10.9
C21	Anus	22	51	73	0.9	1.9	0.5	1.1
C22	Liver	175	93	268	7.2	3.3	3.8	1.6
C23-24	Gallbladder, bile ducts	75	80	155	3.1	2.8	1.6	1.4
C25	Pancreas	415	410	825	17.1	14.3	8.5	6.7
C26	Other digestive organs	63	82	145	2.6	2.9	1.3	1.5
C30-34, C38	**Respiratory organs**	**1671**	**1520**	**3191**	**68.9**	**54.9**	**33.0**	**28.8**
C30-31	Nose, sinuses	16	23	39	0.6	0.8	0.4	0.5
C32	Larynx, epiglottis	86	21	107	3.5	0.8	1.8	0.5
C33-34	Lung, trachea	1564	1471	3035	64.5	53.1	30.7	27.8
C38	Heart, mediastinum and pleura	5	5	10	0.2	0.2	0.1	0.1
C40-41	**Bone**	**33**	**21**	**54**	**1.3**	**0.8**	**0.9**	**0.8**
C43	**Melanoma of the skin**	**1018**	**983**	**2001**	**41.2**	**36.5**	**23.0**	**23.3**
C44	**Skin, non-melanoma**	**1044**	**840**	**1884**	**47.4**	**28.2**	**18.2**	**11.6**
C45	**Mesothelioma**	**65**	**13**	**78**	**2.8**	**0.5**	**1.2**	**0.2**
C47	**Autonomic nervous system**	**4**	**7**	**11**	**0.2**	**0.3**	**0.1**	**0.3**
C48-49	**Soft tissues**	**63**	**72**	**135**	**2.6**	**2.6**	**1.6**	**1.5**
C50	**Breast**	**24**	**3415**	**3439**	**1.1**	**128.0**	**0.4**	**81.3**
C51-58	**Female genital organs**		**1786**	**1786**		**66.4**		**41.6**
C53	Cervix uteri		370	370		14.3		11.3
C54	Corpus uteri		779	779		28.7		16.5
C55	Uterus, other		8	8		0.3		0.2
C56, C57.0-4	Ovary etc.		504	504		18.7		11.3
C51-52, C57.7-9	Other female genital		124	124		4.4		2.3
C58	Placenta		1	1		0.0		0.0
C60-63	**Male genital organs**	**5410**		**5410**	**217.5**		**117.8**	
C61	Prostate	5061		5061	204.2		106.2	
C62	Testis	291		291	11.0		10.4	
C60, C63	Other male genital	58		58	2.3		1.3	
C64-68	**Urinary organs**	**1831**	**774**	**2605**	**76.5**	**27.7**	**37.3**	**15.0**
C64	Kidney excl. renal pelvis	569	305	874	22.7	11.2	13.2	6.9
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	1262	469	1731	53.7	16.5	24.1	8.2
C69	**Eye**	**41**	**41**	**82**	**1.7**	**1.6**	**1.0**	**1.1**
C70-72, D32-33	**Central nervous system**	**435**	**502**	**937**	**17.1**	**18.8**	**12.2**	**13.0**
C73	**Thyroid gland**	**101**	**262**	**363**	**3.9**	**10.0**	**2.7**	**7.2**
C37, C74-75	**Other endocrine glands**	**83**	**97**	**180**	**3.2**	**3.7**	**2.3**	**2.9**
C39, C76, C80	**Other or unspecified**	**151**	**174**	**325**	**6.7**	**5.9**	**2.8**	**2.6**
C81-96	**Lymphoid and haematopoietic tissue**	**1602**	**1243**	**2845**	**65.8**	**44.8**	**36.6**	**25.9**
C81	Hodgkin lymphoma	110	53	163	4.2	2.1	3.6	1.9
C82-86, C96	Non-Hodgkin lymphoma	602	451	1053	24.6	16.3	13.2	8.8
C88	Malignant immunoproliferative diseases	36	17	53	1.5	0.6	0.7	0.3
C90	Multiple myeloma	240	197	437	10.1	7.0	4.7	3.5
C91-95, D45-47	Leukaemia	614	525	1139	25.4	18.9	14.3	11.4

Figure 6. The most frequent types of cancer by age and sex, 2011–2015

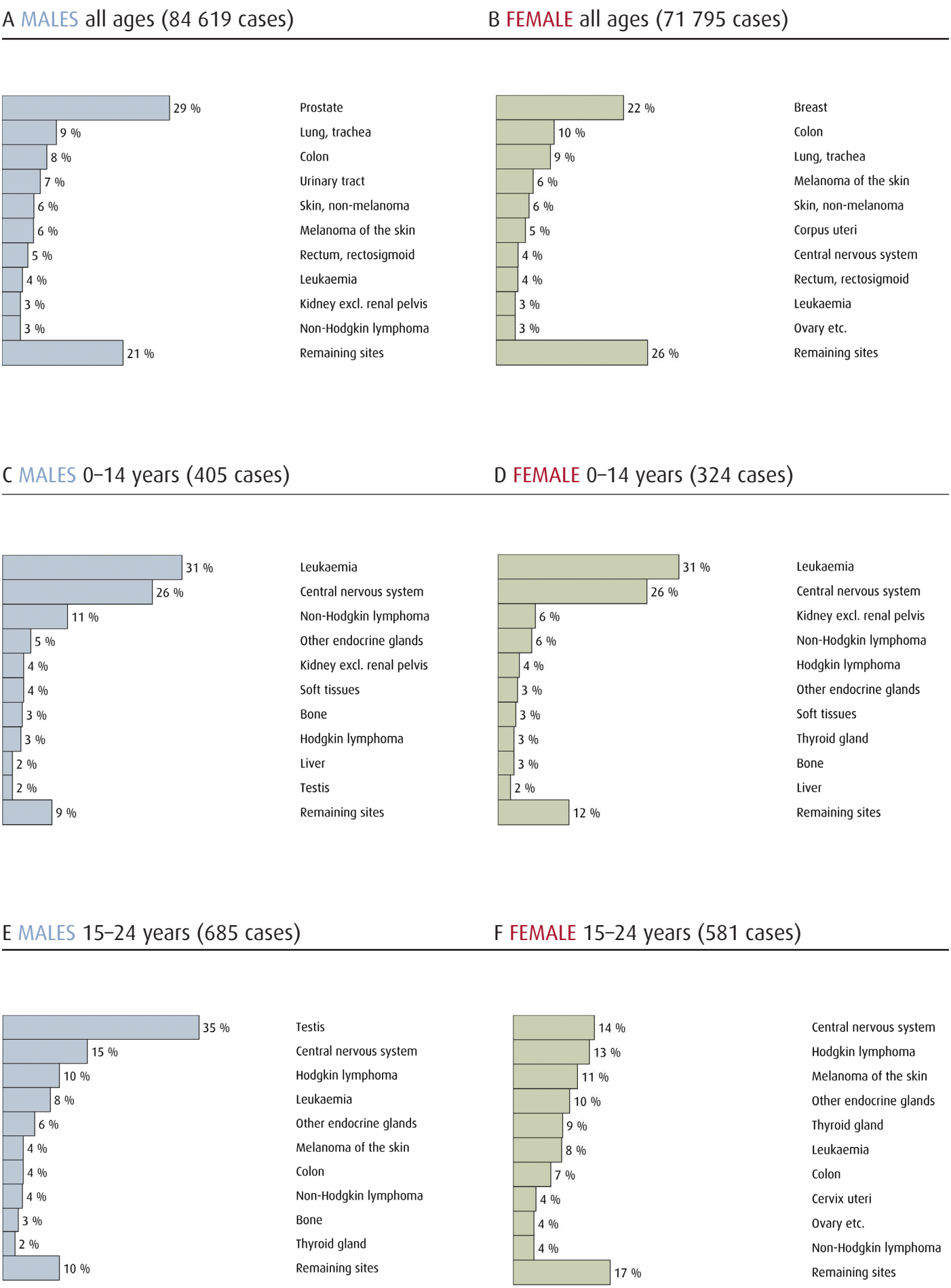
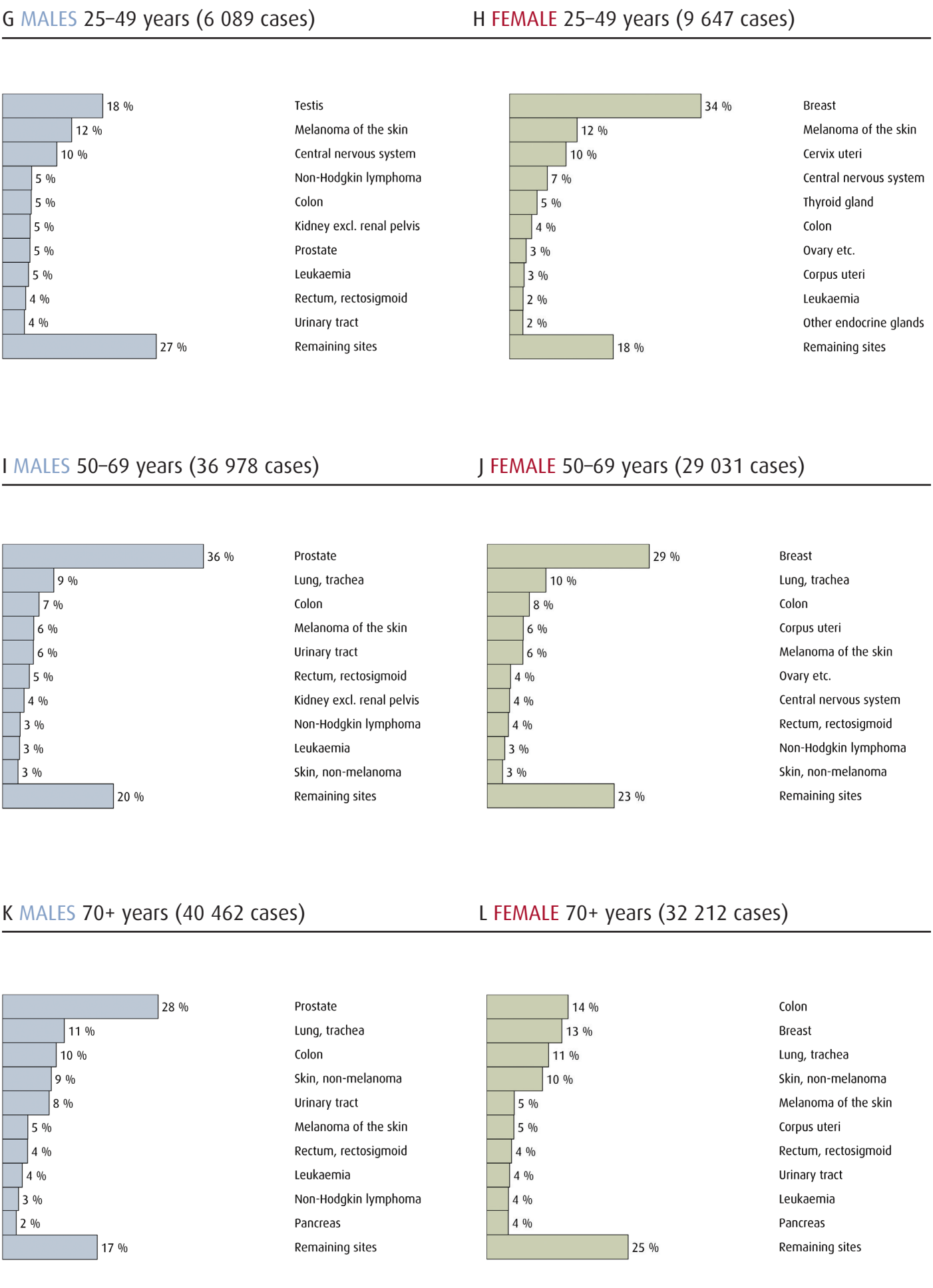


Figure 6. The most frequent types of cancer by age and sex, 2011–2015



The age-standardised rates and male to female ratio (M:F) for selected cancer types in 1981–1985 and 2011–2015 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 trends in women for a number of cancer types. This is especially striking for lung cancer.

Table 8 Sex ratios (male:female) of age-adjusted rates (Norwegian standard) in 1981-85 and 2011-15 by primary site, sorted in descending order in last period

		1981-85			2011-15		
ICD10	Site	M	F	M: F ratio	M	F	M: F ratio
C32	Larynx, epiglottis	5.9	0.5	11.0	4.3	0.7	5.9
C15	Oesophagus	5.2	1.6	3.2	8.5	2.5	3.5
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	40.9	11.9	3.4	50.4	15.5	3.2
C09-14	Pharynx	3.0	0.9	3.2	5.2	1.7	3.1
C64	Kidney excl. renal pelvis	14.2	7.0	2.0	22.7	9.7	2.3
C22	Liver	3.8	2.1	1.8	6.5	3.1	2.1
C16	Stomach	36.1	18.1	2.0	13.2	6.4	2.1
C00	Lip	6.1	1.0	6.3	3.2	1.7	1.9
C01-02	Tongue	2.0	1.1	1.9	3.2	1.7	1.9
C19-20	Rectum, rectosigmoid	30.6	18.5	1.7	32.9	20.3	1.6
C91-95, D45-47	Leukaemia	13.8	8.4	1.6	16.2	10.4	1.6
C90	Multiple myeloma	9.2	6.0	1.5	9.7	6.5	1.5
C82-86, C96	Non-Hodgkin lymphoma	11.8	9.1	1.3	23.1	16.6	1.4
C33-34	Lung, trachea	59.7	14.5	4.1	70.0	51.1	1.4
C81	Hodgkin lymphoma	2.9	1.7	1.7	3.3	2.5	1.4
C25	Pancreas	18.5	12.2	1.5	16.4	14.1	1.2
C18	Colon	39.5	36.0	1.1	58.7	52.5	1.1
C43	Melanoma of the skin	14.4	17.2	0.8	39.5	35.5	1.1
C23-24	Gallbladder, bile ducts	2.6	3.8	0.7	3.4	3.5	1.0
C21	Anus	0.7	1.2	0.6	0.9	2.0	0.5
C73	Thyroid gland	2.5	7.0	0.4	4.0	9.5	0.4

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

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

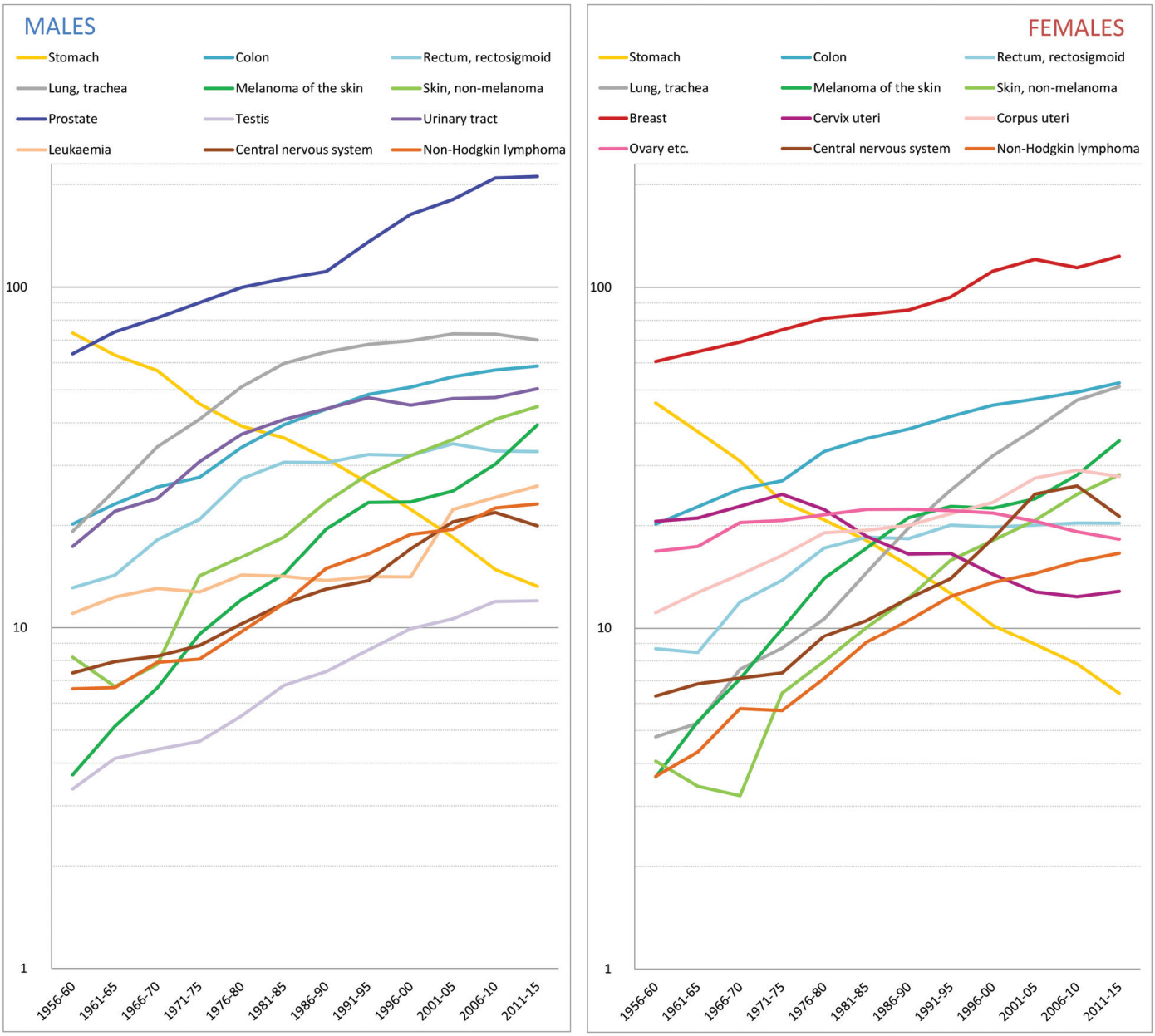
Stomach cancer is one of the few that demonstrates a sharply declining trend. In the first observation period, stomach cancer was the most common cancer in men and women combined, in line with observations of cancer mortality reported by Norwegian general practitioners one hundred years ago (Gade, 1916). The monotonous drop in incidence over 6 decades reflect 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 decline also demonstrates the vast potential in cancer prevention.

The age-standardised incidence rate of prostate cancer has tripled since the start of registration in the early 1950s. A dramatic upsurge from around 1990 illustrates the influence of changes in diagnostic practice with increasing screening tests ordered by general practitioners. The introduction and subsequent widespread use of the Prostate Specific Antigen (PSA) test, followed by biopsies, is the main explanation for this trend.

The incidence of breast cancer has doubled since the beginning of registration. The trend was monotonous upwards until 2005, with a somewhat steeper rise in the late 1990s following the implementation of the Norwegian Breast Cancer Screening Programme. During the last decade, the rate seemed to level off, although there is certain variation from year to year, as seen in table 11b. This might be due to better diagnostic tool used in the programme or locally in studies, or that women continue to have mammography after the age of 70, but it might also reflect random variations.

In women, the incidence of lung cancer has increased

Figure 7. Time trends in age–standardised incidence rates (Norway) in Norway for selected cancers (semi log-scale), 1956–2015



almost tenfold since the beginning of the 1950's. The incidence of lung cancer among men has been levelling off in the last two decades, and we are now seeing a tendency toward a decline. This pattern is however not observed for women, were 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 ranks 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 ultraviolet 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, vaccination against human papilloma virus (HPV) was introduced as part of the Childhood Immunisation Programme in Norway for girls born in 1997 and after. A catch up programme will be implemented, starting in November 2016. Still, we do not expect this primary prevention to affect the incidence rate for another 15 to 20 years.

For some 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 largely 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. One in three Norwegians will develop a cancer before the age of 75. The risk of prostate cancer ranks highest in men, where one in seven men will develop this cancer by the age of 75. The cumulative risk of breast cancer ranks the highest in women, with the figure of 8.5% indicating that about one in 12 Norwegian women develop this disease before turning 75. As among men, lung and colon cancers rank second and third.

Tables 10–19 provide further information on 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, 2011–2015

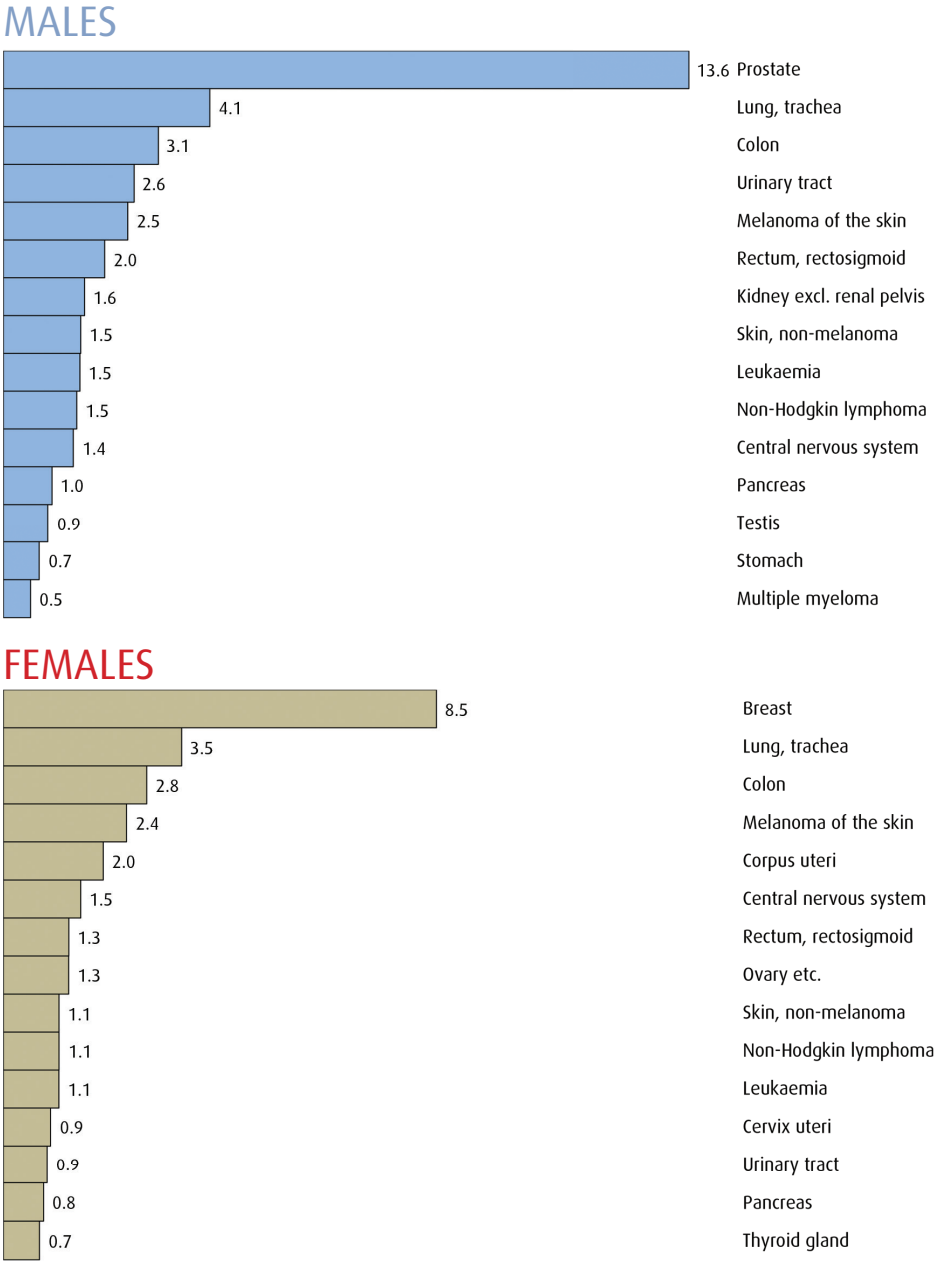


Table 9 Cumulative risk of developing cancer (%) by the age of 75 by primary site and sex, 2011-2015

ICD10	Site	Males	Females
C00-96	**All sites**	**36.2**	**29.5**
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**	**6.1**
C15	Oesophagus	0.5	0.2
C16	Stomach	0.7	0.3
C17	Small intestine	0.3	0.1
C18	Colon	3.1	2.8
C19-20	Rectum, rectosigmoid	2.0	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	1.0	0.8
C26	Other digestive organs	0.1	0.1
C30-34, C38	**Respiratory organs**	**4.5**	**3.6**
C30-31	Nose, sinuses	0.1	0.0
C32	Larynx, epiglottis	0.3	0.0
C33-34	Lung, trachea	4.1	3.5
C38	Heart, mediastinum and pleura	0.0	0.0
C40-41	**Bone**	**0.1**	**0.1**
C43	**Melanoma of the skin**	**2.5**	**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**	**8.5**
C51-58	**Female genital organs**		**4.4**
C53	Cervix uteri		0.9
C54	Corpus uteri		2.0
C55	Uterus, other		0.0
C56, C57.0-4	Ovary etc.		1.3
C51-52, C57.7-9	Other female genital		0.2
C58	Placenta		0.0
C60-63	**Male genital organs**	**14.5**	
C61	Prostate	13.6	
C62	Testis	0.9	
C60, C63	Other male genital	0.1	
C64-68	**Urinary organs**	**4.2**	**1.5**
C64	Kidney excl. renal pelvis	1.6	0.7
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	2.6	0.9
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	0.3	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, 2006-2015

MALES

		Year									
ICD10	Site	2006	07	08	09	10	11	12	13	14	2015
C00-96	**All sites**	**13638**	**14546**	**14772**	**15135**	**15275**	**16380**	**16726**	**16740**	**17275**	**17498**
C00-14	**Mouth, pharynx**	**276**	**275**	**269**	**344**	**313**	**327**	**361**	**334**	**403**	**403**
C00	Lip	68	65	53	82	77	80	70	62	76	68
C01-02	Tongue	46	57	63	74	60	70	71	82	84	86
C03-06	Mouth, other	53	40	43	65	52	38	56	57	61	60
C07-08	Salivary glands	14	18	18	23	28	18	30	28	45	36
C09-14	Pharynx	95	95	92	100	96	121	134	105	137	153
C15-26	**Digestive organs**	**2730**	**2854**	**2938**	**2955**	**3233**	**3136**	**3325**	**3425**	**3468**	**3519**
C15	Oesophagus	148	131	161	149	187	181	175	200	225	214
C16	Stomach	303	336	299	264	299	325	285	303	302	286
C17	Small intestine	66	67	65	82	71	87	104	87	96	98
C18	Colon	1077	1106	1173	1124	1300	1231	1298	1334	1360	1400
C19-20	Rectum, rectosigmoid	640	635	677	731	745	698	752	798	812	771
C21	Anus	16	18	20	20	34	20	24	15	27	22
C22	Liver	88	98	98	98	128	130	136	174	142	175
C23-24	Gallbladder, bile ducts	58	59	66	74	87	59	87	97	73	75
C25	Pancreas	303	366	341	360	319	334	403	360	375	415
C26	Other digestive organs	31	38	38	53	63	71	61	57	56	63
C30-34, C38	**Respiratory organs**	**1612**	**1626**	**1625**	**1660**	**1684**	**1768**	**1783**	**1718**	**1771**	**1671**
C30-31	Nose, sinuses	17	27	25	23	19	22	32	34	30	16
C32	Larynx, epiglottis	116	78	113	90	106	100	98	104	115	86
C33-34	Lung, trachea	1469	1501	1481	1539	1549	1636	1643	1572	1616	1564
C38	Heart, mediastinum and pleura	10	20	6	8	10	10	10	8	10	5
C40-41	**Bone**	**24**	**21**	**23**	**37**	**27**	**28**	**33**	**18**	**28**	**33**
C43	**Melanoma of the skin**	**560**	**581**	**671**	**703**	**747**	**871**	**896**	**848**	**1028**	**1018**
C44	**Skin, non-melanoma**	**749**	**727**	**775**	**852**	**822**	**860**	**889**	**910**	**1008**	**1044**
C45	**Mesothelioma**	**56**	**63**	**64**	**69**	**79**	**64**	**65**	**78**	**58**	**65**
C47	**Autonomic nervous system**	**7**	**7**	**8**	**7**	**6**	**5**	**5**	**6**	**7**	**4**
C48-49	**Soft tissues**	**62**	**67**	**49**	**71**	**52**	**67**	**81**	**78**	**61**	**63**
C50	**Breast**	**14**	**19**	**21**	**15**	**13**	**27**	**28**	**35**	**24**	**24**
C60-63	**Male genital organs**	**4180**	**4782**	**4786**	**4745**	**4569**	**5311**	**5272**	**5246**	**5311**	**5410**
C61	Prostate	3891	4441	4436	4383	4256	4986	4908	4867	4931	5061
C62	Testis	253	297	300	314	267	286	321	332	322	291
C60, C63	Other male genital	36	44	50	48	46	39	43	47	58	58
C64-68	**Urinary organs**	**1287**	**1375**	**1384**	**1410**	**1445**	**1533**	**1609**	**1637**	**1782**	**1831**
C64	Kidney excl. renal pelvis	362	397	414	427	487	520	532	535	576	569
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	925	978	970	983	958	1013	1077	1102	1206	1262
C69	**Eye**	**37**	**29**	**40**	**26**	**38**	**26**	**29**	**34**	**49**	**41**
C70-72, D32-33	**Central nervous system**	**451**	**529**	**480**	**481**	**488**	**508**	**522**	**493**	**488**	**435**
C73	**Thyroid gland**	**77**	**67**	**60**	**73**	**81**	**77**	**92**	**106**	**112**	**101**
C37, C74-75	**Other endocrine glands**	**96**	**141**	**135**	**147**	**109**	**128**	**142**	**115**	**124**	**83**
C39, C76, C80	**Other or unspecified**	**200**	**176**	**170**	**170**	**146**	**165**	**125**	**148**	**155**	**151**
C81-96	**Lymphoid and haematopoietic tissue**	**1220**	**1207**	**1274**	**1370**	**1423**	**1479**	**1469**	**1511**	**1398**	**1602**
C81	Hodgkin lymphoma	69	71	80	83	82	69	88	74	81	110
C82-86, C96	Non-Hodgkin lymphoma	468	429	469	487	552	507	527	550	530	602
C88	Malignant immunoproliferative diseases	33	36	34	28	34	33	52	36	36	36
C90	Multiple myeloma	183	186	206	219	206	240	206	226	194	240
C91-95, D45-47	Leukaemia	467	485	485	553	549	630	596	625	557	614

Table 10b Number of new cases by primary site and year, 2006-2015

FEMALES

		Year									
ICD10	Site	2006	07	08	09	10	11	12	13	14	2015
C00-96	**All sites**	**12438**	**12522**	**12703**	**13045**	**13339**	**13861**	**13759**	**14177**	**14904**	**15094**
C00-14	**Mouth, pharynx**	**189**	**159**	**188**	**167**	**208**	**199**	**183**	**191**	**213**	**225**
C00	Lip	43	46	49	35	54	46	41	49	45	54
C01-02	Tongue	38	24	33	34	33	38	47	45	49	51
C03-06	Mouth, other	50	36	40	44	43	41	31	42	47	39
C07-08	Salivary glands	22	23	25	17	32	29	16	18	26	40
C09-14	Pharynx	36	30	41	37	46	45	48	37	46	41
C15-26	**Digestive organs**	**2683**	**2691**	**2745**	**2851**	**2744**	**2878**	**2949**	**3023**	**3108**	**3119**
C15	Oesophagus	45	56	59	54	65	60	72	63	70	74
C16	Stomach	218	216	213	223	175	199	182	164	190	161
C17	Small intestine	45	55	52	76	62	66	61	48	76	71
C18	Colon	1285	1264	1280	1357	1270	1394	1422	1454	1463	1535
C19-20	Rectum, rectosigmoid	516	505	518	519	529	530	502	581	569	562
C21	Anus	41	42	42	49	53	38	48	59	65	51
C22	Liver	44	54	65	65	78	81	82	81	86	93
C23-24	Gallbladder, bile ducts	78	83	82	84	92	87	103	102	106	80
C25	Pancreas	372	361	371	363	349	365	396	391	395	410
C26	Other digestive organs	39	55	63	61	71	58	81	80	88	82
C30-34, C38	**Respiratory organs**	**1077**	**1162**	**1200**	**1199**	**1321**	**1280**	**1364**	**1379**	**1490**	**1520**
C30-31	Nose, sinuses	19	33	16	12	20	20	19	20	18	23
C32	Larynx, epiglottis	12	17	23	20	19	16	19	21	19	21
C33-34	Lung, trachea	1040	1104	1157	1159	1274	1236	1322	1333	1448	1471
C38	Heart, mediastinum and pleura	6	8	4	8	8	8	4	5	5	5
C40-41	**Bone**	**20**	**22**	**23**	**28**	**25**	**23**	**13**	**25**	**30**	**21**
C43	**Melanoma of the skin**	**661**	**641**	**622**	**729**	**792**	**877**	**889**	**897**	**1003**	**983**
C44	**Skin, non-melanoma**	**643**	**670**	**676**	**744**	**707**	**781**	**776**	**810**	**927**	**840**
C45	**Mesothelioma**	**21**	**14**	**10**	**12**	**14**	**13**	**16**	**11**	**11**	**13**
C47	**Autonomic nervous system**	**8**	**4**	**7**	**5**	**5**	**1**	**0**	**6**	**9**	**7**
C48-49	**Soft tissues**	**82**	**94**	**80**	**101**	**90**	**82**	**81**	**90**	**87**	**72**
C50	**Breast**	**2717**	**2729**	**2742**	**2735**	**2847**	**3085**	**2946**	**3197**	**3328**	**3415**
C51-58	**Female genital organs**	**1563**	**1531**	**1594**	**1588**	**1666**	**1668**	**1543**	**1597**	**1720**	**1786**
C53	Cervix uteri	317	279	295	297	309	293	313	288	357	370
C54	Corpus uteri	660	673	718	715	759	746	651	765	734	779
C55	Uterus, other	9	3	8	11	6	5	6	8	13	8
C56, C57.0-4	Ovary etc.	469	475	483	452	474	514	461	432	487	504
C51-52, C57.7-9	Other female genital	105	100	90	111	115	105	108	102	127	124
C58	Placenta	3	1	0	2	3	5	4	2	2	1
C64-68	**Urinary organs**	**565**	**577**	**602**	**607**	**639**	**652**	**667**	**684**	**658**	**774**
C64	Kidney excl. renal pelvis	212	253	257	238	242	260	257	230	235	305
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	353	324	345	369	397	392	410	454	423	469
C69	**Eye**	**30**	**29**	**31**	**38**	**31**	**33**	**31**	**45**	**45**	**41**
C70-72, D32-33	**Central nervous system**	**643**	**659**	**613**	**658**	**605**	**592**	**584**	**539**	**543**	**502**
C73	**Thyroid gland**	**148**	**160**	**175**	**184**	**205**	**220**	**226**	**249**	**248**	**262**
C37, C74-75	**Other endocrine glands**	**127**	**127**	**163**	**131**	**122**	**141**	**117**	**140**	**109**	**97**
C39, C76, C80	**Other or unspecified**	**243**	**233**	**191**	**200**	**184**	**167**	**157**	**171**	**168**	**174**
C81-96	**Lymphoid and haematopoietic tissue**	**1018**	**1020**	**1041**	**1068**	**1134**	**1169**	**1217**	**1123**	**1207**	**1243**
C81	Hodgkin lymphoma	47	50	45	50	57	73	64	56	63	53
C82-86, C96	Non-Hodgkin lymphoma	391	383	372	399	406	447	458	412	451	451
C88	Malignant immunoproliferative diseases	25	19	17	28	27	26	32	33	30	17
C90	Multiple myeloma	147	170	163	163	182	142	181	177	190	197
C91-95, D45-47	Leukaemia	408	398	444	428	462	481	482	445	473	525

Table 11a Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and year, 2006-2015

MALES

		Year									
ICD10	Site	2006	07	08	09	10	11	12	13	14	2015
C00-96	**All sites**	**685.2**	**716.4**	**712.5**	**718.4**	**708.5**	**741.7**	**739.4**	**722.1**	**729.5**	**720.4**
C00-14	**Mouth, pharynx**	**13.4**	**13.1**	**12.4**	**15.8**	**14.1**	**14.5**	**15.4**	**14.0**	**16.4**	**16.1**
C00	Lip	3.5	3.3	2.6	4.0	3.7	3.7	3.2	2.7	3.3	2.9
C01-02	Tongue	2.3	2.7	2.9	3.3	2.6	3.0	3.1	3.4	3.3	3.3
C03-06	Mouth, other	2.5	1.9	2.0	3.1	2.4	1.8	2.4	2.4	2.5	2.4
C07-08	Salivary glands	0.7	0.8	0.8	1.1	1.3	0.8	1.3	1.2	1.9	1.5
C09-14	Pharynx	4.4	4.4	4.1	4.3	4.1	5.0	5.5	4.2	5.4	6.0
C15-26	**Digestive organs**	**138.9**	**142.5**	**143.5**	**142.6**	**151.8**	**143.9**	**148.8**	**149.3**	**148.1**	**146.5**
C15	Oesophagus	7.5	6.4	7.8	7.0	8.7	8.1	7.6	8.7	9.5	8.7
C16	Stomach	15.8	16.8	14.7	13.0	14.0	15.0	12.8	13.2	13.0	12.2
C17	Small intestine	3.2	3.2	3.1	3.7	3.2	3.9	4.5	3.7	4.0	4.0
C18	Colon	55.1	55.8	57.5	55.0	61.8	57.4	58.6	59.1	59.3	59.0
C19-20	Rectum, rectosigmoid	32.1	31.3	32.8	34.7	34.3	31.6	33.5	34.0	34.0	31.7
C21	Anus	0.7	0.9	1.0	0.9	1.5	0.8	1.1	0.7	1.1	0.9
C22	Liver	4.4	4.7	4.6	4.7	6.0	5.8	5.9	7.5	5.9	7.2
C23-24	Gallbladder, bile ducts	2.9	3.0	3.3	3.7	4.0	2.6	4.0	4.2	3.0	3.1
C25	Pancreas	15.4	18.4	16.7	17.4	15.2	15.3	18.0	15.8	16.0	17.1
C26	Other digestive organs	1.8	2.1	1.9	2.6	3.0	3.4	2.8	2.5	2.5	2.6
C30-34, C38	**Respiratory organs**	**80.5**	**79.4**	**78.5**	**78.9**	**78.4**	**80.5**	**79.7**	**74.6**	**75.6**	**68.9**
C30-31	Nose, sinuses	0.9	1.3	1.3	1.1	0.8	1.0	1.4	1.4	1.3	0.6
C32	Larynx, epiglottis	5.7	3.7	5.3	4.2	4.9	4.4	4.3	4.4	4.8	3.5
C33-34	Lung, trachea	73.4	73.4	71.7	73.3	72.1	74.7	73.5	68.4	69.1	64.5
C38	Heart, mediastinum and pleura	0.5	1.0	0.3	0.4	0.4	0.5	0.5	0.3	0.4	0.2
C40-41	**Bone**	**1.1**	**0.9**	**1.0**	**1.6**	**1.1**	**1.1**	**1.3**	**0.7**	**1.1**	**1.3**
C43	**Melanoma of the skin**	**26.8**	**27.5**	**31.1**	**32.1**	**33.3**	**38.3**	**38.9**	**35.9**	**42.8**	**41.2**
C44	**Skin, non-melanoma**	**40.0**	**38.4**	**40.8**	**43.8**	**41.5**	**42.6**	**42.9**	**43.3**	**46.8**	**47.4**
C45	**Mesothelioma**	**2.9**	**3.1**	**3.2**	**3.2**	**3.9**	**3.0**	**3.0**	**3.5**	**2.5**	**2.8**
C47	**Autonomic nervous system**	**0.4**	**0.3**	**0.3**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**
C48-49	**Soft tissues**	**2.9**	**3.1**	**2.2**	**3.4**	**2.3**	**2.8**	**3.4**	**3.2**	**2.5**	**2.6**
C50	**Breast**	**0.7**	**0.9**	**1.0**	**0.7**	**0.6**	**1.2**	**1.3**	**1.5**	**1.0**	**1.1**
C60-63	**Male genital organs**	**211.9**	**237.5**	**231.2**	**224.3**	**210.6**	**238.2**	**229.4**	**222.7**	**220.2**	**217.5**
C61	Prostate	199.3	222.8	216.4	209.2	197.7	225.1	215.1	207.8	205.4	204.2
C62	Testis	10.9	12.6	12.5	12.8	10.8	11.4	12.5	12.8	12.2	11.0
C60, C63	Other male genital	1.8	2.1	2.3	2.3	2.1	1.7	1.8	2.1	2.5	2.3
C64-68	**Urinary organs**	**64.9**	**67.5**	**67.0**	**67.3**	**67.8**	**69.8**	**71.7**	**71.1**	**75.9**	**76.5**
C64	Kidney excl. renal pelvis	17.8	18.9	19.2	19.6	21.7	22.8	22.6	22.3	23.4	22.7
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	47.1	48.6	47.8	47.7	46.0	47.1	49.2	48.9	52.5	53.7
C69	**Eye**	**1.8**	**1.3**	**1.9**	**1.2**	**1.7**	**1.2**	**1.2**	**1.4**	**2.0**	**1.7**
C70-72, D32-33	**Central nervous system**	**20.8**	**24.3**	**21.4**	**21.3**	**21.4**	**21.5**	**21.8**	**20.0**	**19.6**	**17.1**
C73	**Thyroid gland**	**3.6**	**3.0**	**2.6**	**3.2**	**3.4**	**3.2**	**3.8**	**4.3**	**4.5**	**3.9**
C37, C74-75	**Other endocrine glands**	**4.3**	**6.3**	**6.0**	**6.4**	**4.6**	**5.4**	**5.8**	**4.7**	**4.9**	**3.2**
C39, C76, C80	**Other or unspecified**	**10.5**	**9.2**	**8.8**	**8.6**	**7.1**	**7.9**	**5.9**	**7.0**	**7.0**	**6.7**
C81-96	**Lymphoid and haematopoietic tissue**	**59.8**	**58.1**	**59.8**	**63.7**	**64.8**	**66.3**	**64.8**	**64.6**	**58.4**	**65.8**
C81	Hodgkin lymphoma	3.0	3.0	3.5	3.5	3.5	2.8	3.6	2.9	3.2	4.2
C82-86, C96	Non-Hodgkin lymphoma	22.7	20.4	21.8	22.6	24.9	22.5	23.1	23.2	22.1	24.6
C88	Malignant immunoproliferative diseases	1.7	1.8	1.7	1.3	1.6	1.5	2.3	1.5	1.5	1.5
C90	Multiple myeloma	9.2	9.2	9.9	10.4	9.6	10.8	9.4	10.1	8.1	10.1
C91-95, D45-47	Leukaemia	23.1	23.7	23.0	25.8	25.3	28.6	26.4	26.9	23.5	25.4

