Cancer Registry of Norway
INSTITUTE OF POPULATION-BASED CANCER RESEARCH

Cancer in Norway 2020

Cancer incidence, mortality, survival and prevalence in Norway

Special issue:
Kreft i Norge – hva sier tallene?

Cancer in Norway 2020

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General requests for cancer information or possible research collaboration are welcome, and should be sent to datautlevering@kreftregisteret.no. The application form on https://helsedata.no/ should be used to request for data from the Cancer Registry of Norway.

Cancer in Norway 2020

Cancer incidence, mortality, survival and prevalence in Norway

Foreword

The Covid-19 pandemic has had large consequences in many areas, including on cancer diagnostics and cancer care. Globally, we have all anticipated the 2020 cancer statistics to determine the effect of the pandemic on cancer counts. We present the Norwegian numbers in this report.

The Cancer Registry received notably fewer pathology reports during the first nine months of 2020, compared to previous years. However, there seems to have been a compensatory higher diagnostic activity towards the end of 2020. Similar results have been reported from our neighboring countries. The final result? Overall, the age-adjusted rates among both men and women were lower than the past few years. The impact of the pandemic seems to have been moderate, however, and substantially less than initially feared. The compensatory increase in diagnostics and reporting during the last part of 2020 reduced much of the diagnostic deficit that occurred in the spring.

When examining specific cancers, we find some exceptions. The number of breast cancers was considerably reduced in 2020 compared to 2019 and earlier years. This is likely because the mammographic screening program BreastScreen Norway was shut down for a few months from March 2020. Even though the centers opened gradually over the summer/fall, and several centers extended opening hours to compensate for the closure, markedly fewer screening exams than expected were conducted in 2020. Consequently, there were fewer screen-detected breast cancers in the age group 50-69 than previous years. The program estimates that 90% of the women have had or will have a delayed invitation and a subsequent delayed diagnosis.

Other female cancers were also affected. From March to May, the cervical cancer screening program stopped sending reminders to women to attend screening. This was, however, just a temporary delay. At the end of 2020, all planned reminders were sent, and a subset of women even received additional reminders. Despite this effort, about 13% fewer women than anticipated underwent cervical cancer screening in 2020. This likely explains why the number of cervical cancers for 2020 was 15% lower than expected. There were also fewer uterine and ovarian cancers diagnosed in 2020.

For other cancers, the diagnoses seem to have been delayed with a few months. There were fewer cases of melanoma in men, but not in women, as compared to 2019. The effect on many other cancers seems to be quite limited, most likely due to the compensatory diagnostic activity towards the end of the year.

Interestingly, the increase in thyroid cancer seemed to continue in 2020. Is this a result of higher imaging diagnostic capacity in parts of 2020? We do not fully understand why these rates continue to rise.

Good news is the prolonged downward trend in lung cancer rate among men. The question is whether the 6% lower incidence of lung cancer in women is the start of a similar decline, or whether it was caused by the pandemic. We know smokers and individuals with an undiagnosed cancer could be more prone to have serious Covid-19 disease. It is therefore possible that some could have died of Covid-19 without getting their cancer diagnosed. We have no data on whether this occurred, so time will show whether the low 2020 rate in women was temporary, or the start of a more permanent decline.

There has been much discussion around what to expect of long-term consequences of the Covid-19 pandemic. It seems clear that many of us changed our health seeking behavior during the early phase of the pandemic. If people were less willing to seek help with cancer symptoms, should we then expect staging of cancer to shift towards higher stages? Not necessarily. Some cancers do not grow that fast, and a delay may not be noticeable in the numbers. To what extent were cancers diagnosed in a timely manner in the early stage of the pandemic among old and frail patients? Can some have died of Covid-19 with an undetected stage III or IV cancer? We do not know, and we will likely be discussing the Covid-19 consequences for years to come.

Five-year relative survival is slowly improving for many cancers. Some of this change may, at least partly, be due to increased early diagnosis, lead time, and diagnoses among younger and more healthy individuals. We therefore always examine survival curves together with incidence and mortality curves. Similarly, we examine stage-specific incidence rates when we evaluate improvements in stage-specific survival. If new imaging procedures have resulted in detection of more metastases, then an improvement in five-year survival of advanced disease could be at least partially due to stage migration. If there is no change in stage-specific incidence rates, then stage migration is a less likely explanation.

The incidence rate of advanced melanoma has stayed rather constant over time. Even better news, the marked improvement in five-year relative survival from distant stage melanoma that we reported last year, continues. The improvement during the two last years is substantial in both men and women. The Cancer Registry has now, for the first time, started receiving information on medication administered in the hospitals. These data may help explain how much of the improvement is due immunotherapy.

In this year's special issue, we aim to explain and discuss cancer statistics in a way that should be understandable for the broader Norwegian public. We hope this will be useful for colleagues who do not work on a daily basis with incidence, mortality and survival rates. Thank you to the special issue editorial team for their efforts in explaining cancer epidemiology and cancer registry issues in a simple manner.

Thank you to everyone who has contributed to this report, whether it is hospital employees submitting reports to us or helping us in interpreting the numbers, our own coding personnel, database managers, statistical and editorial staff. We hope you all will find the report useful.

Oslo, September 2021
Giske Ursin, MD, PhD
Director

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Chapter 1 Definitions

Incidence The number of new cases of a 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 within an age stratum, often a five-year interval.

Age-standardisation A procedure for adjusting rates, e.g. incidence rates, designed to minimize the disturbing effects of differences in age composition when comparing rates for different populations (observed by geographical residence or over different time periods). The adjusted rates are referred to as age-standardised (or age-adjusted) rates. For this report, we use a standard chosen to be 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, comparable 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 (or even deficiency) may be attributable or linked 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 a certain number of years. As 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 that point, there is little or no excess mortality in the patient group.

Most definitions are based on Last & al, 2001[1].

Chapter 2 Summary

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. Due to random variation in incidence rates from one year to another, cancer trends should be interpreted by examining the rates over the past several years. Furthermore, the numbers for 2020 might be slightly underreported due to delayed notification of cancer cases.

The report is available online at:

https://www.kreftregisteret.no/

Incidence data are also available at the Cancer Registry of Norway's online statistics:

https://www.kreftregisteret.no/Registrene/data-og-statistikk/statistikkbank/

Incidence

A total of 35 515 new cancer cases were reported in 2020: 54.1% were among men and 45.9% were among women.

The five most frequent types of cancer in men in 2016–2020 were prostate, lung, skin (non-melanoma), colon, and bladder cancer (including the urinary tract).

The five most frequent types of cancer in women in 2016–2020 were breast, lung, colon, skin (non-melanoma) and melanoma of the skin.

The incidence rate for all sites combined has decreased in men by 2.5% and increased by 2.5% in women when comparing the last five-year period (2016–2020) with the previous one (2011–2015). For the most common cancers in men, the largest incidence increase in rates was observed for non-melanoma and melanoma skin cancers. On the positive side, the rates for lung and prostate cancer continue to decrease.

For the most common cancers in women, the strongest increase in incidence rate occurred for non-melanoma and melanoma skin cancers, and lung and breast cancer. A reduction in rates was seen for cancer in ovary and corpus uteri. A notable decrease is still observed for cancer of the central nervous system in both men and women. We have previously suggested that this might be due to underreporting.

The immigrant population in Norway consists of persons from more than 200 countries. First-generation immigrants comprise 15% of the total population, and around 8% of all cancer cases diagnosed in 2020 occured among immigrants.

Cancer incidence and Covid-19

It is difficult to interpret if or how the Covid-19 pandemic affects the number of cancer diagnosis in 2020 as there is a random variation in incidence from one year to another. Overall, the age-adjusted rates among both men and women were lower than the past few years. For the vast majority of cancers, there was no convincing decrease in the incidence from 2019 to 2020, but there were some excetions: The incidence rate of breast cancer decreased by 10%. This is most likely because the mammographic screening program was shut down for a few months. The centers opened gradually over the summer/fall, but the number of screening examinations were markedly fewer during 2020. Moreover, the incidence rate of cervical cancer decreased by 15%. This is most likely due to fewer women than anticipated underwent cervical cancer screening in 2020. There were also fewer uterine and ovarian cancers diagnosed in 2020. Finally, the incidence rate of lung cancer in women decreased by 6%. We do not know whether the low rate of lung cancer is the start of a more permanent decline, og whether it was caused by the pandemic.

Prevalence

At the end of 2020 a total of 305 503 persons were alive after having had at least one cancer diagnosis at some point in time.

Mortality

There were 10 981 deaths due to cancer in 2020. Cancer of the lung accounts for 20% of the cancer mortality, followed by cancer in the colon (11%), prostate (9%), pancreas (7%) and female breast (5%). Together these cancer sites account for 51% of the cancer mortality.

Survival

There has been a slight increase in the five-year relative survival for most cancers when comparing the five-year period (2016–2020) with the previous one. For the most common cancers, the largest increase in survival is observed for lung cancer:

Prostate cancer: Increased from 95.1% to 95.7%.
Breast cancer: Increased from 91.5% to 92.1%.

Lung cancer (M): Increased from 18.3% to 24.7%.
Lung cancer (F): Increased from 24.2% to 31.0%.

Colon cancer (M): Increased from 63.9% to 69.4%.
Colon cancer (F): Increased from 68.7% to 71.3%.

Rectum cancer (M): Increased from 69.6% to 71.4%.
Rectum cancer (F): Increased from 69.3% to 72.4%.

Table 2.1: Summary of cancer statistics for selected cancers

ICD-10	Site	Sex	Incidence cases, 2020[1]	Incidence rate, 2016–20[2]	Change in rate (%)[3]	Mortality rate, 2019[4]	Five-year relative survival (%)	
							2011–15	2016–20
C00–96	All sites	M	19 223	719.8	-2.5	234.7	73.5	76.7
		F	16 292	556.6	2.5	166.9	72.9	75.9
C18	Colon	M	1 504	57.4	-3.0	21.1	63.9	69.4
		F	1 617	53.1	0.4	19.0	68.7	71.3
C19–20	Rectum, rectosigmoid	M	821	31.0	-6.7	8.9	69.6	71.4
		F	552	18.5	-9.5	4.1	69.3	72.4
C33–34	Lung, trachea	M	1 704	64.8	-8.4	41.7	18.3	24.7
		F	1 627	54.2	5.0	33.9	24.2	31.0
C43	Melanoma of the skin	M	1 180	44.3	11.4	7.2	85.6	90.1
		F	1 158	39.6	10.9	3.2	92.6	94.9
C44	Skin, non-melanoma	M	1 558	56.9	26.6	...	...	...
		F	1 343	37.1	29.9	...	...	...
C50	Breast	F	3 424	127.6	3.7	19.9	91.5	92.1
C53	Cervix uteri	F	328	13.6	4.4	2.9	80.3	82.0
C54	Corpus uteri	F	764	27.0	-3.7	2.5	84.8	85.6
C56, C57.0–4, C48.2	Ovary etc.	F	487	17.9	-8.2	10.2	47.5	51.1
C61	Prostate	M	5 030	189.4	-11.1	43.3	95.1	95.7
C62	Testis	M	285	11.0	-8.1	0.2	98.4	99.0
C65–68	Urinary tract	M	1 410	51.3	3.2	11.8	77.2	79.3
		F	442	15.2	-1.6	3.4	71.2	75.4
C70–72	Central nervous system	M	431	16.9	-20.5	8.6	62.2	57.9
		F	526	19.3	-14.5	6.2	77.7	75.3
C73	Thyroid gland	M	130	5.0	25.2	0.7	88.4	88.8
		F	358	11.9	24.2	0.6	92.6	95.1
C82–86, C96	Non-Hodgkin lymphoma	M	602	22.0	-2.0	7.4	72.7	77.6
		F	460	15.4	-5.8	3.8	78.4	79.8
C91–95	Leukaemia	M	740	29.7	6.5	10.5	64.7	69.9
		F	614	20.4	7.7	6.9	72.4	76.2

[1] Number of new cases.
[2] Age-standardised (Norwegian std.) incidence rates per 100 000 person-years.
[3] Percent change in age-standardised incidence rate from 2011–15 to 2016–20.
[4] Age-standardised (Norwegian std.) mortality rates per 100 000 person-years. The mortality data is obtained from the Cause of Death Registry.
... Not estimated in this report.

Erratum:
Table 2.1 has an error: The heading "Mortality rate, 2020" has been replaced with "Mortality rate, 2019"
The correct mortality rates for year 2020 can be found in figure 7.1.

Chapter 3 Data and data sources

3.1 The population of Norway

By January 1st 2021 the total number of inhabitants in Norway was 5 391 369[2]. Table 3.1 shows the age structure by sex for the Norwegian mid-year population in 2020. Back in 1953, when the cancer registration started in Norway, the number of inhabitants was 3 344 010. The population has increased by 61% from 1953 to 2021, largely because of rising life expectancy and, more recently, due to increase in net immigration. The size of the population is expected to reach 6 million in 2050[1], and the elderly will represent an increasing proportion of the population of Norway over the next decades[3]. Recent updates from Statistics Norway estimate that the proportion of persons 70 years or older will increase from 12%, in 2020, to 21% in 2050[3].

Table 3.1: Norwegian mid-year population 2020 by five-year age group and sex

Age group	Males	Females	Total
0–4	147 507	139 005	286 512
5–9	160 431	152 503	312 934
10–14	167 480	158 934	326 414
15–19	162 873	154 538	317 411
20–24	175 827	163 798	339 625
25–29	188 999	179 906	368 905
30–34	192 585	184 945	377 530
35–39	183 795	173 512	357 307
40–44	178 830	168 822	347 652
45–49	191 621	182 355	373 976
50–54	191 381	182 003	373 384
55–59	171 434	164 179	335 613
60–64	155 606	152 832	308 438
65–69	137 879	139 191	277 070
70–74	127 988	132 303	260 291
75–79	86 539	96 322	182 861
80–84	50 916	65 415	116 331
85+	41 221	76 007	117 228

The immigrant population

The immigrant population is heterogeneous with respect to length of stay, country of birth and reason for immigration. The first-generation immigrants consist of persons from more than 200 countries, and by January 1st 2021 they comprise 14.8% of the total population (800 094 persons). An additional 4.9% of the Norwegian population are second-generation immigrants (born in Norway with two foreign born parents). When classifying immigrants by country of birth, immigrants from Poland are the largest group with more than 100 000 persons, followed by immigrants from Lithuania and Sweden[4].

In 2018, the Regulations (*Kreftregisterforskriften*) were revised, and the Cancer Registry of Norway (CRN) was allowed to collect and process data on country of birth, and data on cancer incidence among immigrants is now included in the yearly report. As mentioned above, Norway has immigrants from more than 200 countries. The number of immigrants from most of these countries are small, and it is thus not possible to provide cancer statistics by country of birth. In this report, immigrants are therefore categorised in 6 groups, of which cancer statistics are presented for 5. We do not present data for immigrants from Latin America and the Carribean

[1] Considered the scenario of medium national growth

due to too few cases. Many immigrants in Norway are born in European countries, and Europe was divided in three categories: Nordic countries, Western Europe (including North America and Oceania as these countries have similar cancer patterns) and other European countries. Table 3.2 shows the countries included in each group. The countries are listed according to the number of immigrants and restricted to countries with more than 1000 immigrants.

Table 3.2: Number of first generation immigrants by country per 1 January 2020

Number of first generation immigrants	Nordic countries	Western Europe, North America and Oceania	Other European Countries	Middle East and Africa	Asia	Latin America and the Caribbean*
≥100 000			Poland			
50 000–99 999						
40 000–49 999			Lithuania			
30 000–39 999	Sweden			Syria		
20 000–29 999		Germany		Somalia	Philippines	
				Eritrea	Thailand	
				Iraq	Pakistan	
10 000–19 999	Denmark	United Kingdom	Russia	Iran	Afghanistan	
			Romania		India	
			Bosnia and Herzegovina		Vietnam	
			Turkey			
			Latvia			
			Kosovo			
1 000–9 999	Iceland	United States	Serbia	Ethiopia	China	Chile
	Finland	Netherlands	Bulgaria	Morocco	Sri Lanka	Brazil
		Spain	Ukraine	Sudan	Myanmar	Colombia
		France	Croatia	DR Congo	Nepal	Mexico
		Italy	Estonia	Palestine	Indonesia	Peru
		Portugal	Hungary	Lebanon	South Korea	Venezuela
		Canada	Slovakia	Uganda	Bangladesh	Argentina
		Australia	Greece	Ghana	Japan	Cuba
		Switzerland	North Macedonia	Nigeria	Kazakhstan	
		Austria	Albania	Kenya		
		Belgium	Czech Republic	Egypt		
		Ireland	Moldova	Algeria		
			Belarus	South Africa		
				The Gambia		
				Tunisia		
				Burundi		
				Saudi Arabia		

* Not shown as a separate group in table 5.25, 5.26, 5.27 and 5.28 due to few cancer cases.

3.2 The Cancer Registry of Norway

The CRN has, since the implementation of a directive from the Ministry of Health and Social Affairs in January 1952, systematically collected notifications on cancer occurrence for the Norwegian population. The registration is considered to be close to complete from 1953, and a comprehensive study on data quality estimates the completeness to be 98.8% for the registration period 2001–2005[5]. The Regulations for the collection and processing of data in the CRN came into force in 2002. The following conditions are mandatory to report to the CRN:

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

Main objectives

The main objectives of the CRN can be summarized as the following:

- 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 public about preventive measures.
- Perform epidemiological research of high international standard.

The incidence registry

The incidence registry contains basic data items collected from clinicians and pathologists, as well as data from the Norwegian Patient Registry (NPR) and the Cause of Death Registry. As of 30 August 2021, the incidence registry contained information registered since 1953 on 2 115 736 cancer cases (including premalignant and some benign conditions) in 1 672 670 persons. The incidence registry is updated continuously with information on both new cases and cases diagnosed previous years. A total of 5 567 968 notifications have been registered since 1969 (single notifications were not registered earlier).

The clinical registries

Clinical registries, i.e. comprehensive registration schemes dedicated to specific cancers, are established to provide 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 basis for scientific studies concerning prognostic factors and treatment outcomes, as well as for evaluation of the quality of cancer care. Several clinical registries are now established, and the ongoing and expanding activities of these clinical registries are a major focus for CRN. Each clinical registry has an advisory board consisting 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, quality assurance and registration activities. Table 3.3 shows the status of the clinical registries as of September 2021. Recent reports (in Norwegian) from these registries are found here:

https://www.kreftregisteret.no/Generelt/Rapporter/Arsrapport-fra-kvalitetsregistrene/