Table 11b Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and year, 2006-2015

FEMALES

		Year									
ICD10	Site	2006	07	08	09	10	11	12	13	14	2015
C00-96	**All sites**	**508.4**	**506.6**	**507.7**	**514.5**	**521.3**	**533.1**	**522.6**	**530.4**	**549.6**	**548.8**
C00-14	**Mouth, pharynx**	**7.9**	**6.5**	**7.4**	**6.6**	**8.2**	**7.7**	**6.8**	**7.1**	**7.9**	**8.1**
C00	Lip	1.8	1.8	1.9	1.3	2.0	1.7	1.4	1.8	1.6	1.9
C01-02	Tongue	1.6	1.0	1.3	1.4	1.3	1.4	1.8	1.7	1.8	1.8
C03-06	Mouth, other	2.1	1.5	1.5	1.7	1.7	1.6	1.1	1.6	1.7	1.4
C07-08	Salivary glands	0.9	1.0	1.0	0.7	1.3	1.2	0.6	0.7	1.0	1.5
C09-14	Pharynx	1.6	1.3	1.7	1.5	1.9	1.8	1.9	1.5	1.8	1.6
C15-26	**Digestive organs**	**105.2**	**104.4**	**105.0**	**108.4**	**103.2**	**107.3**	**108.8**	**109.9**	**111.4**	**110.0**
C15	Oesophagus	1.8	2.1	2.3	2.1	2.4	2.3	2.7	2.3	2.5	2.6
C16	Stomach	8.4	8.3	7.9	8.3	6.4	7.2	6.7	5.9	6.8	5.6
C17	Small intestine	1.9	2.2	2.2	3.0	2.4	2.5	2.3	1.8	2.7	2.6
C18	Colon	50.0	48.7	49.1	51.1	47.6	51.8	52.4	52.2	52.1	53.7
C19-20	Rectum, rectosigmoid	20.9	20.5	20.1	20.2	20.2	20.2	18.8	21.6	20.8	20.3
C21	Anus	1.6	1.7	1.7	2.1	2.1	1.5	1.8	2.2	2.4	1.9
C22	Liver	1.6	2.1	2.4	2.5	2.9	2.9	3.0	3.0	3.1	3.3
C23-24	Gallbladder, bile ducts	3.0	3.2	3.2	3.2	3.6	3.2	3.8	3.7	3.8	2.8
C25	Pancreas	14.6	13.6	14.0	13.8	13.0	13.5	14.5	14.2	14.1	14.3
C26	Other digestive organs	1.4	2.0	2.2	2.3	2.6	2.1	2.9	2.9	3.0	2.9
C30-34, C38	**Respiratory organs**	**45.1**	**48.0**	**49.1**	**47.7**	**52.4**	**49.8**	**52.1**	**51.9**	**54.9**	**54.9**
C30-31	Nose, sinuses	0.8	1.3	0.6	0.5	0.8	0.8	0.7	0.7	0.7	0.8
C32	Larynx, epiglottis	0.5	0.7	0.9	0.8	0.8	0.6	0.7	0.8	0.7	0.8
C33-34	Lung, trachea	43.6	45.7	47.4	46.1	50.6	48.1	50.6	50.1	53.4	53.1
C38	Heart, mediastinum and pleura	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.2	0.2
C40-41	**Bone**	**0.9**	**0.9**	**1.0**	**1.1**	**1.0**	**0.9**	**0.5**	**0.9**	**1.2**	**0.8**
C43	**Melanoma of the skin**	**27.8**	**26.3**	**25.4**	**29.5**	**31.6**	**34.3**	**34.6**	**34.2**	**37.7**	**36.5**
C44	**Skin, non-melanoma**	**23.4**	**24.3**	**24.6**	**26.2**	**24.9**	**27.0**	**26.9**	**27.6**	**31.3**	**28.2**
C45	**Mesothelioma**	**0.8**	**0.5**	**0.4**	**0.5**	**0.5**	**0.5**	**0.6**	**0.4**	**0.4**	**0.5**
C47	**Autonomic nervous system**	**0.3**	**0.2**	**0.3**	**0.2**	**0.2**	**0.0**	**0.0**	**0.2**	**0.3**	**0.3**
C48-49	**Soft tissues**	**3.4**	**4.0**	**3.3**	**4.0**	**3.6**	**3.2**	**3.2**	**3.4**	**3.3**	**2.6**
C50	**Breast**	**115.8**	**114.2**	**113.7**	**112.1**	**115.0**	**122.9**	**115.2**	**123.3**	**126.6**	**128.0**
C51-58	**Female genital organs**	**64.9**	**63.6**	**65.1**	**64.2**	**66.5**	**65.4**	**59.7**	**61.1**	**64.6**	**66.4**
C53	Cervix uteri	13.3	11.8	12.0	12.2	12.6	11.9	12.5	11.4	14.0	14.3
C54	Corpus uteri	27.6	28.2	29.9	29.1	30.4	29.1	25.1	29.2	27.3	28.7
C55	Uterus, other	0.3	0.1	0.3	0.4	0.3	0.2	0.2	0.3	0.4	0.3
C56, C57.0-4	Ovary etc.	19.4	19.7	19.6	18.1	19.0	20.1	17.8	16.5	18.2	18.7
C51-52, C57.7-9	Other female genital	4.2	3.8	3.3	4.3	4.2	3.9	4.0	3.6	4.4	4.4
C58	Placenta	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0
C64-68	**Urinary organs**	**22.7**	**22.9**	**23.6**	**23.7**	**24.5**	**24.5**	**24.7**	**25.1**	**24.0**	**27.7**
C64	Kidney excl. renal pelvis	8.8	10.1	10.2	9.6	9.5	10.0	9.9	8.6	8.7	11.2
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	14.0	12.8	13.4	14.1	15.0	14.5	14.8	16.4	15.3	16.5
C69	**Eye**	**1.2**	**1.2**	**1.3**	**1.5**	**1.3**	**1.2**	**1.2**	**1.7**	**1.7**	**1.6**
C70-72, D32-33	**Central nervous system**	**26.9**	**27.5**	**25.4**	**26.7**	**24.2**	**23.4**	**22.9**	**20.7**	**20.6**	**18.8**
C73	**Thyroid gland**	**6.3**	**6.7**	**7.3**	**7.6**	**8.4**	**8.9**	**9.1**	**9.8**	**9.6**	**10.0**
C37, C74-75	**Other endocrine glands**	**5.5**	**5.4**	**6.9**	**5.5**	**5.0**	**5.7**	**4.6**	**5.5**	**4.2**	**3.7**
C39, C76, C80	**Other or unspecified**	**9.1**	**8.4**	**7.0**	**7.1**	**6.6**	**5.6**	**5.4**	**5.8**	**5.6**	**5.9**
C81-96	**Lymphoid and haematopoietic tissue**	**41.0**	**41.4**	**41.1**	**41.9**	**44.0**	**44.7**	**46.1**	**41.7**	**44.1**	**44.8**
C81	Hodgkin lymphoma	2.0	2.1	1.9	2.1	2.4	3.0	2.6	2.2	2.4	2.1
C82-86, C96	Non-Hodgkin lymphoma	15.9	15.7	15.1	15.9	15.9	17.3	17.5	15.4	16.6	16.3
C88	Malignant immunoproliferative diseases	1.0	0.7	0.7	1.0	1.1	1.0	1.2	1.2	1.1	0.6
C90	Multiple myeloma	5.7	6.8	6.2	6.4	6.9	5.3	6.7	6.4	6.8	7.0
C91-95, D45-47	Leukaemia	16.4	16.1	17.1	16.5	17.8	18.2	18.1	16.4	17.2	18.9

Table 12a Average annual number of new cases by primary site and five-year age group, 2011-2015

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	**All sites**	**34**	**23**	**24**	**51**	**86**	**108**
C00-14	**Mouth, pharynx**	**0**	**0**	**0**	**1**	**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**	**5**	**8**
C15	Oesophagus	0	0	0	0	0	0
C16	Stomach	0	0	0	0	0	1
C17	Small intestine	0	0	0	0	0	0
C18	Colon	0	0	0	1	4	4
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	1	0	1
C38	Heart, mediastinum and pleura	0	0	0	0	0	0
C40-41	**Bone**	**0**	**0**	**3**	**2**	**2**	**1**
C43	**Melanoma of the skin**	**0**	**0**	**0**	**1**	**4**	**8**
C44	**Skin, non-melanoma**	**0**	**0**	**0**	**1**	**1**	**2**
C45	**Mesothelioma**	**0**	**0**	**0**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**1**	**0**	**0**	**0**	**0**	**0**
C48-49	**Soft tissues**	**2**	**0**	**1**	**1**	**1**	**1**
C50	**Breast**	**0**	**0**	**0**	**0**	**0**	**0**
C60-63	**Male genital organs**	**1**	**0**	**1**	**11**	**38**	**42**
C61	Prostate	0	0	0	0	0	0
C62	Testis	1	0	1	10	38	42
C60, C63	Other male genital	0	0	0	0	0	0
C64-68	**Urinary organs**	**3**	**0**	**0**	**1**	**1**	**4**
C64	Kidney excl. renal pelvis	3	0	0	0	0	3
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and 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**	**11**	**10**	**15**
C73	**Thyroid gland**	**0**	**0**	**0**	**1**	**2**	**3**
C37, C74-75	**Other endocrine glands**	**2**	**1**	**1**	**3**	**4**	**2**
C39, C76, C80	**Other or unspecified**	**0**	**0**	**0**	**0**	**0**	**0**
C81-96	**Lymphoid and haematopoietic tissue**	**17**	**11**	**9**	**14**	**16**	**19**
C81	Hodgkin lymphoma	0	2	1	6	7	10
C82-86, C96	Non-Hodgkin lymphoma	2	4	3	2	3	4
C88	Malignant immunoproliferative diseases	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0
C91-95, D45-47	Leukaemia	14	6	6	6	6	5

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	**195**	**300**	**459**	**771**	**1403**	**2177**	**3045**	**2618**	**2186**	**1802**	**1487**
3	**4**	**9**	**16**	**34**	**48**	**57**	**68**	**43**	**34**	**27**	**21**
0	0	1	2	3	5	7	10	11	12	12	9
1	1	3	5	10	10	11	16	7	6	4	3
1	1	1	1	3	6	10	13	8	5	3	4
1	1	2	1	2	3	2	5	3	3	4	3
0	1	2	7	16	23	27	24	14	8	4	2
16	**27**	**50**	**85**	**153**	**280**	**406**	**569**	**520**	**483**	**430**	**340**
1	1	3	6	11	20	28	41	29	24	20	16
1	3	4	8	15	28	33	44	44	42	44	34
1	1	3	3	5	11	15	17	13	8	10	7
5	8	18	27	46	87	140	210	217	207	193	157
6	9	11	23	40	70	103	141	115	106	80	61
0	0	1	1	2	3	3	4	1	3	1	2
1	2	3	6	10	20	21	22	17	19	18	11
0	1	1	1	4	8	10	15	12	9	9	7
0	2	5	8	18	29	49	66	63	53	47	36
0	1	1	2	2	5	5	10	8	10	9	8
2	**3**	**11**	**28**	**60**	**124**	**227**	**334**	**316**	**269**	**223**	**143**
0	0	1	1	3	3	3	5	3	2	2	3
0	0	1	2	4	9	19	20	16	15	9	6
1	3	9	24	53	111	205	308	295	252	211	133
0	0	1	0	0	1	0	1	2	1	1	1
1	**1**	**1**	**2**	**2**	**2**	**3**	**4**	**2**	**1**	**0**	**1**
14	**24**	**50**	**54**	**71**	**87**	**108**	**145**	**116**	**97**	**84**	**67**
3	**6**	**7**	**12**	**17**	**27**	**58**	**103**	**127**	**160**	**187**	**230**
0	**0**	**0**	**0**	**1**	**3**	**6**	**12**	**15**	**13**	**9**	**7**
0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
2	**2**	**2**	**7**	**6**	**6**	**9**	**8**	**8**	**4**	**4**	**5**
0	**0**	**1**	**0**	**2**	**2**	**4**	**5**	**5**	**3**	**3**	**4**
55	**55**	**47**	**83**	**187**	**490**	**834**	**1197**	**901**	**630**	**419**	**320**
0	1	8	51	164	474	824	1187	894	622	411	314
55	53	38	29	18	12	4	4	2	1	1	1
0	1	1	3	4	4	5	6	5	7	7	4
7	**13**	**31**	**53**	**86**	**133**	**205**	**269**	**269**	**243**	**193**	**166**
5	8	18	27	49	61	80	94	84	61	31	23
2	5	13	26	37	72	125	175	185	182	162	143
0	**1**	**3**	**2**	**4**	**3**	**5**	**5**	**4**	**3**	**3**	**2**
19	**20**	**28**	**35**	**42**	**48**	**56**	**57**	**46**	**36**	**29**	**17**
5	**7**	**9**	**9**	**8**	**10**	**9**	**12**	**8**	**7**	**4**	**3**
5	**6**	**8**	**8**	**12**	**13**	**12**	**14**	**10**	**9**	**5**	**3**
0	**1**	**2**	**3**	**6**	**8**	**12**	**21**	**22**	**19**	**21**	**32**
22	**26**	**41**	**63**	**80**	**118**	**167**	**220**	**207**	**174**	**160**	**126**
6	6	6	8	4	6	7	6	5	2	1	1
7	10	18	24	33	43	66	92	77	62	54	39
0	0	1	1	1	4	3	7	6	6	6	2
1	2	4	8	11	18	27	32	34	30	30	24
8	8	13	23	30	46	65	83	85	74	69	59

Table 12b Average annual number of new cases by primary site and five-year age group, 2011-2015

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	**All sites**	**29**	**15**	**22**	**46**	**71**	**129**
C00-14	**Mouth, pharynx**	**0**	**0**	**1**	**0**	**1**	**2**
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**	**9**
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	6
C19-20	Rectum, rectosigmoid	0	0	0	0	0	1
C21	Anus	0	0	0	0	0	0
C22	Liver	1	0	0	0	0	0
C23-24	Gallbladder, bile ducts	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	0
C26	Other digestive organs	0	0	0	0	0	0
C30-34, C38	**Respiratory organs**	**0**	**0**	**0**	**0**	**1**	**1**
C30-31	Nose, sinuses	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0
C33-34	Lung, trachea	0	0	0	0	1	1
C38	Heart, mediastinum and pleura	0	0	0	0	0	0
C40-41	**Bone**	**1**	**1**	**1**	**1**	**2**	**2**
C43	**Melanoma of the skin**	**0**	**0**	**1**	**3**	**10**	**19**
C44	**Skin, non-melanoma**	**0**	**1**	**0**	**1**	**1**	**2**
C45	**Mesothelioma**	**0**	**0**	**0**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**1**	**0**	**0**	**0**	**0**	**0**
C48-49	**Soft tissues**	**1**	**0**	**1**	**1**	**2**	**2**
C50	**Breast**	**0**	**0**	**0**	**0**	**3**	**18**
C51-58	**Female genital organs**	**0**	**0**	**1**	**3**	**7**	**30**
C53	Cervix uteri	0	0	0	0	4	24
C54	Corpus uteri	0	0	0	0	0	1
C55	Uterus, other	0	0	0	0	0	0
C56, C57.0-4	Ovary etc.	0	0	0	2	2	3
C51-52, C57.7-9	Other female genital	0	0	0	0	0	0
C58	Placenta	0	0	0	0	0	1
C64-68	**Urinary organs**	**4**	**0**	**0**	**0**	**2**	**2**
C64	Kidney excl. renal pelvis	4	0	0	0	1	1
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	0	0	0	0	1	1
C69	**Eye**	**1**	**0**	**0**	**0**	**0**	**0**
C70-72, D32-33	**Central nervous system**	**6**	**6**	**5**	**7**	**10**	**12**
C73	**Thyroid gland**	**0**	**0**	**1**	**3**	**7**	**10**
C37, C74-75	**Other endocrine glands**	**1**	**0**	**1**	**4**	**7**	**7**
C39, C76, C80	**Other or unspecified**	**0**	**0**	**0**	**0**	**0**	**0**
C81-96	**Lymphoid and haematopoietic tissue**	**12**	**5**	**10**	**17**	**13**	**14**
C81	Hodgkin lymphoma	0	0	2	8	7	6
C82-86, C96	Non-Hodgkin lymphoma	1	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	6	6	4	5

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+
193	**332**	**527**	**749**	**989**	**1243**	**1591**	**1982**	**1639**	**1534**	**1457**	**1812**
2	**4**	**6**	**9**	**15**	**20**	**25**	**26**	**19**	**20**	**20**	**30**
0	1	1	1	2	3	6	5	6	5	7	11
1	1	1	3	4	5	7	6	4	4	5	5
0	0	1	1	3	3	3	6	5	4	5	8
2	2	1	1	3	2	2	3	1	3	2	3
0	1	2	3	4	8	7	7	4	4	1	2
14	**30**	**43**	**79**	**129**	**186**	**273**	**409**	**418**	**439**	**446**	**527**
0	0	1	2	2	4	6	13	10	10	7	13
0	4	3	6	11	8	14	22	21	22	27	40
1	1	2	3	4	6	8	9	7	8	9	8
8	12	16	34	54	79	118	185	205	227	240	261
3	7	12	20	32	47	63	78	77	70	64	74
0	1	3	4	4	5	5	9	5	6	6	5
0	1	0	3	3	5	8	10	12	12	12	15
0	1	1	2	4	6	9	15	14	13	14	17
2	3	4	5	13	23	35	58	56	61	56	75
0	1	1	1	3	3	7	10	9	11	11	20
3	**4**	**10**	**30**	**58**	**117**	**182**	**269**	**251**	**202**	**160**	**118**
0	1	0	1	1	2	2	1	3	2	3	2
0	1	1	1	2	3	2	4	1	3	2	1
2	3	9	29	55	112	177	263	246	197	155	113
0	0	0	0	0	0	1	1	0	0	0	1
2	**1**	**2**	**2**	**0**	**1**	**2**	**2**	**1**	**1**	**2**	**1**
22	**43**	**69**	**79**	**74**	**91**	**92**	**113**	**90**	**65**	**68**	**92**
2	**3**	**8**	**10**	**14**	**29**	**43**	**73**	**87**	**115**	**138**	**300**
0	**0**	**0**	**0**	**1**	**0**	**2**	**2**	**2**	**3**	**2**	**1**
0	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
1	**2**	**3**	**4**	**5**	**8**	**13**	**11**	**9**	**6**	**7**	**6**
38	**99**	**198**	**301**	**383**	**379**	**451**	**462**	**244**	**217**	**180**	**222**
44	**64**	**79**	**97**	**133**	**174**	**203**	**232**	**181**	**154**	**122**	**141**
35	46	46	41	24	22	19	19	13	9	9	11
3	6	13	26	54	85	107	126	103	88	64	57
0	0	0	0	0	0	0	1	1	0	2	3
5	10	15	25	48	55	66	74	53	45	34	44
1	2	4	5	7	10	11	13	11	11	13	26
0	1	0	0	0	0	0	0	0	0	0	0
2	**6**	**13**	**16**	**32**	**53**	**71**	**103**	**93**	**96**	**94**	**100**
1	4	10	9	18	19	31	41	38	32	26	23
1	2	3	7	14	33	40	63	55	64	67	77
2	**0**	**1**	**2**	**3**	**4**	**3**	**9**	**5**	**3**	**3**	**2**
17	**22**	**36**	**43**	**47**	**53**	**66**	**66**	**48**	**36**	**35**	**38**
14	**22**	**21**	**26**	**25**	**22**	**23**	**21**	**18**	**11**	**8**	**8**
9	**9**	**10**	**11**	**10**	**10**	**10**	**10**	**7**	**7**	**4**	**4**
1	**1**	**1**	**2**	**4**	**8**	**10**	**13**	**14**	**22**	**28**	**63**
20	**21**	**27**	**38**	**54**	**91**	**120**	**159**	**151**	**140**	**140**	**160**
6	6	4	4	2	2	3	3	3	3	2	1
6	7	9	15	25	40	51	66	61	54	48	50
0	0	0	1	1	2	4	5	4	4	4	3
0	1	3	2	7	15	18	24	21	30	25	29
7	7	11	16	19	32	44	61	61	50	61	77

Table 13a Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2011-2015

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	**All sites**	**21.6**	**14.6**	**14.9**	**30.4**	**49.8**	**63.0**
C00-14	**Mouth, pharynx**	**0.1**	**0.3**	**0.3**	**0.7**	**0.7**	**0.3**
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	0.1
C03-06	Mouth, other	0.0	0.0	0.1	0.1	0.2	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	0.5	0.0	0.0
C15-26	**Digestive organs**	**0.6**	**0.1**	**0.4**	**1.2**	**2.8**	**4.9**
C15	Oesophagus	0.0	0.0	0.0	0.0	0.0	0.1
C16	Stomach	0.0	0.0	0.0	0.1	0.2	0.5
C17	Small intestine	0.0	0.0	0.0	0.1	0.0	0.2
C18	Colon	0.0	0.0	0.1	0.7	2.2	2.2
C19-20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.3	1.2
C21	Anus	0.0	0.0	0.0	0.0	0.0	0.0
C22	Liver	0.6	0.1	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	0.5
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.1
C30-34, C38	**Respiratory organs**	**0.3**	**0.0**	**0.0**	**0.6**	**0.2**	**0.3**
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	0.4	0.1	0.3
C38	Heart, mediastinum and pleura	0.0	0.0	0.0	0.1	0.0	0.0
C40-41	**Bone**	**0.0**	**0.1**	**1.6**	**1.2**	**1.0**	**0.6**
C43	**Melanoma of the skin**	**0.0**	**0.1**	**0.3**	**0.4**	**2.5**	**4.9**
C44	**Skin, non-melanoma**	**0.0**	**0.1**	**0.1**	**0.7**	**0.6**	**1.2**
C45	**Mesothelioma**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
C47	**Autonomic nervous system**	**0.6**	**0.3**	**0.0**	**0.2**	**0.1**	**0.1**
C48-49	**Soft tissues**	**1.0**	**0.3**	**0.6**	**0.5**	**0.7**	**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**	**0.5**	**6.3**	**21.8**	**24.5**
C61	Prostate	0.1	0.0	0.0	0.2	0.0	0.0
C62	Testis	0.4	0.1	0.4	6.1	21.8	24.5
C60, C63	Other male genital	0.0	0.1	0.1	0.0	0.0	0.0
C64-68	**Urinary organs**	**1.9**	**0.3**	**0.1**	**0.6**	**0.8**	**2.6**
C64	Kidney excl. renal pelvis	1.6	0.3	0.0	0.2	0.0	1.6
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	0.3	0.0	0.1	0.4	0.8	0.9
C69	**Eye**	**0.1**	**0.4**	**0.1**	**0.1**	**0.0**	**0.1**
C70-72, D32-33	**Central nervous system**	**4.5**	**4.6**	**4.3**	**6.6**	**5.6**	**8.6**
C73	**Thyroid gland**	**0.0**	**0.0**	**0.1**	**0.8**	**0.9**	**1.9**
C37, C74-75	**Other endocrine glands**	**1.3**	**0.6**	**0.6**	**2.0**	**2.5**	**0.9**
C39, C76, C80	**Other or unspecified**	**0.3**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**
C81-96	**Lymphoid and haematopoietic tissue**	**10.4**	**7.2**	**5.8**	**8.3**	**9.4**	**11.3**
C81	Hodgkin lymphoma	0.0	1.0	0.6	3.8	4.3	6.1
C82-86, C96	Non-Hodgkin lymphoma	1.5	2.7	1.6	1.2	1.6	2.3
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.0	0.0	0.0
C91-95, D45-47	Leukaemia	8.9	3.5	3.5	3.3	3.5	2.9

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+
89.3	**109.5**	**156.1**	**245.9**	**455.5**	**892.6**	**1503.0**	**2323.5**	**3008.0**	**3614.7**	**4096.1**	**4059.8**
1.6	**2.2**	**4.7**	**8.5**	**20.1**	**30.3**	**39.2**	**51.7**	**49.0**	**55.6**	**60.9**	**56.8**
0.1	0.2	0.5	1.0	1.7	3.4	4.6	7.6	12.4	19.2	26.4	24.0
0.6	0.7	1.4	2.5	5.9	6.6	7.9	12.2	8.5	10.3	9.5	8.2
0.3	0.3	0.5	0.6	2.0	3.6	6.6	9.6	8.7	7.9	6.8	9.8
0.5	0.6	1.0	0.6	1.3	1.9	1.5	3.8	3.4	4.6	8.6	9.3
0.1	0.4	1.2	3.7	9.2	14.8	18.6	18.5	15.9	13.6	9.5	5.5
9.1	**15.0**	**25.8**	**45.3**	**90.6**	**178.4**	**280.0**	**434.2**	**597.7**	**798.4**	**976.9**	**928.0**
0.5	0.4	1.6	3.1	6.5	12.9	19.1	31.1	32.9	40.0	45.5	43.7
0.6	1.5	2.2	4.1	8.7	17.7	22.5	33.6	51.0	68.8	100.0	93.4
0.5	0.7	1.6	1.7	2.8	6.9	10.4	13.0	14.5	13.9	22.3	19.7
3.1	4.6	9.4	14.5	27.3	55.2	96.6	160.1	249.6	342.0	438.7	429.3
3.4	4.8	5.8	12.1	23.9	44.7	70.8	107.3	132.4	175.3	181.4	165.5
0.1	0.1	0.4	0.6	1.2	1.7	2.1	3.4	1.4	5.3	1.4	6.0
0.7	1.0	1.4	3.2	5.7	12.6	14.8	16.5	20.0	32.1	40.0	30.6
0.0	0.6	0.6	0.5	2.5	5.3	6.6	11.3	14.2	15.5	20.5	19.7
0.1	1.0	2.6	4.2	10.5	18.6	33.7	50.7	72.6	88.3	106.8	97.2
0.2	0.3	0.3	1.3	1.4	2.9	3.5	7.3	9.2	17.2	20.5	22.9
0.9	**1.9**	**5.9**	**14.8**	**35.3**	**78.9**	**156.4**	**254.9**	**363.1**	**445.5**	**506.4**	**391.1**
0.2	0.2	0.6	0.6	1.7	2.0	2.1	3.8	3.0	3.0	5.0	7.1
0.1	0.1	0.5	1.2	2.2	5.7	12.8	15.0	18.6	24.1	20.9	16.4
0.5	1.6	4.5	12.7	31.2	70.5	141.4	235.3	339.4	417.4	478.7	363.8
0.1	0.0	0.3	0.2	0.2	0.6	0.1	0.8	2.1	1.0	1.8	3.8
0.8	**0.4**	**0.6**	**0.9**	**1.2**	**1.4**	**1.8**	**3.2**	**1.8**	**2.3**	**0.9**	**2.7**
8.3	**13.2**	**25.9**	**28.8**	**42.2**	**55.4**	**74.7**	**110.9**	**133.1**	**160.7**	**191.4**	**184.1**
1.6	**3.5**	**3.6**	**6.6**	**9.9**	**17.3**	**40.2**	**78.9**	**145.7**	**264.3**	**425.9**	**627.0**
0.0	**0.0**	**0.0**	**0.2**	**0.8**	**1.7**	**4.4**	**9.2**	**17.2**	**20.8**	**20.5**	**18.0**
0.2	**0.0**	**0.1**	**0.0**	**0.2**	**0.0**	**0.3**	**0.9**	**0.5**	**0.0**	**0.0**	**0.5**
1.2	**1.2**	**1.0**	**3.6**	**3.3**	**3.8**	**6.4**	**6.3**	**9.7**	**7.3**	**9.5**	**13.1**
0.0	**0.1**	**0.6**	**0.0**	**1.2**	**1.0**	**2.5**	**3.7**	**5.3**	**5.6**	**5.9**	**9.8**
32.0	**30.7**	**24.3**	**44.6**	**110.3**	**311.8**	**575.5**	**913.5**	**1035.5**	**1041.5**	**952.8**	**873.3**
0.0	0.3	4.2	27.3	97.2	301.6	569.1	905.4	1027.0	1027.9	934.6	858.6
31.8	29.8	19.5	15.7	10.6	7.5	2.9	3.4	2.5	2.3	1.4	3.8
0.2	0.6	0.6	1.5	2.5	2.7	3.6	4.7	6.0	11.2	16.8	10.9
3.8	**7.2**	**16.1**	**28.3**	**50.6**	**84.8**	**141.5**	**205.4**	**308.6**	**402.5**	**439.6**	**454.4**
2.7	4.4	9.3	14.5	28.7	39.1	55.4	71.9	96.1	100.9	70.5	62.8
1.2	2.8	6.9	13.8	21.9	45.7	86.1	133.5	212.6	301.6	369.1	391.6
0.2	**0.6**	**1.4**	**1.2**	**2.1**	**2.2**	**3.2**	**3.5**	**4.8**	**5.3**	**5.9**	**5.5**
11.1	**11.3**	**14.8**	**18.9**	**24.9**	**30.3**	**38.7**	**43.2**	**52.6**	**59.5**	**65.0**	**45.9**
2.7	**3.9**	**4.5**	**4.7**	**4.8**	**6.6**	**6.5**	**9.3**	**8.7**	**11.9**	**10.0**	**7.6**
2.7	**3.1**	**4.4**	**4.3**	**7.0**	**8.5**	**8.1**	**10.5**	**12.0**	**14.9**	**11.4**	**8.7**
0.1	**0.3**	**0.9**	**1.7**	**3.8**	**5.1**	**8.1**	**16.2**	**25.3**	**31.1**	**48.6**	**88.5**
12.9	**14.7**	**21.5**	**33.6**	**47.0**	**75.1**	**115.6**	**168.0**	**237.4**	**287.4**	**364.6**	**344.6**
3.2	3.6	3.0	4.1	2.6	3.8	4.7	4.3	5.3	4.0	2.3	3.8
4.3	5.8	9.3	12.6	19.3	27.6	45.7	70.2	88.0	101.9	123.2	107.6
0.1	0.0	0.4	0.6	0.6	2.7	1.9	5.5	7.4	10.6	13.6	6.6
0.5	0.9	2.2	4.2	6.6	11.6	18.4	24.6	39.5	49.3	68.6	66.1
4.9	4.4	6.7	12.1	18.0	29.4	44.9	63.5	97.2	121.7	156.8	160.6

Table 13b Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2011-2015

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	**All sites**	**18.9**	**9.7**	**14.3**	**28.9**	**42.9**	**77.9**
C00-14	**Mouth, pharynx**	**0.3**	**0.0**	**0.5**	**0.3**	**0.7**	**1.2**
C00	Lip	0.1	0.0	0.0	0.0	0.0	0.0
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	0.0
C07-08	Salivary glands	0.0	0.0	0.4	0.1	0.2	0.5
C09-14	Pharynx	0.1	0.0	0.0	0.0	0.2	0.2
C15-26	**Digestive organs**	**0.7**	**0.3**	**0.8**	**2.3**	**3.6**	**5.4**
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	0.0	0.1	0.1
C18	Colon	0.0	0.1	0.7	2.0	2.7	3.9
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	0.7	0.1	0.1	0.1	0.2	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	0.1
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.2
C30-34, C38	**Respiratory organs**	**0.1**	**0.1**	**0.0**	**0.3**	**0.6**	**0.7**
C30-31	Nose, sinuses	0.0	0.0	0.0	0.1	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	0.1	0.0	0.1	0.4	0.5
C38	Heart, mediastinum and pleura	0.0	0.0	0.0	0.0	0.0	0.0
C40-41	**Bone**	**0.4**	**0.4**	**0.4**	**0.9**	**1.0**	**1.0**
C43	**Melanoma of the skin**	**0.1**	**0.1**	**0.4**	**2.2**	**5.8**	**11.2**
C44	**Skin, non-melanoma**	**0.0**	**0.4**	**0.0**	**0.8**	**0.6**	**1.1**
C45	**Mesothelioma**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**
C47	**Autonomic nervous system**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**
C48-49	**Soft tissues**	**0.7**	**0.3**	**0.4**	**0.5**	**1.0**	**1.0**
C50	**Breast**	**0.0**	**0.0**	**0.0**	**0.1**	**1.9**	**10.9**
C51-58	**Female genital organs**	**0.1**	**0.0**	**0.4**	**1.9**	**4.1**	**17.9**
C53	Cervix uteri	0.0	0.0	0.0	0.3	2.6	14.6
C54	Corpus uteri	0.0	0.0	0.0	0.1	0.2	0.5
C55	Uterus, other	0.0	0.0	0.0	0.0	0.0	0.0
C56, C57.0-4	Ovary etc.	0.1	0.0	0.3	1.5	1.1	2.1
C51-52, C57.7-9	Other female genital	0.0	0.0	0.1	0.0	0.0	0.1
C58	Placenta	0.0	0.0	0.0	0.0	0.2	0.6
C64-68	**Urinary organs**	**2.8**	**0.1**	**0.0**	**0.1**	**1.0**	**1.0**
C64	Kidney excl. renal pelvis	2.6	0.1	0.0	0.1	0.4	0.6
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	0.1	0.0	0.0	0.0	0.6	0.4
C69	**Eye**	**0.8**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**
C70-72, D32-33	**Central nervous system**	**3.7**	**3.8**	**3.6**	**4.3**	**5.8**	**7.1**
C73	**Thyroid gland**	**0.0**	**0.3**	**0.9**	**1.8**	**4.4**	**6.2**
C37, C74-75	**Other endocrine glands**	**0.8**	**0.3**	**0.4**	**2.5**	**4.5**	**4.2**
C39, C76, C80	**Other or unspecified**	**0.0**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**
C81-96	**Lymphoid and haematopoietic tissue**	**7.7**	**3.5**	**6.5**	**10.8**	**7.7**	**8.7**
C81	Hodgkin lymphoma	0.0	0.0	1.6	5.3	4.3	3.6
C82-86, C96	Non-Hodgkin lymphoma	0.8	0.5	1.2	1.4	1.2	2.1
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.1	0.0	0.0
C91-95, D45-47	Leukaemia	6.9	2.9	3.7	3.9	2.2	3.0

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+
117.7	**197.5**	**290.3**	**427.0**	**615.8**	**813.5**	**1119.2**	**1496.2**	**1728.2**	**2073.9**	**2316.9**	**2339.2**
1.5	**2.5**	**3.1**	**5.1**	**9.2**	**13.3**	**17.7**	**19.9**	**20.5**	**27.3**	**31.8**	**38.5**
0.1	0.4	0.3	0.5	1.0	2.1	4.1	3.6	6.1	7.0	11.1	14.5
0.4	0.5	0.3	1.7	2.4	3.0	4.8	4.5	4.2	5.9	7.9	7.0
0.0	0.2	0.8	0.3	1.6	2.1	2.4	4.8	4.9	5.7	7.3	10.3
1.0	1.1	0.3	0.8	1.9	1.2	1.4	2.0	1.1	3.8	3.2	4.1
0.0	0.4	1.3	1.8	2.4	5.0	5.1	5.0	4.2	4.9	2.2	2.6
8.8	**17.6**	**23.6**	**45.2**	**80.3**	**121.6**	**192.0**	**309.0**	**441.3**	**593.4**	**709.8**	**680.4**
0.0	0.0	0.4	1.0	1.2	2.9	3.9	10.1	10.5	13.0	11.8	16.3
0.1	2.4	1.8	3.6	6.6	5.1	9.8	16.6	22.6	29.2	43.6	51.4
0.4	0.5	0.9	1.6	2.5	3.7	5.8	6.8	7.6	10.3	14.3	9.8
4.9	6.9	8.9	19.2	33.4	51.7	83.0	139.6	216.4	307.4	381.0	337.1
2.0	4.0	6.6	11.3	19.9	30.6	44.2	59.2	81.4	94.6	102.1	96.0
0.0	0.6	1.4	2.1	2.7	3.5	3.7	6.6	5.3	8.1	8.9	5.9
0.2	0.6	0.2	1.5	1.7	3.5	5.6	7.7	13.1	16.0	19.7	19.4
0.2	0.6	0.4	1.0	2.5	3.7	6.3	11.2	15.0	17.8	21.6	22.2
1.0	1.7	2.3	3.1	8.1	14.9	24.6	43.6	59.5	81.9	89.4	96.5
0.0	0.4	0.6	0.8	1.6	2.0	5.1	7.5	9.9	15.1	17.5	25.8
1.6	**2.5**	**5.5**	**17.3**	**36.2**	**76.7**	**127.7**	**203.3**	**264.9**	**272.5**	**253.8**	**151.8**
0.2	0.4	0.1	0.5	0.7	1.3	1.5	0.9	3.6	2.7	4.5	2.8
0.0	0.4	0.3	0.3	1.0	1.8	1.3	3.0	1.5	3.5	2.9	1.8
1.3	1.8	5.1	16.4	34.2	73.4	124.2	198.5	259.4	266.0	245.8	145.3
0.0	0.0	0.0	0.1	0.2	0.1	0.7	0.9	0.4	0.3	0.6	1.8
1.2	**0.4**	**0.9**	**0.9**	**0.1**	**0.4**	**1.7**	**1.5**	**1.3**	**1.1**	**2.5**	**1.8**
13.3	**25.4**	**38.0**	**44.8**	**45.9**	**59.3**	**64.6**	**85.3**	**95.1**	**88.1**	**108.8**	**119.0**
1.3	**1.8**	**4.5**	**5.9**	**9.0**	**19.0**	**30.2**	**54.8**	**91.5**	**154.9**	**219.7**	**386.9**
0.0	**0.0**	**0.0**	**0.1**	**0.6**	**0.1**	**1.3**	**1.8**	**1.9**	**3.5**	**2.5**	**1.3**
0.2	**0.1**	**0.4**	**0.0**	**0.0**	**0.0**	**0.6**	**0.3**	**0.4**	**0.0**	**0.0**	**0.3**
0.9	**1.0**	**1.9**	**2.3**	**3.4**	**5.1**	**9.4**	**8.5**	**9.5**	**7.8**	**11.4**	**8.0**
23.2	**59.1**	**109.0**	**171.4**	**238.3**	**248.1**	**317.2**	**348.4**	**257.3**	**292.8**	**286.5**	**286.0**
27.1	**38.1**	**43.3**	**55.1**	**83.0**	**113.6**	**142.9**	**175.1**	**190.7**	**207.6**	**193.7**	**181.5**
21.6	27.6	25.3	23.4	15.1	14.7	13.4	14.3	13.7	12.7	14.0	13.9
2.1	3.5	7.4	14.9	33.6	55.9	75.2	95.1	109.1	118.7	102.4	73.3
0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.6	0.8	0.5	2.5	3.6
2.8	5.7	8.1	14.0	29.8	36.1	46.1	55.5	55.7	60.3	54.4	56.8
0.4	1.0	2.2	2.6	4.2	6.7	7.9	9.5	11.4	15.4	20.4	33.8
0.2	0.4	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.2	**3.8**	**7.2**	**9.4**	**20.2**	**34.4**	**49.9**	**77.9**	**98.3**	**129.5**	**148.8**	**128.5**
0.7	2.5	5.4	5.1	11.3	12.6	21.5	30.6	40.1	42.7	42.0	29.2
0.5	1.3	1.8	4.2	8.8	21.9	28.4	47.2	58.2	86.8	106.8	99.4
1.0	**0.2**	**0.8**	**0.9**	**1.9**	**2.6**	**2.4**	**6.9**	**4.9**	**3.8**	**5.1**	**2.8**
10.1	**13.2**	**19.7**	**24.4**	**29.1**	**34.6**	**46.7**	**50.0**	**51.0**	**48.4**	**55.6**	**49.3**
8.6	**13.3**	**11.8**	**14.9**	**15.8**	**14.1**	**16.0**	**16.0**	**18.8**	**14.3**	**12.1**	**10.3**
5.3	**5.4**	**5.4**	**6.4**	**6.3**	**6.3**	**7.0**	**7.7**	**7.0**	**8.9**	**6.7**	**5.4**
0.4	**0.7**	**0.6**	**1.0**	**2.6**	**5.0**	**7.3**	**9.7**	**14.8**	**30.0**	**45.2**	**80.8**
12.0	**12.5**	**14.8**	**21.8**	**33.7**	**59.3**	**84.5**	**120.2**	**159.0**	**189.8**	**222.9**	**206.5**
3.4	3.5	2.0	2.3	1.0	1.3	2.3	2.6	3.2	3.5	3.8	1.0
3.8	4.4	5.2	8.3	15.8	25.9	35.9	49.8	64.3	72.5	77.0	64.3
0.0	0.0	0.0	0.7	0.6	1.2	2.8	3.6	4.6	5.1	5.7	3.9
0.2	0.5	1.5	1.4	4.6	9.9	12.9	18.4	22.4	40.6	40.1	37.4
4.5	4.2	6.1	9.1	11.7	20.9	30.7	45.7	64.5	68.1	96.4	99.9