Table 3.3: Status of the clinical registries, September 2021

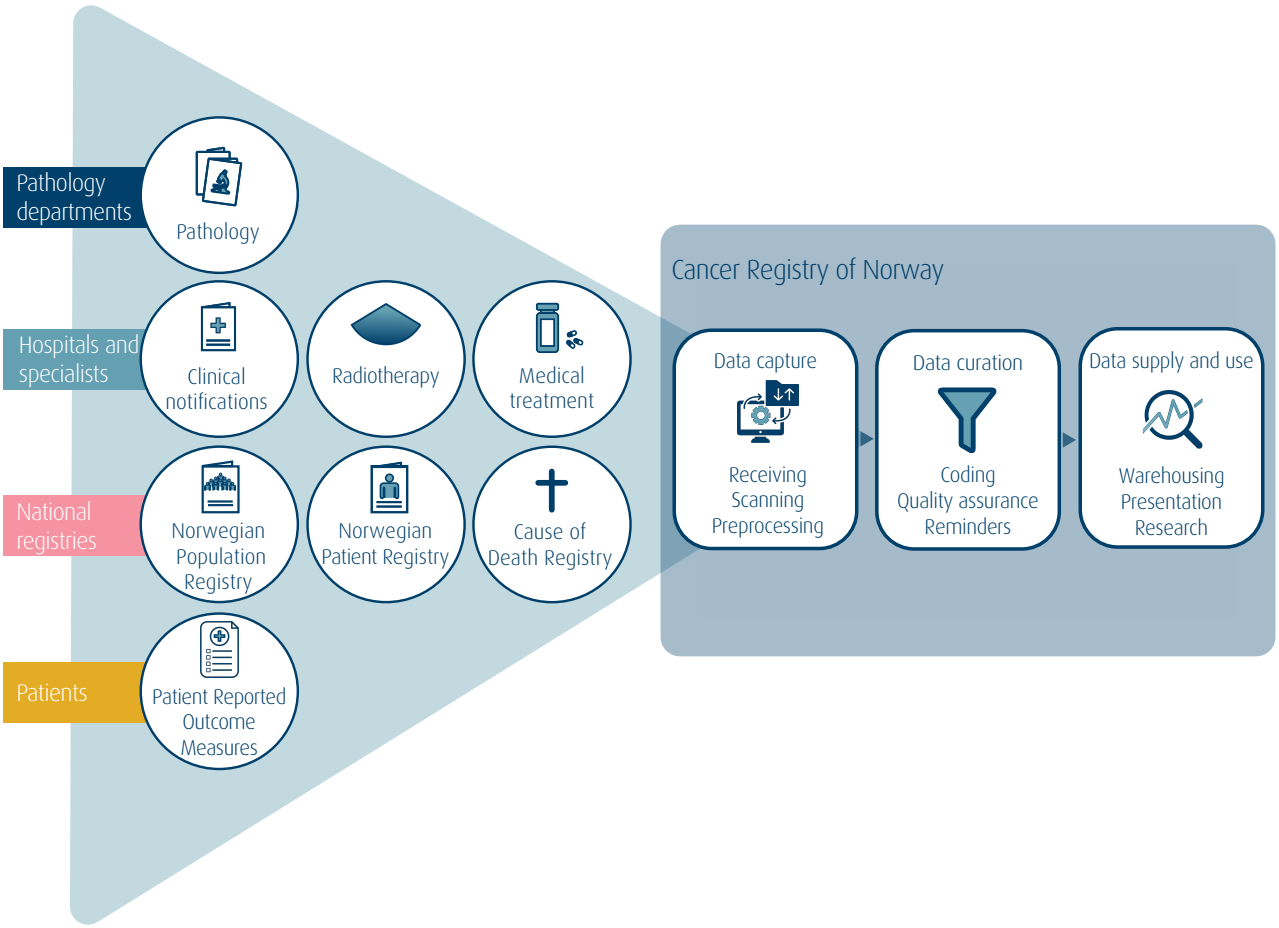
Clinical registry for	Clinical reference/ project group	Established with extended data*	Clinical parameters for electronical report specified	Electronical report form in use	National status
Colorectal cancer	Yes	Yes	Yes	Yes	2009
Prostate cancer	Yes	Yes	Yes	Yes	2009
Breast cancer	Yes	Yes	Yes	Yes	2013
Childhood cancer	Yes	Yes	Yes	Yes	2013
Gynecological cancer**	Yes	Yes	Yes	Yes	2013
Lung cancer	Yes	Yes	Yes	Yes	2013
Lymphomas and lymphoid leukaemias	Yes	Yes	Yes	Yes	2013
Melanoma of the skin	Yes	Yes	Yes	Yes	2013
Oesophagus and stomach cancer	Yes	Yes	Yes	Yes	***
Sarcoma	Yes	Yes	Yes	Yes	***
Central nervous system	Yes	No	No	No	****
Urinary tract	Yes	No	Yes	No	***
Pancreatic cancer	Yes	Yes	Yes	Yes	****

* Either by having a separate clinical report form and/or by having a database with extended information beyond the incidence registry.
** Established for ovarian and cervical cancer, and will be extended to include all gynecological cancer.
*** Funding and status as national clinical registry has been applied for.
**** Applied for status as national clinical registry. The CRN has received funding from the Norwegian Cancer Society for establishment and operation for three years.

3.3 Sources of information

The sources of information and the notification process are illustrated in Figure 3.1. Information from clinical notifications, pathology reports and death certificates are the main sources that enables the CRN to code and store data on cancer patients in Norway. Information from the NPR is an important additional source for identifying cancer cases. The information is identified and linked by the personal identification number system that was established in Norway in 1964.

Figure 3.1: Sources of information and the process of cancer registration at the Cancer Registry of Norway



Information from pathology departments, hospitals and specialists

The CRN Regulations, as issued by the Ministry of Health and Social Affairs, require all health institutions in Norway involved in cancer diagnostics, treatment and follow-up to report to the CRN. Reporting should be done as soon as possible after end of diagnostics or treatment. The clinical registries use specific forms with extended information relevant for each cancer site. In addition, there are two generic forms for reporting 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. Clinical notifications are 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/

Pathology reports from hospitals and independent laboratories provide histological, cytological or autopsy information. About 65% of the pathology reports are sent electronically to the CRN. The aim is to further reduce the amount of paper copies over the next couple of years by having even more pathology departments report electronically.

Dispatching of reminders to clinicians

It is mandatory to report clinical information on all new cases of cancer, except those diagnosed at autopsy. Thus, at least one clinical notification should be registered for each cancer case. In those cases where the clinical notification is missing, a reminder is sent via the KREMT-portal to the hospital/ward/physician responsible for the treatment.

Information from national registries

The Norwegian Population Registry

The CRN receives monthly updates on patients' vital status from the Norwegian Population Registry. These data are used to estimate incidence rates and long-term survival patterns and trends.

The Norwegian Patient Registry

Since 2002, the CRN has received data from the Patient Administrative Data System used in all Norwegian hospitals. Information was first sent directly from the hospitals, and from 2010 it has been provided by the NPR. The data contain information regarding patients who have been treated for premalignant and malignant conditions, and reminders are sent to clinicians for all cancer cases not previously registered in the CRN. The NPR is a key source in finding information on unreported cases (Figure 3.1).

Cause of Death Registry

In addition, the Cause of Death Registry, run by the Norwegian Institute of Public Health, send death certificates and information on cause of death throughout the 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 are not previously reported, or where the diagnosis differs. Cancer cases first identified from death certificates are traced back to the health institution responsible for the treatment of the patient to verify the diagnosis and, if possible, get clinical information about the case.

Patient Reported Outcome Measures

Most cancer patients have received some form of treatment, either surgery, and/or radiotherapy, chemotherapy, or symptom directed palliative therapy. Extensive cancer treatments sometime cause harmful complications and late side effects, which may also affect the quality of life. To gain better knowledge in this field, the CRN now invites patients with prostate cancer, breast cancer, colorectal cancer and melanoma of the skin to research projects and/or population surveys. Other cancers will be included in the next few years. The results from these Patient Reported Outcome Measures (PROMs) will provide valuable information that can be used to improve current health care and optimise future treatment strategies for cancer patients.

3.4 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 30 August 2021. The tables and figures in general represent either the latest year of complete incidence (2020) or the latest five-year period (2016–2020). Population data, stratified by year, sex and age, are provided by Statistics Norway.

Registered codes from ICD-7, ICD-O-2 and ICD-O-3 are converted to ICD-10 using a combination of topography and morphology. According to the ICD-10 classification this means that, for example, a neuroendocrine tumor is included in the cancer site from which it originated. The main cancer types are tabulated according to their ICD-10 categories.

Table 3.4 gives a detailed description of specific morphologies that are included or excluded in all cancer statistics presented in the present report. The "All sites" figure comprises all malignant neoplasms (ICD-10 C00–96) and the D-diagnoses listed in Table 3.4. 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. Of notice is that in the subsequent tables and figures the D-codes are not shown in labels due to lack of space.

Table 3.4: Description of ICD-10 codes

ICD-10	Site	Comments
C00–96	All sites	Includes the following D-diagnoses: D32–33, D35.2–4, D42–43, D44.3–5 and D45–47. Excludes all basal cell carcinomas of all topographies
C00	Lip	Includes the following ICD-10 codes: C00.0–2, C00.6, C00.8 (only included if Lip NOS), C00.9
C02–06	Oral cavity	Includes the following ICD-10 codes: C00.3–5, C00.8 (if the tumor is in mucosa of upper or lower lip), C02.0–4, C02.8–9, C03.0–9, C04.0–9, C05.0, C05.8, C05.9, C06.0–9
C07–08	Salivary glands	Includes the following ICD-10 codes: C07.9, C08.0–9
C09–10, C01, C14	Oropharynx	Includes the following ICD-10 codes: C01.9, C05.1–2, C09.0–9, C10.0–9, C14.0–8
C11	Nasopharynx	Includes the following ICD-10 codes: C11.0–9
C12–13	Hypopharynx	Includes the following ICD-10 codes: C12.9, C13.0–9
C25	Pancreas	Includes neuroendocrine tumours
C38	Heart, mediastinum and pleura	Excludes mesotheliomas (which are included in C45)
C48–49	Soft tissues etc.	Includes retroperitoneum and peritoneum (C48). In women, cases in peritoneum (C48.2) are excluded, as these are included in ovary etc. (C56, C57.0–4, C48.2)
C50	Breast	Excludes Pagets disease
C56, C57.0–4, C48.2	Ovary etc.	Excludes borderline tumours. Includes the following sites: Neoplasms in peritoneum (C48.2, epithelial tumours), fallopian tube (C57.0), broad ligament (C57.1), round ligament (C57.2), parametrium (C57.3), uterine adnexa, unspecified (C57.4) and epithelial tumors supposed to originate from tube, ovary or peritoneum
C64	Kidney (excl. 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 of central nervous system	Includes benign tumours (D32–33, D42–43)
C75	Other endocrine glands and related structures	Includes benign tumours (D35.2–4, D44.3–5)
C90	Multiple myeloma	Includes plasmacytomas (C90.2–3)
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)

Multiple primary neoplasms

Multiple primaries occur where two or more primary cancers develop within the same organ (or a pair of organs), as opposed to a recurrence or progression of an existing cancer. They may occur at the same time (synchronous), or in sequences (metachronous).

We use the recommendations for counting multiple primary neoplasms as outlined by the IARC/WHO/ENCR/IACR Working group in 2004. These are available at:

http://www.iacr.com.fr/images/doc/MPrules_july2004.pdf

The guidelines state that when counting cases, only one tumour is recognized as arising in an organ or a pair of organs or tissue. Furthermore, the IARC recommendations has a list of 17 groups of maligant neoplasms considered to be histologically 'different' for the purpose of defining multiple tumours (as described in Table 25, page 26, World health Organization International Classification of Diseases for Oncology, third edition, first revision, 2013[6]).

Thus, in this report only the first invasive tumour of a defined histological type is counted within one two-digit topography code (ICD-O-3) (for example breast C50). A new cancer of the same histological group in the same organ at a later point in time 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 cancer cases. 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 like lymphomas, leukaemias and kaposi's sarcomas (defined as histological groups 8–15 in the IARC recommendations).

For metachronous cases within the same histological group, i.e. cancer cases considered to be histologically similar, the case with the first date of diagnosis is reported. For synchronous cases the case with the most severe metastasis status is reported. If the metastasis status is equal, the case with the numerically highest morphology code (ICD-O-3) is reported. Finally, if metastasis status, and morphology code is equal we report the first registered case.

In previous publications of Cancer in Norway (CiN) we have reported a slighly higher number of cases than if the IARC recommendations had been followed strictly because we considered non-specific groups as separate morphology groups. In this report, we have adjusted this in order to better comply to the IARC recommendations:

We now exclude cases with unspecific histological groups (5 and 17) if the person also is registered with another case within the same organ or pair of organs or tissue that has a specific histology (1–4, 6–7 and 16). Histology group 5 is preferred over 17 if a person only has several tumours with unspecified histology in the same organ. Among cases with tumours of haematopoietic and lymphoid tissues, we exclude cases with an unspecified histology (14) if the person also has a case with specified histology (8–13). These rules are followed regardless of time of diagnosis.

Extent of disease

In the present report we have classified stage as follows:

Localised stage: All cases where the tumor is confined to the primary organ.

Regional stage: All cases where the tumor has invaded neighbouring tissue outside of the primary organ or metastasised to regional lymph nodes.

Distant stage: All cases where the tumor has metastasised to other organs or distant lymph nodes.

Unknown: All cases where the primary origin of the tumor is not known and cases with insufficient information to set stage.

For some cases, the CRN only receive histological reports and no clinical notifications. A large proportion of these cases lack verified information on metastases at the time of diagnosis.

The following rules are used to set a specific stage for these patients: If a patient has major surgery and there is no clinical or pathological information that indicates metastasis, the patient is considered to have localised disease. If only a cytology or biopsy exist for the case, and there is no information about extent of disease, the patient is registered with an unknown stage.

3.5 Data quality

A comprehensive assessment of the data quality in the CRN was conducted in 2007[5]. Larsen & al. reported that the coding and classification systems in general followed 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[7]. Methods for the evaluation of registry completeness were also assessed the same year[8].

Two indicators of accuracy are shown in Table 3.5, namely the percentage of cases morphologically verified (MV%), and the percentage of death certificate only registrations (DCO%).

3.6 Completeness and timeliness

Table 3.6 presents completness estimates for the period 2016–2020. For all cancers combined, the new estimates are nearly the same as those reported for the early 2000s. We still see that some few cancers have completeness estimates below 95% (e.g. cancer of the liver, central nervous system, pancreas and leukaemia).

Table 3.7 shows the number of cancer cases diagnosed in 2019 as extracted on 18 September 2020 (for CiN 2019), and on 30 August 2021.

The number of cancer cases diagnosed in 2019 reported and appearing in this issue (CiN 2020) are 640 (1.8%) higher than reported in the previous report (CiN 2019)[2]. The difference between registered cases at publication and one year later, are highest for the rarest cancers (e.g. heart, eye) or unspesified cancers.

In the last years, the report has been published before we receive the complete numbers of deaths from the Cause of Death Registry (CDR), but we expect that we have received most of the death certificates for 2020.

[2] In this report we have implemented new rules for counting of multiple primaries, and the comparison is based on the new counting method.

Table 3.5: Percentage distribution of morphologically verified (MV) and death certificate only (DCO) cases by primary site, 2016–2020

ICD-10	Site	Cases	MV (%)	DCO (%)
C00–96	**All sites**	**174 476**	**93.0**	**1.5**
C00–14	**Mouth, pharynx**	**3 301**	**98.8**	**0.3**
C00	Lip	481	100.0	0.0
C02–06	Oral cavity	1 110	98.7	0.3
C07–08	Salivary glands	326	98.5	0.6
C09–10, C01, C14	Oropharynx	1 166	98.5	0.3
C11	Nasopharynx	77	97.4	0.0
C12–13	Hypopharynx	141	99.3	0.0
C15–26	**Digestive organs**	**35 258**	**89.8**	**1.8**
C15	Oesophagus	1 600	95.6	1.3
C16	Stomach	2 278	95.0	1.4
C17	Small intestine	1 063	95.6	1.3
C18	Colon	15 394	94.6	1.3
C19–20	Rectum, rectosigmoid	6 802	97.6	0.4
C21	Anus	523	93.9	0.0
C22	Liver	1 703	63.1	4.7
C23–24	Gallbladder, bile ducts	812	70.3	6.3
C25	Pancreas	4 448	68.6	3.2
C26	Other digestive organs	635	86.9	9.9
C30–34, C38	**Respiratory organs**	**17 396**	**86.6**	**2.3**
C30–31	Nose, sinuses	215	98.1	0.5
C32	Larynx, epiglottis	535	97.0	0.6
C33–34	Lung, trachea	16 559	86.2	2.3
C38	Heart, mediastinum and pleura	87	60.9	18.4
C40–41	**Bone**	**280**	**97.5**	**0.7**
C43	**Melanoma of the skin**	**11 401**	**99.8**	**0.1**
C44	**Skin, non-melanoma**	**12 558**	**99.8**	**0.0**
C45	**Mesothelioma**	**401**	**93.0**	**1.2**
C47	**Autonomic nervous system**	**40**	**100.0**	**0.0**
C48–49	**Soft tissues**	**613**	**96.1**	**1.3**
C50	**Breast**	**17 830**	**99.4**	**0.4**
C51–58	**Female genital organs**	**8 955**	**97.1**	**1.1**
C51–52, C57.7–9	Other female genital	617	95.3	2.6
C53	Cervix uteri	1 799	99.4	0.3
C54	Corpus uteri	3 902	98.9	0.4
C55	Uterus, other	46	63.0	21.7
C56, C57.0–4, C48.2	Ovary etc.	2 579	94.0	2.0
C58	Placenta	12	83.3	0.0
C60–63	**Male genital organs**	**27 125**	**95.4**	**0.9**
C61	Prostate	25 300	95.1	0.9
C62	Testis	1 489	99.7	0.0
C60, C63	Other male genital	336	98.8	0.9
C64–68	**Urinary organs**	**13 389**	**96.1**	**1.0**
C64	Kidney (excl. renal pelvis)	4 523	92.3	1.9
C65–68	Urinary tract	8 866	98.1	0.6
C69	**Eye**	**396**	**54.5**	**0.3**
C70–72	**Central nervous system**	**4 930**	**73.1**	**2.5**
C73	**Thyroid gland**	**2 268**	**99.5**	**0.3**
C37, C74–75	**Other endocrine glands**	**935**	**66.0**	**1.2**
C39, C76, C80	**Other or unspecified**	**1 703**	**52.5**	**34.2**
C81–96	**Lymphoid/haematopoietic tissue**	**15 697**	**91.9**	**1.1**
C81	Hodgkin lymphoma	753	99.9	0.1
C82–86, C96	Non-Hodgkin lymphoma	5 165	98.9	0.3
C88	Immunoproliferative disease	426	98.6	0.5
C90	Multiple myeloma	2 529	92.0	1.1
C91–95	Leukaemia	6 824	85.4	1.9

Table 3.6: Completeness by primary site, 2016–2020

ICD-10	Site	Completeness (%)
C00–96	**All sites**	**98.6**
C00–14	**Mouth, pharynx**	**99.8**
C00	Lip	-
C02–06	Oral cavity	99.7
C07–08	Salivary glands	-
C09–10, C01, C14	Oropharynx	99.8
C11	Nasopharynx	98.4
C12–13	Hypopharynx	99.6
C15–26	**Digestive organs**	**98.9**
C15	Oesophagus	99.6
C16	Stomach	99.0
C17	Small intestine	98.3
C18	Colon	99.8
C19–20	Rectum, rectosigmoid	99.9
C21	Anus	99.5
C22	Liver	83.4
C23–24	Gallbladder, bile ducts	91.1
C25	Pancreas	90.3
C26	Other digestive organs	94.7
C30–34, C38	**Respiratory organs**	**98.7**
C30–31	Nose, sinuses	100.0
C32	Larynx, epiglottis	99.9
C33–34	Lung, trachea	98.8
C38	Heart, mediastinum and pleura	88.6
C40–41	**Bone**	**99.9**
C43	**Melanoma of the skin**	**99.9**
C44	**Skin, non-melanoma**	**99.8**
C45	**Mesothelioma**	**98.4**
C47	**Autonomic nervous system**	**-**
C48–49	**Soft tissues**	**99.3**
C50	**Breast**	**100.0**
C51–58	**Female genital organs**	**99.8**
C51–52, C57.7–9	Other female genital	99.9
C53	Cervix uteri	100.0
C54	Corpus uteri	99.9
C55	Uterus, other	91.5
C56, C57.0–4, C48.2	Ovary etc.	99.7
C58	Placenta	95.5
C60–63	**Male genital organs**	**99.6**
C61	Prostate	99.7
C62	Testis	99.8
C60, C63	Other male genital	99.6
C64–68	**Urinary organs**	**98.7**
C64	Kidney (excl. renal pelvis)	96.6
C65–68	Urinary tract	99.6
C69	**Eye**	**89.6**
C70–72	**Central nervous system**	**87.7**
C73	**Thyroid gland**	**99.5**
C37, C74–75	**Other endocrine glands**	**66.6**
C39, C76, C80	**Other or unspecified**	**72.9**
C81–96	**Lymphoid/haematopoietic tissue**	**96.6**
C81	Hodgkin lymphoma	99.9
C82–86, C96	Non-Hodgkin lymphoma	99.8
C88	Immunoproliferative disease	99.5
C90	Multiple myeloma	92.9
C91–95	Leukaemia	92.6

- Not estimable (see CiN Technical Supplement[9]).