Table 14a Average annual number of new cases by primary site and five-year period, 1956-2015

ICD10	Site	1956-60	1961-65	1966-70	1971-75
C00-96	**All sites**	**3971**	**4610**	**5400**	**6294**
C00-14	**Mouth, pharynx**	**189**	**187**	**203**	**245**
C00	Lip	101	93	103	121
C01-02	Tongue	18	21	21	25
C03-06	Mouth, other	22	21	32	29
C07-08	Salivary glands	12	13	14	13
C09-14	Pharynx	35	39	32	56
C15-26	**Digestive organs**	**1642**	**1725**	**1864**	**1950**
C15	Oesophagus	74	80	77	84
C16	Stomach	851	794	769	662
C17	Small intestine	10	11	18	16
C18	Colon	236	290	357	402
C19-20	Rectum, rectosigmoid	152	182	250	310
C21	Anus	3	7	6	6
C22	Liver	19	23	36	55
C23-24	Gallbladder, bile ducts	17	22	27	28
C25	Pancreas	143	176	218	250
C26	Other digestive organs	137	140	106	140
C30-34, C38	**Respiratory organs**	**327**	**451**	**633**	**787**
C30-31	Nose, sinuses	20	22	21	22
C32	Larynx, epiglottis	32	46	67	70
C33-34	Lung, trachea	263	373	532	678
C38	Heart, mediastinum and pleura	12	11	13	17
C40-41	**Bone**	**13**	**16**	**18**	**22**
C43	**Melanoma of the skin**	**51**	**76**	**103**	**157**
C44	**Skin, non-melanoma**	**84**	**73**	**90**	**172**
C45	**Mesothelioma**	**0**	**3**	**3**	**8**
C47	**Autonomic nervous system**	**20**	**14**	**16**	**11**
C48-49	**Soft tissues**	**23**	**28**	**39**	**48**
C50	**Breast**	**7**	**8**	**9**	**9**
C60-63	**Male genital organs**	**727**	**931**	**1108**	**1334**
C61	Prostate	654	840	1012	1226
C62	Testis	55	68	75	84
C60, C63	Other male genital	18	23	21	23
C64-68	**Urinary organs**	**304**	**410**	**499**	**642**
C64	Kidney excl. renal pelvis	95	124	154	174
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	209	286	345	468
C69	**Eye**	**20**	**18**	**23**	**18**
C70-72, D32-33	**Central nervous system**	**120**	**136**	**145**	**161**
C73	**Thyroid gland**	**20**	**23**	**35**	**34**
C37, C74-75	**Other endocrine glands**	**5**	**11**	**16**	**26**
C39, C76, C80	**Other or unspecified**	**54**	**85**	**125**	**146**
C81-96	**Lymphoid and haematopoietic tissue**	**362**	**416**	**473**	**525**
C81	Hodgkin lymphoma	44	52	59	62
C82-86, C96	Non-Hodgkin lymphoma	92	99	122	131
C88	Malignant immunoproliferative diseases	0	0	2	6
C90	Multiple myeloma	72	83	90	117
C91-95, D45-47	Leukaemia	154	182	201	207

MALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
7424	**8441**	**9155**	**10257**	**11239**	**12592**	**14673**	**16924**
239	**245**	**253**	**253**	**267**	**251**	**295**	**366**
116	98	94	74	66	48	69	71
29	35	35	41	47	50	60	79
34	45	46	54	51	45	51	54
14	14	15	21	22	21	20	31
45	52	62	63	81	87	96	130
2151	**2357**	**2364**	**2467**	**2518**	**2714**	**2942**	**3375**
87	87	98	107	118	133	155	199
602	588	528	460	399	342	300	300
19	31	25	32	40	53	70	94
521	648	739	843	918	1022	1156	1325
428	507	525	566	580	655	686	766
9	11	10	17	18	19	22	22
50	65	58	61	68	80	102	151
39	43	49	54	57	66	69	78
264	299	291	281	274	308	338	377
131	78	42	47	44	36	45	62
1007	**1191**	**1291**	**1365**	**1430**	**1538**	**1641**	**1742**
24	22	24	20	22	23	22	27
89	104	107	103	106	106	101	101
874	1051	1153	1226	1287	1395	1508	1606
19	15	7	15	14	14	11	9
20	**24**	**21**	**22**	**21**	**25**	**26**	**28**
205	**253**	**351**	**435**	**454**	**505**	**652**	**932**
224	**276**	**368**	**473**	**548**	**641**	**785**	**942**
19	**25**	**38**	**39**	**55**	**67**	**66**	**66**
9	**8**	**8**	**7**	**6**	**5**	**7**	**5**
57	**47**	**43**	**47**	**49**	**54**	**60**	**70**
10	**13**	**12**	**13**	**15**	**15**	**16**	**28**
1608	**1861**	**2046**	**2571**	**3143**	**3619**	**4612**	**5310**
1475	1690	1856	2344	2880	3329	4281	4951
107	142	165	197	232	249	286	310
26	29	25	31	31	40	45	49
792	**929**	**1000**	**1098**	**1097**	**1231**	**1380**	**1678**
199	244	252	268	285	348	417	546
594	685	748	829	812	883	963	1132
26	**25**	**24**	**26**	**30**	**31**	**34**	**36**
189	**220**	**244**	**264**	**345**	**430**	**486**	**489**
43	**45**	**49**	**45**	**47**	**56**	**72**	**98**
27	**43**	**42**	**53**	**66**	**88**	**126**	**118**
182	**221**	**270**	**291**	**289**	**228**	**172**	**149**
616	**659**	**731**	**787**	**860**	**1095**	**1299**	**1492**
67	56	50	50	59	67	77	84
161	204	268	307	356	386	481	543
7	10	8	16	20	32	33	39
149	152	162	160	162	182	200	221
232	238	244	254	264	428	508	604

Table 14b Average annual number of new cases by primary site and five-year period, 1956-2015

ICD10	Site	1956-60	1961-65	1966-70	1971-75
C00-96	**All sites**	**4139**	**4576**	**5306**	**6003**
C00-14	**Mouth, pharynx**	**60**	**67**	**74**	**78**
C00	Lip	8	9	10	10
C01-02	Tongue	10	13	17	16
C03-06	Mouth, other	11	13	17	17
C07-08	Salivary glands	8	14	14	12
C09-14	Pharynx	23	19	17	22
C15-26	**Digestive organs**	**1384**	**1435**	**1579**	**1689**
C15	Oesophagus	23	29	30	30
C16	Stomach	595	538	501	423
C17	Small intestine	10	11	13	19
C18	Colon	273	337	427	494
C19-20	Rectum, rectosigmoid	121	130	201	253
C21	Anus	6	8	13	12
C22	Liver	11	14	19	30
C23-24	Gallbladder, bile ducts	46	52	61	49
C25	Pancreas	97	119	156	183
C26	Other digestive organs	202	198	158	195
C30-34, C38	**Respiratory organs**	**89**	**108**	**156**	**194**
C30-31	Nose, sinuses	13	13	12	14
C32	Larynx, epiglottis	2	4	6	7
C33-34	Lung, trachea	70	84	131	165
C38	Heart, mediastinum and pleura	4	7	6	8
C40-41	**Bone**	**9**	**11**	**12**	**13**
C43	**Melanoma of the skin**	**55**	**88**	**120**	**178**
C44	**Skin, non-melanoma**	**53**	**46**	**49**	**107**
C45	**Mesothelioma**	**0**	**1**	**1**	**2**
C47	**Autonomic nervous system**	**17**	**11**	**14**	**10**
C48-49	**Soft tissues**	**17**	**26**	**29**	**39**
C50	**Breast**	**921**	**1045**	**1198**	**1360**
C51-58	**Female genital organs**	**862**	**949**	**1098**	**1214**
C53	Cervix uteri	341	357	395	435
C54	Corpus uteri	175	216	259	310
C55	Uterus, other	23	21	14	9
C56, C57.0-4	Ovary etc.	262	290	365	387
C51-52, C57.7-9	Other female genital	59	63	60	69
C58	Placenta	3	2	4	3
C64-68	**Urinary organs**	**196**	**219**	**261**	**315**
C64	Kidney excl. renal pelvis	75	89	110	116
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	121	129	151	199
C69	**Eye**	**15**	**18**	**17**	**18**
C70-72, D32-33	**Central nervous system**	**105**	**120**	**130**	**140**
C73	**Thyroid gland**	**53**	**58**	**85**	**107**
C37, C74-75	**Other endocrine glands**	**7**	**7**	**10**	**16**
C39, C76, C80	**Other or unspecified**	**47**	**70**	**97**	**103**
C81-96	**Lymphoid and haematopoietic tissue**	**248**	**297**	**377**	**421**
C81	Hodgkin lymphoma	31	37	45	41
C82-86, C96	Non-Hodgkin lymphoma	57	70	101	106
C88	Malignant immunoproliferative diseases	0	0	0	4
C90	Multiple myeloma	37	58	77	106
C91-95, D45-47	Leukaemia	122	132	153	164

FEMALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
7000	**7721**	**8409**	**9345**	**10374**	**11655**	**12809**	**14359**
88	**100**	**111**	**120**	**130**	**142**	**182**	**202**
16	19	26	28	26	29	45	47
18	22	24	22	27	28	32	46
21	24	28	35	33	35	43	40
13	14	13	17	20	20	24	26
21	19	19	19	25	30	38	43
1984	**2141**	**2203**	**2340**	**2454**	**2550**	**2743**	**3015**
31	35	36	42	47	54	56	68
411	390	353	306	254	228	209	179
19	28	28	31	40	49	58	64
656	771	871	986	1097	1178	1291	1454
339	395	414	461	471	491	517	549
20	23	26	38	35	44	45	52
33	44	41	44	44	47	61	85
70	83	78	72	83	74	84	96
218	265	286	303	319	335	363	391
188	109	70	58	64	50	58	78
242	**329**	**451**	**588**	**744**	**922**	**1192**	**1407**
13	12	16	17	15	17	20	20
10	12	11	18	20	18	18	19
213	301	420	548	701	880	1147	1362
6	5	4	6	7	7	7	5
14	**13**	**15**	**17**	**20**	**18**	**24**	**22**
259	**336**	**430**	**485**	**502**	**555**	**689**	**930**
146	**209**	**281**	**381**	**461**	**550**	**688**	**827**
3	**4**	**6**	**10**	**9**	**10**	**14**	**13**
7	**5**	**9**	**6**	**6**	**4**	**6**	**5**
44	**47**	**46**	**46**	**56**	**75**	**89**	**82**
1539	**1659**	**1787**	**2008**	**2418**	**2728**	**2754**	**3194**
1287	**1278**	**1302**	**1380**	**1410**	**1524**	**1588**	**1663**
410	363	336	353	317	297	299	324
369	382	408	454	505	634	705	735
7	6	6	8	9	9	7	8
416	443	460	468	483	478	471	480
82	79	88	92	93	102	104	113
2	4	5	5	4	4	2	3
370	**405**	**448**	**476**	**496**	**553**	**598**	**687**
137	149	179	188	191	211	240	257
233	257	270	288	305	342	358	430
23	**21**	**23**	**30**	**28**	**32**	**32**	**39**
185	**212**	**253**	**298**	**410**	**566**	**636**	**552**
129	**141**	**135**	**138**	**122**	**150**	**174**	**241**
29	**48**	**37**	**49**	**60**	**95**	**134**	**121**
162	**220**	**270**	**311**	**311**	**288**	**210**	**167**
490	**551**	**603**	**662**	**738**	**893**	**1056**	**1192**
45	37	37	31	44	45	50	62
140	191	229	278	313	345	390	444
3	6	7	14	11	19	23	28
124	129	138	138	143	159	165	177
177	189	192	202	227	324	428	481

Table 15a Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and five-year period, 1956-2015

ICD10	Site	1956-60	1961-65	1966-70	1971-75
C00-96	**All sites**	**332.2**	**355.0**	**385.6**	**420.4**
C00-14	**Mouth, pharynx**	**16.1**	**14.4**	**14.7**	**16.2**
C00	Lip	8.8	7.4	7.9	8.2
C01-02	Tongue	1.5	1.6	1.5	1.7
C03-06	Mouth, other	1.8	1.9	2.3	1.9
C07-08	Salivary glands	0.9	0.9	0.9	0.9
C09-14	Pharynx	3.0	2.7	2.2	3.5
C15-26	**Digestive organs**	**140.9**	**136.4**	**136.0**	**133.2**
C15	Oesophagus	6.7	6.5	5.6	5.7
C16	Stomach	73.4	63.2	56.9	45.5
C17	Small intestine	0.8	0.8	1.2	1.0
C18	Colon	20.2	23.1	25.9	27.7
C19-20	Rectum, rectosigmoid	13.1	14.2	18.1	20.8
C21	Anus	0.3	0.6	0.4	0.4
C22	Liver	1.4	1.6	2.4	3.4
C23-24	Gallbladder, bile ducts	1.3	1.6	2.0	1.9
C25	Pancreas	11.6	12.9	15.3	16.3
C26	Other digestive organs	12.2	11.9	8.0	10.5
C30-34, C38	**Respiratory organs**	**24.1**	**31.0**	**40.5**	**47.6**
C30-31	Nose, sinuses	1.6	1.7	1.4	1.4
C32	Larynx, epiglottis	2.4	3.2	4.3	4.2
C33-34	Lung, trachea	19.2	25.4	34.0	41.0
C38	Heart, mediastinum and pleura	0.9	0.8	0.8	1.0
C40-41	**Bone**	**0.8**	**0.9**	**1.0**	**1.2**
C43	**Melanoma of the skin**	**3.7**	**5.1**	**6.7**	**9.6**
C44	**Skin, non-melanoma**	**8.2**	**6.7**	**7.8**	**14.2**
C45	**Mesothelioma**	**0.0**	**0.2**	**0.2**	**0.4**
C47	**Autonomic nervous system**	**1.4**	**0.8**	**0.9**	**0.6**
C48-49	**Soft tissues**	**1.8**	**1.9**	**2.6**	**3.0**
C50	**Breast**	**0.6**	**0.7**	**0.7**	**0.6**
C60-63	**Male genital organs**	**68.7**	**80.1**	**87.3**	**96.3**
C61	Prostate	63.8	74.0	81.2	90.0
C62	Testis	3.4	4.1	4.4	4.6
C60, C63	Other male genital	1.6	2.0	1.7	1.6
C64-68	**Urinary organs**	**24.5**	**30.8**	**34.3**	**41.5**
C64	Kidney excl. renal pelvis	7.1	8.8	10.3	10.7
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	17.4	22.0	24.0	30.8
C69	**Eye**	**1.4**	**1.2**	**1.4**	**1.0**
C70-72, D32-33	**Central nervous system**	**7.4**	**7.9**	**8.2**	**8.9**
C73	**Thyroid gland**	**1.5**	**1.6**	**2.3**	**2.2**
C37, C74-75	**Other endocrine glands**	**0.3**	**0.6**	**0.9**	**1.4**
C39, C76, C80	**Other or unspecified**	**4.4**	**6.3**	**9.1**	**10.0**
C81-96	**Lymphoid and haematopoietic tissue**	**26.3**	**28.2**	**31.0**	**32.5**
C81	Hodgkin lymphoma	3.0	3.2	3.5	3.6
C82-86, C96	Non-Hodgkin lymphoma	6.6	6.7	7.9	8.1
C88	Malignant immunoproliferative diseases	0.0	0.0	0.1	0.4
C90	Multiple myeloma	5.7	6.0	6.4	7.8
C91-95, D45-47	Leukaemia	11.0	12.3	13.0	12.7

MALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
468.2	**506.3**	**531.3**	**578.9**	**616.5**	**663.1**	**708.4**	**730.3**
15.0	**14.6**	**14.8**	**14.3**	**14.5**	**12.8**	**13.8**	**15.3**
7.4	6.1	5.6	4.3	3.7	2.6	3.4	3.2
1.7	2.0	2.0	2.3	2.5	2.5	2.8	3.2
2.2	2.7	2.8	3.0	2.8	2.3	2.4	2.3
0.9	0.8	0.9	1.2	1.2	1.1	1.0	1.4
2.7	3.0	3.5	3.6	4.3	4.3	4.3	5.2
139.0	**144.5**	**139.5**	**141.8**	**139.8**	**144.6**	**144.0**	**147.4**
5.5	5.2	5.7	6.2	6.6	7.1	7.5	8.5
39.1	36.1	31.4	26.6	22.3	18.5	14.8	13.2
1.2	1.9	1.4	1.8	2.2	2.7	3.3	4.0
33.9	39.5	43.8	48.5	50.9	54.6	57.1	58.7
27.4	30.6	30.6	32.3	32.1	34.7	33.1	32.9
0.5	0.7	0.6	1.0	1.0	1.0	1.0	0.9
3.1	3.8	3.4	3.3	3.6	4.1	4.9	6.5
2.5	2.6	2.8	3.1	3.3	3.4	3.4	3.4
16.5	18.5	17.0	16.1	15.2	16.4	16.6	16.4
9.1	5.5	2.8	3.0	2.7	2.0	2.3	2.7
58.8	**67.8**	**72.3**	**75.7**	**77.4**	**80.3**	**79.1**	**75.8**
1.4	1.3	1.4	1.2	1.1	1.2	1.0	1.1
5.2	5.9	6.0	5.8	5.8	5.5	4.8	4.3
51.0	59.7	64.5	68.0	69.7	72.9	72.8	70.0
1.2	0.9	0.4	0.8	0.8	0.7	0.5	0.4
1.1	**1.2**	**1.0**	**1.1**	**1.0**	**1.2**	**1.1**	**1.1**
12.1	**14.4**	**19.5**	**23.4**	**23.4**	**25.2**	**30.3**	**39.5**
16.1	**18.5**	**23.4**	**28.3**	**32.1**	**35.7**	**40.9**	**44.6**
1.1	**1.4**	**2.2**	**2.2**	**3.0**	**3.5**	**3.3**	**2.9**
0.5	**0.4**	**0.4**	**0.3**	**0.3**	**0.2**	**0.3**	**0.2**
3.5	**2.7**	**2.3**	**2.6**	**2.5**	**2.6**	**2.8**	**2.9**
0.7	**0.9**	**0.7**	**0.7**	**0.9**	**0.8**	**0.8**	**1.2**
107.0	**114.4**	**120.1**	**146.1**	**175.2**	**193.6**	**223.0**	**225.3**
99.8	105.8	111.2	135.7	163.5	180.9	209.0	211.2
5.5	6.8	7.4	8.6	9.9	10.6	11.9	12.0
1.7	1.8	1.5	1.8	1.7	2.1	2.1	2.1
48.7	**55.1**	**58.4**	**62.3**	**60.4**	**64.8**	**67.0**	**73.1**
11.7	14.2	14.5	14.9	15.3	17.7	19.5	22.7
37.0	40.9	44.0	47.4	45.1	47.1	47.5	50.4
1.5	**1.4**	**1.3**	**1.4**	**1.6**	**1.6**	**1.6**	**1.5**
10.3	**11.8**	**13.0**	**13.7**	**17.1**	**20.5**	**21.8**	**20.0**
2.5	**2.5**	**2.6**	**2.4**	**2.3**	**2.6**	**3.2**	**4.0**
1.4	**2.3**	**2.2**	**2.7**	**3.2**	**4.2**	**5.5**	**4.8**
11.4	**13.8**	**16.3**	**17.1**	**16.2**	**12.6**	**8.8**	**6.9**
37.5	**38.7**	**41.2**	**43.0**	**45.7**	**56.1**	**61.2**	**63.9**
3.6	2.9	2.4	2.3	2.7	3.1	3.3	3.3
9.7	11.8	14.9	16.5	18.8	19.5	22.5	23.1
0.4	0.6	0.5	0.9	1.1	1.7	1.6	1.7
9.5	9.2	9.7	9.1	9.0	9.6	9.6	9.7
14.3	14.1	13.7	14.1	14.1	22.3	24.2	26.1

Table 15b Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and five-year period, 1956-2015

ICD10	Site	1956-60	1961-65	1966-70	1971-75
C00-96	**All sites**	**285.5**	**291.2**	**310.3**	**328.7**
C00-14	**Mouth, pharynx**	**4.5**	**4.5**	**4.5**	**4.3**
C00	Lip	0.6	0.6	0.6	0.6
C01-02	Tongue	0.8	0.9	1.0	0.9
C03-06	Mouth, other	1.0	0.9	1.0	0.9
C07-08	Salivary glands	0.6	0.9	0.8	0.7
C09-14	Pharynx	1.6	1.2	1.0	1.2
C15-26	**Digestive organs**	**104.5**	**98.3**	**96.2**	**93.2**
C15	Oesophagus	1.8	2.0	1.9	1.6
C16	Stomach	45.8	37.7	30.9	23.5
C17	Small intestine	0.7	0.6	0.7	1.0
C18	Colon	20.2	22.7	25.6	27.1
C19-20	Rectum, rectosigmoid	8.7	8.5	11.9	13.8
C21	Anus	0.5	0.5	0.8	0.7
C22	Liver	0.8	0.9	1.1	1.6
C23-24	Gallbladder, bile ducts	3.3	3.4	3.6	2.7
C25	Pancreas	6.9	7.6	9.2	9.8
C26	Other digestive organs	15.9	14.3	10.3	11.4
C30-34, C38	**Respiratory organs**	**6.2**	**6.9**	**9.0**	**10.3**
C30-31	Nose, sinuses	1.1	0.9	0.8	0.8
C32	Larynx, epiglottis	0.1	0.3	0.3	0.4
C33-34	Lung, trachea	4.8	5.3	7.6	8.7
C38	Heart, mediastinum and pleura	0.3	0.5	0.3	0.4
C40-41	**Bone**	**0.5**	**0.6**	**0.6**	**0.7**
C43	**Melanoma of the skin**	**3.7**	**5.3**	**7.1**	**10.0**
C44	**Skin, non-melanoma**	**4.1**	**3.4**	**3.2**	**6.4**
C45	**Mesothelioma**	**0.0**	**0.1**	**0.1**	**0.1**
C47	**Autonomic nervous system**	**1.1**	**0.6**	**0.7**	**0.5**
C48-49	**Soft tissues**	**1.1**	**1.7**	**1.6**	**2.2**
C50	**Breast**	**60.6**	**64.8**	**69.0**	**75.0**
C51-58	**Female genital organs**	**54.9**	**56.9**	**62.4**	**66.2**
C53	Cervix uteri	20.6	21.1	22.8	24.7
C54	Corpus uteri	11.1	12.7	14.4	16.4
C55	Uterus, other	1.8	1.4	1.0	0.5
C56, C57.0-4	Ovary etc.	16.8	17.4	20.4	20.7
C51-52, C57.7-9	Other female genital	4.3	4.1	3.5	3.7
C58	Placenta	0.2	0.1	0.2	0.1
C64-68	**Urinary organs**	**13.9**	**14.0**	**15.2**	**16.8**
C64	Kidney excl. renal pelvis	5.0	5.4	6.2	6.1
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	8.8	8.6	9.0	10.7
C69	**Eye**	**0.9**	**1.0**	**1.0**	**0.9**
C70-72, D32-33	**Central nervous system**	**6.3**	**6.9**	**7.1**	**7.4**
C73	**Thyroid gland**	**3.6**	**3.6**	**4.9**	**5.9**
C37, C74-75	**Other endocrine glands**	**0.4**	**0.4**	**0.6**	**0.8**
C39, C76, C80	**Other or unspecified**	**3.3**	**4.4**	**5.8**	**5.7**
C81-96	**Lymphoid and haematopoietic tissue**	**16.0**	**17.9**	**21.3**	**22.3**
C81	Hodgkin lymphoma	1.9	2.2	2.5	2.2
C82-86, C96	Non-Hodgkin lymphoma	3.7	4.3	5.8	5.7
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.2
C90	Multiple myeloma	2.6	3.6	4.5	5.5
C91-95, D45-47	Leukaemia	7.8	7.7	8.6	8.7

FEMALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
361.1	**374.9**	**389.3**	**418.8**	**452.5**	**490.3**	**511.8**	**537.1**
4.6	**4.8**	**5.2**	**5.4**	**5.7**	**6.0**	**7.3**	**7.5**
0.8	1.0	1.2	1.2	1.1	1.1	1.7	1.7
1.0	1.1	1.1	1.0	1.2	1.2	1.3	1.7
1.1	1.1	1.3	1.5	1.4	1.5	1.7	1.5
0.7	0.7	0.6	0.8	0.9	0.8	1.0	1.0
1.0	0.9	1.0	0.8	1.2	1.3	1.6	1.7
100.3	**100.0**	**96.8**	**99.3**	**100.7**	**102.0**	**105.2**	**109.5**
1.6	1.6	1.6	1.8	1.9	2.2	2.1	2.5
20.8	18.1	15.3	12.7	10.2	9.0	7.8	6.4
0.9	1.3	1.3	1.4	1.7	2.1	2.3	2.4
33.0	36.0	38.4	41.8	45.1	47.0	49.3	52.5
17.2	18.5	18.3	20.1	19.8	20.1	20.4	20.3
1.0	1.2	1.3	1.8	1.5	1.8	1.8	2.0
1.7	2.1	1.8	1.9	1.9	1.9	2.3	3.1
3.4	3.8	3.4	3.0	3.3	2.9	3.2	3.5
10.7	12.2	12.3	12.6	12.7	13.2	13.8	14.1
10.0	5.2	3.1	2.4	2.4	1.9	2.1	2.8
12.1	**15.8**	**21.1**	**27.2**	**34.0**	**40.1**	**48.5**	**52.8**
0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.7
0.5	0.5	0.5	0.8	0.9	0.8	0.7	0.7
10.7	14.5	19.7	25.4	32.1	38.4	46.7	51.1
0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2
0.7	**0.6**	**0.7**	**0.8**	**0.9**	**0.8**	**1.0**	**0.9**
14.0	**17.2**	**21.1**	**22.8**	**22.5**	**24.0**	**28.2**	**35.5**
8.0	**10.0**	**12.3**	**15.8**	**18.1**	**20.7**	**24.7**	**28.2**
0.1	**0.2**	**0.3**	**0.4**	**0.4**	**0.4**	**0.6**	**0.5**
0.3	**0.3**	**0.4**	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**
2.2	**2.2**	**2.2**	**2.1**	**2.4**	**3.3**	**3.7**	**3.1**
81.1	**83.3**	**85.8**	**93.6**	**111.5**	**120.8**	**114.2**	**123.3**
67.7	**64.6**	**63.3**	**64.9**	**63.9**	**65.5**	**65.0**	**63.5**
22.3	18.6	16.5	16.6	14.4	12.8	12.4	12.8
19.1	19.4	20.0	21.7	23.4	27.6	29.1	27.9
0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3
21.5	22.3	22.4	22.1	21.8	20.6	19.2	18.3
4.3	3.8	3.9	4.0	3.8	4.1	4.0	4.1
0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1
18.4	**18.8**	**19.9**	**20.3**	**20.7**	**22.4**	**23.5**	**25.2**
6.8	7.0	8.1	8.1	8.1	8.7	9.6	9.7
11.6	11.9	11.9	12.2	12.5	13.7	13.8	15.5
1.1	**1.1**	**1.0**	**1.4**	**1.2**	**1.3**	**1.3**	**1.5**
9.5	**10.5**	**12.2**	**14.0**	**18.3**	**24.7**	**26.1**	**21.3**
6.9	**7.0**	**6.4**	**6.4**	**5.4**	**6.4**	**7.3**	**9.5**
1.5	**2.4**	**1.8**	**2.3**	**2.7**	**4.2**	**5.7**	**4.8**
8.2	**10.2**	**11.8**	**13.0**	**12.5**	**10.8**	**7.6**	**5.7**
24.5	**25.7**	**27.0**	**28.8**	**31.3**	**36.6**	**41.9**	**44.3**
2.2	1.7	1.6	1.4	1.9	1.9	2.1	2.5
7.1	9.1	10.5	12.4	13.6	14.5	15.7	16.6
0.2	0.3	0.3	0.6	0.4	0.8	0.9	1.0
6.1	6.0	6.0	5.7	5.9	6.4	6.4	6.5
8.9	8.7	8.5	8.7	9.5	13.0	16.8	17.7

Table 16a Average annual number of new cases by primary site and county, 2011-2015

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	**All sites**	**16924**	**1083**	**1791**	**1506**	**729**	**685**	**968**
C00-14	**Mouth, pharynx**	**366**	**22**	**35**	**43**	**15**	**15**	**22**
C00	Lip	71	5	6	4	3	4	5
C01-02	Tongue	79	4	10	10	2	3	4
C03-06	Mouth, other	54	3	6	6	2	3	3
C07-08	Salivary glands	31	2	2	4	2	1	1
C09-14	Pharynx	130	8	12	18	6	5	9
C15-26	**Digestive organs**	**3375**	**208**	**354**	**305**	**149**	**137**	**186**
C15	Oesophagus	199	12	20	15	11	11	11
C16	Stomach	300	17	24	25	12	12	17
C17	Small intestine	94	5	11	6	4	3	4
C18	Colon	1325	86	141	113	55	55	75
C19-20	Rectum, rectosigmoid	766	49	84	69	34	31	41
C21	Anus	22	2	2	3	1	1	1
C22	Liver	151	8	17	22	8	4	7
C23-24	Gallbladder, bile ducts	78	6	9	8	4	4	4
C25	Pancreas	377	18	38	36	17	15	23
C26	Other digestive organs	62	4	7	8	3	2	4
C30-34, C38	**Respiratory organs**	**1742**	**115**	**153**	**132**	**82**	**77**	**91**
C30-31	Nose, sinuses	27	0	2	2	2	2	2
C32	Larynx, epiglottis	101	5	9	10	5	5	5
C33-34	Lung, trachea	1606	109	141	120	74	70	84
C38	Heart, mediastinum and pleura	9	0	1	0	1	0	0
C40-41	**Bone**	**28**	**3**	**2**	**2**	**2**	**1**	**0**
C43	**Melanoma of the skin**	**932**	**56**	**117**	**98**	**40**	**32**	**59**
C44	**Skin, non-melanoma**	**942**	**63**	**96**	**76**	**32**	**28**	**65**
C45	**Mesothelioma**	**66**	**3**	**7**	**8**	**3**	**3**	**5**
C47	**Autonomic nervous system**	**5**	**0**	**1**	**0**	**0**	**0**	**1**
C48-49	**Soft tissues**	**70**	**3**	**8**	**8**	**3**	**4**	**4**
C50	**Breast**	**28**	**1**	**4**	**3**	**1**	**1**	**1**
C60-63	**Male genital organs**	**5310**	**383**	**576**	**443**	**221**	**222**	**298**
C61	Prostate	4951	363	542	395	209	210	284
C62	Testis	310	17	30	41	11	10	12
C60, C63	Other male genital	49	3	4	6	1	2	3
C64-68	**Urinary organs**	**1678**	**101**	**177**	**144**	**76**	**66**	**100**
C64	Kidney excl. renal pelvis	546	31	56	50	25	24	36
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	1132	70	121	93	51	43	65
C69	**Eye**	**36**	**4**	**3**	**4**	**2**	**1**	**2**
C70-72, D32-33	**Central nervous system**	**489**	**27**	**53**	**51**	**19**	**19**	**29**
C73	**Thyroid gland**	**98**	**5**	**11**	**13**	**4**	**3**	**7**
C37, C74-75	**Other endocrine glands**	**118**	**7**	**14**	**13**	**4**	**5**	**5**
C39, C76, C80	**Other or unspecified**	**149**	**9**	**11**	**13**	**7**	**7**	**11**
C81-96	**Lymphoid and haematopoietic tissue**	**1492**	**74**	**170**	**152**	**70**	**63**	**82**
C81	Hodgkin lymphoma	84	3	8	10	6	3	4
C82-86, C96	Non-Hodgkin lymphoma	543	29	56	52	25	25	25
C88	Malignant immunoproliferative diseases	39	1	7	4	1	1	3
C90	Multiple myeloma	221	9	25	22	13	10	11
C91-95, D45-47	Leukaemia	604	31	73	65	25	24	38

MALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finnmark
964	**645**	**431**	**566**	**1427**	**1688**	**406**	**977**	**940**	**494**	**841**	**548**	**233**
23	**16**	**7**	**12**	**28**	**36**	**8**	**20**	**22**	**6**	**20**	**11**	**5**
3	3	2	3	8	7	2	6	4	2	4	2	0
6	2	1	2	6	9	2	4	6	1	4	2	2
4	2	2	1	5	7	1	2	3	1	3	1	1
2	2	0	1	2	3	0	3	2	1	3	1	0
8	7	2	5	7	10	3	6	8	2	6	6	2
178	**117**	**78**	**103**	**268**	**340**	**88**	**194**	**203**	**107**	**198**	**115**	**47**
11	7	4	6	16	22	6	11	9	5	13	7	3
13	12	7	9	25	32	9	18	20	10	21	12	6
5	3	1	4	11	12	2	4	8	4	3	3	1
70	44	29	41	106	134	34	82	81	45	78	41	15
43	25	18	23	59	79	22	45	44	24	39	29	9
1	1	0	0	1	2	0	1	2	1	0	0	1
8	6	2	3	12	12	3	7	9	4	9	7	2
3	3	3	2	4	6	2	4	6	2	4	3	1
20	15	11	12	29	37	10	19	22	11	25	12	7
5	1	1	2	4	5	1	4	2	1	5	1	1
106	**66**	**48**	**65**	**155**	**170**	**42**	**98**	**92**	**55**	**99**	**61**	**36**
2	1	0	0	3	3	1	2	1	1	2	1	0
5	3	2	2	11	9	2	8	4	4	6	3	1
98	61	46	62	141	158	39	88	86	50	90	56	34
1	1	0	0	1	1	0	1	0	0	1	0	0
1	**1**	**0**	**0**	**2**	**4**	**1**	**2**	**2**	**1**	**2**	**1**	**1**
70	**37**	**25**	**33**	**88**	**91**	**16**	**31**	**56**	**27**	**27**	**23**	**6**
61	**50**	**35**	**51**	**82**	**106**	**22**	**37**	**44**	**24**	**39**	**25**	**9**
6	**2**	**1**	**3**	**5**	**9**	**1**	**3**	**2**	**1**	**2**	**1**	**1**
0	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4	**2**	**2**	**2**	**5**	**6**	**1**	**3**	**4**	**3**	**4**	**3**	**0**
2	**2**	**0**	**1**	**3**	**3**	**0**	**1**	**1**	**0**	**1**	**0**	**0**
288	**203**	**138**	**163**	**458**	**530**	**128**	**360**	**287**	**149**	**223**	**174**	**69**
270	192	131	150	423	491	120	340	263	139	205	162	62
14	8	6	12	32	33	7	18	22	7	14	10	6
4	2	1	1	2	6	1	2	2	2	4	1	1
102	**62**	**38**	**55**	**117**	**161**	**40**	**107**	**90**	**50**	**104**	**64**	**24**
31	21	12	22	41	48	14	32	35	18	26	16	9
71	41	26	33	77	113	25	75	55	32	78	48	15
2	**1**	**1**	**1**	**4**	**2**	**1**	**1**	**2**	**1**	**2**	**2**	**1**
26	**20**	**11**	**17**	**50**	**45**	**11**	**20**	**30**	**16**	**23**	**14**	**8**
3	**3**	**1**	**4**	**6**	**10**	**2**	**7**	**5**	**3**	**5**	**4**	**3**
5	**6**	**3**	**5**	**10**	**16**	**4**	**2**	**7**	**3**	**5**	**4**	**1**
7	**5**	**5**	**5**	**9**	**17**	**3**	**9**	**9**	**4**	**9**	**5**	**4**
81	**51**	**38**	**46**	**138**	**141**	**38**	**81**	**83**	**44**	**77**	**42**	**20**
4	2	2	3	7	9	1	6	5	2	5	4	1
27	18	15	16	51	48	13	38	32	16	31	18	7
3	1	1	1	2	5	1	2	3	0	2	1	0
12	8	5	5	19	21	8	11	12	7	15	4	3
34	23	16	22	59	58	14	24	32	18	25	15	7

Table 16b Average annual number of new cases by primary site and county, 2011-2015

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	**All sites**	**14359**	**886**	**1556**	**1562**	**613**	**590**	**828**
C00-14	**Mouth, pharynx**	**202**	**11**	**22**	**26**	**10**	**8**	**8**
C00	Lip	47	3	5	3	3	2	2
C01-02	Tongue	46	2	5	6	2	1	1
C03-06	Mouth, other	40	2	5	6	2	2	2
C07-08	Salivary glands	26	1	3	3	2	2	0
C09-14	Pharynx	43	2	4	8	1	1	2
C15-26	**Digestive organs**	**3015**	**192**	**321**	**287**	**132**	**121**	**168**
C15	Oesophagus	68	3	6	10	4	4	3
C16	Stomach	179	9	14	16	7	7	9
C17	Small intestine	64	4	6	6	5	2	3
C18	Colon	1454	97	149	133	58	54	87
C19-20	Rectum, rectosigmoid	549	35	64	50	24	26	29
C21	Anus	52	2	8	6	2	2	3
C22	Liver	85	5	10	10	5	2	3
C23-24	Gallbladder, bile ducts	96	4	11	10	5	6	7
C25	Pancreas	391	26	46	37	18	14	19
C26	Other digestive organs	78	6	7	9	4	3	5
C30-34, C38	**Respiratory organs**	**1407**	**105**	**151**	**133**	**66**	**56**	**73**
C30-31	Nose, sinuses	20	1	2	2	1	2	2
C32	Larynx, epiglottis	19	2	1	2	1	0	1
C33-34	Lung, trachea	1362	101	147	129	64	53	70
C38	Heart, mediastinum and pleura	5	1	0	0	0	0	0
C40-41	**Bone**	**22**	**1**	**2**	**3**	**1**	**1**	**0**
C43	**Melanoma of the skin**	**930**	**54**	**115**	**104**	**34**	**35**	**55**
C44	**Skin, non-melanoma**	**827**	**52**	**80**	**74**	**29**	**22**	**65**
C45	**Mesothelioma**	**13**	**1**	**2**	**1**	**0**	**1**	**1**
C47	**Autonomic nervous system**	**5**	**0**	**1**	**0**	**0**	**0**	**0**
C48-49	**Soft tissues**	**82**	**4**	**8**	**9**	**4**	**4**	**5**
C50	**Breast**	**3194**	**193**	**364**	**405**	**130**	**128**	**178**
C51-58	**Female genital organs**	**1663**	**110**	**180**	**190**	**75**	**84**	**98**
C53	Cervix uteri	324	21	36	48	14	14	16
C54	Corpus uteri	735	47	75	74	37	39	47
C55	Uterus, other	8	1	1	1	0	0	1
C56, C57.0-4	Ovary etc.	480	34	56	55	18	25	26
C51-52, C57.7-9	Other female genital	113	7	11	12	6	5	8
C58	Placenta	3	0	0	0	0	0	0
C64-68	**Urinary organs**	**687**	**41**	**63**	**67**	**31**	**34**	**39**
C64	Kidney excl. renal pelvis	257	15	27	23	10	13	17
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	430	26	36	45	20	21	22
C69	**Eye**	**39**	**3**	**2**	**5**	**2**	**1**	**2**
C70-72, D32-33	**Central nervous system**	**552**	**30**	**56**	**49**	**24**	**24**	**34**
C73	**Thyroid gland**	**241**	**10**	**23**	**42**	**8**	**7**	**11**
C37, C74-75	**Other endocrine glands**	**121**	**6**	**14**	**16**	**4**	**4**	**7**
C39, C76, C80	**Other or unspecified**	**167**	**10**	**15**	**19**	**8**	**8**	**9**
C81-96	**Lymphoid and haematopoietic tissue**	**1192**	**65**	**137**	**129**	**54**	**52**	**73**
C81	Hodgkin lymphoma	62	4	7	8	3	1	5
C82-86, C96	Non-Hodgkin lymphoma	444	26	48	46	20	19	23
C88	Malignant immunoproliferative diseases	28	1	3	3	2	1	2
C90	Multiple myeloma	177	9	21	18	11	9	13
C91-95, D45-47	Leukaemia	481	25	57	54	19	21	31