Table 3.7: Registered cancer cases in Norway 2019, as obtained from the incidence registry 18 September 2020 and 30 August 2021

		Cases diagnosed 2019 as of				
ICD-10	**Site**	**18.9.2020[1]**	**18.9.2020[2]**	**30.8.2021[2]**	**Difference[2]**	**%[2]**
C00–96	**All sites**	**34 979**	**34 923**	**35 563**	**640**	**1.8**
C00–14	**Mouth, pharynx**	**648**	**648**	**651**	**3**	**0.5**
C00	Lip	97	97	99	2	2.1
C02–06	Oral cavity	197	197	197	0	0.0
C07–08	Salivary glands	54	54	54	0	0.0
C09–10, C01, C14	Oropharynx	261	261	260	-1	-0.4
C11	Nasopharynx	12	12	13	1	8.3
C12–13	Hypopharynx	27	27	28	1	3.7
C15–26	**Digestive organs**	**6 878**	**6 871**	**7 046**	**175**	**2.5**
C15	Oesophagus	313	313	315	2	0.6
C16	Stomach	440	440	462	22	5.0
C17	Small intestine	204	204	208	4	2.0
C18	Colon	2 979	2 973	3 038	65	2.2
C19–20	Rectum, rectosigmoid	1 316	1 315	1 328	13	1.0
C21	Anus	112	112	117	5	4.5
C22	Liver	342	342	367	25	7.3
C23–24	Gallbladder, bile ducts	165	165	172	7	4.2
C25	Pancreas	884	884	917	33	3.7
C26	Other digestive organs	123	123	122	-1	-0.8
C30–34, C38	**Respiratory organs**	**3 481**	**3 457**	**3 507**	**50**	**1.4**
C30–31	Nose, sinuses	45	45	47	2	4.4
C32	Larynx, epiglottis	104	104	105	1	1.0
C33–34	Lung, trachea	3 320	3 296	3 337	41	1.2
C38	Heart, mediastinum and pleura	12	12	18	6	50.0
C40–41	**Bone**	**58**	**58**	**63**	**5**	**8.6**
C43	**Melanoma of the skin**	**2 330**	**2 329**	**2 346**	**17**	**0.7**
C44	**Skin, non-melanoma**	**2 741**	**2 736**	**2 743**	**7**	**0.3**
C45	**Mesothelioma**	**93**	**93**	**96**	**3**	**3.2**
C47	**Autonomic nervous system**	**7**	**7**	**7**	**0**	**0.0**
C48–49	**Soft tissues**	**149**	**149**	**147**	**-2**	**-1.3**
C50	**Breast**	**3 753**	**3 751**	**3 745**	**-6**	**-0.2**
C51–58	**Female genital organs**	**1 852**	**1 852**	**1 890**	**38**	**2.1**
C51–52, C57.7–9	Other female genital	116	116	117	1	0.9
C53	Cervix uteri	368	368	390	22	6.0
C54	Corpus uteri	828	828	836	8	1.0
C55	Uterus, other	9	9	12	3	33.3
C56, C57.0–4, C48.2	Ovary etc.	528	528	532	4	0.8
C58	Placenta	3	3	3	0	0.0
C60–63	**Male genital organs**	**5 245**	**5 245**	**5 334**	**89**	**1.7**
C61	Prostate	4 877	4 877	4 966	89	1.8
C62	Testis	303	303	303	0	0.0
C60, C63	Other male genital	65	65	65	0	0.0
C64–68	**Urinary organs**	**2 689**	**2 682**	**2 694**	**12**	**0.4**
C64	Kidney (excl. renal pelvis)	911	907	924	17	1.9
C65–68	Urinary tract	1 778	1 775	1 770	-5	-0.3
C69	**Eye**	**76**	**76**	**86**	**10**	**13.2**
C70–72	**Central nervous system**	**904**	**903**	**963**	**60**	**6.6**
C73	**Thyroid gland**	**450**	**450**	**461**	**11**	**2.4**
C37, C74–75	**Other endocrine glands**	**170**	**170**	**187**	**17**	**10.0**
C39, C76, C80	**Other or unspecified**	**297**	**297**	**346**	**49**	**16.5**
C81–96	**Lymphoid/haematopoietic tissue**	**3 158**	**3 149**	**3 251**	**102**	**3.2**
C81*	Hodgkin lymphoma	146	146	146	0	0.0
C82–86, C96	Non-Hodgkin lymphoma	1 157	1 155	1 099	-56	-4.8
C88	Immunoproliferative disease	70	70	91	21	30.0
C90	Multiple myeloma	506	506	523	17	3.4
C91–95*	Leukaemia	1 279	1 272	1 392	120	9.4

[1] Old method of counting multiple primary neoplasms. Same numbers as reported in Table 5.1 in CiN 2019.
[2] New method of counting multiple primary neoplasms.
* Due to international guidelines of conversions between ICD-O-3 and ICD-10, and more strict adherence to these, there are some cases that have been reclassified from non-Hodgkin lymphoma to chronic lymphatic leukemia.

Chapter 4 Statistical methods

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

4.1 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, its utility in comparing cancer risk between different populations 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 group 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:

$$r_i = \frac{d_i}{Y_i} \cdot 100000$$

Usually, rates are provided separately for males and females, because of the different patterns by sex both in terms of number of cases (see Table 5.9 and 5.10) and persons under risk (see Table 3.1). Age- and sex-specific incidence and mortality rates are the basis of epidemiological analysis of cancer frequency data. Table 3.1

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 group of the standard population are known as the weights to be used in the standardisation process. The ASR is calculated as:

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

where w_i is a weight given a reference population.

The World Standard Population[10,11] has been used as reference population in several previous report of Cancer in Norway. Since Cancer in Norway 2014 we have used the Norwegian mid-year population in 2014 as the reference population. This standard is referred to as the *Norwegian standard*.

The two standards, using 18 age groups, are shown in Figure 4.1, and it clearly illustrates the difference between them: The Norwegian standard has higher weights for the oldest age groups.

The main advantage of using the Norwegian standard as the 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 5.1 shows the ASR in 2020 with the two different standards.

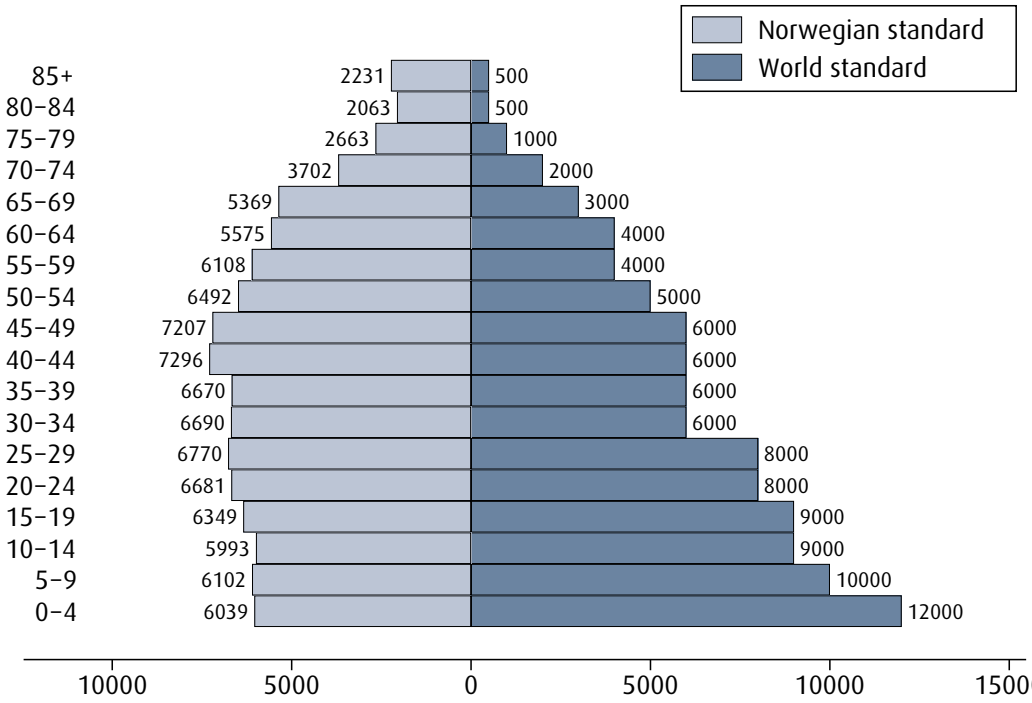
Of notice is that, in general, the ASRs with Norwegian standard gives twice as high rates as the ASRs with World standard. This is because the World standard has lower weights for the oldest age groups. Cancers that have the highest incidence rates in the youngest age groups

(e.g. testicular cancer) are less affected by the choice of reference population.

Age-standardised incidence rates (World standard) are available at:

https://sb.kreftregisteret.no/insidens

Figure 4.1: Comparison of population weights



Cumulative risk

The cumulative risk is the probability that an individual will develop the cancer under study during a certain age span, in the absence of other competing causes of death[12]. The age span over which the risk is accumulated must be specified, and in this report, the range 0–79 years is used and provides an approximation of the risk of developing cancer. If before the age of 80 the cumulative risk is less than 10%, as is the case for most cancer forms, it is reasonably approximated by the cumulative rate. This is the summation of the age-specific rates over each year of age from birth to a defined upper age limit. As age-specific incidence rates are computed according to five-year age groups, the cumulative rate is five times the sum of the age-specific rates calculated over the five-year age groups, assuming the age-specific rates are the same for all ages within the five-year age stratum:

$$\text{Cumulative rate} = 5 \sum_i r_i$$

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

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

Completeness

4.1.1 Completeness

Completeness was estimated by the use of the capture-recapture method described in Parkin and Bray (Parkin and Bray, 2009).

This method has been used to estimate the size of a population, and is widely used in field biology to estimate the size of a closed animal population. In that purpose, and briefly explained, animals are captured, marked and released, followed by a new catch (recapture). The number of captured animals in the first catch, the number of new animals in the second catch and the number of recaptured animales are used to estimate the number of uncatched animals.

When this method is used to estimate completeness in a cancer registry context, we assume that cases are registered by two different data sources. Cases registered on pathology reports and/or death certificates (source A) is the first 'catch', and cases registered on clinical notifications (source B) is the second 'catch'. A detailed description of the method can be found in CiN Technical Supplement[9].

4.2 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 December 31st 2020 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.

4.3 Survival

The survival time of a cancer patient is defined as the time that elapses between a cancer diagnosis and subsequent death, emigration or end of follow-up. A common measure of survival is five-year observed survival, which represents the percentage of patients still alive five years after their date of diagnosis.

Follow-up data

To estimate long-term survival patterns and trends, vital statistics of patients diagnosed with cancer during 1965–2020 were obtained from the National Population Registry and Statistics Norway through to December 31st 2020.

The 23 most common cancers were selected for analysis, grouped according to their respective ICD-10 categories. About 3% of cases were excluded as they were either registered on death certificate only (DCO), 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 artificially elevate estimates of survival[13]. 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. In Norway, the effect of their inclusion has been shown to reduce five-year survival by less than a percentage point[14].

Survival results should be interpreted with caution. Survival of prostate cancer and breast cancer has been affected by PSA testing and mammographic screening, respectively.

Relative survival (net survival)

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* the survival in a hypotetical world were the cancer is the only possible cause of death.

Relative survival is calculated as the observed survival proportion in a patient group divided by the expected survival of a comparable group in the general population with respect to age, sex and calendar year of investigation. At each time, $t(year)$, since diagnosis, the relative survival from the cancer, $R(t)$, is defined as follows:

$$R(t) = \frac{S_O(t)}{S_E(t)}$$

where $S_O(t)$ is the *observed survival* of cancer patients, the *expected survival*, $S_E(t)$, is based on the general population survival using national population life tables from Statistics Norway by sex, one-year age group and calendar year. Age standardised relative survival (net

survival) was estimated by the Stata program stnet[15] using the Pohar Perme estimator[16]. The estimates were age standardised applying weights to individuals[17,18] based on the age distribution of the patient group the last five year period 2016–2020 (females and males combined for all groups, other than "All sites" where sex-specific weights were used).

For patient cohorts with complete five-year follow-up the *cohort* method was used.

With traditional cohort-based analyses, the most up-to-date estimates of long-term survival pertains to patients diagnosed in the distant past, with corresponding profiles of prognosis. A more up-to date picture of the current survival is obtained using the period method. In this report we used a five-year period window (2016–2020) to *predict* relative survival up to 15 years for patients diagnosed in 2016–2020 (Table 8.3 and Figure 8.1). The period approach consists of the pieces of survival experience observed in the period 2016–2020 for patients diagnosed up to 15 years ago. Thus, patients diagnosed in 2015–2020 contribute with (part of) their survival experience the first year of follow up, patients diagnosed in 2014–2019 contribute to the second year of follow-up, patients diagnosed in 2013–2018 contribute to the third year of follow-up and so on.

When analysing time trends in five-year relative survival (Figure 9.1) a rolling five-year window was used to obtain smoother curves. For patients with (potential) five-year obserervation the cohort approach was used. Thus, estimates for e.g. 2015 is based on patients diagnosed in 2011–2015. Estimates for 2020 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 (2016–2019) were obtained using a combination of the cohort and period approach to ensure that minimal survival experience from patients diagnosed in the past was used.

Estimation was performed for groups with 30 or more patients at start of follow-up.

A detailed description of the methods can be found in CiN Techical Supplement[9].

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[19,20].

The time at which five-year relative survival reaches 100% is the point from which there is no excess mortality among the cancer patients, and their survial is equivalent to survival in the general population. We present estimates of sex-specific five-year relative survival conditional on being alive 1 to 10 years after diagnosis in Figure 8.1.

Estimates were not plotted when there were less than twenty patients alive ($n < 20$).

Chapter 5 Incidence

5.1 New cancer cases

In 2020, there were 35 515 new cases of cancer (in 34 631 individuals) recorded in Norway, of which 19 223 cases were diagnosed in men, and 16 292 in women (Table 5.1). The four most common cancers (cancers of the prostate, female breast, lung and colon) accounted for 42% of the new cancer cases in 2020. The proportion increases to 46% if rectal cancer is included.

In men, prostate cancer continued to be the most common cancer site, with 5030 new cases; followed by lung (1704 cases) and colon cancer (1504 cases). Breast cancer remained the most frequent cancer site in women, with 3424 new cases; followed by lung cancer (1627 cases) and colon cancer (1617 cases).

In last year's report (CiN 2019) we assumed that we only had received 73% of the expected number of deaths for 2019 from the Cause of Death Registry. This year, we already have received most of the death certificates, and the reporting of cases for 2020 is thus assumed to be more complete.

When comparing the rates in the most recent five-year period (2016–2020) with the previous one (2011–2015) (Tables 5.15 and 5.16) we observe that:

- The rate for all cancers combined decreased by 2.5% for men, and increased by 2.5% for women.
- The rate of prostate cancer decreased by 11.1%.
- The rate of breast cancer increased by 3.7%.
- The rate of lung cancer for men decreased by 8.4%, and increased by 5.0% in women.
- The rate of colon cancer decreased by 3.0% in men, and was stable in women. The rate of rectal cancer decreased by 6.7% in men and 9.5% in women.
- The rates of melanoma of the skin increased by 11.4% in men and 10.9% in women.
- The rates of non-melanoma skin cancer, increased by 26.6% in men and 29,9% in women.
- Among more uncommon cancers, the notable increase in the rates for liver and thyroid cancer in both genders continues.
- We have previously suggested that the reduction in CNS cases has been due to underreporting. Preliminary analyses (not shown) suggest that the reduction is limited to benign cases and to those above 30 years of age.

In 2016–2020, 8% of all cancer cases occured in immigrants, and for the majority of cancers immigrants have lower incidence rates compared to Norwegian-borns. The exceptions are lung, liver and stomach cancers, where rates are higher among some immigrant groups. The incidence numbers and rates presented in Tables 5.25–5.28 must be interpreted with caution as the number of cancer cases among immigrants are low and prone to random variation.

Cancer incidence and Covid-19

In januar 2021, the CRN published a report with preliminary results on how the Covid-19 pandemic had affected cancer diagnosis. That report was based on data from January to September 2020, and showed that between March and September 2020 the CRN received fewer patology reports than expected. The decrease was highest for breast and lung cancer, but was also noticed for other cancers[21].

The present report includes data for the entire year 2020, and includes cases reported from all of our data sources. It is difficult to interpret if or how the Covid-19 pandemic affects the number of cancer diagnosis in 2020 as there is a random variation in incidence from one year to another. Overall, the age-adjusted rates among both men and women were lower than the past few years. For the vast majority of cancers, there was no convincing decrease in the incidence from 2019 to 2020, but there were some excetions: The incidence rate of breast cancer decreased by 10%. This is most likely because the mammographic screening program was shut down for a few months. The centers opened gradually over the summer/fall, but the number of screening examinations were markedly fewer during 2020. Moreover, the incidence rate of cervical cancer decreased by 15%. This is most likely due to fewer women than anticipated underwent cervical cancer screening in 2020. There were also fewer uterine and ovarian cancers diagnosed in 2020. Finally, the incidence rate of lung cancer in women decreased by 6%. We do not know whether the low rate of lung cancer is the start of a more permanent decline, og whether it was caused by the pandemic.

Table 5.1: Number and age-standardised rates of new cases by primary site and sex, 2020

		Cases			Age-standardised rates			
					Norwegian std.		World std.	
ICD-10	Site	Males	Females	Total	Males	Females	Males	Females
C00–96	**All sites**	**19 223**	**16 292**	**35 515**	**697.3**	**543.6**	**355.3**	**309.1**
C00–14	**Mouth, pharynx**	**455**	**231**	**686**	**16.3**	**7.5**	**9.0**	**4.0**
C00	Lip	65	35	100	2.5	1.1	1.0	0.4
C02–06	Oral cavity	120	102	222	4.3	3.2	2.4	1.7
C07–08	Salivary glands	37	23	60	1.4	0.8	0.8	0.4
C09–10, C01, C14	Oropharynx	187	62	249	6.6	2.1	4.0	1.3
C11	Nasopharynx	11	3	14	0.4	0.1	0.2	0.1
C12–13	Hypopharynx	35	6	41	1.2	0.2	0.6	0.1
C15–26	**Digestive organs**	**3 967**	**3 324**	**7 291**	**143.5**	**107.4**	**71.0**	**53.6**
C15	Oesophagus	291	97	388	10.3	3.1	5.4	1.5
C16	Stomach	287	175	462	10.5	5.7	5.3	2.7
C17	Small intestine	141	108	249	5.1	3.6	2.8	1.9
C18	Colon	1 504	1 617	3 121	54.9	51.7	25.9	24.9
C19–20	Rectum, rectosigmoid	821	552	1 373	29.6	18.4	15.1	10.1
C21	Anus	38	68	106	1.4	2.3	0.8	1.3
C22	Liver	245	132	377	8.8	4.4	4.7	2.5
C23–24	Gallbladder, bile ducts	84	95	179	3.0	3.0	1.4	1.4
C25	Pancreas	505	424	929	18.1	13.4	8.7	6.4
C26	Other digestive organs	51	56	107	1.8	1.8	0.9	0.9
C30–34, C38	**Respiratory organs**	**1 828**	**1 666**	**3 494**	**65.4**	**53.4**	**31.0**	**27.5**
C30–31	Nose, sinuses	30	19	49	1.1	0.6	0.7	0.4
C32	Larynx, epiglottis	82	18	100	2.9	0.6	1.4	0.4
C33–34	Lung, trachea	1 704	1 627	3 331	60.9	52.1	28.6	26.7
C38	Heart, mediastinum and pleura	12	2	14	0.5	0.1	0.3	0.0
C40–41	**Bone**	**27**	**19**	**46**	**1.0**	**0.7**	**0.8**	**0.6**
C43	**Melanoma of the skin**	**1 180**	**1 158**	**2 338**	**42.6**	**39.8**	**23.2**	**25.1**
C44	**Skin, non-melanoma**	**1 558**	**1 343**	**2 901**	**61.0**	**41.5**	**22.2**	**16.2**
C45	**Mesothelioma**	**53**	**18**	**71**	**1.9**	**0.6**	**0.8**	**0.3**
C47	**Autonomic nervous system**	**2**	**6**	**8**	**0.1**	**0.2**	**0.1**	**0.3**
C48–49	**Soft tissues**	**65**	**57**	**122**	**2.4**	**2.0**	**1.5**	**1.3**
C50	**Breast**	**31**	**3 424**	**3 455**	**1.1**	**120.0**	**0.6**	**76.2**
C51–58	**Female genital organs**		**1 700**	**1 700**		**57.8**		**35.5**
C51–52, C57.7–9	Other female genital		114	114		3.7		1.8
C53	Cervix uteri		328	328		12.3		9.7
C54	Corpus uteri		764	764		25.4		14.3
C55	Uterus, other		6	6		0.2		0.1
C56, C57.0–4, C48.2	Ovary etc.		487	487		16.2		9.5
C58	Placenta		1	1		0.0		0.0
C60–63	**Male genital organs**	**5 370**		**5 370**	**190.7**		**102.4**	
C61	Prostate	5 030		5 030	178.3		91.4	
C62	Testis	285		285	10.5		9.9	
C60, C63	Other male genital	55		55	2.0		1.0	
C64–68	**Urinary organs**	**2 005**	**741**	**2 746**	**73.1**	**24.2**	**35.8**	**12.8**
C64	Kidney (excl. renal pelvis)	595	299	894	21.3	10.0	12.1	6.1
C65–68	Urinary tract	1 410	442	1 852	51.8	14.2	23.7	6.7
C69	**Eye**	**47**	**31**	**78**	**1.7**	**1.1**	**0.9**	**0.7**
C70–72	**Central nervous system**	**431**	**526**	**957**	**15.8**	**18.5**	**11.1**	**13.2**
C73	**Thyroid gland**	**130**	**358**	**488**	**4.7**	**13.2**	**3.3**	**10.1**
C37, C74–75	**Other endocrine glands**	**84**	**77**	**161**	**3.0**	**2.8**	**2.2**	**2.0**
C39, C76, C80	**Other or unspecified**	**171**	**219**	**390**	**6.7**	**6.8**	**2.6**	**2.6**
C81–96	**Lymphoid/haematopoietic tissue**	**1 819**	**1 394**	**3 213**	**66.2**	**46.2**	**36.7**	**26.9**
C81	Hodgkin lymphoma	93	54	147	3.4	2.0	2.8	1.9
C82–86, C96	Non-Hodgkin lymphoma	602	460	1 062	21.6	15.3	12.0	8.9
C88	Immunoproliferative disease	56	38	94	2.0	1.2	0.9	0.7
C90	Multiple myeloma	328	228	556	11.8	7.4	5.7	3.6
C91–95	Leukaemia	740	614	1 354	27.4	20.3	15.3	11.9