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finnmark
761	**540**	**341**	**524**	**1190**	**1404**	**311**	**714**	**820**	**387**	**705**	**435**	**191**
12	**8**	**5**	**5**	**18**	**17**	**5**	**10**	**10**	**4**	**12**	**7**	**2**
3	1	1	2	7	5	2	2	3	0	2	1	0
4	2	1	1	4	3	1	2	2	1	4	2	1
2	2	1	1	2	4	0	3	2	0	2	1	0
1	1	0	1	2	3	0	1	1	1	2	1	0
3	2	1	1	3	3	1	2	3	1	3	2	1
147	**105**	**61**	**107**	**244**	**306**	**80**	**177**	**176**	**89**	**161**	**101**	**40**
6	3	1	1	5	6	1	2	4	2	5	2	1
8	6	2	5	15	22	6	13	11	5	11	8	3
2	3	2	2	3	7	2	3	6	2	3	2	1
65	47	32	53	125	156	39	90	81	42	80	46	18
32	20	9	21	42	57	14	31	30	16	29	15	6
1	1	1	1	5	5	1	3	3	2	2	2	1
4	3	2	2	5	7	1	4	8	3	4	5	2
4	4	1	3	8	8	3	4	6	4	4	2	1
20	15	9	15	30	32	10	23	24	10	20	18	6
4	4	3	3	6	6	2	3	4	3	3	2	1
85	**54**	**39**	**60**	**111**	**131**	**24**	**67**	**78**	**36**	**71**	**43**	**25**
2	1	0	1	1	1	0	1	1	1	1	1	0
1	1	0	1	2	3	0	1	2	0	1	1	1
82	52	39	58	107	127	23	65	75	35	69	41	24
0	0	0	0	0	0	0	0	0	0	1	0	1
1	**1**	**1**	**1**	**2**	**3**	**0**	**1**	**1**	**1**	**2**	**0**	**0**
68	**36**	**24**	**34**	**95**	**92**	**18**	**32**	**60**	**23**	**28**	**19**	**6**
41	**40**	**33**	**60**	**80**	**90**	**17**	**33**	**34**	**17**	**33**	**20**	**8**
1	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**1**	**1**	**0**
0	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4	**3**	**2**	**3**	**5**	**5**	**2**	**3**	**7**	**3**	**4**	**5**	**1**
157	**117**	**74**	**109**	**269**	**298**	**64**	**164**	**185**	**89**	**143**	**89**	**39**
82	**64**	**39**	**50**	**128**	**163**	**32**	**76**	**95**	**43**	**82**	**51**	**21**
19	12	7	8	19	33	7	16	17	7	16	10	5
33	27	17	25	59	74	13	34	44	22	35	24	8
0	0	0	0	1	1	0	0	0	1	0	0	0
23	20	11	15	42	45	9	21	27	10	23	13	6
7	5	3	3	7	11	2	6	6	3	8	4	1
0	0	0	0	0	0	0	0	0	0	0	0	0
39	**23**	**15**	**21**	**48**	**67**	**15**	**41**	**41**	**18**	**44**	**28**	**12**
12	9	6	8	15	23	6	15	17	8	16	11	5
27	14	9	13	32	43	9	26	24	10	27	17	8
2	**0**	**1**	**1**	**4**	**5**	**0**	**1**	**3**	**0**	**2**	**2**	**1**
35	**19**	**12**	**17**	**53**	**59**	**13**	**22**	**29**	**18**	**31**	**19**	**8**
11	**11**	**3**	**9**	**12**	**23**	**5**	**12**	**19**	**3**	**15**	**12**	**3**
9	**3**	**2**	**4**	**6**	**18**	**5**	**3**	**6**	**4**	**5**	**2**	**1**
7	**8**	**4**	**5**	**13**	**14**	**4**	**10**	**8**	**6**	**11**	**4**	**4**
59	**47**	**27**	**39**	**101**	**111**	**26**	**62**	**69**	**34**	**61**	**30**	**17**
2	3	3	1	5	5	1	4	4	1	2	2	1
20	16	8	17	34	43	9	24	28	13	28	13	8
1	0	1	1	2	4	1	1	2	1	1	0	0
9	7	5	4	12	13	5	10	10	7	8	4	2
27	21	11	16	47	45	11	22	25	12	21	10	5

Table 17a Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and county, 2011-2015

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	**All sites**	**730.3**	**776.2**	**727.7**	**674.8**	**676.3**	**670.3**	**748.1**
C00-14	**Mouth, pharynx**	**15.3**	**15.7**	**13.7**	**18.2**	**13.5**	**14.8**	**16.5**
C00	Lip	3.2	3.7	2.4	2.2	2.8	3.5	4.0
C01-02	Tongue	3.2	2.6	3.7	4.0	2.2	2.5	3.0
C03-06	Mouth, other	2.3	2.1	2.4	2.8	1.8	2.8	2.2
C07-08	Salivary glands	1.4	1.6	0.8	1.7	1.5	1.2	0.8
C09-14	Pharynx	5.2	5.7	4.4	7.4	5.3	4.9	6.5
C15-26	**Digestive organs**	**147.4**	**149.6**	**144.6**	**140.2**	**137.4**	**134.0**	**144.8**
C15	Oesophagus	8.5	8.4	7.9	7.0	9.9	10.4	7.9
C16	Stomach	13.2	12.3	9.4	11.6	11.3	11.4	13.3
C17	Small intestine	4.0	3.7	4.2	2.4	4.0	2.8	3.1
C18	Colon	58.7	62.8	58.9	53.2	51.3	53.9	59.0
C19-20	Rectum, rectosigmoid	32.9	34.8	33.9	30.7	31.0	29.4	31.5
C21	Anus	0.9	1.4	0.9	1.4	0.9	0.8	0.7
C22	Liver	6.5	5.9	7.0	9.7	7.6	4.1	5.5
C23-24	Gallbladder, bile ducts	3.4	4.1	3.7	3.8	3.7	4.3	3.2
C25	Pancreas	16.4	12.8	15.7	16.8	15.4	14.8	17.7
C26	Other digestive organs	2.7	3.5	3.0	3.7	2.3	2.1	2.8
C30-34, C38	**Respiratory organs**	**75.8**	**82.1**	**63.8**	**61.6**	**74.2**	**74.0**	**70.6**
C30-31	Nose, sinuses	1.1	0.2	0.7	0.8	1.5	1.5	1.2
C32	Larynx, epiglottis	4.3	3.7	3.5	4.7	4.8	4.4	4.1
C33-34	Lung, trachea	70.0	78.0	59.0	56.0	67.4	67.6	65.1
C38	Heart, mediastinum and pleura	0.4	0.3	0.5	0.0	0.6	0.5	0.2
C40-41	**Bone**	**1.1**	**1.8**	**0.9**	**0.9**	**1.6**	**1.3**	**0.1**
C43	**Melanoma of the skin**	**39.5**	**39.8**	**46.5**	**41.6**	**37.4**	**31.0**	**44.5**
C44	**Skin, non-melanoma**	**44.6**	**49.8**	**44.3**	**39.1**	**31.3**	**29.5**	**55.4**
C45	**Mesothelioma**	**2.9**	**2.3**	**2.7**	**4.1**	**2.8**	**2.8**	**3.5**
C47	**Autonomic nervous system**	**0.2**	**0.0**	**0.2**	**0.1**	**0.2**	**0.0**	**0.9**
C48-49	**Soft tissues**	**2.9**	**2.0**	**2.8**	**3.2**	**3.5**	**3.7**	**3.1**
C50	**Breast**	**1.2**	**1.2**	**1.5**	**1.3**	**1.4**	**0.8**	**0.6**
C60-63	**Male genital organs**	**225.3**	**270.0**	**231.0**	**195.4**	**202.3**	**215.5**	**226.1**
C61	Prostate	211.2	255.2	218.7	181.7	189.1	202.1	215.4
C62	Testis	12.0	12.8	10.5	10.8	12.0	11.8	8.7
C60, C63	Other male genital	2.1	1.9	1.8	2.9	1.2	1.6	1.9
C64-68	**Urinary organs**	**73.1**	**72.5**	**73.1**	**66.4**	**70.9**	**64.6**	**77.8**
C64	Kidney excl. renal pelvis	22.7	21.3	21.8	20.9	23.1	23.1	26.5
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	50.4	51.2	51.2	45.4	47.8	41.6	51.3
C69	**Eye**	**1.5**	**2.5**	**1.1**	**1.6**	**1.6**	**1.2**	**1.2**
C70-72, D32-33	**Central nervous system**	**20.0**	**19.1**	**19.5**	**18.7**	**18.9**	**19.3**	**21.4**
C73	**Thyroid gland**	**4.0**	**3.8**	**3.8**	**4.7**	**3.6**	**2.7**	**4.9**
C37, C74-75	**Other endocrine glands**	**4.8**	**4.9**	**5.0**	**5.2**	**3.4**	**4.6**	**3.8**
C39, C76, C80	**Other or unspecified**	**6.9**	**6.7**	**5.3**	**6.1**	**6.4**	**7.3**	**8.5**
C81-96	**Lymphoid and haematopoietic tissue**	**63.9**	**52.2**	**68.1**	**66.5**	**65.8**	**63.0**	**64.2**
C81	Hodgkin lymphoma	3.3	2.5	2.9	3.2	5.8	3.5	3.0
C82-86, C96	Non-Hodgkin lymphoma	23.1	20.4	22.3	22.3	23.4	24.7	19.5
C88	Malignant immunoproliferative diseases	1.7	0.6	2.9	1.7	0.7	0.8	2.7
C90	Multiple myeloma	9.7	6.4	10.2	10.5	12.5	10.3	9.1
C91-95, D45-47	Leukaemia	26.1	22.3	29.8	28.9	23.4	23.7	29.9

MALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finnmark
824.3	**731.8**	**795.5**	**725.7**	**792.1**	**772.3**	**714.2**	**743.1**	**695.1**	**704.7**	**669.4**	**718.6**	**650.2**
18.7	**17.5**	**12.7**	**14.3**	**15.2**	**15.7**	**13.2**	**15.0**	**15.9**	**8.9**	**15.4**	**14.2**	**12.9**
2.9	3.4	3.5	3.6	4.7	3.2	2.8	4.2	2.9	2.2	3.4	2.1	0.5
4.7	2.6	1.4	2.6	3.2	3.7	2.7	2.9	4.1	1.4	3.1	2.9	5.6
3.2	1.8	3.0	1.5	2.7	3.2	1.8	1.4	1.8	0.8	2.3	1.3	2.1
1.3	2.4	0.6	1.0	0.9	1.4	0.7	2.3	1.4	1.7	2.1	1.0	0.0
6.6	7.2	4.2	5.6	3.7	4.3	5.2	4.1	5.7	2.7	4.5	6.9	4.8
153.8	**132.8**	**144.3**	**134.7**	**152.7**	**157.6**	**156.4**	**149.5**	**153.5**	**152.2**	**156.7**	**152.9**	**132.8**
9.3	8.1	7.2	7.9	9.0	10.0	10.8	8.0	6.8	7.1	10.7	9.0	8.2
11.3	13.1	13.7	11.1	14.2	15.3	15.7	13.7	15.0	14.2	17.5	16.4	17.1
4.3	3.0	2.3	5.7	6.2	5.5	3.5	2.8	5.8	5.3	2.6	3.8	3.0
60.7	51.1	54.7	54.7	61.7	62.4	59.5	63.4	62.5	65.6	62.3	55.8	43.5
36.4	27.4	32.8	29.2	33.5	36.3	38.0	34.7	32.0	33.7	30.2	37.2	26.8
0.7	1.2	0.4	0.5	0.7	0.9	0.4	0.6	1.5	1.1	0.4	0.5	2.4
6.4	6.8	4.3	4.0	6.3	5.3	6.0	5.2	7.0	5.3	7.0	8.8	6.3
2.7	3.0	5.0	2.7	2.2	2.6	3.2	3.4	4.7	3.4	3.0	3.7	1.9
17.5	17.3	21.0	15.7	16.6	17.2	16.8	14.7	16.4	15.2	19.2	16.4	20.9
4.4	1.6	2.9	3.1	2.3	2.1	2.6	3.0	1.8	1.5	3.7	1.4	2.6
90.1	**75.4**	**87.8**	**84.6**	**88.0**	**78.8**	**72.1**	**75.0**	**69.2**	**78.5**	**77.9**	**81.3**	**97.7**
1.7	1.7	0.4	0.2	1.5	1.3	1.4	1.2	0.7	2.0	1.7	1.8	1.0
4.2	3.9	3.2	2.9	6.0	4.2	2.7	6.1	3.1	5.3	4.8	4.3	2.4
83.5	68.7	84.2	81.0	80.2	73.1	68.0	66.9	65.4	71.2	70.9	74.7	93.1
0.7	1.2	0.0	0.5	0.4	0.3	0.0	0.6	0.0	0.0	0.5	0.5	1.1
1.2	**1.0**	**0.9**	**0.5**	**0.7**	**1.7**	**1.0**	**1.2**	**1.6**	**0.9**	**1.6**	**1.2**	**1.5**
59.1	**42.1**	**46.6**	**41.2**	**47.6**	**41.1**	**28.6**	**23.4**	**40.0**	**39.5**	**22.2**	**28.3**	**15.5**
56.8	**59.4**	**68.7**	**71.5**	**51.0**	**52.3**	**40.0**	**30.1**	**35.8**	**35.9**	**33.6**	**35.1**	**28.1**
4.8	**2.6**	**2.8**	**3.7**	**3.1**	**4.4**	**2.2**	**2.6**	**1.6**	**1.1**	**1.5**	**1.5**	**1.7**
0.2	**0.6**	**0.3**	**0.7**	**0.2**	**0.2**	**0.0**	**0.3**	**0.0**	**0.0**	**0.3**	**0.2**	**0.0**
3.5	**2.5**	**4.2**	**2.7**	**2.3**	**2.7**	**1.8**	**2.2**	**2.7**	**4.4**	**3.4**	**4.0**	**1.7**
1.6	**2.7**	**0.7**	**1.6**	**1.4**	**1.6**	**0.8**	**0.7**	**1.1**	**0.3**	**0.9**	**0.7**	**0.5**
242.5	**225.0**	**245.9**	**202.9**	**249.1**	**238.6**	**223.3**	**269.1**	**208.5**	**207.1**	**174.6**	**221.2**	**192.0**
226.8	212.0	233.1	187.9	234.5	223.5	208.4	253.8	193.5	192.4	158.7	207.0	173.0
12.5	10.2	11.1	13.2	13.3	12.6	13.5	13.9	13.4	11.4	12.3	12.5	16.8
3.3	2.8	1.7	1.8	1.3	2.6	1.4	1.4	1.5	3.3	3.5	1.7	2.2
86.5	**70.8**	**71.8**	**71.0**	**66.4**	**74.5**	**69.6**	**81.4**	**67.3**	**72.0**	**83.5**	**87.0**	**70.1**
25.6	23.7	21.4	26.9	21.1	21.3	24.6	24.0	25.0	25.3	20.6	20.9	23.4
61.0	47.2	50.4	44.0	45.3	53.2	45.0	57.4	42.3	46.7	62.9	66.1	46.7
1.4	**1.4**	**1.4**	**1.0**	**2.3**	**0.8**	**1.7**	**1.0**	**1.6**	**2.1**	**1.5**	**2.2**	**2.2**
21.7	**23.3**	**20.1**	**19.7**	**24.2**	**19.4**	**19.4**	**15.4**	**20.7**	**23.4**	**18.3**	**17.4**	**20.6**
2.8	**3.8**	**2.1**	**4.3**	**3.0**	**4.3**	**4.0**	**5.1**	**3.1**	**4.1**	**4.1**	**5.4**	**7.2**
3.9	**6.4**	**5.2**	**5.8**	**4.8**	**6.6**	**7.4**	**1.8**	**5.1**	**4.6**	**4.6**	**4.6**	**2.0**
6.5	**6.2**	**9.4**	**6.9**	**5.5**	**8.5**	**6.2**	**6.9**	**7.5**	**6.3**	**7.7**	**7.4**	**10.9**
69.1	**58.5**	**70.6**	**58.9**	**74.7**	**63.6**	**66.7**	**62.4**	**59.9**	**63.4**	**61.4**	**53.9**	**52.9**
3.2	1.9	3.0	3.3	3.0	3.4	1.7	4.9	3.3	3.3	3.9	4.6	3.6
22.9	20.9	26.8	20.0	27.3	21.7	23.4	28.8	23.0	23.3	24.2	22.5	19.6
2.8	0.9	1.2	0.8	1.4	2.4	2.1	1.6	1.8	0.6	1.3	1.0	1.1
10.7	9.1	9.3	6.1	10.5	9.8	14.0	8.6	8.7	9.3	12.0	5.9	8.6
29.4	25.5	30.3	28.7	32.5	26.3	25.5	18.6	23.2	26.9	19.9	20.0	19.9

Table 17b Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and county, 2011-2015

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	**All sites**	**537.1**	**547.8**	**540.4**	**552.1**	**503.1**	**515.2**	**555.9**
C00-14	**Mouth, pharynx**	**7.5**	**6.8**	**7.6**	**9.5**	**8.5**	**6.9**	**5.5**
C00	Lip	1.7	1.9	1.7	1.2	2.3	1.3	1.3
C01-02	Tongue	1.7	1.5	1.9	2.3	1.8	1.1	0.9
C03-06	Mouth, other	1.5	1.4	1.8	2.0	1.7	1.6	1.6
C07-08	Salivary glands	1.0	0.9	1.1	1.2	1.5	1.7	0.3
C09-14	Pharynx	1.7	1.1	1.3	2.9	1.2	1.2	1.5
C15-26	**Digestive organs**	**109.5**	**114.0**	**111.4**	**101.2**	**101.3**	**99.4**	**110.1**
C15	Oesophagus	2.5	2.0	2.2	3.6	2.9	3.6	2.1
C16	Stomach	6.4	5.5	4.9	5.7	5.1	5.7	6.1
C17	Small intestine	2.4	2.7	2.1	2.2	3.5	2.3	2.2
C18	Colon	52.5	57.7	51.5	46.5	44.8	43.8	56.7
C19-20	Rectum, rectosigmoid	20.3	21.3	22.2	17.6	19.1	21.7	19.2
C21	Anus	2.0	1.4	2.8	2.1	1.8	1.8	2.3
C22	Liver	3.1	2.8	3.4	3.6	4.1	2.0	1.9
C23-24	Gallbladder, bile ducts	3.5	2.2	3.9	3.6	3.4	5.2	4.4
C25	Pancreas	14.1	15.0	16.0	13.2	13.4	11.1	12.2
C26	Other digestive organs	2.8	3.5	2.5	3.2	3.1	2.3	3.0
C30-34, C38	**Respiratory organs**	**52.8**	**63.5**	**52.9**	**49.5**	**52.8**	**47.5**	**48.5**
C30-31	Nose, sinuses	0.7	0.5	0.9	0.7	0.6	1.6	1.3
C32	Larynx, epiglottis	0.7	1.1	0.4	0.7	0.7	0.4	0.4
C33-34	Lung, trachea	51.1	61.7	51.6	48.1	51.4	45.1	46.8
C38	Heart, mediastinum and pleura	0.2	0.3	0.1	0.1	0.1	0.4	0.0
C40-41	**Bone**	**0.9**	**0.4**	**0.8**	**1.0**	**1.0**	**0.9**	**0.3**
C43	**Melanoma of the skin**	**35.5**	**34.1**	**40.0**	**35.7**	**28.9**	**32.8**	**37.4**
C44	**Skin, non-melanoma**	**28.2**	**29.2**	**27.1**	**23.9**	**20.2**	**16.3**	**40.2**
C45	**Mesothelioma**	**0.5**	**0.5**	**0.6**	**0.5**	**0.3**	**0.6**	**0.8**
C47	**Autonomic nervous system**	**0.2**	**0.2**	**0.3**	**0.1**	**0.0**	**0.0**	**0.3**
C48-49	**Soft tissues**	**3.1**	**2.8**	**3.0**	**3.3**	**3.6**	**3.5**	**3.7**
C50	**Breast**	**123.3**	**123.6**	**125.9**	**147.3**	**112.3**	**117.4**	**122.8**
C51-58	**Female genital organs**	**63.5**	**70.2**	**62.9**	**66.4**	**64.7**	**76.4**	**66.8**
C53	Cervix uteri	12.8	14.7	12.6	14.8	14.4	14.8	11.9
C54	Corpus uteri	27.9	29.1	26.2	27.6	30.6	33.4	31.8
C55	Uterus, other	0.3	0.5	0.5	0.2	0.3	0.3	0.5
C56, C57.0-4	Ovary etc.	18.3	21.8	19.7	19.8	14.9	23.0	17.6
C51-52, C57.7-9	Other female genital	4.1	4.1	3.9	4.0	4.5	4.4	4.9
C58	Placenta	0.1	0.0	0.1	0.1	0.0	0.5	0.1
C64-68	**Urinary organs**	**25.2**	**24.9**	**22.0**	**23.8**	**24.5**	**28.1**	**25.8**
C64	Kidney excl. renal pelvis	9.7	9.4	9.6	8.1	8.6	11.1	11.4
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	15.5	15.5	12.5	15.7	15.9	17.0	14.4
C69	**Eye**	**1.5**	**1.7**	**0.8**	**1.9**	**1.7**	**1.0**	**1.5**
C70-72, D32-33	**Central nervous system**	**21.3**	**19.5**	**19.5**	**17.1**	**21.0**	**22.6**	**23.6**
C73	**Thyroid gland**	**9.5**	**7.0**	**7.9**	**14.3**	**7.7**	**7.5**	**8.3**
C37, C74-75	**Other endocrine glands**	**4.8**	**4.3**	**5.2**	**5.1**	**4.2**	**3.7**	**5.2**
C39, C76, C80	**Other or unspecified**	**5.7**	**5.5**	**5.0**	**6.3**	**5.9**	**6.4**	**5.8**
C81-96	**Lymphoid and haematopoietic tissue**	**44.3**	**39.6**	**47.5**	**45.1**	**44.6**	**44.2**	**49.3**
C81	Hodgkin lymphoma	2.5	2.7	2.6	2.6	2.8	1.3	3.9
C82-86, C96	Non-Hodgkin lymphoma	16.6	15.6	16.6	16.1	17.0	16.4	15.3
C88	Malignant immunoproliferative diseases	1.0	0.7	1.2	1.2	1.4	0.6	1.6
C90	Multiple myeloma	6.5	5.3	7.3	6.4	8.2	7.6	8.1
C91-95, D45-47	Leukaemia	17.7	15.3	19.9	18.8	15.2	18.2	20.5

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøn-delag	Nord-Trøn-delag	Nordland	Troms	Finnmark
554.9	**531.3**	**561.6**	**570.7**	**571.3**	**551.3**	**506.9**	**489.0**	**531.6**	**505.0**	**508.6**	**514.0**	**500.7**
8.7	**7.8**	**8.1**	**6.0**	**8.7**	**6.7**	**7.4**	**6.8**	**6.3**	**5.5**	**8.8**	**8.5**	**6.2**
1.8	0.8	2.2	1.9	3.4	1.8	3.3	1.5	1.5	0.4	1.4	1.1	0.5
2.8	2.2	1.8	0.9	1.7	1.3	2.0	1.3	1.1	1.3	2.5	2.1	2.1
1.3	2.4	1.9	1.1	0.9	1.4	0.6	1.5	1.2	0.5	1.2	1.7	0.5
0.7	0.8	0.4	0.6	1.1	1.1	0.3	0.9	0.5	1.3	1.2	1.7	1.0
2.1	1.8	1.7	1.4	1.6	1.2	1.3	1.5	1.9	2.0	2.5	1.9	2.1
102.3	**97.6**	**98.4**	**113.8**	**116.7**	**116.1**	**123.1**	**114.6**	**110.9**	**109.9**	**110.1**	**115.8**	**103.7**
3.9	2.9	1.6	0.7	2.2	2.1	2.1	1.4	2.3	2.1	3.2	2.1	3.1
5.6	5.2	3.0	4.8	7.0	8.3	10.4	8.8	7.0	6.6	7.5	8.7	8.2
1.1	2.3	2.5	2.7	1.6	2.7	3.9	2.2	3.8	3.1	2.1	1.8	3.0
45.0	42.8	51.6	56.5	59.2	58.7	59.8	57.6	51.0	51.0	54.1	52.7	46.4
23.0	18.8	14.6	22.3	20.4	22.3	22.1	20.5	19.0	21.0	20.9	17.0	14.7
1.0	1.1	2.4	1.5	2.4	1.9	1.9	1.7	1.8	2.3	1.7	2.3	3.7
3.1	2.5	2.9	2.0	2.3	2.7	1.7	2.8	4.8	3.5	2.7	5.3	5.5
2.7	3.6	1.5	3.6	4.0	3.2	3.9	2.7	3.9	4.7	2.7	2.5	1.5
13.8	14.6	14.3	16.5	14.7	12.1	13.8	15.2	14.9	11.9	13.2	20.7	16.0
3.1	3.7	3.9	3.1	2.7	2.1	3.6	1.6	2.4	3.7	2.0	2.6	1.5
61.3	**52.5**	**64.4**	**65.8**	**54.7**	**52.0**	**39.7**	**45.7**	**50.9**	**45.2**	**50.1**	**49.8**	**65.9**
1.2	0.9	0.4	1.1	0.6	0.3	0.7	0.5	0.8	0.8	0.6	0.7	0.0
0.9	0.6	0.7	0.7	1.0	1.1	0.8	0.9	1.0	0.0	0.4	1.0	1.6
59.1	50.8	63.0	63.8	52.9	50.5	37.9	44.1	49.0	44.5	48.5	48.1	62.8
0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.3	0.1	0.0	0.6	0.0	1.5
0.9	**0.8**	**1.7**	**0.7**	**0.9**	**1.1**	**0.9**	**1.2**	**0.5**	**1.6**	**1.4**	**0.5**	**0.0**
51.7	**36.9**	**40.1**	**37.4**	**45.3**	**37.0**	**31.4**	**22.1**	**40.0**	**32.6**	**20.8**	**23.3**	**16.4**
26.8	**34.3**	**50.9**	**60.0**	**36.7**	**31.5**	**23.9**	**19.5**	**20.7**	**18.9**	**20.7**	**22.6**	**21.1**
0.4	**0.3**	**0.3**	**0.2**	**0.4**	**0.4**	**0.6**	**0.1**	**0.5**	**0.0**	**0.6**	**1.1**	**0.5**
0.2	**0.3**	**0.0**	**0.0**	**0.2**	**0.3**	**0.3**	**0.3**	**0.1**	**0.3**	**0.0**	**0.0**	**0.5**
3.1	**2.9**	**2.8**	**3.3**	**2.7**	**2.1**	**2.6**	**2.2**	**4.3**	**3.9**	**3.1**	**5.5**	**3.2**
118.3	**121.1**	**125.3**	**122.7**	**129.9**	**122.0**	**109.8**	**119.0**	**122.6**	**121.9**	**108.4**	**107.4**	**104.3**
61.7	**66.6**	**65.7**	**55.8**	**62.2**	**65.8**	**55.0**	**54.4**	**62.1**	**57.1**	**61.8**	**61.3**	**54.5**
15.5	14.3	12.5	9.5	8.7	13.5	13.4	12.2	11.4	10.0	13.9	12.5	13.0
23.8	26.8	28.7	27.2	29.3	29.6	22.6	23.6	29.1	29.3	25.6	28.5	21.5
0.1	0.2	0.3	0.0	0.3	0.2	0.0	0.0	0.3	0.6	0.2	0.4	0.0
16.8	20.7	18.9	16.4	20.5	18.1	15.7	15.0	17.7	12.4	16.9	15.2	17.0
5.0	4.6	5.3	2.6	3.3	4.2	3.4	3.7	3.5	4.1	5.1	4.4	3.1
0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.7	0.2	0.3	0.0
27.7	**22.4**	**23.8**	**22.0**	**23.2**	**25.4**	**23.2**	**27.1**	**26.1**	**23.9**	**30.0**	**33.1**	**32.3**
9.2	8.9	9.7	9.0	7.4	9.2	10.4	10.5	11.0	11.0	11.4	13.0	12.6
18.5	13.5	14.1	13.0	15.8	16.2	12.8	16.5	15.1	13.0	18.7	20.1	19.7
1.7	**0.4**	**1.0**	**1.3**	**2.1**	**2.1**	**0.7**	**1.0**	**1.8**	**0.5**	**1.5**	**2.5**	**1.9**
26.8	**19.5**	**19.7**	**18.7**	**25.2**	**24.0**	**22.3**	**16.3**	**19.6**	**24.4**	**24.3**	**23.8**	**22.5**
8.9	**11.8**	**5.6**	**10.5**	**5.6**	**9.6**	**8.8**	**8.9**	**12.4**	**3.9**	**12.6**	**15.2**	**9.4**
7.1	**3.7**	**4.4**	**4.8**	**2.9**	**7.4**	**8.7**	**2.5**	**4.0**	**5.7**	**4.1**	**3.0**	**3.8**
5.0	**7.2**	**5.4**	**5.1**	**5.9**	**5.0**	**5.3**	**5.5**	**4.6**	**6.4**	**6.7**	**4.9**	**10.5**
42.5	**45.2**	**43.9**	**42.5**	**48.2**	**42.8**	**43.2**	**41.9**	**44.1**	**43.3**	**43.6**	**35.8**	**44.0**
2.0	3.4	4.6	1.6	2.1	2.0	1.4	3.6	2.3	1.7	1.5	2.7	1.6
14.2	14.9	12.9	19.3	16.6	17.0	14.5	17.1	18.1	16.5	20.0	16.0	21.3
0.6	0.2	1.0	0.9	1.1	1.6	1.1	0.5	1.3	0.8	1.0	0.5	0.6
6.2	6.2	8.0	4.1	5.6	5.1	7.9	6.2	6.4	9.0	5.9	5.0	6.3
19.5	20.5	17.4	16.7	22.7	17.1	18.2	14.5	16.1	15.2	15.2	11.6	14.2

Table 18a Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1956-2015

ICD10	Site	Stage	1956-60	1961-65	1966-70	1971-75
C00-14	Mouth, pharynx	Total	189	187	203	245
		Localized	131	131	131	160
		Regional	45	45	44	65
		Distant	3	6	9	10
		Unknown	10	5	18	9
C15	Oesophagus	Total	74	80	77	84
		Localized	46	47	43	39
		Regional	10	11	10	18
		Distant	12	18	18	22
		Unknown	5	4	6	5
C16	Stomach	Total	851	794	769	662
		Localized	241	221	199	164
		Regional	182	175	152	150
		Distant	348	346	333	302
		Unknown	80	52	85	46
C18	Colon	Total	236	290	357	402
		Localized	91	117	139	138
		Regional	66	70	82	117
		Distant	66	90	117	132
		Unknown	13	13	19	15
C19-20	Rectum, rectosigmoid	Total	152	182	250	310
		Localized	73	89	113	145
		Regional	38	45	69	87
		Distant	29	40	55	69
		Unknown	12	7	13	9
C22	Liver	Total	19	23	36	55
		Localized	9	11	18	24
		Regional	1	1	1	4
		Distant	7	9	14	22
		Unknown	2	1	3	4
C23-24	Gallbladder, bile ducts	Total	17	22	27	28
		Localized	8	9	8	9
		Regional	3	3	5	5
		Distant	6	10	11	13
		Unknown	1	1	2	1
C25	Pancreas	Total	143	176	218	250
		Localized	41	54	54	51
		Regional	15	19	29	34
		Distant	74	94	119	144
		Unknown	12	9	15	22
C33-34	Lung, trachea	Total	263	373	532	678
		Localized	76	130	171	217
		Regional	54	80	104	129
		Distant	112	141	226	285
		Unknown	21	22	31	48
C43	Melanoma of the skin	Total	51	76	103	157
		Localized	31	49	64	121
		Regional	10	10	13	16
		Distant	7	16	15	16
		Unknown	3	1	11	5
C61	Prostate	Total	654	840	1012	1226
		Localized	388	547	642	809
		Regional	29	31	37	67
		Distant	174	205	230	263
		Unknown	63	57	104	87
C62	Testis	Total	55	68	75	84
		Localized	38	43	49	44
		Regional	2	4	6	16
		Distant	14	18	18	23
		Unknown	2	2	3	1
C64	Kidney excl. renal pelvis	Total	95	124	154	174
		Localized	49	66	75	71
		Regional	8	16	21	37
		Distant	34	38	52	62
		Unknown	4	4	5	3
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	209	286	345	468
		Localized	162	242	272	364
		Regional	16	22	36	60
		Distant	21	15	21	31
		Unknown	10	6	16	13
C70-72, D32-33	Central nervous system	Total	120	136	145	161
		Non-malignant	30	38	41	44
		Malignant	90	97	104	117
C73	Thyroid gland	Total	20	23	35	34
		Localized	6	5	12	14
		Regional	10	11	13	15
		Distant	4	7	9	5
		Unknown	0	0	1	1

MALES

Period								
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15	% 2011-15
239	245	253	253	267	251	295	366	*100.0*
152	145	146	123	96	79	105	137	*37.5*
71	87	81	90	100	113	140	181	*49.4*
9	5	8	12	12	12	13	16	*4.4*
7	8	19	29	58	47	37	32	*8.7*
87	87	98	107	118	133	155	199	*100.0*
42	40	30	22	19	24	28	30	*14.9*
18	20	24	25	25	33	45	54	*27.2*
22	22	30	28	33	44	46	53	*26.7*
5	5	14	33	41	33	36	62	*31.2*
602	588	528	460	399	342	300	300	*100.0*
174	171	142	93	56	56	59	54	*18.1*
146	163	144	133	116	106	84	89	*29.6*
244	212	181	148	136	122	100	93	*31.1*
37	42	61	85	91	58	58	64	*21.2*
521	648	739	843	918	1022	1156	1325	*100.0*
155	194	217	235	155	174	174	222	*16.7*
194	265	286	332	447	507	607	690	*52.1*
153	163	204	222	239	265	305	332	*25.1*
20	26	32	55	77	76	70	80	*6.1*
428	507	525	566	580	655	686	766	*100.0*
191	227	204	203	151	155	131	161	*21.0*
144	169	203	207	229	280	346	385	*50.3*
85	91	95	104	112	135	142	142	*18.6*
9	20	24	52	88	85	66	78	*10.2*
50	65	58	61	68	80	102	151	*100.0*
22	32	27	23	21	26	37	53	*34.7*
4	5	4	3	5	6	11	18	*12.0*
20	18	13	11	15	19	27	35	*23.4*
4	10	14	24	28	28	27	45	*29.9*
39	43	49	54	57	66	69	78	*100.0*
11	14	17	12	7	11	13	11	*14.3*
9	10	10	10	11	22	24	36	*45.8*
17	15	13	16	17	18	20	21	*26.6*
2	4	9	16	22	15	12	10	*13.3*
264	299	291	281	274	308	338	377	*100.0*
41	57	58	39	17	24	30	39	*10.3*
34	42	29	31	35	67	75	81	*21.5*
159	159	156	134	132	160	188	201	*53.3*
29	42	47	78	90	56	45	56	*14.9*
874	1051	1153	1226	1287	1395	1508	1606	*100.0*
286	333	325	292	203	183	217	322	*20.0*
154	197	241	240	322	390	440	455	*28.4*
373	431	455	474	543	666	706	692	*43.1*
61	88	132	221	220	156	145	138	*8.6*
205	253	351	435	454	505	652	932	*100.0*
168	207	299	367	294	283	391	789	*84.7*
16	19	16	17	14	23	31	64	*6.9*
16	16	22	26	26	34	31	32	*3.5*
4	11	14	26	120	165	199	46	*5.0*
1475	1690	1856	2344	2880	3329	4281	4951	*100.0*
990	1092	1183	1181	888	1383	1943	2428	*49.1*
69	64	56	98	116	205	701	1279	*25.8*
316	415	483	402	409	412	408	365	*7.4*
100	119	133	663	1467	1329	1230	879	*17.7*
107	142	165	197	232	249	286	310	*100.0*
61	76	108	133	133	143	191	256	*82.6*
22	40	30	36	35	45	39	31	*9.9*
22	23	23	22	30	27	29	22	*7.0*
1	3	3	5	34	34	27	2	*0.5*
199	244	252	268	285	348	417	546	*100.0*
80	106	113	133	108	157	216	383	*70.1*
49	47	48	37	44	43	39	48	*8.8*
66	81	80	70	75	80	89	81	*14.8*
4	10	12	29	58	69	74	34	*6.3*
594	685	748	829	812	883	963	1132	*100.0*
480	556	614	655	439	482	615	929	*82.1*
63	62	55	49	46	68	78	69	*6.1*
38	30	33	29	37	39	46	38	*3.4*
12	36	46	96	291	294	223	96	*8.5*
189	220	244	264	345	430	486	489	*100.0*
57	70	73	112	160	230	265	250	*51.1*
132	149	171	152	185	200	221	239	*48.9*
43	45	49	45	47	56	72	98	*100.0*
21	19	26	20	19	19	22	50	*51.6*
16	16	14	14	16	23	35	39	*39.8*
6	8	8	8	7	7	8	6	*6.4*
0	1	1	3	5	8	6	2	*2.3*

Table 18b Average annual number of new cases for selected primary sites, stage and period of diagnosis, 1956-2015

ICD10	Site	Stage	1956-60	1961-65	1966-70	1971-75
C00-14	Mouth, pharynx	Total	60	67	74	78
		Localized	35	39	42	40
		Regional	19	22	28	27
		Distant	3	4	1	5
		Unknown	3	3	3	5
C15	Oesophagus	Total	23	29	30	30
		Localized	15	19	18	15
		Regional	3	3	4	6
		Distant	3	4	6	5
		Unknown	2	3	3	3
C16	Stomach	Total	595	538	501	423
		Localized	169	153	117	101
		Regional	99	97	91	84
		Distant	240	224	226	203
		Unknown	87	63	67	35
C18	Colon	Total	273	337	427	494
		Localized	106	141	164	170
		Regional	70	78	108	151
		Distant	74	100	131	153
		Unknown	23	18	24	21
C19-20	Rectum, rectosigmoid	Total	121	130	201	253
		Localized	56	62	88	120
		Regional	31	32	55	73
		Distant	27	28	48	54
		Unknown	6	7	11	6
C22	Liver	Total	11	14	19	30
		Localized	5	6	8	15
		Regional	0	0	1	1
		Distant	4	7	9	12
		Unknown	2	1	1	2
C23-24	Gallbladder, bile ducts	Total	46	52	61	49
		Localized	13	15	15	14
		Regional	8	9	8	10
		Distant	23	26	36	22
		Unknown	2	2	2	3
C25	Pancreas	Total	97	119	156	183
		Localized	29	38	42	41
		Regional	9	11	17	24
		Distant	48	63	84	98
		Unknown	11	7	14	20
C33-34	Lung, trachea	Total	70	84	131	165
		Localized	18	25	42	50
		Regional	8	11	20	27
		Distant	35	42	62	77
		Unknown	9	6	8	12
C43	Melanoma of the skin	Total	55	88	120	178
		Localized	42	73	85	154
		Regional	7	6	8	9
		Distant	6	6	13	10
		Unknown	2	3	14	5
C50	Breast	Total	921	1045	1198	1360
		I	407	486	579	667
		II	349	348	373	431
		III	44	89	79	105
		IV	93	95	119	111
		Unknown	28	27	47	46
C53	Cervix uteri [1]	Total	~~341~~	~~357~~	~~395~~	~~435~~
		I	~~145~~	~~148~~	~~198~~	~~232~~
		II	~~114~~	~~125~~	~~130~~	~~116~~
		III	~~52~~	~~54~~	~~41~~	~~62~~
		IV	~~23~~	~~23~~	~~19~~	~~23~~
		Unknown	~~7~~	~~7~~	~~7~~	~~3~~
C54	Corpus uteri	Total	175	216	259	310
		Localized	139	181	203	258
		Regional	9	11	16	21
		Distant	19	20	37	27
		Unknown	7	3	4	4
C56, C57.0-4	Ovary etc.	Total	262	290	365	387
		Localized	85	97	111	143
		Regional	24	15	20	24
		Distant	143	166	225	211
		Unknown	10	12	9	9
C64	Kidney excl. renal pelvis	Total	75	89	110	116
		Localized	42	52	58	58
		Regional	8	9	13	23
		Distant	21	27	34	30
		Unknown	4	2	4	4
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	121	129	151	199
		Localized	76	81	99	128
		Regional	13	21	21	31
		Distant	21	20	21	27
		Unknown	12	8	9	13
C70-72, D32-33	Central nervous system	Total	105	120	130	140
		Non-malignant	42	53	59	58
		Malignant	63	67	71	82
C73	Thyroid gland	Total	53	58	85	107
		Localized	22	26	46	59
		Regional	15	22	26	30
		Distant	12	9	9	14
		Unknown	3	1	3	4