5.2 Incidence by age

The vast majority of cancers in Norway, over 90% in men and 86% in women, are diagnosed among people aged 50 years or more (Figure 5.1). In men, 53% of all new cases occur in men 70 years old or more, while 39% of the cases are diagnosed in men aged 50 to 69 years. In women, 49% of all cases are diagnosed at age 70 years or older, and 37% are diagnosed in the age group 50 to 69 years. In the age group 25 to 49 years, a smaller proportion of the cancers are diagnosed in men (6%) than women (13%). About 1% of all cancers occurs in children and young adults (younger than 25 years), with equal frequencies in boys and girls.

Table 5.2 shows the median age at diagnosis at different time periods. For all sites combined, the median age at diagnosis is 70 years, and this has been stable over the last decades. However, there is some variation between the sites. Cancer in the autonomic nervous system, a very rare cancer, has the lowest median age at diagnosis. Among the more commons cancers, testis has the lowest median age at diagnosis (36 years). Non-melanoma skin cancer, on the other hand, has the highest median age (79 years). Among the most common cancers, the median age at diagnosis is 62 years for breast and 70 years for prostate cancer. For these to cancer sites there has been a reduction in median age at diagnosis with 4 and 5 years, respectively, in the latest period 2016–2020 compared to twenty years ago. For lung cancers and melanoma of the skin, the median age at diagnosis has increased. Changes in median age at diagnosis may be influenced by changes in the age distribution of the population, by diagnostic intensity and by the age-specific incidence rates at different periods. Thus, it might be difficult to interpret patterns and trends without information about these factors.

Figure 5.2 shows the most common cancer types by gender and age at diagnosis. The most commonly occurring cancers in boys and girls (0–14 years old) are leukaemia and tumours in the central nervous system. Tumour in the central nervous system was previously the most common cancer among young girls (15–24 years), but has been bypassed by melanoma of the skin. Testicular cancer is by far the most common cancer in young men (15–24 years). Prostate cancer is the most frequent cancer in men above 50, while breast cancer is the most common cancer in women aged 25 through 69. Colon cancer is slightly more common than breast cancer in women above age 70.

Figure 5.1: Percentage distribution of cancer incidence by age, 2016–2020

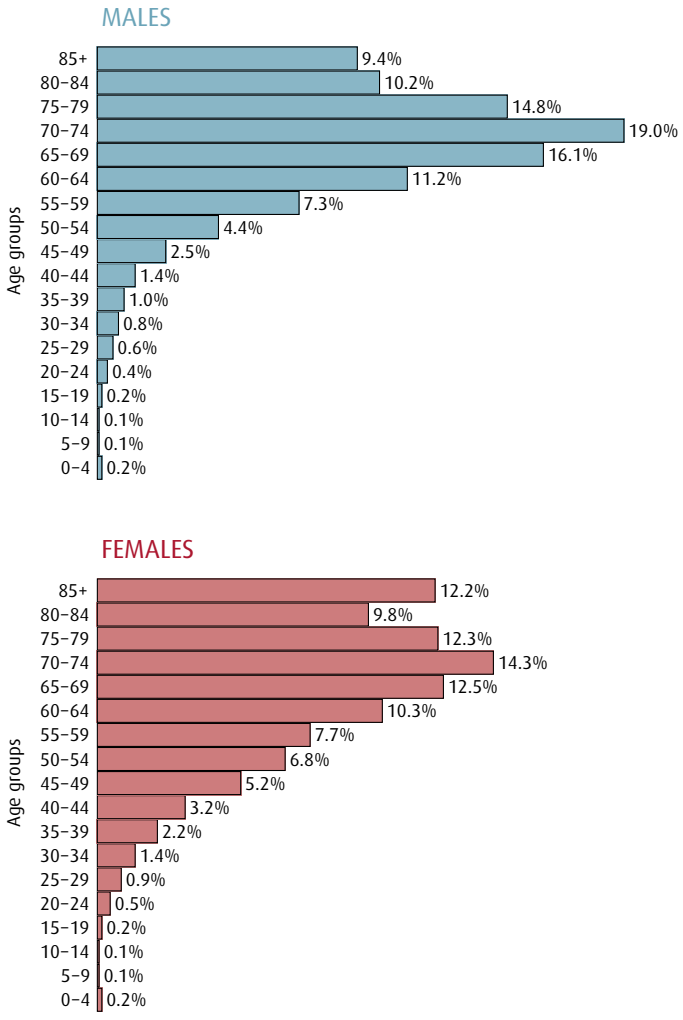


Table 5.2: Median age at diagnosis at different time periods by primary site

		Median age in			
ICD-10	**Site**	**1986–90**	**1996–00**	**2006–10**	**2016–20**
C00–96	**All sites**	**70.0**	**70.0**	**68.0**	**70.0**
C00–14	**Mouth, pharynx**	**68.0**	**66.0**	**65.0**	**67.0**
C00	Lip	71.0	72.0	73.0	75.0
C02–06	Oral cavity	68.0	67.0	67.0	69.0
C07–08	Salivary glands	66.0	68.0	65.0	68.5
C09–10, C01, C14	Oropharynx	63.0	60.0	61.0	63.0
C11	Nasopharynx	63.0	59.0	55.0	58.0
C12–13	Hypopharynx	66.0	67.0	66.0	70.0
C15–26	**Digestive organs**	**72.0**	**74.0**	**73.0**	**72.0**
C15	Oesophagus	70.0	71.0	70.0	70.0
C16	Stomach	74.0	75.0	74.0	73.0
C17	Small intestine	69.0	71.0	67.0	69.0
C18	Colon	72.0	74.0	74.0	73.0
C19–20	Rectum, rectosigmoid	71.0	72.0	70.0	70.0
C21	Anus	68.0	70.0	65.0	67.0
C22	Liver	71.0	72.0	71.0	71.0
C23–24	Gallbladder, bile ducts	73.5	75.0	73.0	73.0
C25	Pancreas	73.0	75.0	73.0	73.0
C26	Other digestive organs	79.0	77.0	76.0	73.0
C30–34, C38	**Respiratory organs**	**68.0**	**69.0**	**70.0**	**72.0**
C30–31	Nose, sinuses	70.0	67.0	67.0	69.0
C32	Larynx, epiglottis	66.0	68.0	66.0	70.0
C33–34	Lung, trachea	68.0	70.0	70.0	72.0
C38	Heart, mediastinum and pleura	70.0	71.0	70.0	75.0
C40–41	**Bone**	**39.0**	**39.0**	**46.0**	**51.0**
C43	**Melanoma of the skin**	**56.0**	**59.0**	**63.0**	**66.0**
C44	**Skin, non-melanoma**	**76.0**	**77.0**	**79.0**	**79.0**
C45	**Mesothelioma**	**67.0**	**70.0**	**72.0**	**75.0**
C47	**Autonomic nervous system**	**31.0**	**34.0**	**32.0**	**6.5**
C48–49	**Soft tissues**	**64.0**	**64.0**	**63.0**	**64.0**
C50	**Breast**	**66.0**	**61.0**	**61.0**	**62.0**
C51–58	**Female genital organs**	**64.0**	**63.0**	**64.0**	**66.0**
C51–52, C57.7–9	Other female genital	74.0	75.0	74.0	72.0
C53	Cervix uteri	52.0	49.0	47.0	45.0
C54	Corpus uteri	65.0	66.0	66.0	69.0
C55	Uterus, other	85.0	75.5	77.0	79.0
C56, C57.0–4, C48.2	Ovary etc.	65.0	65.0	65.0	68.0
C58	Placenta	27.0	30.0	32.0	33.0
C60–63	**Male genital organs**	**74.0**	**72.0**	**68.0**	**69.0**
C61	Prostate	75.0	73.0	69.0	70.0
C62	Testis	32.0	32.0	35.0	36.0
C60, C63	Other male genital	69.0	71.0	66.0	71.0
C64–68	**Urinary organs**	**71.0**	**72.0**	**71.0**	**71.0**
C64	Kidney (excl. renal pelvis)	69.0	70.0	67.0	67.0
C65–68	Urinary tract	72.0	73.0	73.0	73.0
C69	**Eye**	**65.0**	**65.5**	**63.0**	**65.0**
C70–72	**Central nervous system**	**58.0**	**57.0**	**59.0**	**60.0**
C73	**Thyroid gland**	**54.0**	**53.0**	**52.0**	**54.0**
C37, C74–75	**Other endocrine glands**	**49.0**	**51.0**	**53.0**	**58.0**
C39, C76, C80	**Other or unspecified**	**73.0**	**76.0**	**78.0**	**79.0**
C81–96	**Lymphoid/haematopoietic tissue**	**68.0**	**69.0**	**68.0**	**70.0**
C81	Hodgkin lymphoma	39.0	33.0	39.0	45.0
C82–86, C96	Non-Hodgkin lymphoma	67.0	67.0	66.0	70.0
C88	Immunoproliferative disease	71.0	72.0	72.0	73.5
C90	Multiple myeloma	72.0	74.0	72.0	71.0
C91–95	Leukaemia	69.0	71.0	69.0	70.0