1 The Cancer in Norway reports from 2015 to 2018 contained an error in staging of cervical cancer, and the numbers given in this table are incorrect. For more details see: https://www.kreftregisteret.no/Generelt/Rapporter/Cancer-in-Norway/erratum-for-cancer-in-norway/

FEMALES

Period								
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15	% 2011-15
88	100	111	120	130	142	182	202	*100.0*
51	54	66	66	53	48	76	95	*47.0*
29	39	32	35	40	54	71	82	*40.4*
4	2	5	3	6	6	6	4	*2.0*
5	4	8	16	31	35	29	22	*10.7*
31	35	36	42	47	54	56	68	*100.0*
18	16	14	10	9	11	13	15	*22.7*
5	9	8	7	8	13	14	13	*19.5*
7	6	8	7	10	13	13	14	*21.2*
2	4	6	18	20	17	16	25	*36.6*
411	390	353	306	254	228	209	179	*100.0*
114	122	107	65	42	42	45	32	*17.7*
104	95	93	75	64	66	46	43	*24.1*
157	131	110	103	80	77	78	53	*29.6*
35	41	43	63	68	43	41	51	*28.6*
656	771	871	986	1097	1178	1291	1454	*100.0*
189	230	253	280	187	205	202	237	*16.3*
252	317	357	399	542	587	697	797	*54.8*
187	187	218	231	250	288	309	319	*21.9*
28	37	42	76	119	98	83	100	*6.9*
339	395	414	461	471	491	517	549	*100.0*
152	174	167	174	124	126	105	133	*24.3*
108	131	142	155	181	203	254	254	*46.2*
69	70	75	76	88	90	101	97	*17.6*
10	20	29	56	79	72	58	65	*11.8*
33	44	41	44	44	47	61	85	*100.0*
16	18	19	14	10	12	19	29	*33.8*
1	4	1	3	4	6	8	10	*11.3*
14	16	10	8	10	8	15	19	*22.9*
3	7	10	20	20	20	18	27	*31.9*
70	83	78	72	83	74	84	96	*100.0*
20	24	25	16	10	12	15	14	*14.9*
11	19	14	12	16	15	24	36	*37.9*
34	33	25	22	27	27	31	34	*35.4*
4	8	15	21	31	20	14	11	*11.9*
218	265	286	303	319	335	363	391	*100.0*
46	53	67	48	23	28	45	51	*12.9*
28	34	31	31	37	62	76	82	*20.8*
121	137	140	119	144	164	178	186	*47.4*
23	41	49	105	115	81	64	74	*18.8*
213	301	420	548	701	880	1147	1362	*100.0*
62	80	108	118	105	125	205	313	*23.0*
30	50	79	108	159	228	292	361	*26.5*
102	142	183	216	307	434	540	570	*41.9*
18	30	49	106	131	93	109	117	*8.6*
259	336	430	485	502	555	689	930	*100.0*
232	298	396	432	328	329	432	829	*89.2*
8	16	12	11	11	14	22	42	*4.5*
13	12	12	15	21	21	18	18	*2.0*
5	11	10	27	141	191	217	40	*4.3*
1539	1659	1787	2008	2418	2728	2754	3194	*100.0*
832	892	316	404	690	1004	1118	1318	*41.3*
433	485	687	769	909	1122	1036	1084	*33.9*
96	95	122	115	138	174	259	373	*11.7*
114	107	122	135	122	134	108	105	*3.3*
64	79	540	585	558	293	233	314	*9.8*
~~410~~	~~363~~	~~336~~	~~353~~	~~317~~	~~297~~	~~299~~	~~324~~	~~*100.0*~~
~~233~~	~~209~~	~~184~~	~~224~~	~~185~~	~~172~~	~~165~~	~~211~~	~~*65.2*~~
~~89~~	~~75~~	~~73~~	~~58~~	~~66~~	~~55~~	~~69~~	~~53~~	~~*16.2*~~
~~56~~	~~53~~	~~46~~	~~39~~	~~35~~	~~33~~	~~25~~	~~22~~	~~*6.8*~~
~~23~~	~~23~~	~~28~~	~~27~~	~~26~~	~~26~~	~~32~~	~~30~~	~~*9.3*~~
~~10~~	~~3~~	~~5~~	~~5~~	~~5~~	~~10~~	9	8	~~*2.4*~~
369	382	408	454	505	634	705	735	*100.0*
288	285	300	321	312	376	476	546	*74.3*
42	47	47	44	59	74	66	42	*5.7*
34	36	48	55	68	82	97	91	*12.4*
5	15	12	34	66	102	66	56	*7.7*
416	443	460	468	483	478	471	480	*100.0*
108	115	124	126	91	85	88	105	*21.8*
32	40	24	16	14	13	16	15	*3.1*
265	271	296	299	320	323	325	328	*68.3*
11	18	15	28	57	58	42	33	*6.8*
137	149	179	188	191	211	240	257	*100.0*
65	66	87	102	75	93	131	184	*71.6*
27	31	28	21	22	24	20	17	*6.8*
42	44	50	44	51	42	41	33	*12.7*
3	7	14	22	43	52	48	23	*8.9*
233	257	270	288	305	342	358	430	*100.0*
164	188	209	204	140	173	217	328	*76.3*
32	32	22	20	24	34	35	32	*7.5*
26	17	19	18	23	26	24	23	*5.3*
11	20	20	46	117	109	81	47	*11.0*
185	212	253	298	410	566	636	552	*100.0*
80	94	131	171	264	407	469	384	*69.5*
106	118	122	128	145	158	167	168	*30.5*
129	141	135	138	122	150	174	241	*100.0*
84	93	91	84	56	68	86	153	*63.3*
30	33	31	37	37	47	56	75	*31.1*
13	10	9	11	10	10	7	8	*3.4*
2	5	4	7	18	24	25	5	*2.2*

Table 19a Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1956-2015

ICD10	Site	Stage	1956-60	1961-65	1966-70	1971-75
C00-14	Mouth, pharynx	Total	16.1	14.4	14.7	16.2
		Localized	11.0	10.2	9.6	10.7
		Regional	3.7	3.2	3.2	4.3
		Distant	0.2	0.5	0.6	0.6
		Unknown	1.1	0.4	1.3	0.7
C15	Oesophagus	Total	6.7	6.5	5.6	5.7
		Localized	4.4	4.0	3.2	2.7
		Regional	0.8	0.7	0.7	1.2
		Distant	0.9	1.2	1.2	1.4
		Unknown	0.6	0.5	0.5	0.4
C16	Stomach	Total	73.4	63.2	56.9	45.5
		Localized	21.9	18.7	15.9	12.0
		Regional	13.9	12.7	10.1	9.7
		Distant	28.7	26.2	23.2	19.6
		Unknown	8.9	5.6	7.7	4.1
C18	Colon	Total	20.2	23.1	25.9	27.7
		Localized	7.9	9.8	10.2	9.7
		Regional	5.3	5.0	5.7	7.7
		Distant	5.5	6.9	8.3	8.9
		Unknown	1.4	1.4	1.7	1.3
C19-20	Rectum, rectosigmoid	Total	13.1	14.2	18.1	20.8
		Localized	6.5	7.1	8.4	9.9
		Regional	2.9	3.5	4.7	5.6
		Distant	2.4	2.9	3.9	4.5
		Unknown	1.2	0.8	1.2	0.8
C22	Liver	Total	1.4	1.6	2.4	3.4
		Localized	0.6	0.8	1.3	1.5
		Regional	0.1	0.1	0.1	0.3
		Distant	0.6	0.6	0.9	1.4
		Unknown	0.1	0.0	0.2	0.3
C23-24	Gallbladder, bile ducts	Total	1.3	1.6	2.0	1.9
		Localized	0.6	0.6	0.6	0.6
		Regional	0.2	0.2	0.3	0.3
		Distant	0.4	0.8	0.8	0.9
		Unknown	0.1	0.1	0.2	0.1
C25	Pancreas	Total	11.6	12.9	15.3	16.3
		Localized	3.3	4.1	3.9	3.4
		Regional	1.3	1.4	2.0	2.2
		Distant	6.0	6.7	8.3	9.2
		Unknown	1.0	0.8	1.1	1.4
C33-34	Lung, trachea	Total	19.2	25.4	34.0	41.0
		Localized	5.7	8.8	11.1	13.2
		Regional	3.7	5.3	6.4	7.5
		Distant	8.1	9.6	14.4	17.2
		Unknown	1.7	1.7	2.2	3.0
C43	Melanoma of the skin	Total	3.7	5.1	6.7	9.6
		Localized	2.3	3.4	4.1	7.4
		Regional	0.7	0.6	0.8	0.9
		Distant	0.5	1.0	1.0	0.9
		Unknown	0.2	0.1	0.7	0.3
C61	Prostate	Total	63.8	74.0	81.2	90.0
		Localized	37.9	48.2	51.0	58.3
		Regional	3.0	2.8	3.1	5.1
		Distant	16.4	17.4	17.8	19.3
		Unknown	6.5	5.4	9.3	7.3
C62	Testis	Total	3.4	4.1	4.4	4.6
		Localized	2.2	2.6	2.8	2.4
		Regional	0.1	0.3	0.3	0.8
		Distant	0.9	1.1	1.0	1.2
		Unknown	0.1	0.1	0.2	0.1
C64	Kidney excl. renal pelvis	Total	7.1	8.8	10.3	10.7
		Localized	3.6	4.7	5.2	4.5
		Regional	0.6	1.1	1.3	2.2
		Distant	2.6	2.7	3.4	3.8
		Unknown	0.3	0.3	0.4	0.2
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	17.4	22.0	24.0	30.8
		Localized	13.4	18.6	18.7	23.7
		Regional	1.3	1.7	2.6	3.9
		Distant	1.7	1.2	1.5	2.2
		Unknown	0.9	0.5	1.2	0.9
C70-72, D32-33	Central nervous system	Total	7.4	7.9	8.2	8.9
		Non-malignant	1.9	2.3	2.5	2.5
		Malignant	5.5	5.7	5.8	6.4
C73	Thyroid gland	Total	1.5	1.6	2.3	2.2
		Localized	0.5	0.3	0.8	0.9
		Regional	0.7	0.7	0.8	0.9
		Distant	0.3	0.5	0.6	0.3
		Unknown	0.0	0.0	0.1	0.0

MALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
15.0	14.6	14.8	14.3	14.5	12.8	13.8	15.3
9.5	8.8	8.6	6.9	5.3	4.1	5.0	5.9
4.4	5.0	4.6	5.0	5.3	5.7	6.4	7.4
0.6	0.3	0.4	0.6	0.6	0.6	0.6	0.7
0.5	0.5	1.2	1.7	3.3	2.5	1.8	1.4
5.5	5.2	5.7	6.2	6.6	7.1	7.5	8.5
2.8	2.5	1.8	1.3	1.0	1.3	1.4	1.3
1.0	1.1	1.3	1.4	1.4	1.8	2.1	2.3
1.3	1.2	1.7	1.5	1.8	2.3	2.2	2.2
0.4	0.3	0.9	2.0	2.3	1.8	1.8	2.7
39.1	36.1	31.4	26.6	22.3	18.5	14.8	13.2
11.9	11.3	9.0	5.5	3.1	3.1	3.0	2.4
9.1	9.4	8.0	7.4	6.4	5.5	4.0	3.8
15.3	12.5	10.4	8.3	7.4	6.5	4.8	4.1
2.9	2.9	4.0	5.5	5.4	3.4	3.0	2.8
33.9	39.5	43.8	48.5	50.9	54.6	57.1	58.7
10.2	12.1	12.7	13.5	8.5	9.3	8.5	9.7
12.4	15.7	16.9	19.0	24.8	26.9	30.1	30.5
9.7	9.8	12.1	12.4	13.1	14.0	14.8	14.6
1.6	1.8	2.3	3.6	4.5	4.4	3.7	4.0
27.4	30.6	30.6	32.3	32.1	34.7	33.1	32.9
12.7	14.0	11.9	11.5	8.2	8.3	6.4	6.8
8.8	9.7	11.5	11.6	12.4	14.6	16.6	16.5
5.3	5.5	5.4	5.9	6.2	7.1	6.8	6.1
0.7	1.4	1.7	3.4	5.2	4.7	3.3	3.5
3.1	3.8	3.4	3.3	3.6	4.1	4.9	6.5
1.4	1.9	1.6	1.2	1.1	1.4	1.8	2.2
0.2	0.3	0.2	0.1	0.3	0.3	0.5	0.8
1.1	1.1	0.7	0.6	0.7	1.0	1.3	1.5
0.3	0.6	0.8	1.3	1.5	1.5	1.3	2.0
2.5	2.6	2.8	3.1	3.3	3.4	3.4	3.4
0.8	0.9	1.0	0.7	0.4	0.6	0.7	0.5
0.5	0.5	0.5	0.6	0.6	1.1	1.2	1.5
1.1	0.9	0.7	0.9	0.9	0.9	1.0	0.9
0.1	0.3	0.5	1.0	1.4	0.9	0.6	0.5
16.5	18.5	17.0	16.1	15.2	16.4	16.6	16.4
2.7	3.9	3.5	2.4	0.9	1.3	1.5	1.7
2.1	2.5	1.7	1.7	1.9	3.5	3.7	3.5
9.9	9.3	8.9	7.4	7.2	8.4	9.1	8.6
1.9	2.9	2.8	4.7	5.2	3.1	2.4	2.7
51.0	59.7	64.5	68.0	69.7	72.9	72.8	70.0
16.8	19.1	18.2	16.0	10.9	9.5	10.5	14.0
8.7	11.0	13.3	13.0	17.1	20.3	21.1	19.6
21.5	24.4	25.4	26.2	29.3	34.6	33.9	29.9
4.0	5.3	7.7	12.7	12.4	8.5	7.2	6.5
12.1	14.4	19.5	23.4	23.4	25.2	30.3	39.5
9.9	11.7	16.5	19.6	15.1	14.0	18.1	33.3
1.0	1.1	0.9	0.9	0.7	1.2	1.4	2.8
1.0	0.9	1.3	1.5	1.4	1.7	1.5	1.4
0.2	0.6	0.8	1.4	6.2	8.4	9.3	2.0
99.8	105.8	111.2	135.7	163.5	180.9	209.0	211.2
66.2	67.7	70.2	67.7	49.5	74.2	93.0	101.0
4.6	3.9	3.3	5.8	6.8	11.1	34.4	55.0
21.3	26.3	28.9	23.2	23.3	22.6	20.8	16.8
7.7	8.0	8.7	39.0	83.9	72.9	60.8	38.4
5.5	6.8	7.4	8.6	9.9	10.6	11.9	12.0
3.1	3.7	4.9	5.8	5.6	6.0	7.9	9.9
1.2	1.9	1.3	1.6	1.5	1.9	1.6	1.2
1.1	1.1	1.1	0.9	1.3	1.2	1.2	0.8
0.1	0.1	0.2	0.2	1.4	1.5	1.1	0.1
11.7	14.2	14.5	14.9	15.3	17.7	19.5	22.7
4.7	6.2	6.4	7.3	5.7	7.9	9.9	15.7
2.8	2.7	2.7	2.1	2.3	2.1	1.8	2.0
3.9	4.6	4.6	3.8	4.0	4.1	4.2	3.4
0.3	0.7	0.8	1.6	3.3	3.6	3.5	1.6
37.0	40.9	44.0	47.4	45.1	47.1	47.5	50.4
29.8	33.2	36.1	37.3	24.2	25.6	30.2	41.3
3.8	3.6	3.1	2.8	2.5	3.6	3.8	3.0
2.5	1.8	1.9	1.7	2.0	2.0	2.3	1.7
0.9	2.4	2.8	5.7	16.4	15.9	11.2	4.3
10.3	11.8	13.0	13.7	17.1	20.5	21.8	20.0
3.2	4.0	4.0	5.8	7.9	10.9	11.8	10.2
7.1	7.8	9.0	7.9	9.2	9.6	10.0	9.8
2.5	2.5	2.6	2.4	2.3	2.6	3.2	4.0
1.2	1.1	1.4	1.1	0.9	0.9	1.0	2.0
0.9	0.9	0.7	0.7	0.8	1.0	1.5	1.6
0.4	0.5	0.5	0.4	0.4	0.3	0.4	0.3
0.0	0.1	0.1	0.2	0.3	0.4	0.3	0.1

Table 19b Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected primary sites, stage and period of diagnosis, 1956-2015

ICD10	Site	Stage	1956-60	1961-65	1966-70	1971-75
C00-14	Mouth, pharynx	Total	4.5	4.5	4.5	4.3
		Localized	2.6	2.5	2.5	2.3
		Regional	1.5	1.5	1.7	1.5
		Distant	0.2	0.2	0.1	0.3
		Unknown	0.2	0.2	0.2	0.3
C15	Oesophagus	Total	1.8	2.0	1.9	1.6
		Localized	1.2	1.3	1.1	0.8
		Regional	0.2	0.2	0.2	0.3
		Distant	0.2	0.3	0.4	0.3
		Unknown	0.2	0.2	0.2	0.2
C16	Stomach	Total	45.8	37.7	30.9	23.5
		Localized	13.6	11.1	7.6	5.8
		Regional	6.6	6.0	5.1	4.4
		Distant	17.4	15.0	13.3	11.1
		Unknown	8.2	5.7	4.9	2.2
C18	Colon	Total	20.2	22.7	25.6	27.1
		Localized	7.9	9.6	10.0	9.4
		Regional	4.8	4.9	6.1	8.0
		Distant	5.3	6.5	7.7	8.2
		Unknown	2.1	1.6	1.8	1.5
C19-20	Rectum, rectosigmoid	Total	8.7	8.5	11.9	13.8
		Localized	4.1	4.0	5.3	6.6
		Regional	2.1	2.0	3.1	3.9
		Distant	1.9	1.9	2.8	2.9
		Unknown	0.6	0.6	0.8	0.4
C22	Liver	Total	0.8	0.9	1.1	1.6
		Localized	0.4	0.4	0.5	0.8
		Regional	0.0	0.0	0.1	0.1
		Distant	0.3	0.4	0.5	0.7
		Unknown	0.1	0.0	0.1	0.1
C23-24	Gallbladder, bile ducts	Total	3.3	3.4	3.6	2.7
		Localized	0.9	1.0	0.9	0.8
		Regional	0.6	0.6	0.5	0.5
		Distant	1.6	1.7	2.1	1.2
		Unknown	0.2	0.1	0.1	0.2
C25	Pancreas	Total	6.9	7.6	9.2	9.8
		Localized	2.2	2.5	2.4	2.2
		Regional	0.6	0.7	1.0	1.2
		Distant	3.4	3.9	4.9	5.2
		Unknown	0.8	0.5	0.9	1.1
C33-34	Lung, trachea	Total	4.8	5.3	7.6	8.7
		Localized	1.2	1.6	2.5	2.6
		Regional	0.5	0.6	1.1	1.4
		Distant	2.4	2.6	3.5	4.1
		Unknown	0.6	0.4	0.5	0.7
C43	Melanoma of the skin	Total	3.7	5.3	7.1	10.0
		Localized	2.7	4.3	5.0	8.6
		Regional	0.4	0.4	0.5	0.5
		Distant	0.4	0.4	0.8	0.5
		Unknown	0.1	0.2	0.8	0.3
C50	Breast	Total	60.6	64.8	69.0	75.0
		I	26.7	30.0	33.4	36.9
		II	22.0	20.8	20.9	23.4
		III	3.2	6.0	4.7	5.8
		IV	6.6	6.1	7.0	6.1
		Unknown	2.1	1.9	3.0	2.8
C53	Cervix uteri [1]	Total	~~20.6~~	~~21.1~~	~~22.8~~	~~24.7~~
		I	~~8.5~~	~~8.6~~	~~11.6~~	~~13.7~~
		II	~~6.9~~	~~7.3~~	~~7.3~~	~~6.4~~
		III	~~3.3~~	~~3.3~~	~~2.3~~	~~3.3~~
		IV	~~1.5~~	~~1.4~~	~~1.1~~	~~1.2~~
		Unknown	~~0.5~~	~~0.5~~	~~0.4~~	~~0.1~~
C54	Corpus uteri	Total	11.1	12.7	14.4	16.4
		Localized	8.8	10.6	11.2	13.6
		Regional	0.7	0.7	0.9	1.1
		Distant	1.3	1.2	2.0	1.4
		Unknown	0.4	0.2	0.2	0.2
C56, C57.0-4	Ovary etc.	Total	16.8	17.4	20.4	20.7
		Localized	5.3	5.8	6.2	7.7
		Regional	1.5	0.9	1.1	1.3
		Distant	9.2	9.9	12.5	11.1
		Unknown	0.7	0.8	0.6	0.5
C64	Kidney excl. renal pelvis	Total	5.0	5.4	6.2	6.1
		Localized	2.8	3.2	3.4	3.1
		Regional	0.6	0.5	0.7	1.2
		Distant	1.4	1.6	1.9	1.6
		Unknown	0.3	0.1	0.2	0.2
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	8.8	8.6	9.0	10.7
		Localized	5.5	5.4	5.8	6.8
		Regional	1.0	1.3	1.2	1.7
		Distant	1.4	1.3	1.3	1.4
		Unknown	0.9	0.6	0.7	0.8
C70-72, D32-33	Central nervous system	Total	6.3	6.9	7.1	7.4
		Non-malignant	2.6	3.1	3.3	3.1
		Malignant	3.7	3.7	3.8	4.2
C73	Thyroid gland	Total	3.6	3.6	4.9	5.9
		Localized	1.5	1.6	2.7	3.3
		Regional	1.0	1.4	1.5	1.7
		Distant	0.8	0.6	0.5	0.7
		Unknown	0.2	0.1	0.2	0.2

1 The Cancer in Norway reports from 2015 to 2018 contained an error in staging of cervical cancer, and the numbers given in this table are incorrect. For more details see: https://www.kreftregisteret.no/Generelt/Rapporter/Cancer-in-Norway/erratum-for-cancer-in-norway/

FEMALES

Period							
1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15
4.6	4.8	5.2	5.4	5.7	6.0	7.3	7.5
2.7	2.6	3.0	3.0	2.3	2.0	3.0	3.5
1.5	1.9	1.5	1.6	1.8	2.3	2.9	3.1
0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.1
0.3	0.2	0.4	0.7	1.4	1.4	1.2	0.8
1.6	1.6	1.6	1.8	1.9	2.2	2.1	2.5
0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.6
0.2	0.4	0.4	0.3	0.4	0.6	0.6	0.5
0.3	0.3	0.4	0.3	0.4	0.6	0.5	0.5
0.1	0.2	0.3	0.7	0.8	0.6	0.6	0.9
20.8	18.1	15.3	12.7	10.2	9.0	7.8	6.4
6.0	5.7	4.7	2.7	1.7	1.6	1.7	1.1
5.1	4.3	4.1	3.1	2.6	2.6	1.7	1.5
7.8	6.0	4.7	4.3	3.4	3.1	3.0	2.0
2.0	2.1	1.9	2.5	2.5	1.6	1.5	1.8
33.0	36.0	38.4	41.8	45.1	47.0	49.3	52.5
9.5	10.7	11.1	11.8	7.7	8.1	7.8	8.7
12.6	14.7	15.7	17.0	22.3	23.6	26.7	28.9
9.3	8.8	9.8	10.0	10.4	11.6	12.0	11.7
1.6	1.8	1.8	3.1	4.7	3.7	2.8	3.2
17.2	18.5	18.3	20.1	19.8	20.1	20.4	20.3
7.8	8.3	7.4	7.6	5.3	5.2	4.2	5.0
5.3	6.0	6.4	6.9	7.7	8.4	10.0	9.5
3.5	3.2	3.3	3.3	3.7	3.8	4.0	3.6
0.6	1.0	1.3	2.3	3.1	2.8	2.1	2.3
1.7	2.1	1.8	1.9	1.9	1.9	2.3	3.1
0.8	0.8	0.8	0.6	0.5	0.5	0.7	1.1
0.0	0.2	0.1	0.1	0.2	0.3	0.3	0.4
0.7	0.7	0.4	0.3	0.4	0.3	0.6	0.7
0.2	0.4	0.4	0.8	0.8	0.8	0.7	0.9
3.4	3.8	3.4	3.0	3.3	2.9	3.2	3.5
1.0	1.1	1.1	0.7	0.4	0.5	0.6	0.5
0.5	0.9	0.6	0.5	0.7	0.6	1.0	1.4
1.7	1.5	1.1	0.9	1.1	1.1	1.2	1.2
0.2	0.4	0.6	0.8	1.1	0.7	0.5	0.4
10.7	12.2	12.3	12.6	12.7	13.2	13.8	14.1
2.3	2.4	2.9	2.0	0.9	1.0	1.6	1.8
1.4	1.6	1.4	1.4	1.5	2.5	3.0	3.0
5.8	6.3	6.1	5.2	6.0	6.7	7.0	6.8
1.2	1.9	2.0	4.1	4.3	3.0	2.2	2.5
10.7	14.5	19.7	25.4	32.1	38.4	46.7	51.1
3.1	3.7	5.0	5.4	4.8	5.5	8.5	11.9
1.5	2.5	3.8	5.2	7.4	10.0	12.0	13.7
5.1	7.0	8.7	10.3	14.3	19.2	22.0	21.5
1.0	1.4	2.2	4.5	5.6	3.8	4.2	4.1
14.0	17.2	21.1	22.8	22.5	24.0	28.2	35.5
12.6	15.3	19.6	20.3	14.8	14.3	17.8	31.8
0.4	0.8	0.5	0.5	0.5	0.6	0.8	1.5
0.7	0.6	0.6	0.7	0.9	0.9	0.7	0.7
0.3	0.5	0.5	1.3	6.3	8.1	8.9	1.5
81.1	83.3	85.8	93.6	111.5	120.8	114.2	123.3
43.7	44.3	15.2	19.4	33.3	47.0	47.9	51.9
22.8	24.7	33.4	36.3	42.0	49.7	43.0	41.9
5.1	4.6	5.8	5.0	6.0	7.2	10.5	14.3
5.9	5.3	5.7	6.3	5.4	5.6	4.3	4.0
3.7	4.3	25.6	26.5	24.9	11.3	8.4	11.1
~~22.3~~	~~18.6~~	~~16.5~~	~~16.6~~	~~14.4~~	~~12.8~~	~~12.4~~	~~12.8~~
~~13.0~~	~~10.8~~	~~9.0~~	~~10.5~~	~~8.5~~	~~7.5~~	~~6.9~~	~~8.4~~
~~4.7~~	~~3.9~~	~~3.6~~	~~2.8~~	~~3.0~~	~~2.4~~	~~2.9~~	~~2.1~~
~~2.9~~	~~2.6~~	~~2.3~~	~~1.8~~	~~1.6~~	~~1.4~~	~~1.0~~	~~0.9~~
~~1.2~~	~~1.1~~	~~1.4~~	~~1.2~~	~~1.1~~	~~1.1~~	~~1.3~~	~~1.2~~
~~0.5~~	~~0.2~~	~~0.2~~	~~0.2~~	~~0.2~~	~~0.4~~	~~0.3~~	~~0.3~~
19.1	19.4	20.0	21.7	23.4	27.6	29.1	27.9
15.0	14.7	14.9	15.5	14.7	16.6	19.7	20.8
2.1	2.3	2.2	2.1	2.7	3.1	2.7	1.6
1.7	1.7	2.3	2.5	3.1	3.5	4.0	3.4
0.3	0.7	0.6	1.5	2.9	4.4	2.7	2.0
21.5	22.3	22.4	22.1	21.8	20.6	19.2	18.3
5.7	5.9	6.1	6.1	4.2	3.8	3.6	4.1
1.7	2.1	1.2	0.7	0.7	0.5	0.6	0.6
13.6	13.5	14.4	14.2	14.5	13.9	13.3	12.5
0.5	0.8	0.7	1.2	2.4	2.4	1.6	1.1
6.8	7.0	8.1	8.1	8.1	8.7	9.6	9.7
3.3	3.2	3.9	4.5	3.3	4.0	5.4	7.1
1.3	1.5	1.3	0.9	0.9	1.0	0.8	0.7
2.1	2.0	2.3	1.8	2.1	1.7	1.6	1.2
0.2	0.3	0.6	0.9	1.8	2.0	1.9	0.8
11.6	11.9	11.9	12.2	12.5	13.7	13.8	15.5
8.2	8.7	9.2	8.7	5.9	7.0	8.4	11.9
1.6	1.4	1.0	0.9	1.0	1.4	1.4	1.2
1.3	0.8	0.8	0.8	1.0	1.0	0.9	0.8
0.6	0.9	0.9	1.9	4.6	4.3	3.1	1.7
9.5	10.5	12.2	14.0	18.3	24.7	26.1	21.3
4.1	4.7	6.4	8.0	11.8	17.9	19.3	14.8
5.3	5.9	5.9	6.0	6.5	6.8	6.9	6.5
6.9	7.0	6.4	6.4	5.4	6.4	7.3	9.5
4.6	4.8	4.4	4.0	2.6	3.0	3.6	6.1
1.5	1.6	1.4	1.7	1.6	2.0	2.3	2.9
0.6	0.5	0.4	0.5	0.4	0.4	0.3	0.3
0.1	0.2	0.2	0.3	0.8	1.0	1.1	0.2

Prevalence

As of December 31st 2015, more than 252 000 individuals 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 (19 573) followed by melanoma of the skin (10 744), prostate (8 866) and colon cancer (6 484).

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

Table 20 Prevalence of cancer 31.12.2005 and 31.12.2015, both sexes

		Total no. of persons alive		Years after diagnosis			
ICD10	Site	31.12.05	31.12.15	<1	1-4	5-9	10+
C00-96	**All sites**	**171781**	**252997**	**23617**	**71785**	**60355**	**97240**
C00-14	**Mouth, pharynx**	**3323**	**4808**	**561**	**1519**	**1143**	**1585**
C00	Lip	1184	1368	120	381	347	520
C01-02	Tongue	535	946	127	342	207	270
C03-06	Mouth, other	579	746	86	228	182	250
C07-08	Salivary glands	449	592	69	141	122	260
C09-14	Pharynx	602	1219	177	457	296	289
C15-26	**Digestive organs**	**26966**	**37569**	**4921**	**12114**	**8842**	**11692**
C15	Oesophagus	278	613	204	242	102	65
C16	Stomach	1977	1969	304	565	387	713
C17	Small intestine	541	1075	147	377	289	262
C18	Colon	14778	20618	2478	6678	4978	6484
C19-20	Rectum, rectosigmoid	8427	11448	1227	3585	2819	3817
C21	Anus	526	708	66	212	175	255
C22	Liver	185	494	140	198	75	81
C23-24	Gallbladder, bile ducts	302	440	96	164	83	97
C25	Pancreas	510	950	377	349	130	94
C26	Other digestive organs	110	189	67	53	22	47
C30-34, C38	**Respiratory organs**	**5382**	**8513**	**2006**	**3223**	**1660**	**1624**
C30-31	Nose, sinuses	264	345	35	111	87	112
C32	Larynx, epiglottis	1060	1106	90	325	272	419
C33-34	Lung, trachea	4025	7047	1888	2798	1296	1065
C38	Heart, mediastinum and pleura	58	59	6	9	11	33
C40-41	**Bone**	**569**	**781**	**52**	**137**	**144**	**448**
C43	**Melanoma of the skin**	**15312**	**23393**	**1942**	**6149**	**4558**	**10744**
C44	**Skin, non-melanoma**	**9738**	**14725**	**1780**	**5227**	**3647**	**4071**
C45	**Mesothelioma**	**100**	**136**	**56**	**57**	**13**	**10**
C47	**Autonomic nervous system**	**222**	**252**	**10**	**27**	**35**	**180**
C48-49	**Soft tissues**	**1137**	**1548**	**117**	**414**	**311**	**706**
C50	**Breast**	**31364**	**44182**	**3332**	**11192**	**10085**	**19573**
C51-58	**Female genital organs**	**19332**	**22561**	**1609**	**4683**	**4352**	**11917**
C53	Cervix uteri	6753	7102	348	1045	1018	4691
C54	Corpus uteri	7787	10088	737	2356	2403	4592
C55	Uterus, other	41	44	4	8	6	26
C56, C57.0-4	Ovary etc.	4154	4575	434	1091	776	2274
C51-52, C57.7-9	Other female genital	767	940	109	250	207	374
C58	Placenta	141	151	1	13	8	129
C60-63	**Male genital organs**	**27223**	**52052**	**5178**	**18240**	**15193**	**13441**
C61	Prostate	21913	44458	4863	16957	13772	8866
C62	Testis	5031	7277	288	1223	1358	4408
C60, C63	Other male genital	344	505	54	133	128	190
C64-68	**Urinary organs**	**13679**	**19645**	**2335**	**6330**	**4745**	**6235**
C64	Kidney excl. renal pelvis	3711	6404	764	2197	1592	1851
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	10028	13382	1597	4201	3185	4399
C69	**Eye**	**860**	**1073**	**82**	**244**	**197**	**550**
C70-72, D32-33	**Central nervous system**	**8315**	**12919**	**792**	**2817**	**3308**	**6002**
C73	**Thyroid gland**	**3842**	**5421**	**324**	**1131**	**961**	**3005**
C37, C74-75	**Other endocrine glands**	**2201**	**3868**	**168**	**918**	**1046**	**1736**
C39, C76, C80	**Other or unspecified**	**499**	**594**	**117**	**160**	**118**	**199**
C81-96	**Lymphoid and haematopoietic tissue**	**12972**	**22182**	**2368**	**6914**	**5507**	**7393**
C81	Hodgkin lymphoma	1897	2693	158	503	494	1538
C82-86, C96	Non-Hodgkin lymphoma	5377	9200	915	2805	2346	3134
C88	Malignant immunoproliferative diseases	319	586	51	237	177	121
C90	Multiple myeloma	1298	1917	348	820	472	277
C91-95, D45-47	Leukaemia	4144	7972	930	2624	2064	2354

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 dec. 1990	Alive by 31st of dec. 1995	Alive by 31st of dec. 2000	Alive by 31st of dec. 2005	Alive by 31st of dec. 2010	Alive by 31st of dec. 2015
South East	4 066	4 858	5 990	7 561	9 636	11 273
West	1 495	1 627	2 131	2 629	3 247	3 940
Middle	1 072	1 248	1 458	1 867	2 250	2 608
North	670	743	945	1 170	1 475	1 749
Total	**7 303**	**8 476**	**10 524**	**13 227**	**16 608**	**19 570**

Mortality

The mortality data is obtained from the Cause of Death Registry. Of note is that mortality data for 2015 was not complete when this report was published, and we therefore report figures for 2014.

There were 10 971 deaths from cancer in Norway in 2014, of which 5 833 were men, and 5 138 women (Table 22). Cancers of the lung, colon, rectum, prostate and female breast account for half of the total cancer mortality.

For men, 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 death 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 death among women. Figure 9 shows the distribution of age-standardised mortality rates for selected cancer sites. There is at least a 100-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 (Norwegian standard) mortality rates per 100 000 person-years for selected cancers in Norway, 2014

Table 22 Number of cancer deaths in Norway by primary site and sex, 2014

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	Heart, mediastinum and pleura	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, C57.0-4	Ovary etc.		297	297
C51-52, C57.7-9	Other female genital		53	53
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
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	251	122	373
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-year, 5-year, 10-year and 15-year relative survival estimates (with 95% confidence intervals) for the follow-up period 2011–2015 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 is above 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.

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, 1976 - 2015

MALES

ICD10	Site	Stage	Relative survival (%) 1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15*
C00-96	All sites	Total	40.0	43.2	46.0	51.1	56.7	61.5	68.0	71.1
C00-14	Mouth, pharynx	Total	60.7	58.1	57.5	54.2	55.9	54.6	62.7	67.1
		Localized	80.5	79.0	77.4	80.7	79.4	79.4	80.5	82.7
		Regional	27.6	26.5	30.2	27.4	37.0	41.7	51.1	60.7
		Distant	-	-	-	10.5	9.5	11.7	9.9	14.1
		Unknown	-	-	40.7	37.6	57.2	56.9	74.8	51.2
C15	Oesophagus	Total	2.0	4.6	4.7	5.5	7.1	8.1	13.2	17.1
		Localized	2.7	6.3	9.7	15.7	24.6	21.7	30.0	44.6
		Regional	2.5	6.4	5.3	4.3	7.9	10.4	13.7	19.3
		Distant	-	-	-	-	-	-	-	3.0
		Unknown	-	-	4.7	-	5.3	7.2	15.1	14.6
C16	Stomach	Total	17.4	16.9	19.1	17.7	18.7	19.5	23.6	24.3
		Localized	39.5	35.9	45.0	48.9	58.4	52.4	51.3	55.9
		Regional	20.4	18.6	20.4	17.9	19.8	21.5	23.3	30.2
		Distant	1.4	2.1	0.9	0.4	1.9	1.4	4.1	2.9
		Unknown	4.8	4.5	9.6	16.2	19.2	24.0	31.0	21.4
C18	Colon	Total	41.7	47.9	47.5	49.9	55.4	56.4	59.9	60.6
		Localized	70.6	77.1	78.2	81.7	93.5	87.8	90.0	91.5
		Regional	49.9	54.7	57.3	60.5	67.9	71.0	77.0	78.9
		Distant	6.4	4.8	4.3	4.3	6.0	8.1	11.2	12.9
		Unknown	11.9	24.8	22.9	31.1	48.2	52.4	45.4	19.2
C19-20	Rectum, rectosigmoid	Total	38.6	43.2	46.6	50.6	56.7	59.4	65.8	68.2
		Localized	57.6	65.0	70.8	79.0	83.6	87.3	90.1	93.2
		Regional	35.0	38.2	45.1	49.0	63.9	68.7	79.3	81.9
		Distant	3.4	2.6	2.8	3.6	9.9	10.5	16.6	18.2
		Unknown	-	25.6	26.8	37.3	50.0	56.5	50.4	40.7
C22	Liver	Total	5.7	2.5	2.8	8.0	6.8	7.9	13.8	16.7
		Localized	8.7	5.2	4.4	15.7	19.7	13.1	25.3	36.0
		Regional	-	-	-	-	-	-	-	5.3
		Distant	-	-	-	-	-	-	2.7	1.2
		Unknown	-	-	-	4.0	-	7.5	15.7	12.8
C23-24	Gallbladder, bile ducts	Total	8.6	11.1	12.6	8.8	15.7	16.7	16.2	19.0
		Localized	11.1	16.8	14.4	18.0	-	44.2	23.2	35.2
		Regional	-	-	-	10.7	24.5	16.8	24.8	26.5
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	11.6	12.0	-	-
C25	Pancreas	Total	1.6	1.7	1.9	2.5	3.1	4.4	5.0	6.4
		Localized	4.2	2.3	4.9	5.2	15.0	17.0	18.2	30.6
		Regional	2.5	3.3	4.3	7.2	6.9	5.7	7.4	8.4
		Distant	0.5	0.3	1.0	1.1	1.4	2.2	1.8	2.1
		Unknown	7.3	-	-	1.8	1.6	3.7	6.8	8.5
C33-34	Lung, trachea	Total	6.1	7.2	7.5	8.1	8.5	9.6	12.2	14.4
		Localized	12.5	16.4	15.9	19.4	31.2	37.9	41.6	43.9
		Regional	5.6	8.1	9.8	9.4	8.7	11.1	14.7	18.0
		Distant	0.9	0.6	0.6	0.6	0.5	1.3	1.7	1.7
		Unknown	4.1	2.1	3.8	6.8	5.4	8.0	11.7	9.7
C43	Melanoma of the skin	Total	59.9	67.4	69.3	74.6	75.3	75.7	77.1	81.6
		Localized	69.2	76.8	77.5	82.4	83.6	85.6	85.7	88.8
		Regional	17.8	28.3	27.0	37.7	34.7	47.2	37.3	44.2
		Distant	12.6	-	8.2	10.3	10.1	10.7	9.6	16.8
		Unknown	-	60.3	44.3	62.5	73.1	75.8	74.7	54.2
C61	Prostate	Total	56.1	57.3	57.5	65.7	78.2	84.0	90.7	92.9
		Localized	71.2	73.7	73.0	77.9	94.4	96.5	99.9	101.3
		Regional	40.4	38.1	51.9	62.1	69.8	77.2	91.7	93.2
		Distant	18.8	18.8	25.3	21.5	24.2	28.5	33.2	34.1
		Unknown	42.4	51.7	59.1	69.0	81.6	86.5	92.8	96.2
C62	Testis	Total	82.6	92.2	93.9	95.9	96.9	96.8	98.1	98.1
		Localized	95.1	98.0	98.4	99.4	99.2	99.3	99.9	99.3
		Regional	83.7	95.3	96.1	95.2	98.3	95.6	96.3	95.8
		Distant	44.4	69.3	74.3	74.7	81.1	85.7	87.4	88.5
		Unknown	-	-	-	-	101.0	96.5	99.1	-
C64	Kidney excl. renal pelvis	Total	39.2	41.9	42.7	51.3	49.8	59.7	64.9	70.3
		Localized	71.9	72.7	70.0	77.1	76.2	85.7	85.7	87.9
		Regional	44.1	46.2	47.0	53.2	51.2	52.1	57.6	58.3
		Distant	4.7	5.9	5.7	5.2	7.6	6.9	10.3	8.7
		Unknown	-	-	-	29.2	51.3	59.2	68.8	49.9
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	59.2	63.2	66.5	69.4	68.4	71.6	73.5	76.1
		Localized	68.7	71.4	73.0	76.0	78.5	84.6	84.1	83.3
		Regional	29.1	23.0	26.6	25.0	26.9	25.3	32.0	31.1
		Distant	0.7	2.2	7.5	5.4	4.5	7.6	4.3	5.3
		Unknown	27.4	58.7	68.1	67.4	68.7	70.8	74.5	80.6
C70-72, D32-33	Central nervous system	Total	30.4	34.9	38.6	44.8	51.9	59.6	61.7	61.2
		Non-malignant	59.1	71.7	76.4	80.5	89.8	93.1	92.8	93.8
		Malignant	17.7	18.1	23.0	21.4	20.4	21.5	25.6	25.6
C73	Thyroid gland	Total	76.4	83.1	73.3	75.4	79.9	85.8	84.4	89.8
		Localized	92.9	100.2	90.1	97.9	98.9	97.4	96.9	96.9
		Regional	79.9	85.5	83.0	84.0	82.1	89.3	89.0	91.1
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	-	-	-	-
C81	Hodgkin lymphoma	Total	56.9	67.1	73.5	79.6	85.4	85.4	82.9	84.9
C82-86,96	Non-Hodgkin lymphoma	Total	38.2	41.0	45.2	46.0	49.7	59.3	64.8	70.8
C91-95, 45-47	Leukaemia	Total	22.9	25.3	33.8	40.5	45.7	53.9	58.9	60.3

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

* For 2011-2015 the 5-year relative survial estimates are based on the period approach (observation window 2011-2015).

Table 23b Five-year relative survival by primary site, stage and period of diagnosis, 1976 - 2015

FEMALES

			Relative survival (%)							
ICD10	Site	Stage	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	2011-15*
C00-96	All sites	Total	49.8	52.6	55.0	58.2	61.6	64.6	67.8	70.5
C00-14	Mouth, pharynx	Total	55.7	57.5	58.9	64.5	58.4	64.5	69.3	74.0
		Localized	68.9	74.2	71.2	82.8	81.6	83.8	83.1	87.7
		Regional	38.0	38.9	45.3	40.3	37.5	51.4	55.8	62.1
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	48.9	52.4	68.7	77.3	65.2
C15	Oesophagus	Total	7.7	11.5	7.7	10.1	9.5	8.6	12.9	17.7
		Localized	12.5	14.9	14.7	17.3	-	19.1	38.7	41.3
		Regional	-	-	-	-	-	8.5	16.0	22.3
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	10.0	7.4	8.7	7.7	6.4
C16	Stomach	Total	15.2	19.2	21.5	21.7	24.9	22.6	23.9	24.6
		Localized	38.8	46.9	47.7	56.8	71.2	60.5	58.6	58.3
		Regional	16.0	19.0	24.8	26.5	33.8	21.8	22.7	26.7
		Distant	1.4	0.7	1.0	1.4	3.2	3.8	3.5	2.8
		Unknown	5.8	11.8	11.4	15.6	16.2	24.3	30.8	24.8
C18	Colon	Total	42.5	47.6	50.6	52.9	57.3	58.9	63.3	66.2
		Localized	69.9	77.4	79.9	84.5	89.2	92.0	95.2	96.1
		Regional	52.6	55.8	60.6	61.6	69.9	71.7	78.0	81.5
		Distant	4.0	4.1	4.3	4.9	8.9	9.8	13.4	15.5
		Unknown	16.0	13.3	22.3	27.3	41.5	49.3	40.0	17.1
C19-20	Rectum, rectosigmoid	Total	43.5	46.8	50.5	56.0	58.8	64.6	65.8	67.7
		Localized	66.4	70.7	76.5	80.1	95.3	91.9	96.0	97.4
		Regional	37.4	41.0	49.9	57.8	62.4	72.5	75.8	79.3
		Distant	6.9	3.8	2.2	5.7	6.9	10.8	17.8	21.3
		Unknown	-	27.3	24.5	43.0	50.3	61.2	50.6	35.8
C22	Liver	Total	-	5.4	6.1	9.8	8.0	12.3	15.4	19.6
		Localized	-	11.0	12.6	24.0	-	22.2	34.4	41.0
		Regional	-	-	-	-	-	-	-	7.6
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	6.7	-	11.8	10.7	8.9
C23-24	Gallbladder, bile ducts	Total	9.6	10.4	10.7	9.4	12.2	9.6	15.4	14.4
		Localized	21.6	23.5	13.4	22.2	-	21.0	30.3	23.7
		Regional	9.6	11.1	17.0	9.7	18.7	25.1	23.8	28.6
		Distant	-	-	-	-	2.5	-	1.6	0.8
		Unknown	-	-	6.5	-	8.4	4.3	8.5	-
C25	Pancreas	Total	2.1	1.8	2.3	3.2	3.5	3.4	6.3	7.7
		Localized	4.5	4.0	6.2	11.1	16.2	18.5	22.6	29.1
		Regional	6.0	4.9	4.0	4.9	3.9	4.5	6.4	11.1
		Distant	1.1	0.7	0.3	0.9	1.0	1.2	2.5	2.4
		Unknown	-	-	-	2.2	5.2	3.8	8.3	2.1
C33-34	Lung, trachea	Total	11.2	7.3	8.9	11.5	12.3	13.3	17.4	20.9
		Localized	24.5	20.5	23.3	31.0	45.5	50.1	52.9	56.7
		Regional	12.1	4.8	9.3	13.8	11.6	14.6	19.4	23.6
		Distant	1.6	0.3	1.2	1.4	1.5	1.7	2.6	2.7
		Unknown	13.0	6.5	6.3	6.1	11.1	15.3	17.1	17.3
C43	Melanoma of the skin	Total	79.3	80.9	86.5	87.2	88.7	87.1	87.8	89.4
		Localized	85.4	87.6	91.0	91.7	95.7	93.6	92.9	93.1
		Regional	-	35.1	44.6	41.7	54.7	53.0	50.0	60.2
		Distant	16.4	3.1	13.2	17.2	16.8	22.2	32.3	29.3
		Unknown	-	69.1	69.7	79.7	84.9	84.9	83.3	70.2
C50	Breast	Total	71.0	73.6	74.9	77.0	84.4	86.4	87.8	89.0
		I	86.7	86.6	92.9	95.6	97.8	99.0	99.6	100.2
		II	60.2	65.4	73.9	76.2	84.8	87.5	91.0	92.3
		III	47.1	46.1	47.9	51.6	60.2	66.3	73.0	76.0
		IV	14.6	15.3	19.2	19.8	17.1	18.3	22.6	25.5
		Unknown	61.6	77.5	74.6	78.5	83.1	79.3	62.1	64.2
C53	Cervix uteri [1]	Total	~~72.3~~	~~71.3~~	~~68.5~~	~~72.6~~	~~74.1~~	~~77.5~~	~~77.4~~	~~80.6~~
		I	~~88.7~~	~~87.1~~	~~85.7~~	~~86.0~~	~~91.9~~	~~93.6~~	~~93.2~~	~~92.7~~
		II	~~61.1~~	~~59.1~~	~~56.6~~	~~59.4~~	~~59.6~~	~~73.6~~	~~72.3~~	~~79.8~~
		III	~~32.1~~	~~32.8~~	~~26.9~~	~~37.6~~	~~38.9~~	~~42.1~~	~~52.0~~	~~52.8~~
		IV	~~6.8~~	~~5.9~~	~~20.8~~	~~23.2~~	~~9.8~~	~~19.4~~	~~18.6~~	~~24.7~~
		Unknown	-	-	-	-	-	-	-	-
C54	Corpus uteri	Total	72.7	70.3	71.6	76.1	78.5	80.7	82.9	83.4
		Localized	82.8	82.8	82.9	88.4	91.4	91.1	94.6	95.4
		Regional	57.8	51.5	61.9	56.9	70.2	74.5	64.5	59.3
		Distant	18.4	23.0	22.7	32.4	31.8	35.1	39.6	36.2
		Unknown	-	33.7	-	54.4	73.2	84.1	80.0	64.7
C56, C57.0-4	Ovary etc.	Total	34.8	34.7	35.6	37.7	42.4	42.9	45.0	48.1
		Localized	79.9	79.8	83.2	84.7	90.0	87.8	89.0	93.2
		Regional	40.7	44.5	48.8	48.2	61.9	70.3	67.0	61.6
		Distant	16.6	15.5	15.8	18.7	25.7	27.7	31.6	34.2
		Unknown	-	35.8	19.6	31.6	51.4	54.4	44.8	37.5
C64	Kidney excl. renal pelvis	Total	40.1	43.5	50.3	54.8	53.0	61.4	70.9	73.2
		Localized	69.8	70.6	78.8	78.8	82.0	85.9	89.0	90.1
		Regional	39.4	43.0	48.6	47.3	47.4	47.3	43.7	43.9
		Distant	2.6	5.2	7.5	4.3	9.7	10.4	13.7	11.5
		Unknown	-	-	-	30.2	47.4	56.6	74.9	54.7
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	Total	48.0	54.4	59.7	59.6	60.4	60.2	64.8	68.2
		Localized	62.6	67.0	68.3	70.0	78.4	77.9	76.0	77.0
		Regional	11.5	13.9	14.0	21.8	28.2	22.2	24.0	24.0
		Distant	-	5.5	-	4.9	2.9	7.0	7.7	7.3
		Unknown	-	36.4	64.8	53.4	59.5	60.5	70.7	70.5
C70-72, D32-33	Central nervous system	Total	40.2	48.7	56.0	59.6	67.8	75.0	77.6	76.5
		Non-malignant	72.8	84.6	83.0	85.9	90.9	93.0	94.7	95.6
		Malignant	14.9	20.4	26.9	25.9	25.5	27.2	28.7	28.9
C73	Thyroid gland	Total	86.9	86.3	88.8	90.7	86.5	91.0	92.3	92.9
		Localized	95.7	94.6	95.4	98.0	101.8	103.0	101.3	98.2
		Regional	85.3	83.8	86.0	88.6	83.3	89.7	91.1	91.5
		Distant	25.3	-	-	33.3	-	-	-	-
		Unknown	-	-	-	-	73.1	76.9	80.1	-
C81	Hodgkin lymphoma	Total	71.8	68.5	77.4	78.5	87.6	85.4	85.8	88.9
C82-86, C96	Non-Hodgkin lymphoma	Total	41.9	47.3	53.3	51.2	55.3	62.2	71.2	75.1
C91-95, D45-47	Leukaemia	Total	23.8	28.3	31.5	44.9	49.5	56.4	63.7	65.1

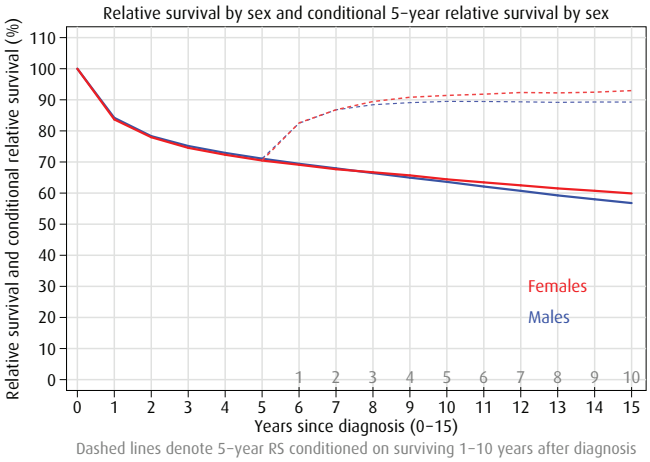
1 The Cancer in Norway reports from 2015 to 2018 contained an error in staging of cervical cancer, and the numbers given in this table are incorrect. For more details see: https://www.kreftregisteret.no/Generelt/Rapporter/Cancer-in-Norway/erratum-for-cancer-in-norway/

Table 24 1-, 5-, 10,- and 15-year relative survival proportion (95% confidence interval) by cancer site and sex, period approach follow-up, 2011 - 2015

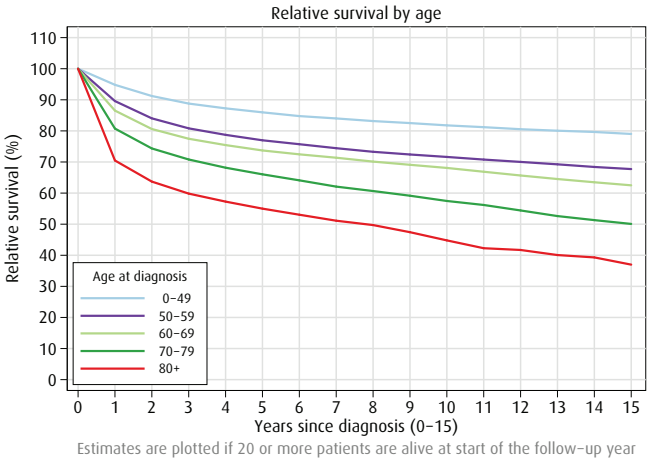
ICD10	Site	Sex	1-year		5-year		10-year		15-year	
C00-14	Mouth, pharynx	M	84.3	(82.4, 86.1)	67.1	(64.2, 69.8)	54.0	(49.9, 58.0)	46.9	(41.0, 52.6)
		F	88.4	(85.9, 90.4)	74.0	(70.1, 77.6)	64.2	(58.2, 69.5)	54.0	(43.8, 63.0)
C15	Oesophagus	M	45.7	(42.6, 48.8)	17.1	(14.5, 19.9)	14.2	(11.1, 17.6)	13.9	(9.5, 19.1)
		F	46.0	(40.8, 51.1)	17.7	(13.0, 23.0)	11.5	(7.2, 16.7)	10.8	(5.4, 18.6)
C16	Stomach	M	52.0	(49.5, 54.5)	24.3	(21.9, 26.8)	20.3	(17.5, 23.2)	17.9	(14.6, 21.5)
		F	47.8	(44.5, 51.1)	24.6	(21.5, 27.9)	22.1	(18.4, 26.1)	19.9	(14.8, 25.7)
C18	Colon	M	79.2	(78.0, 80.2)	60.6	(58.9, 62.2)	55.6	(53.0, 58.0)	49.7	(45.0, 54.1)
		F	81.2	(80.2, 82.2)	66.2	(64.7, 67.7)	61.2	(58.8, 63.6)	57.0	(51.9, 61.7)
C19-20	Rectum, rectosigmoid	M	88.2	(87.0, 89.3)	68.2	(66.1, 70.1)	58.2	(55.2, 61.1)	56.6	(51.3, 61.5)
		F	86.6	(85.1, 87.9)	67.7	(65.4, 69.8)	64.0	(60.9, 66.9)	60.7	(55.7, 65.3)
C22	Liver	M	37.8	(34.0, 41.6)	16.7	(13.6, 20.1)	11.9	(8.3, 16.4)	10.1	(5.7, 16.3)
		F	42.7	(37.7, 47.5)	19.6	(15.1, 24.6)	17.9	(12.9, 23.7)	12.5	(7.4, 19.2)
C23-24	Gallbladder, bile ducts	M	55.5	(50.1, 60.5)	19.0	(14.6, 24.0)	17.2	(12.2, 23.0)	14.4	(8.1, 22.4)
		F	41.1	(36.9, 45.4)	14.4	(11.2, 18.1)	12.2	(8.6, 16.4)	10.7	(7.0, 15.4)
C25	Pancreas	M	26.6	(24.6, 28.6)	6.4	(5.2, 7.8)	4.9	(3.6, 6.3)	3.2	(2.0, 4.8)
		F	25.2	(23.3, 27.1)	7.7	(6.4, 9.2)	6.3	(4.9, 7.9)	4.3	(2.9, 6.1)
C33-34	Lung, trachea	M	39.4	(38.3, 40.5)	14.4	(13.5, 15.3)	8.6	(7.7, 9.5)	6.2	(5.1, 7.3)
		F	48.1	(46.9, 49.3)	20.9	(19.8, 22.0)	14.5	(13.3, 15.8)	10.8	(9.2, 12.6)
C43	Melanoma of the skin	M	95.5	(94.6, 96.2)	81.6	(79.8, 83.3)	75.8	(72.6, 78.7)	68.0	(62.3, 73.1)
		F	97.7	(97.0, 98.3)	89.4	(87.8, 90.8)	86.6	(84.1, 88.8)	85.9	(81.6, 89.2)
C50	Breast	F	97.8	(97.5, 98.1)	89.0	(88.3, 89.7)	81.2	(80.1, 82.2)	76.1	(74.7, 77.5)
C53	Cervix uteri	F	92.8	(91.3, 94.0)	80.6	(78.5, 82.6)	76.3	(73.8, 78.6)	71.5	(68.9, 74.0)
C54	Corpus uteri	F	93.4	(92.5, 94.3)	83.4	(81.6, 84.9)	79.1	(76.5, 81.4)	75.2	(71.0, 78.9)
C56, C57.0-4	Ovary etc.	F	79.0	(77.3, 80.6)	48.1	(45.9, 50.3)	37.3	(34.9, 39.6)	33.1	(30.4, 35.8)
C61	Prostate	M	99.1	(98.8, 99.3)	92.9	(92.3, 93.6)	83.3	(82.1, 84.3)	72.1	(70.1, 74.0)
C62	Testis	M	99.0	(98.2, 99.4)	98.1	(96.9, 98.8)	97.8	(96.2, 98.8)	97.6	(95.4, 98.8)
C64	Kidney excl. renal pelvis	M	85.6	(84.0, 86.9)	70.3	(68.0, 72.5)	58.9	(55.6, 62.0)	52.8	(47.6, 57.8)
		F	84.8	(82.5, 86.7)	73.2	(70.1, 76.0)	65.1	(61.2, 68.7)	55.1	(49.5, 60.4)
C65-68	Urinary tract (renal pelvis, ureters, urinary bladder, and urethra)	M	89.1	(88.1, 90.1)	76.1	(74.2, 77.8)	66.8	(63.7, 69.6)	58.9	(53.0, 64.3)
		F	82.1	(80.2, 83.8)	68.2	(65.3, 70.9)	64.7	(59.7, 69.2)	51.8	(43.1, 59.8)
C70-72, D32-33	Central nervous system	M	78.1	(76.5, 79.7)	61.2	(59.1, 63.3)	57.4	(54.9, 59.9)	51.6	(48.3, 54.8)
		F	86.7	(85.3, 87.9)	76.5	(74.7, 78.3)	72.9	(70.7, 74.9)	69.1	(66.2, 71.9)
C73	Thyroid gland	M	93.0	(89.9, 95.2)	89.8	(84.9, 93.2)	85.9	(77.4, 91.4)	84.4	(69.4, 92.4)
		F	95.5	(94.0, 96.7)	92.9	(90.7, 94.7)	90.4	(86.8, 93.0)	85.4	(80.0, 89.4)
C81	Hodgkin lymphoma	M	91.7	(88.6, 94.0)	84.9	(80.8, 88.2)	81.4	(76.5, 85.3)	78.0	(72.0, 82.9)
		F	96.9	(94.2, 98.4)	88.9	(84.8, 91.9)	87.0	(81.6, 90.9)	85.0	(78.1, 89.9)
C82-86, C96	Non-Hodgkin lymphoma	M	83.3	(81.7, 84.7)	70.8	(68.6, 72.9)	59.8	(56.4, 63.0)	51.5	(45.6, 57.1)
		F	85.0	(83.4, 86.5)	75.1	(72.7, 77.2)	64.9	(61.8, 67.8)	56.3	(50.8, 61.5)
C91-95, D45-47	Leukaemia	M	80.6	(79.0, 82.1)	60.3	(58.2, 62.4)	47.1	(44.4, 49.8)	38.6	(34.3, 42.8)
		F	79.0	(77.1, 80.7)	65.1	(62.7, 67.3)	52.6	(49.6, 55.5)	45.4	(40.0, 50.7)

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

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

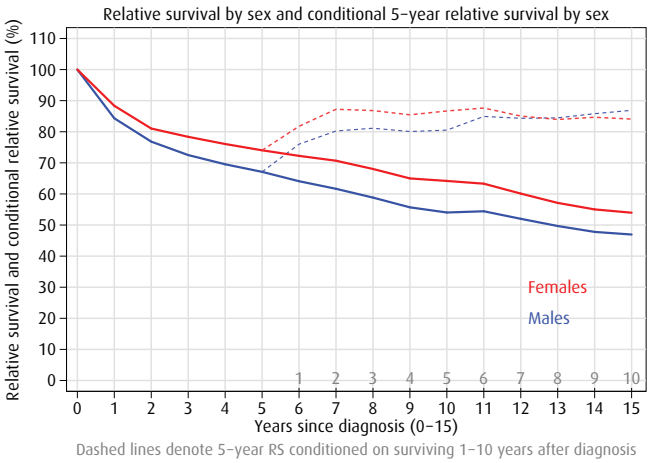


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

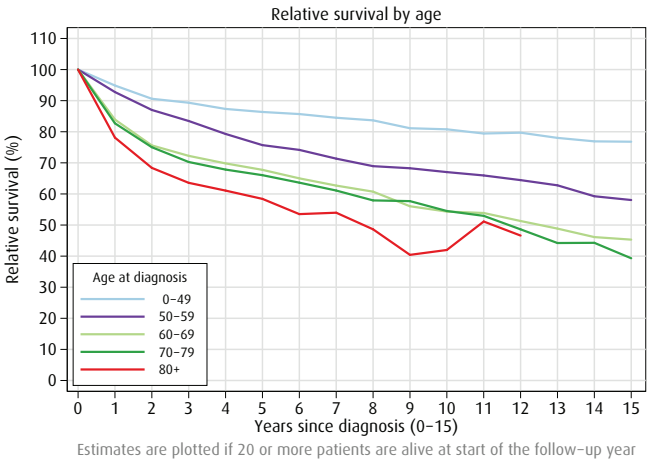


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

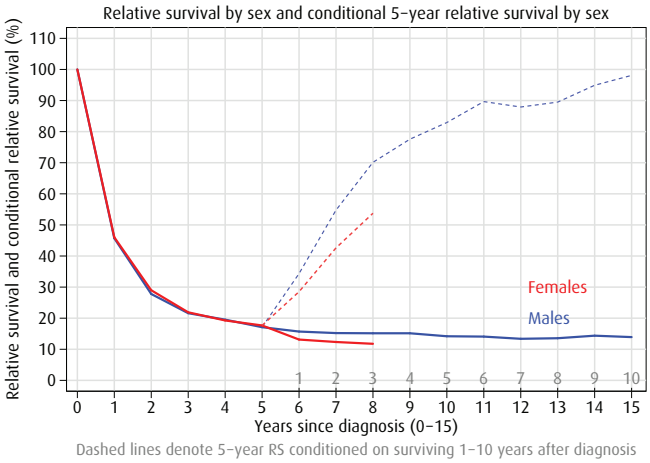


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

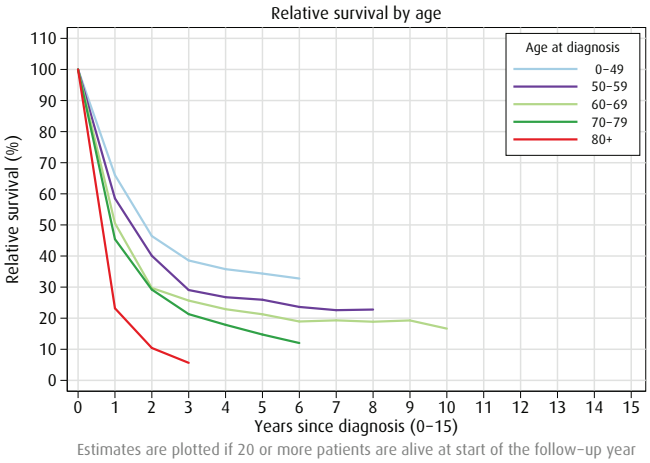


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10C: Oesophagus (ICD-10 C15)



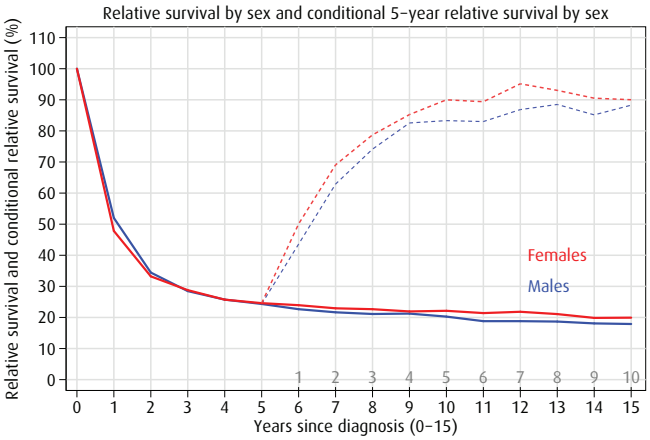
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



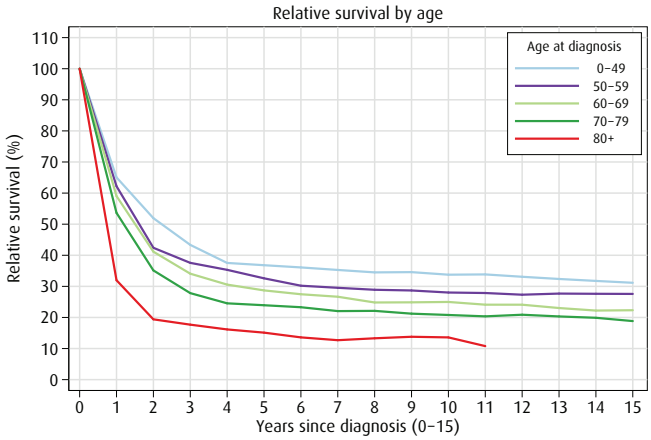
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

Figure 10D: Stomach (ICD-10 C16)

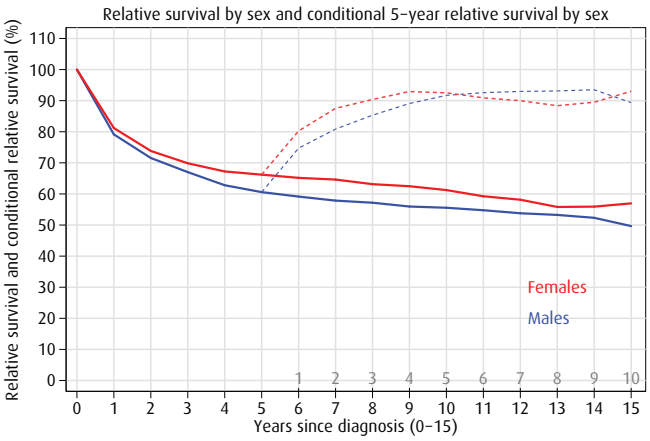


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

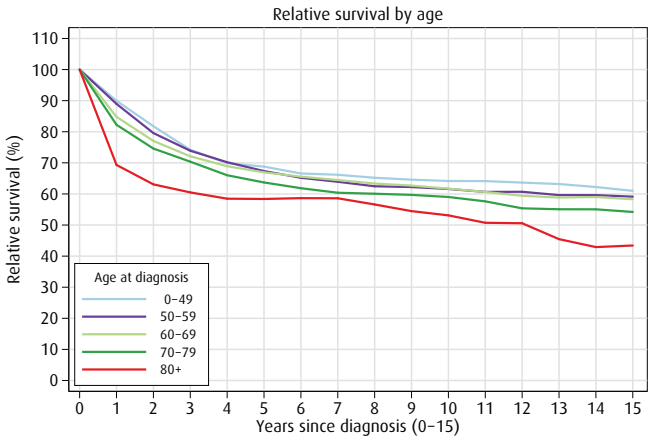


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10E: Colon (ICD-10 C18)

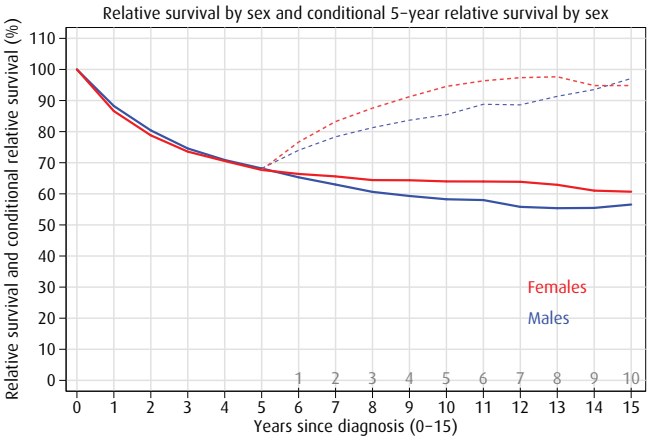


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

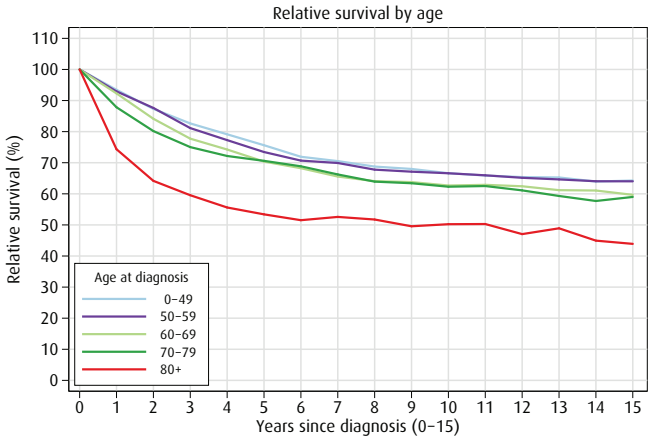


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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



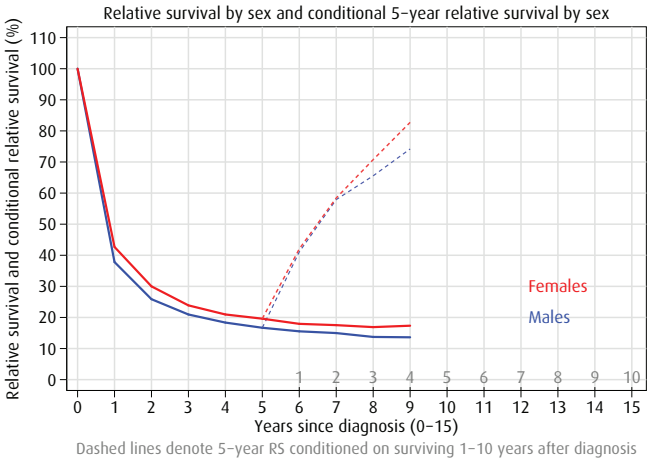
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



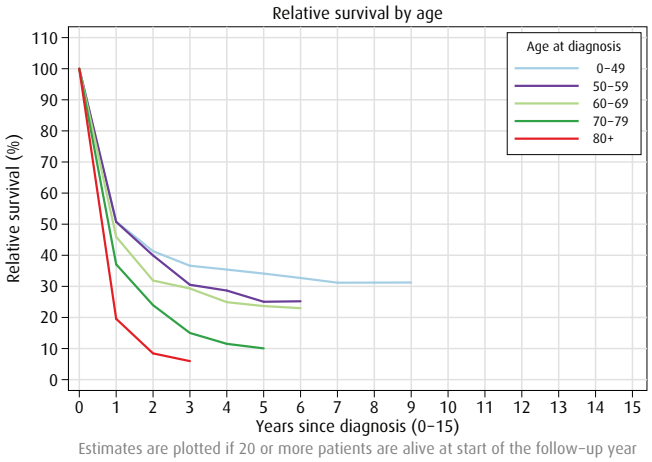
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

Figure 10G: Liver (ICD-10 C22)

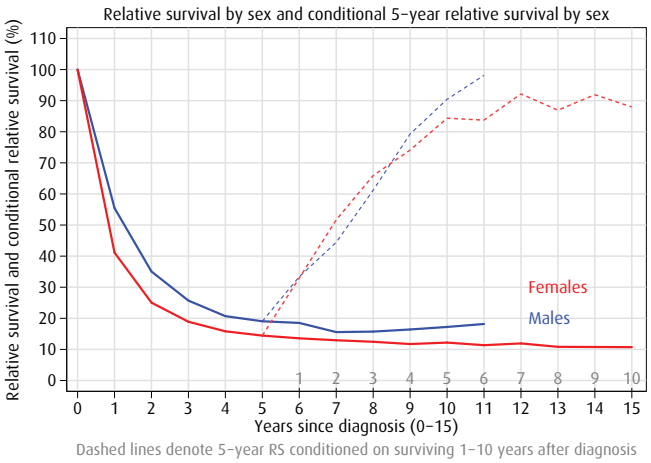


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

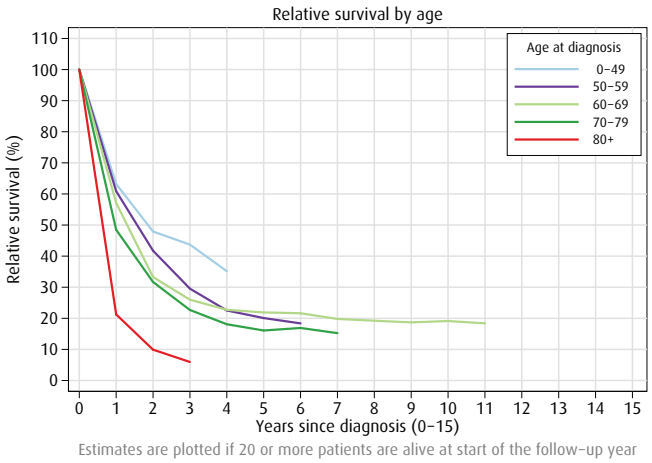


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

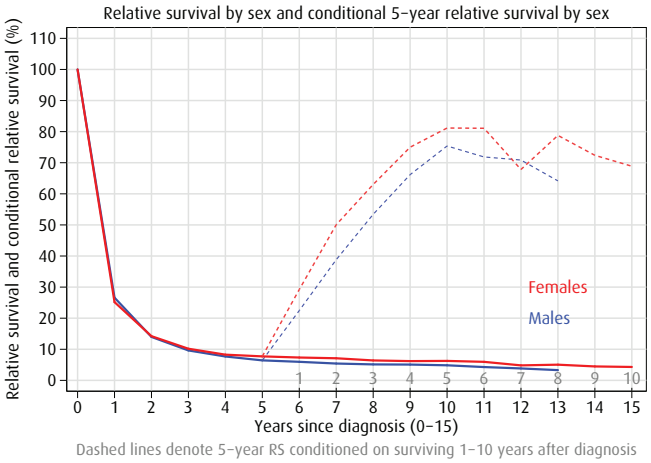


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

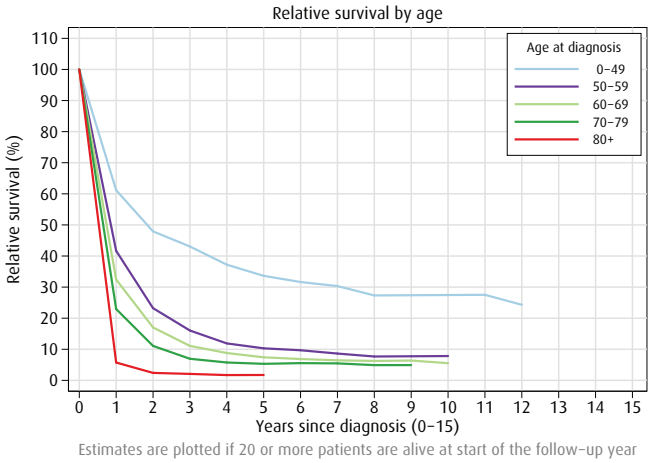


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10I: Pancreas (ICD-10 C25)



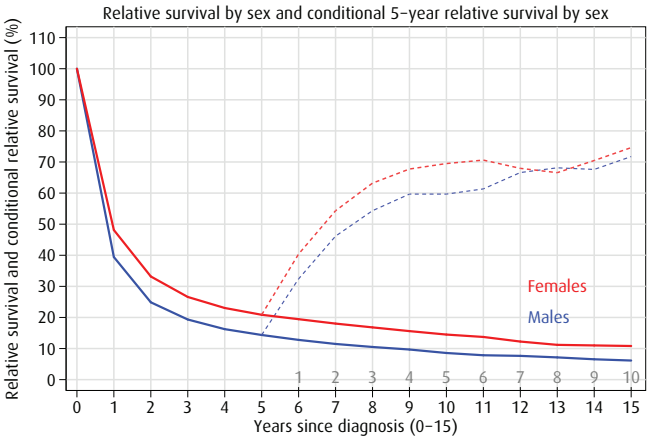
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



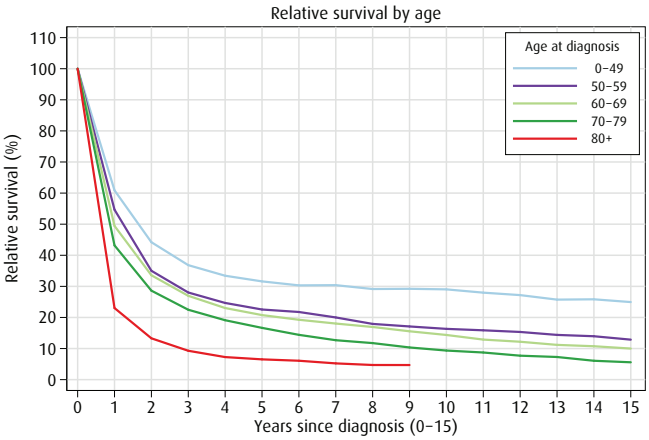
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

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

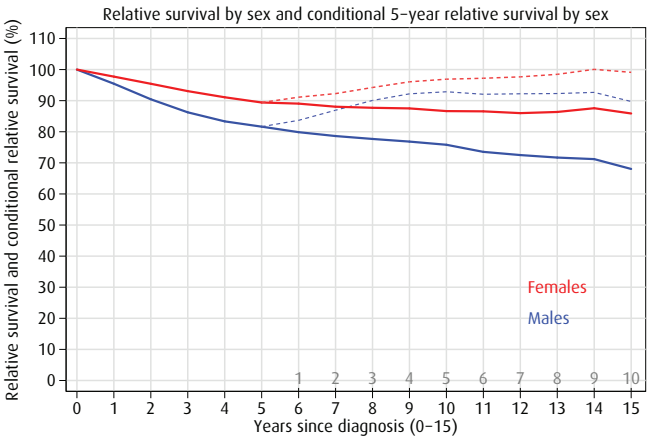


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

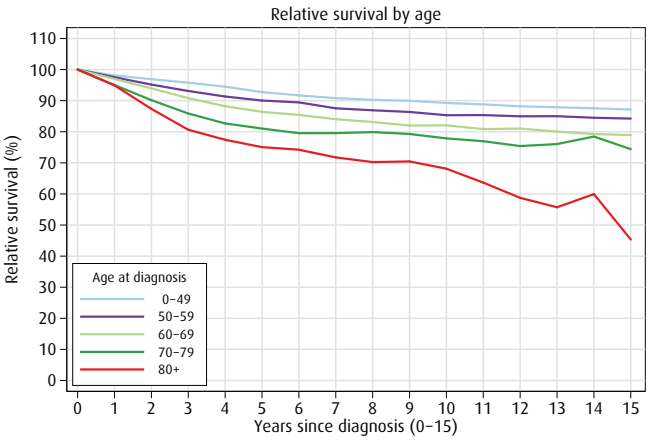


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

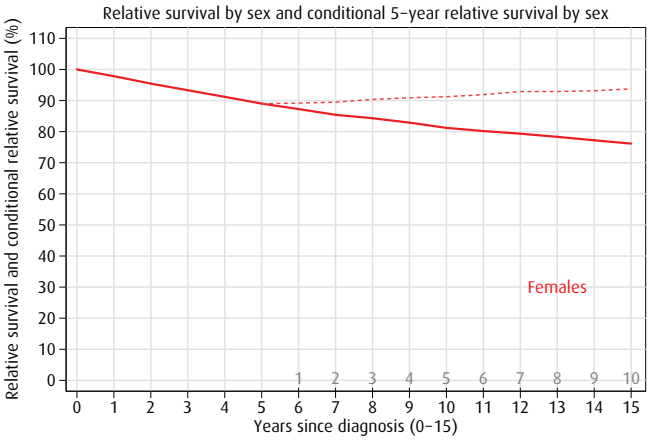


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

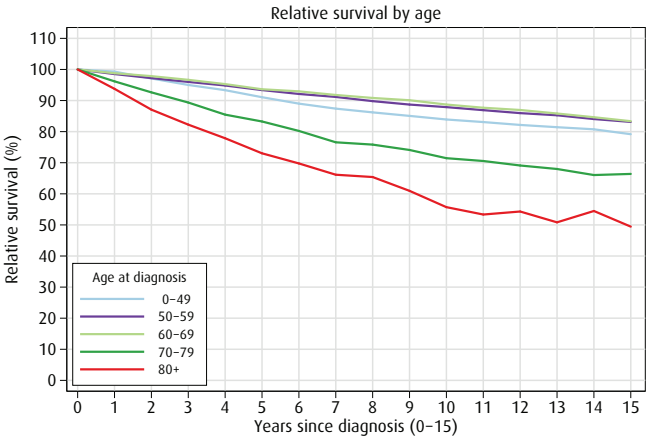


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10L: Breast (ICD-10 C50)



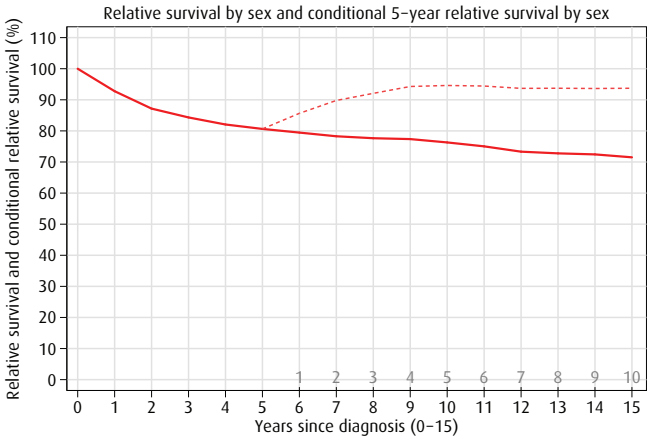
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



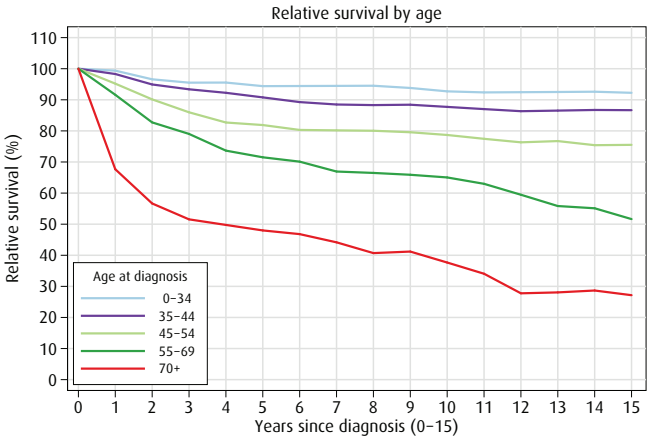
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

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

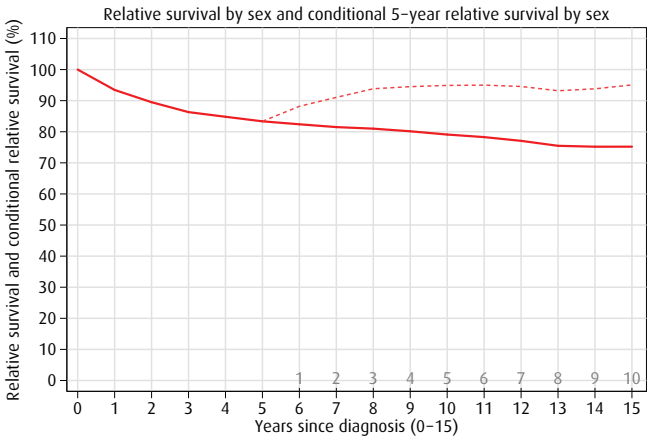


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

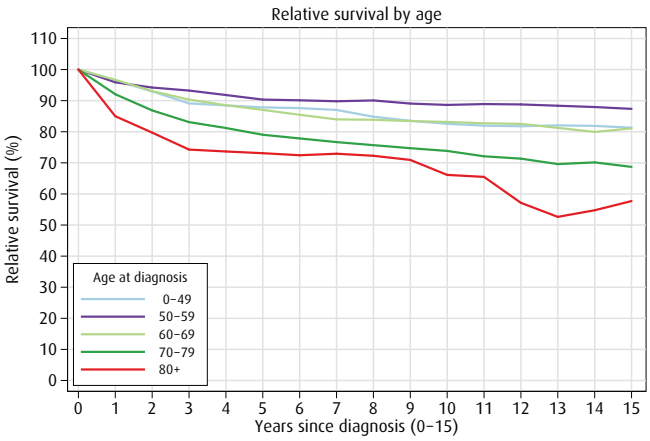


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

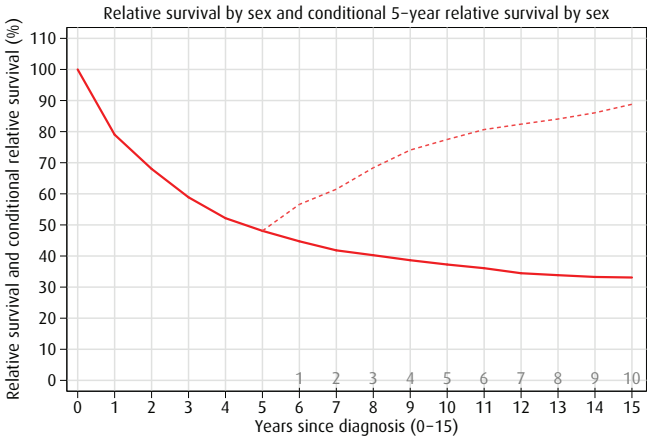


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

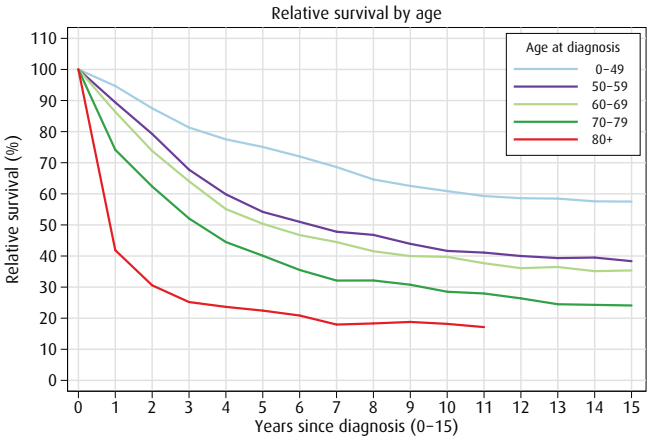


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10O: Ovary (ICD-10 C56, C57.0–4)



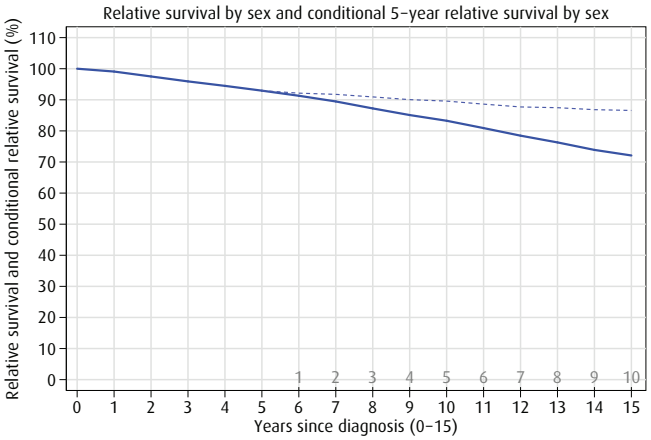
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



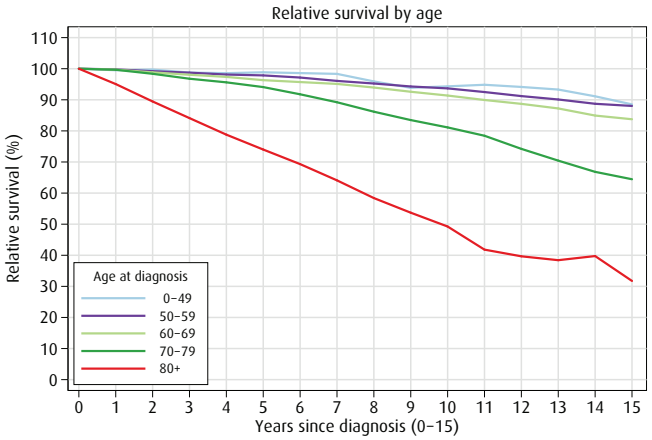
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

Figure 10P: Prostate (ICD-10 C61)

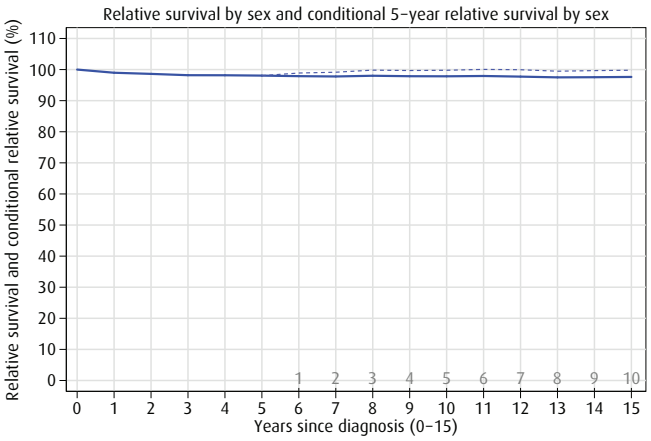


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

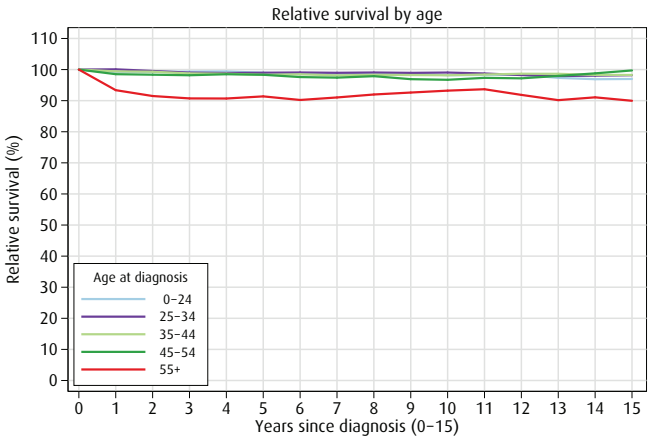


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10Q: Testis (ICD-10 C62)

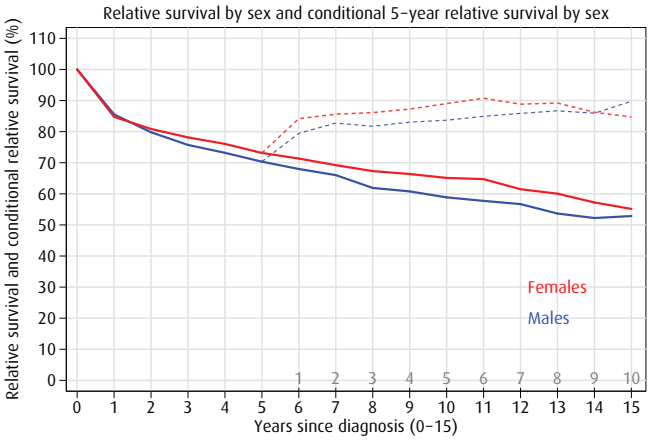


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

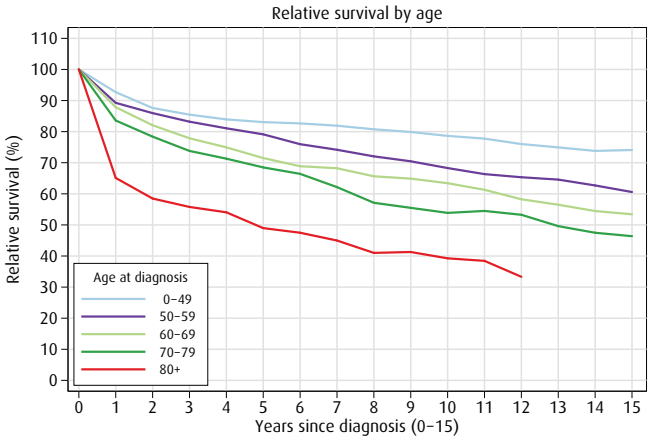


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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



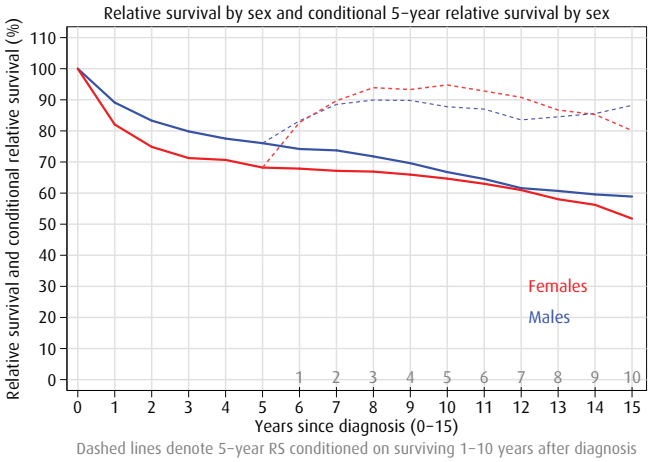
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



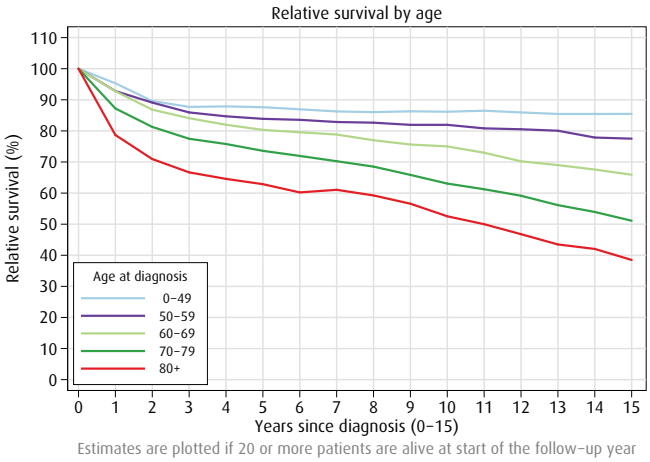
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

Figure 10S: Urinary tract (renal pelvis, ureters, urinary bladder,and urethra) (ICD-10 C65–68)

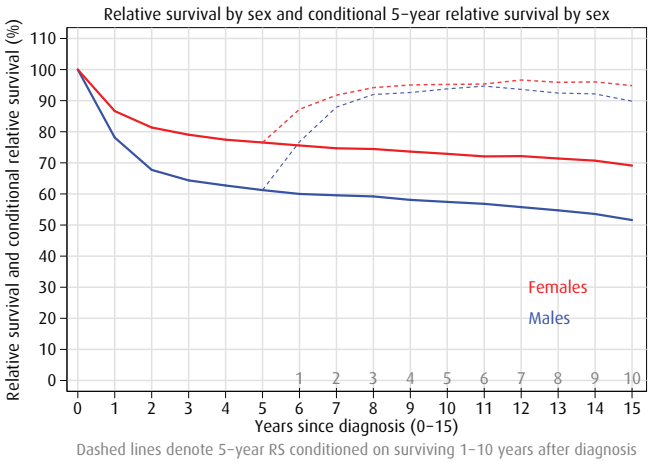


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

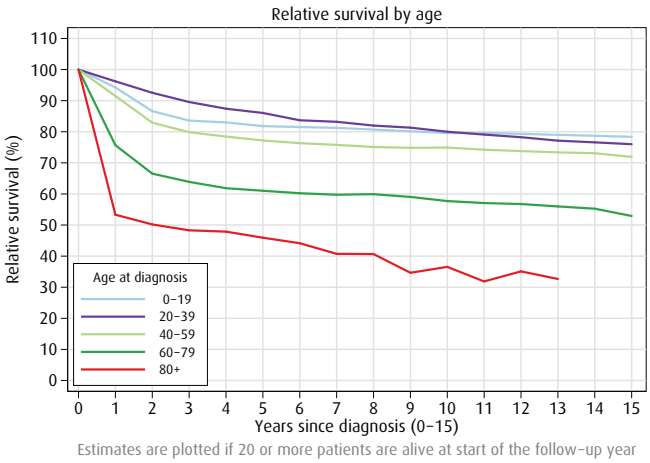


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

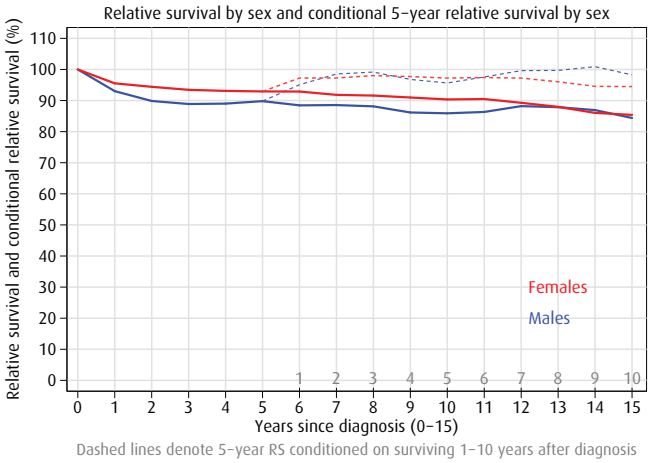


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

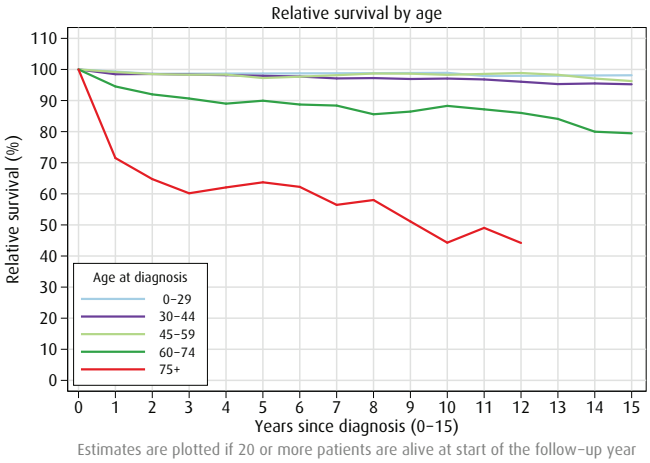


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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



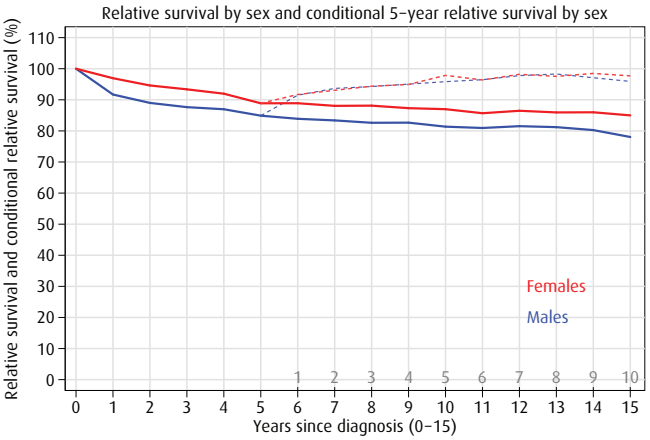
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



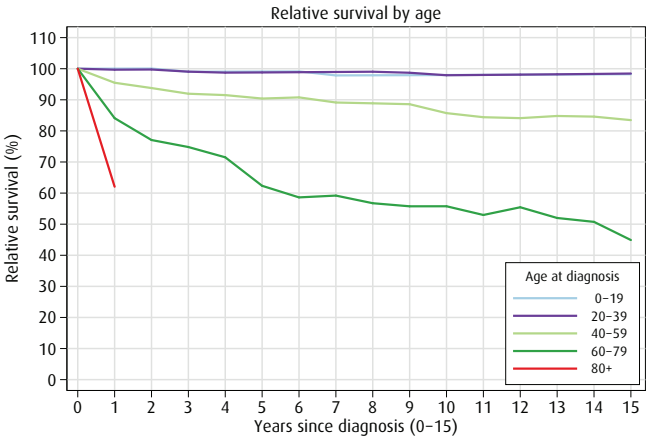
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 10. Relative survival (RS) up to 15 years after diagnosis by sex and age (2011–15)

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

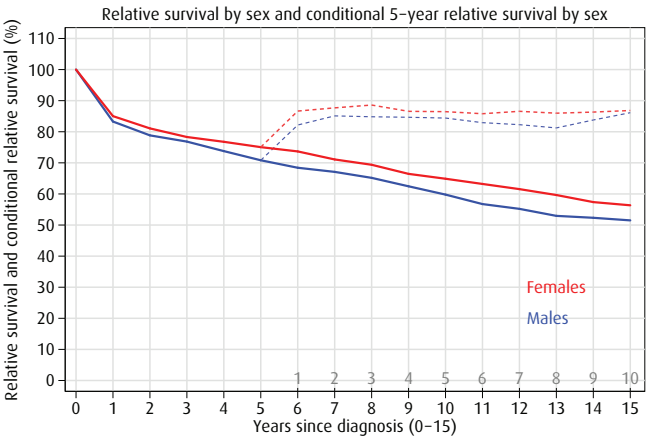


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

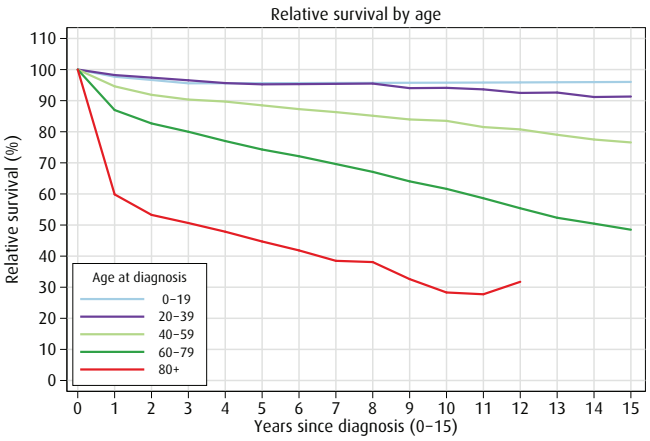


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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

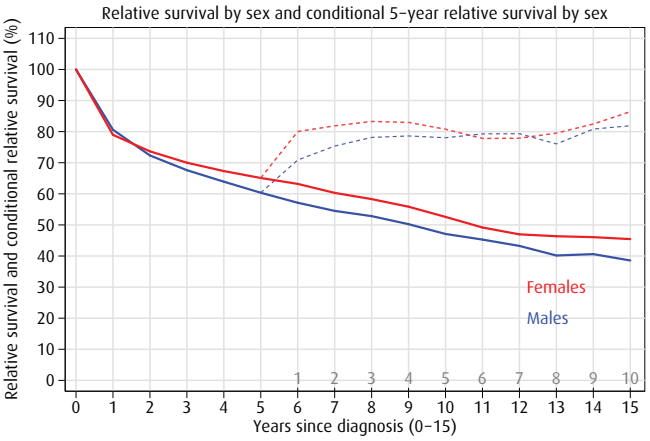


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

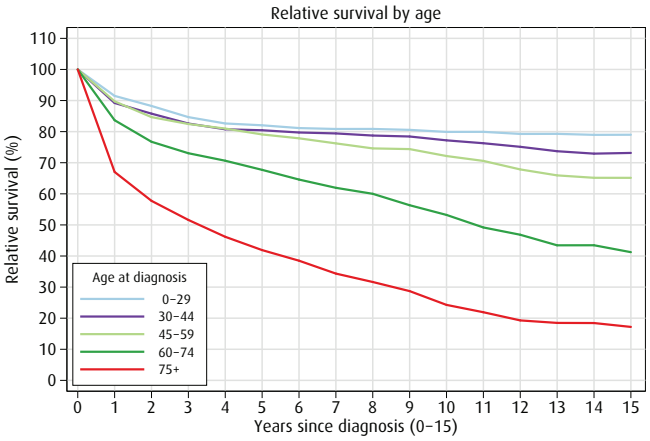


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

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



Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Trends in incidence, mortality and survival, Norway 1965–2015

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 1966–2015 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.

Among men, nearly 30% of all cancers diagnosed in 2015 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 early 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 between 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 better diagnostic methods being used in the programme or locally in studies, or that women continue to have mammography after the age of 70,

but it might also reflects random fluctuations.. The breast cancer mortality was almost stable from 1995 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 rates in 2014 and 2015 suggest 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 determinans 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 germcell 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.

A remarkable increase in incidence rates has been seen during the last years for malignant melanoma in both genders. The increase in incidence rates for malignant melanoma is probably explained by sun tanning, 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.

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

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. We do not know the exact reason for this increase, but it may be due to changes in the diagnostic workup with 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-F, 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)

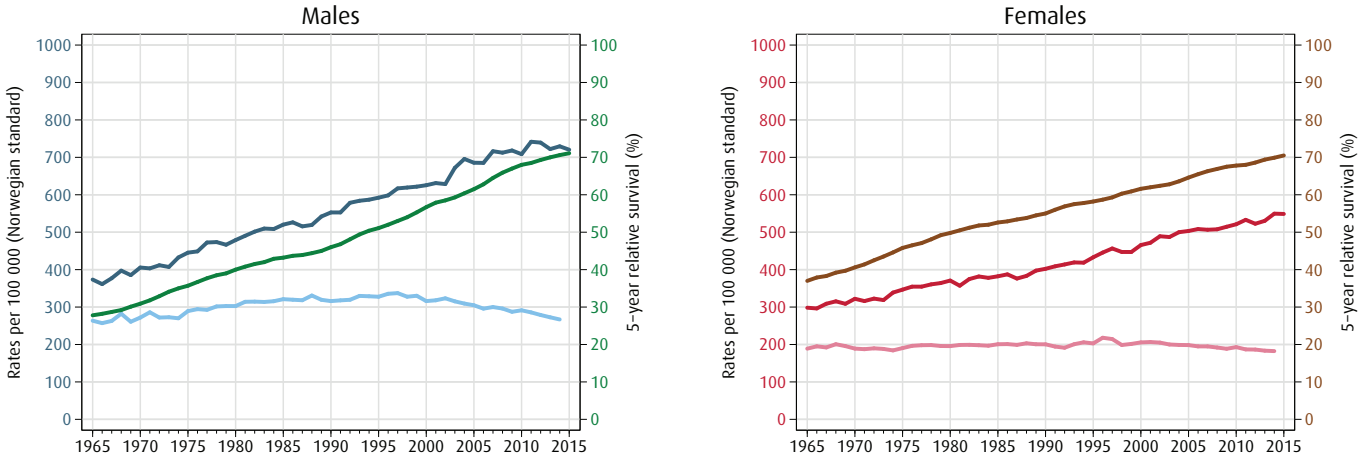


Figure 11-B: Mouth, pharynx (ICD-10 C00–14)

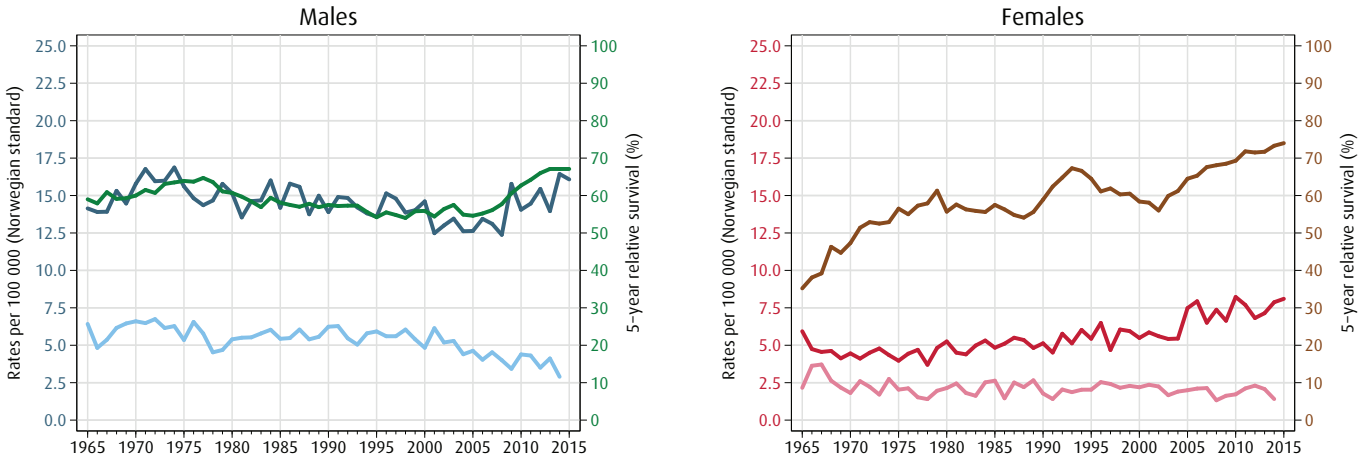


Figure 11-C: Oesophagus (ICD-10 C15)

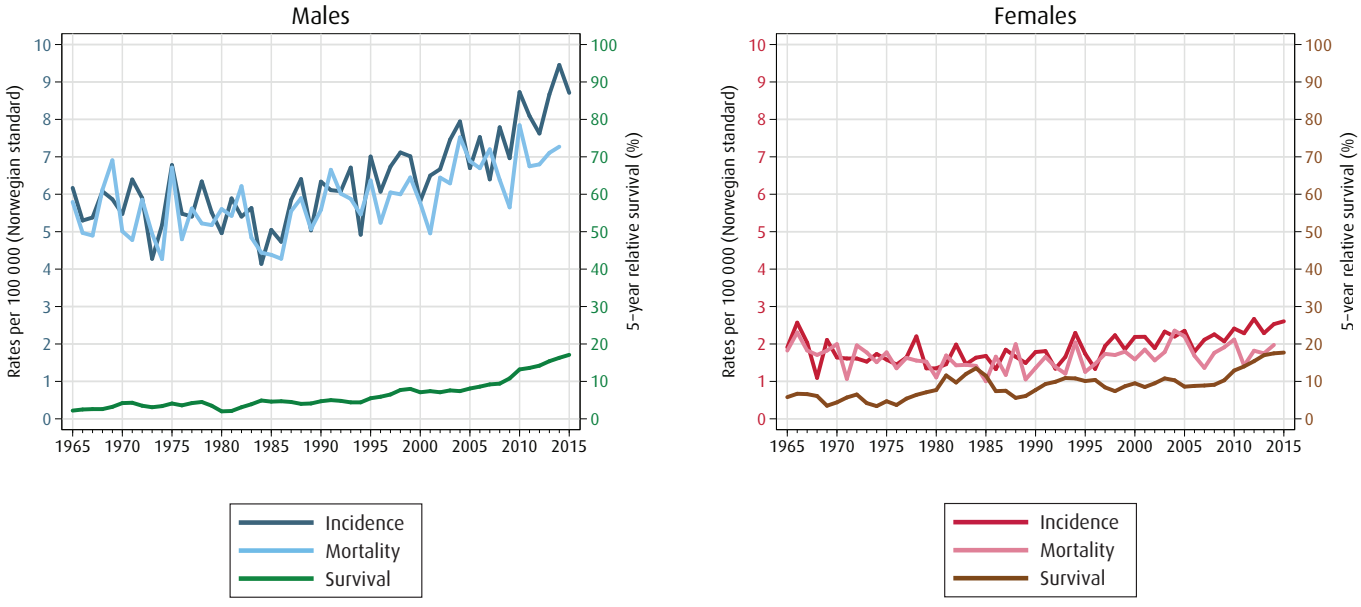


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

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

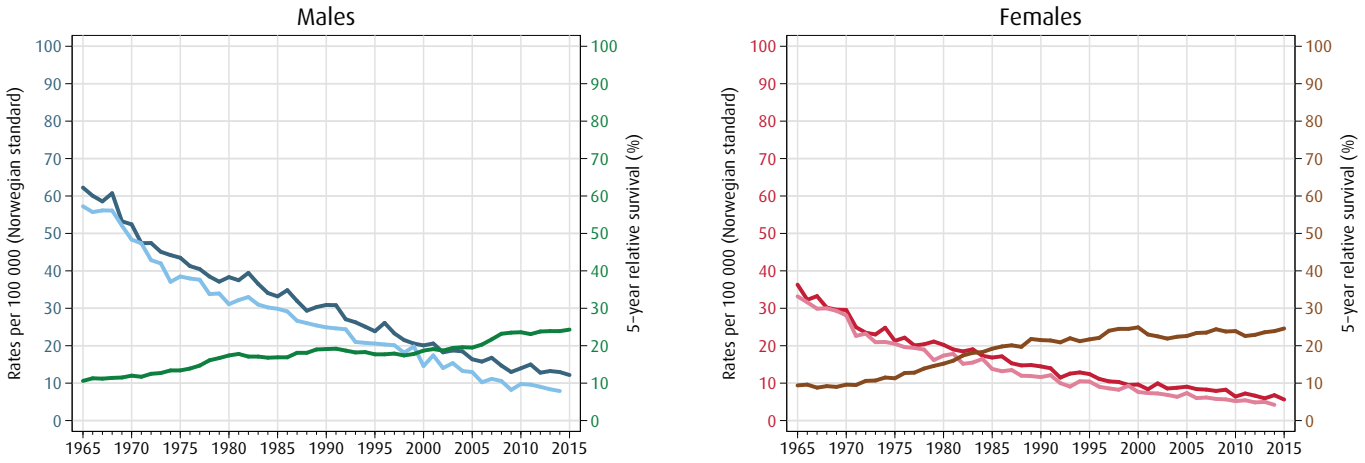


Figure 11-E: Colon (ICD-10 C18)

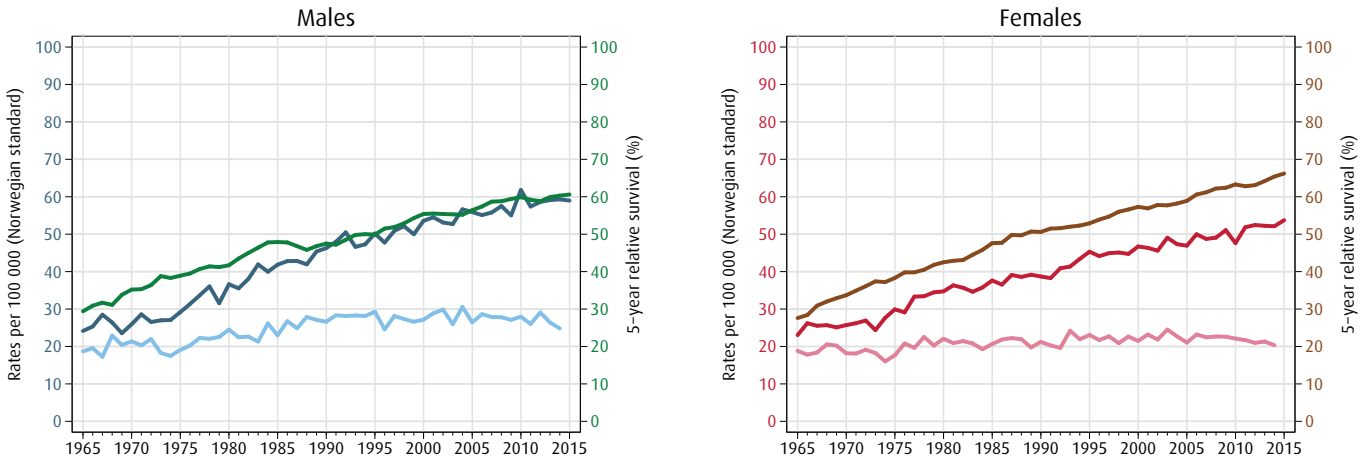


Figure 11-F: Rectum, rectosigmoid (ICD-10 C19–20)

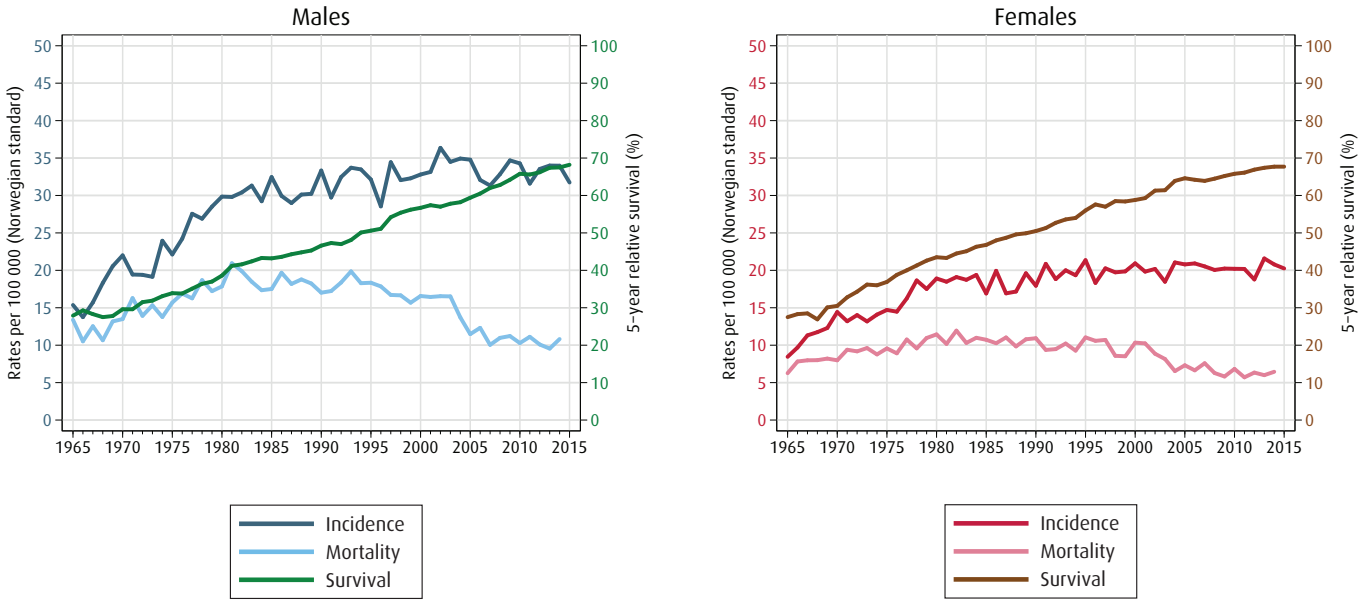


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

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

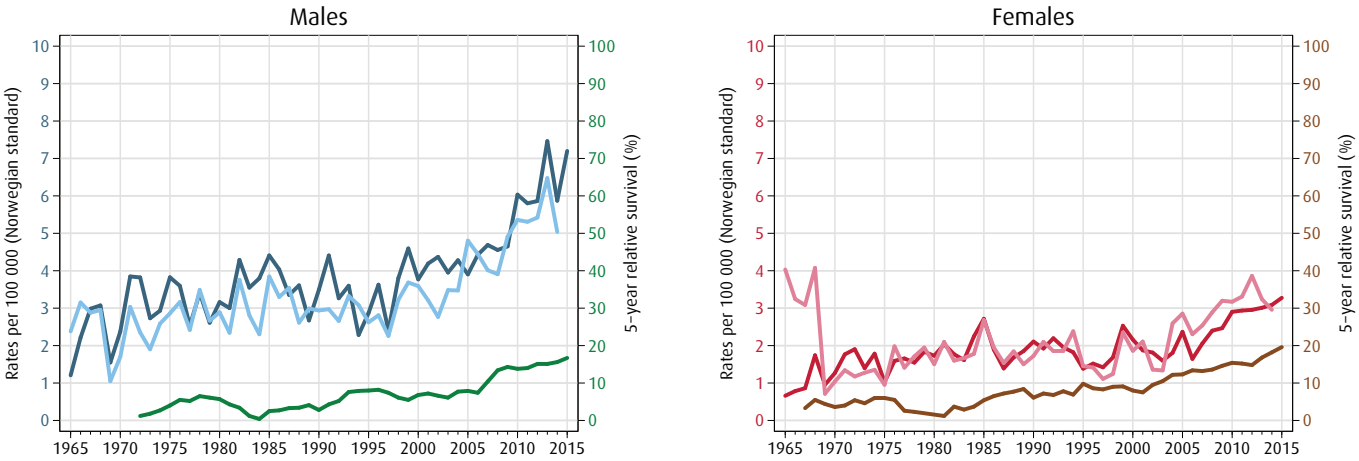


Figure 11-H: Gallbladder, bile ducts (ICD-10 C23–24)

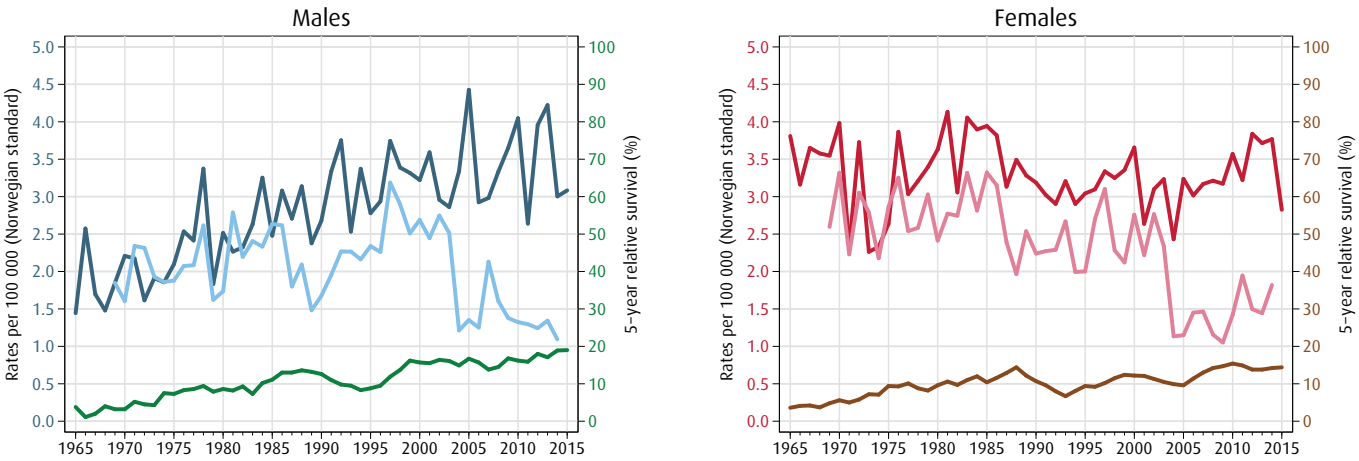


Figure 11-I: Pancreas (ICD-10 C25)

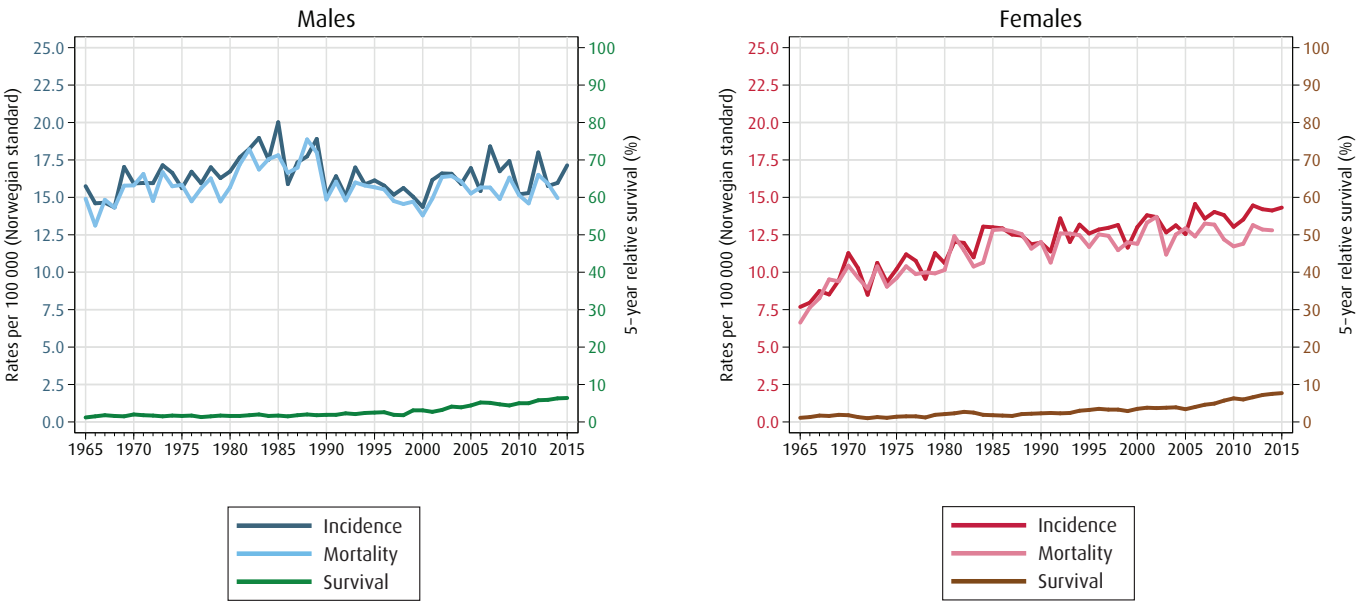


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

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

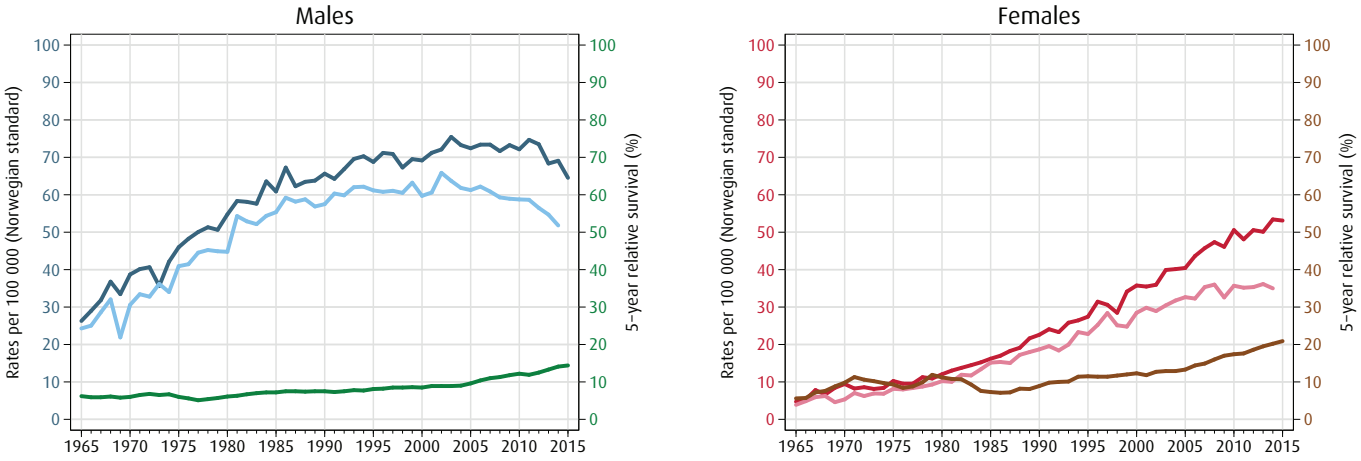


Figure 11-K: Melanoma of the skin (ICD-10 C43)

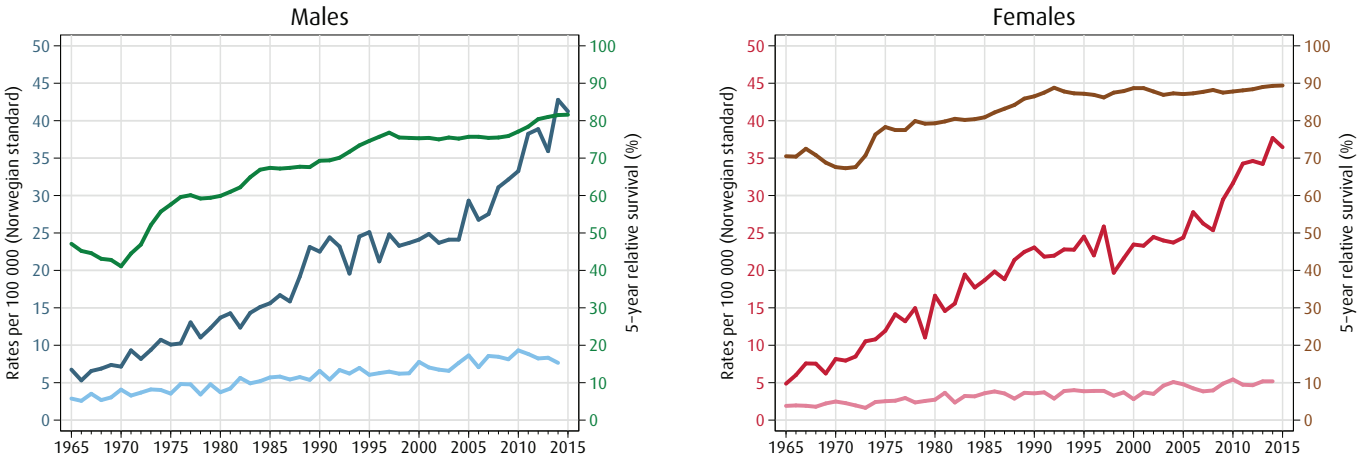
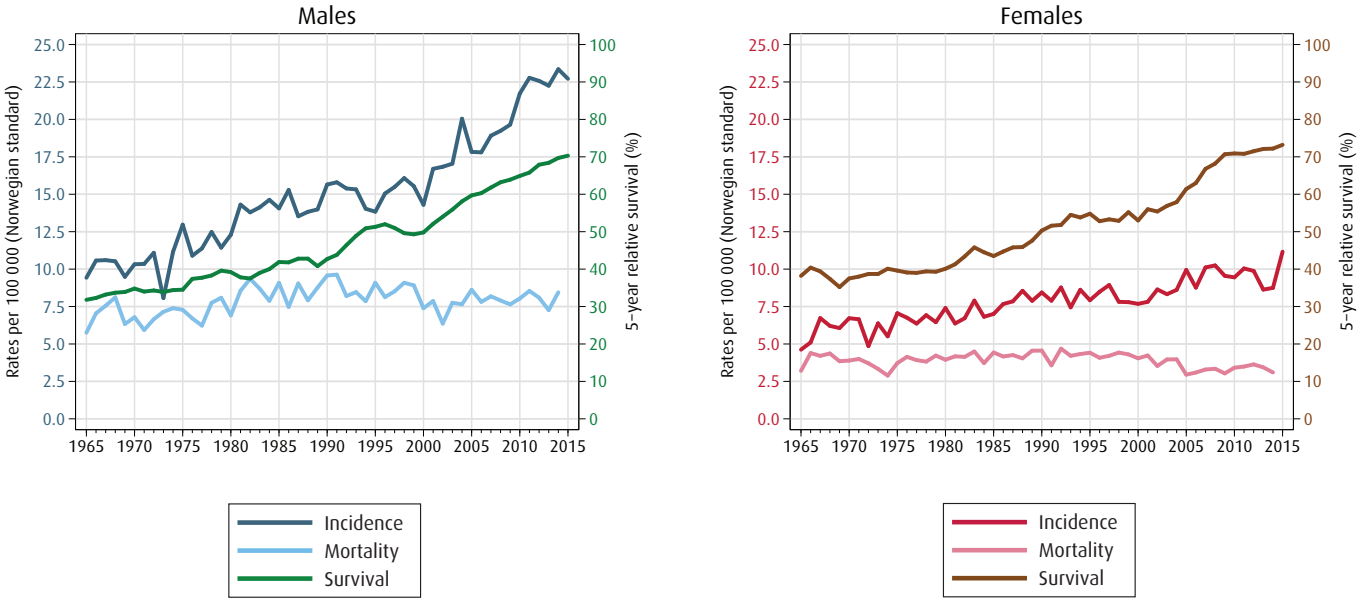


Figure 11-L: Kidney excluding renal pelvis (ICD-10 C64)



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

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

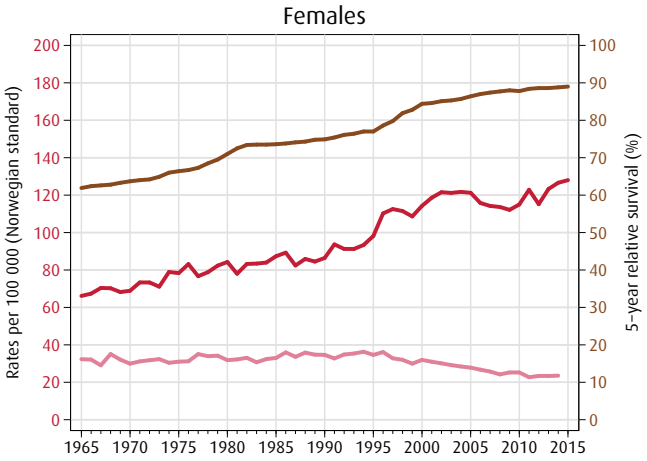


Figure 11-N: Cervix uteri (ICD-10 C53)

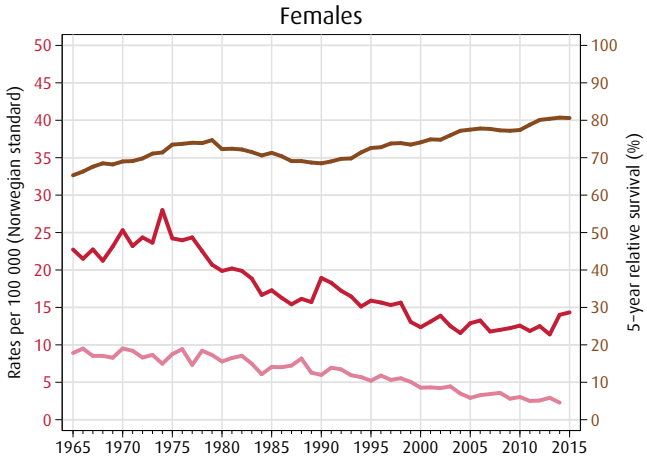


Figure 11-O: Prostate (ICD-10 C61)

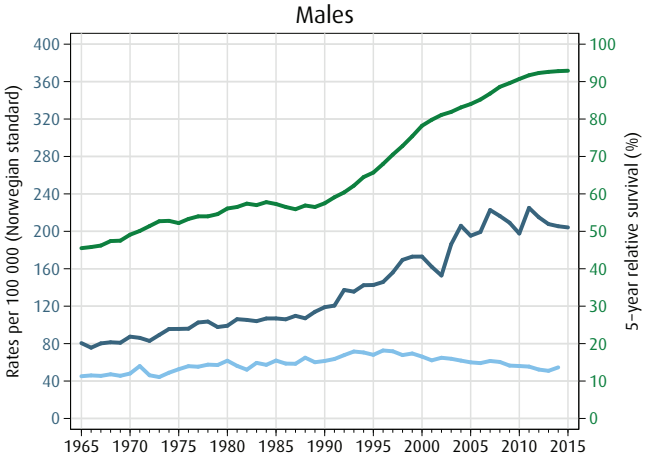


Figure 11-P: Corpus uteri (ICD-10 C54)

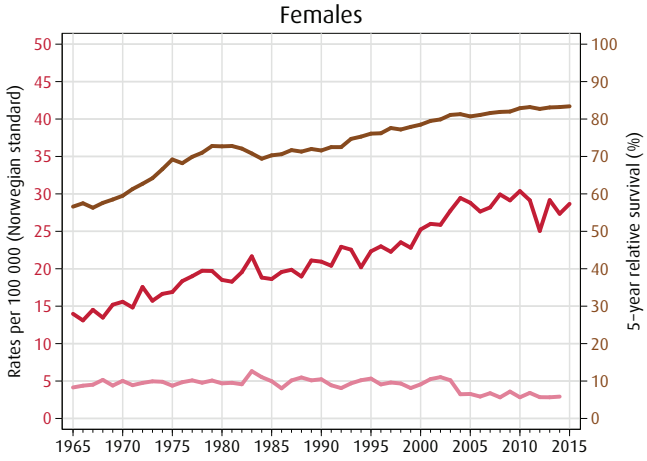


Figure 11-Q: Testis (ICD-10 C62)

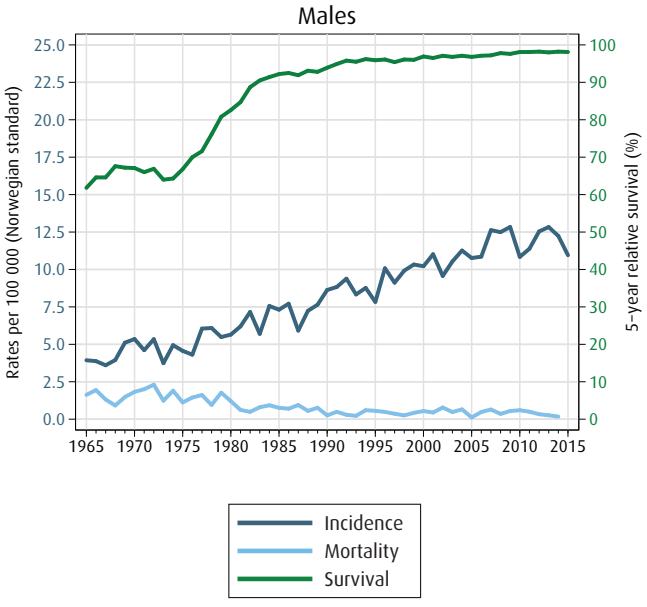


Figure 11-R: Ovary (ICD-10 C56, C57.0–4)

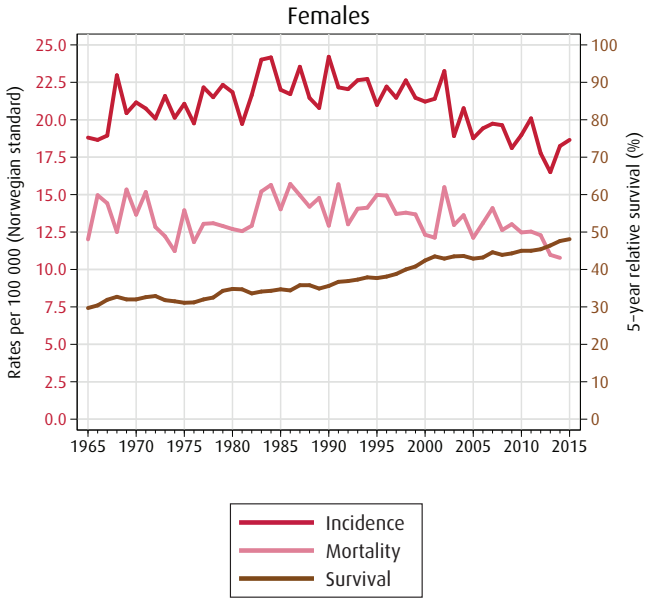


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 11-S: Urinary tract (renal pelvis, ureters, urinary bladder,and urethra) (ICD-10 C65–68)

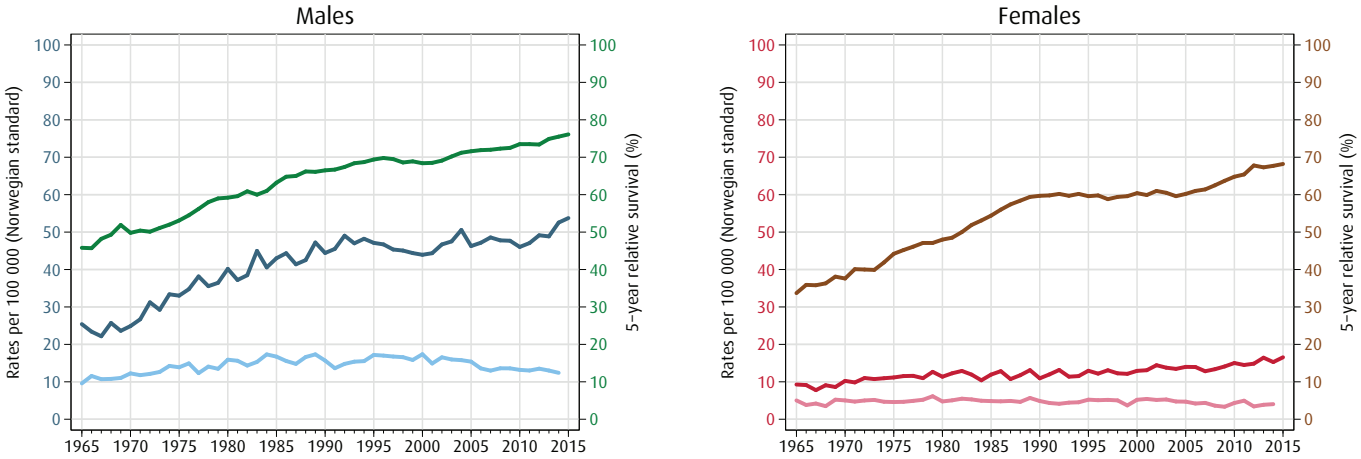


Figure 11-T: Central nervous system (ICD-10 C70–72, D32–33, D42–43)

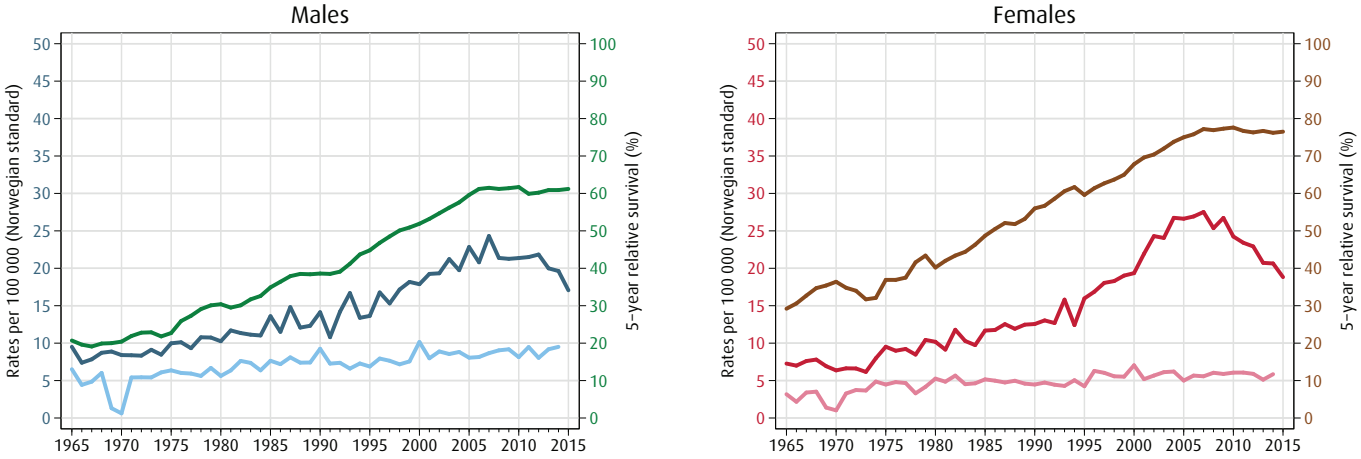


Figure 11-U: Thyroid gland (ICD-10 C73)

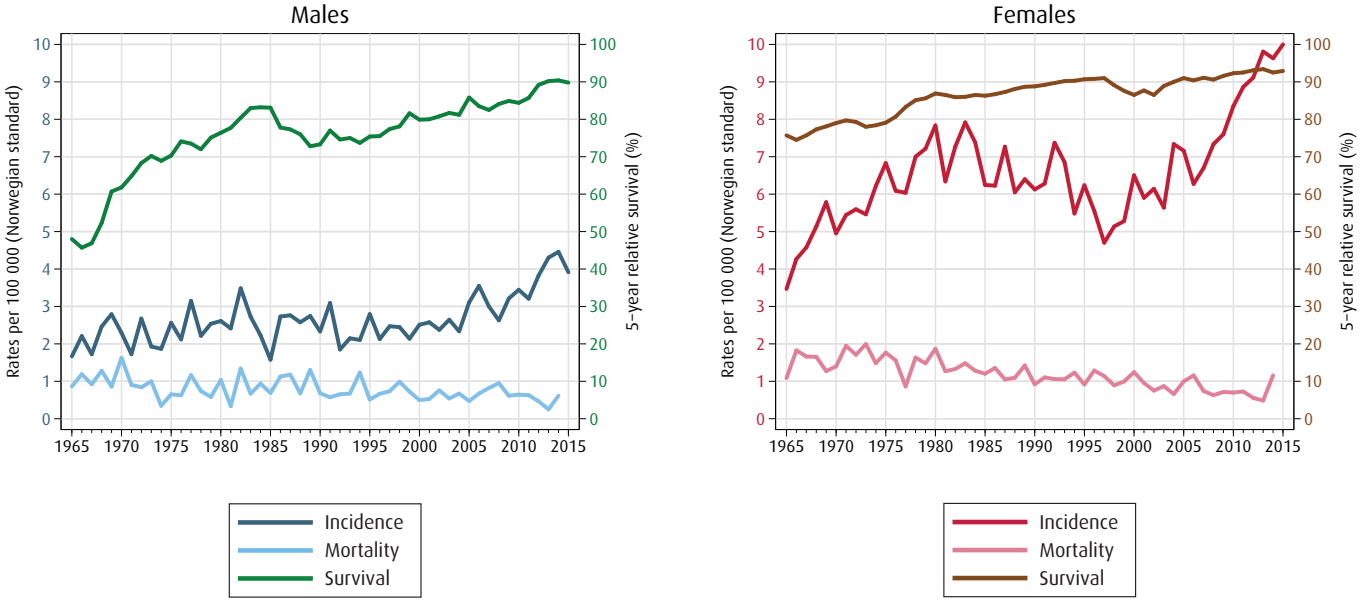


Figure 11. Trends in incidence and mortality rates and 5-year relative survival proportions

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

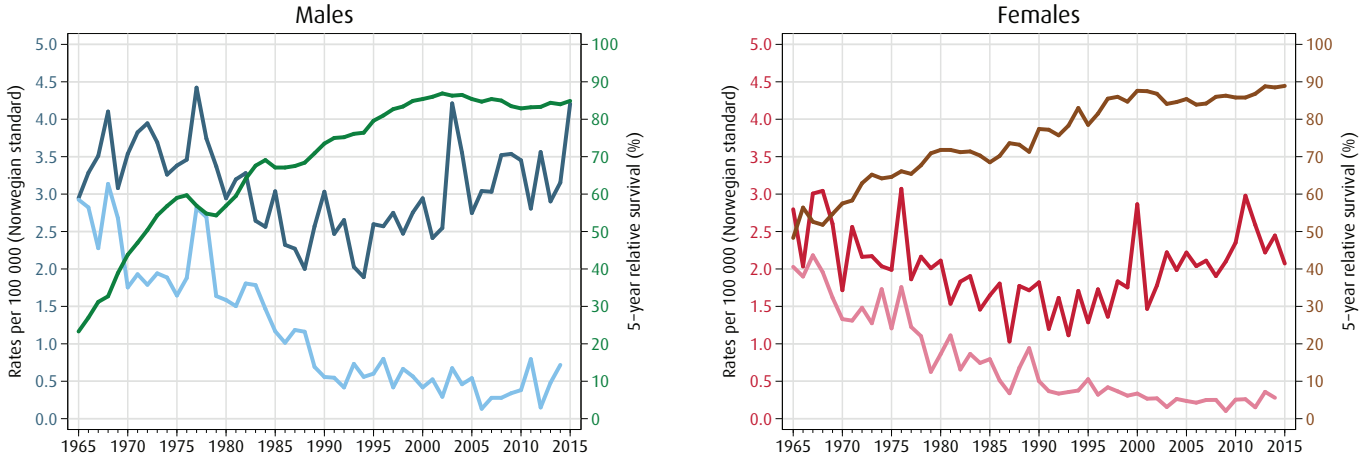


Figure 11-W: Non-Hodgkin lymphoma (ICD-10 C82–86, C96)

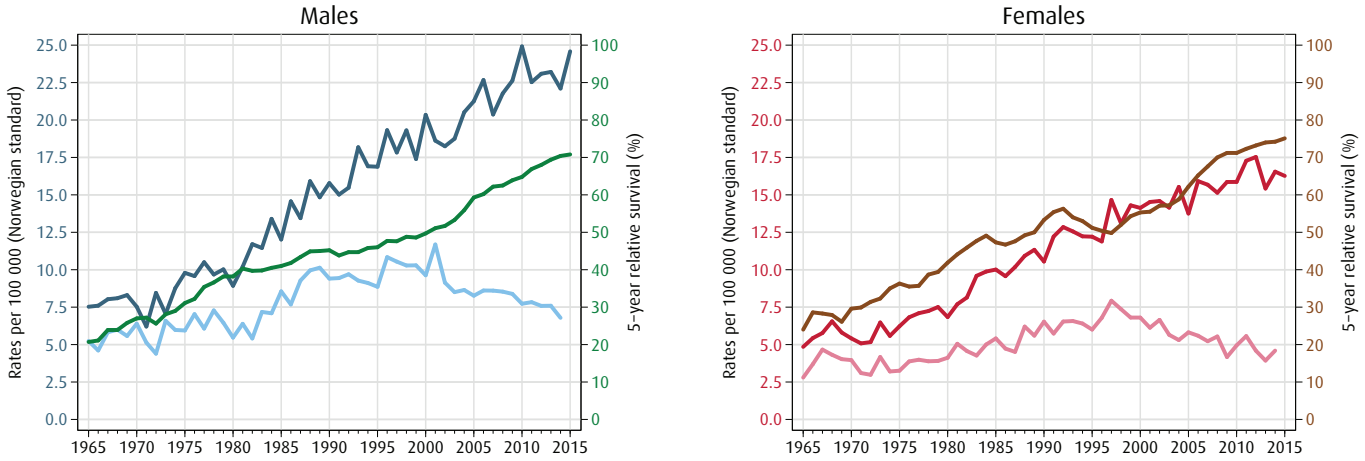
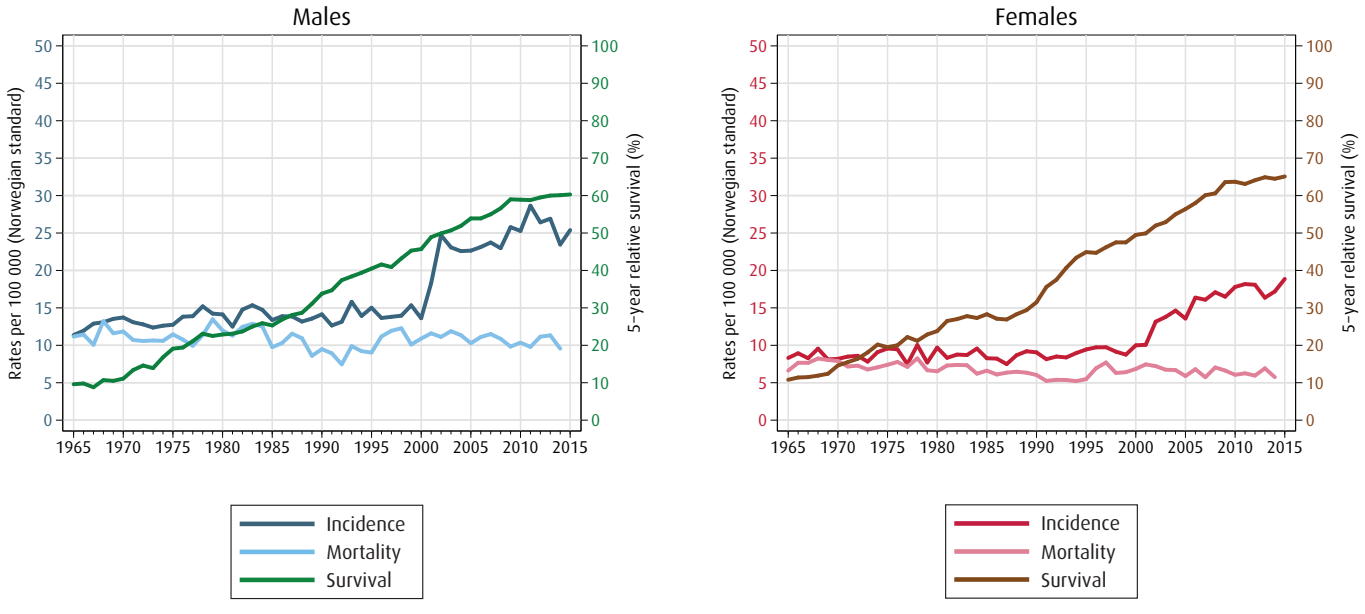


Figure 11-X: Leukaemia (ICD-10 C91–95, D45–47)



References

Alfsen GC, Lyckander LG, Lindboe AW, Svaar H. Kvalitetssikring ved dødsfall i sykehus. Tidskrift Nor Legeforen 2010; 130:476-9. http://dx.doi.org/10.4045/tidsskr.09.0744

Boyle P. Relative value of incidence and mortality data in cancer research. Recent Results Cancer Res 1989; 114:41-63.

Bray F, Parkin DM. Evaluation of data quality in the cancer registry: principles and methods. Part I: comparability, validity and timeliness. Eur J Cancer 2009; 45(5):747-755.

Brenner H, Hakulinen T. Very-long-term survival rates of patients with cancer. J Clin Oncol 2002;20(21):4405-4409. http://dx.doi.org/10.1200/JCO.2002.99.060

Brenner H, Hakulinen T. Maximizing the benefits of model-based period analysis of cancer patient survival. Cancer Epidemiol Biomarkers Prev 2007; 16(8):1675-1681. http://dx.doi.org/10.1158/1055-9965.EPI-06-1046

Coleman MP. Trends in breast cancer incidence, survival, and mortality. Lancet 2000; 356(9229):590-591. http://dx.doi.org/10.1016/S0140-6736(00)02593-9

Day, N. E. Cumulative rate and cumulative risk. In: D. M. Parkin, C. S. Muir, S. L. Whelan et al. (Eds) Cancer Incidence in Five Continents, Volume VI (IARC Scientific Publications No.120). International Agency for Research on Cancer, Lyon, 1992.

Doll R., Payne P., & Waterhouse J. (Eds) Cancer Incidence in Five Continents: A Techical Report. Springer-Verlag (for UICC), table 38. Genève: UICC, 1966: 217 – 9., Berlin, 1966.

Doll R, Peto R. The causes of cancer: quantitative estimates of avoidable risks of cancer in the United States today. J Natl Cancer Inst 1981; 66(6):1191-1308. http://dx.doi.org/10.1093/jnci/67.6.1191

Ederer F, Heise H. Instructions to IBM 650 programmers in processing survival computations. Methodological note no. 10. End Results Evaluation Section, National Cancer Institute, Bethesda, MD; 1959.

Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, Whelan S. International classification of diseases for oncology: ICD-O. Third Edition.World Health Organization, Geneva, 2000.

Gade FG. Undersøkelser over kræftsygdommene i Norge, paa grundlag av den officielle mortalitetsstatistik 1902–1911 samt det av den norske komité for kræftforskning samlede materiale 1908–1912 [Investigations on cancer diseases in Norway, based on official mortality statistics 1902–1911 and material collected by the Norwegian Committee for cancer research 1908–1911]. Kristiania (Oslo): Dybwad, 1916:p1–102. [In Norwegian] http://archive.org/stream/skrifterutgitavv161chri#page/n5/mode/2up

Hakulinen T. Cancer survival corrected for heterogeneity in patient withdrawal. Biometrics 1982; 38(4):933-942. Hankey BF, Steinhorn SC. Long-term patient survival for some of the more frequently occurring cancers. Cancer 1982; 50(9):1904–1912. http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1097-0142

Hankey BF, Steinhorn SC. Long-term patient survival for some of the more frequently occurring cancers. Cancer 1982; 50:1904–1912. DOI: 10.1002/1097-0142(19821101)50:9<1904::AID-CNCR2820500943>3.0.CO;2-S.

International Association of Cancer Registries. International Rules for Multiple Primary Cancers (ICD-O third edition). Lyon, International Agency for Research on Cancer Internal Report No. 2004/02, 2004. www.iacr.com.fr/MPrules_july2004.pdf

Janssen-Heijnen ML, Houterman S, Lemmens VE, Brenner H, Steyerberg EW, Coebergh JW. Prognosis for long-term survivors of cancer. Ann Oncol 2007; 18(8):1408-1413. http://dx.doi.org/10.1093/annonc/mdm127

Lambert PC. Modelling of the cure fraction in survival studies. The Stata Journal 2007; 7(3):351-375.

Larsen IK, Smastuen M, Johannesen TB, Langmark F, Parkin DM, Bray F, Moller B. Data quality at the Cancer Registry of Norway: an overview of comparability, completeness, validity and timeliness. Eur J Cancer 2009; 45(7):1218-1231. http://dx.doi.org/10.1016/j.ejca.2008.10.037

Last, J. M. A Dictionary of epidemiology, 4th ed. New York, Oxford Uni. Press, 2001.

Muir CS, Fraumeni JF, Jr., Doll R. The interpretation of time trends. Cancer Surv 1994; 19-20:5-21.

Parkin DM, Bray F. Evaluation of data quality in the cancer registry: principles and methods Part II. Completeness. Eur J Cancer 2009; 45(5):756-764. http://dx.doi.org/10.1016/j.ejca.2008.11.033

Percy C, Stanek E, III, Gloeckler L. Accuracy of cancer death certificates and its effect on cancer mortality statistics. Am J Public Health 1981; 71(3):242-250. http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC1619811/

Peto R, Boreham J, Clarke M, Davies C, Beral V. UK and USA breast cancer deaths down 25% in year 2000 at ages 20-69 years. Lancet 2000; 355(9217):1822. http://dx.doi.org/10.1016/S0140-6736(00)02277-7

Rosso S, De Angelis R, Ciccolallo L, Carrani E, Soerjomataram I, Grande E, Zigon G, Brenner H. Multiple tumours in survival estimates. Eur J Cancer 2009; 45(6):1080-1094. http://dx.doi.org/10.1016/j.ejca.2008.11.030

Saxen, E. Trend: Facts or Fallacy. In: Trends in cancer incidence: Causes and Practical Implications. The international Union Against Cancer and The Norwegian Cancer Society, Oslo, 1982.

Segi, M. Cancer mortality for selected sites in 24 countries (1950-1957). Tohoku University of Public Health, Sendai, 1960.

Statistics Norway. www.ssb.no. Accessed date: September 19 2016.

Syse A, Pham DQ, Keilman N. Befolkningsframskrivinger 2016-2100: Dødelighet og levealder. I: Økonomiske analyser 3/2016. Oslo: Statistisk sentralbyrå; 2016. p. 25-36.

Return address:
Kreftregisteret
P.O. box 5313 Majorstuen
N-0304 Oslo
Norway

2015

Cancer in Norway

Cancer Registry of Norway
Institute of Population-based Cancer Research

Postal address:
P.O. box 5313 Majorstuen
N-0304 Oslo
Norway

Office address:
Ullernchausseen 64, Oslo

Telephone: +47 22 45 13 00

E-mail: kreftregisteret@kreftregisteret.no
Internet: www.kreftregisteret.no