Figure 5.2: The most frequent types of cancer by age and sex, 2016–2020

Figure 5.2–A: All ages

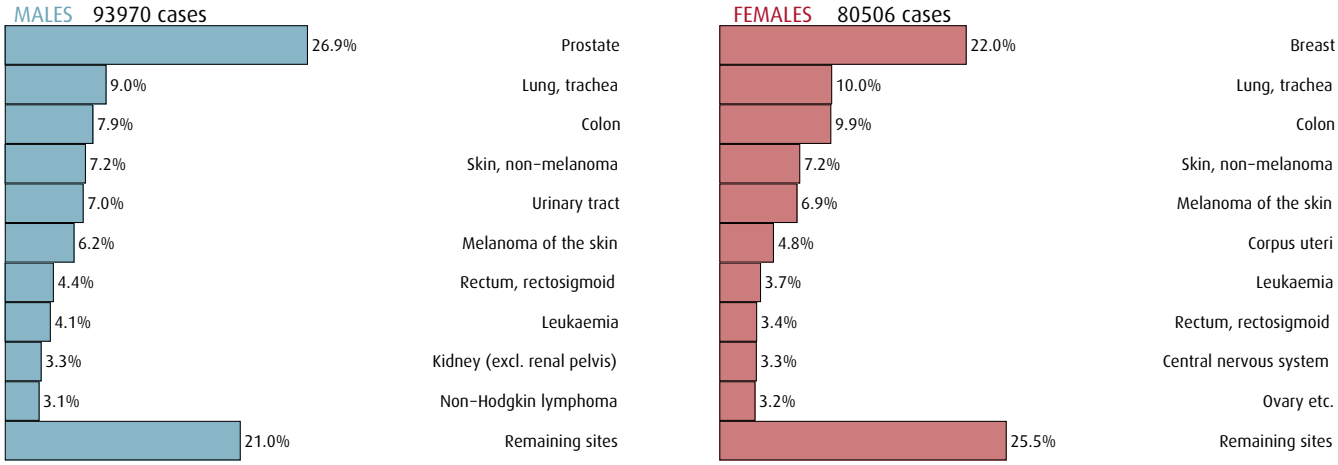


Figure 5.2–B: 0–14 years

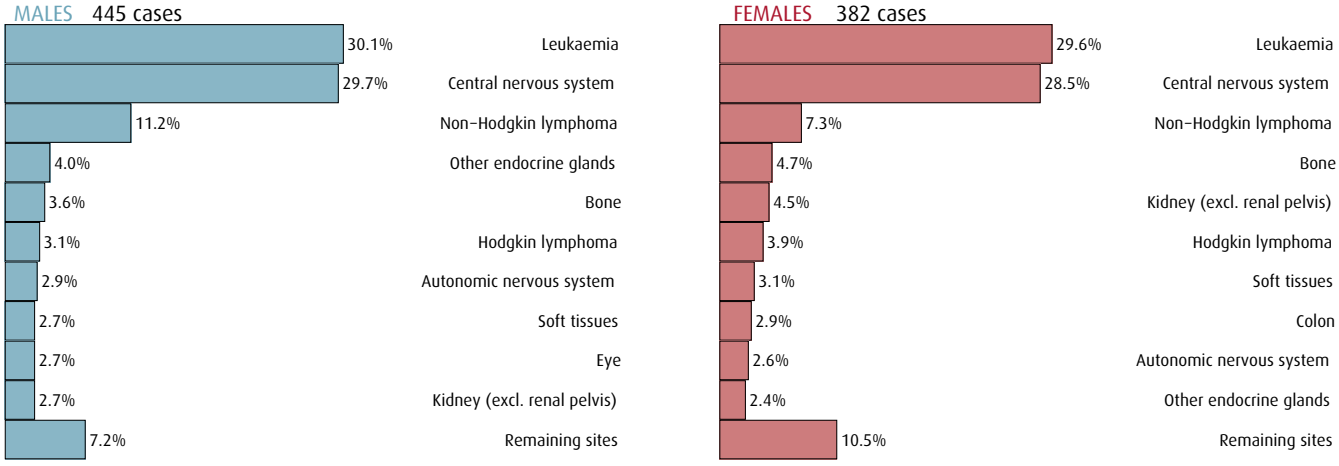


Figure 5.2–C: 15–24 years

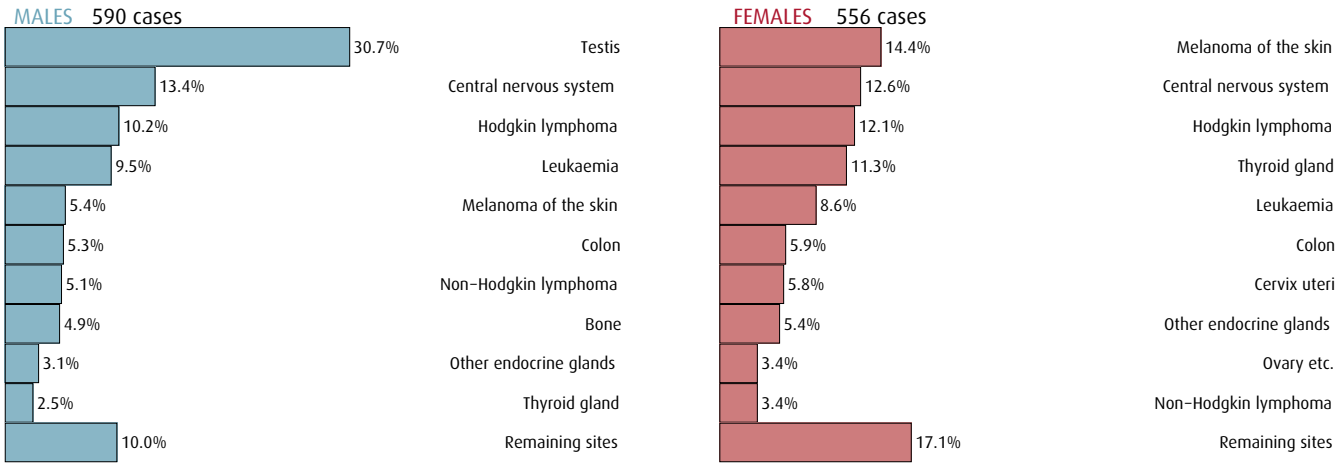


Figure 5.2: The most frequent types of cancer by age and sex, 2016–2020

Figure 5.2–D: 25–49 years

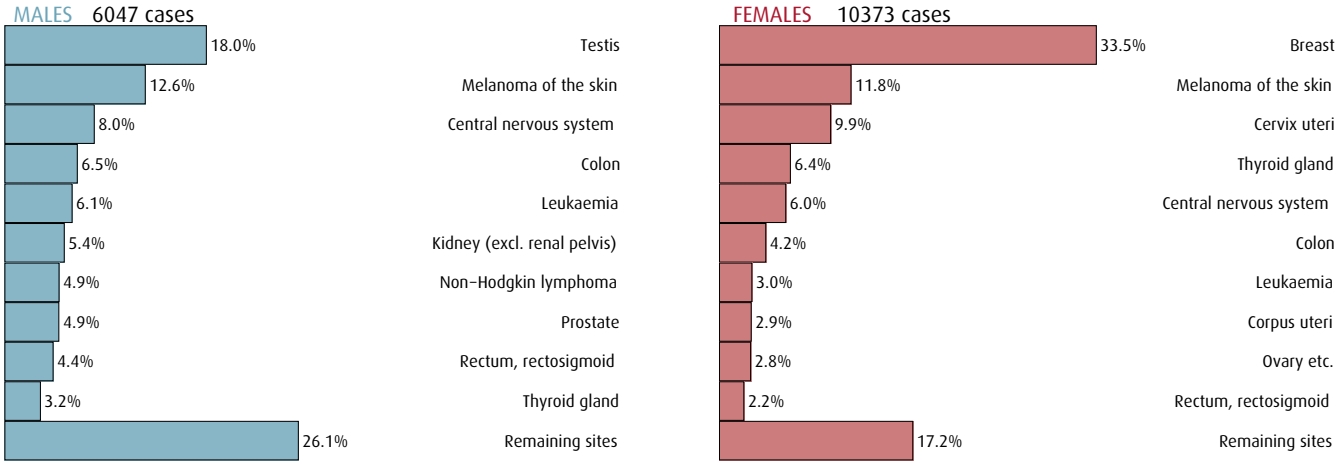


Figure 5.2–E: 50–69 years

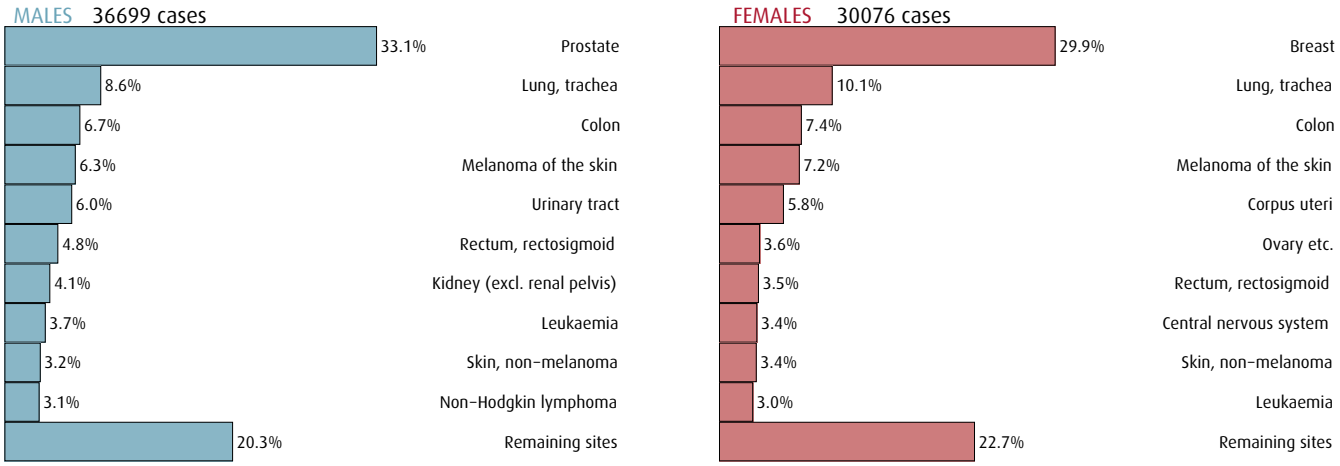
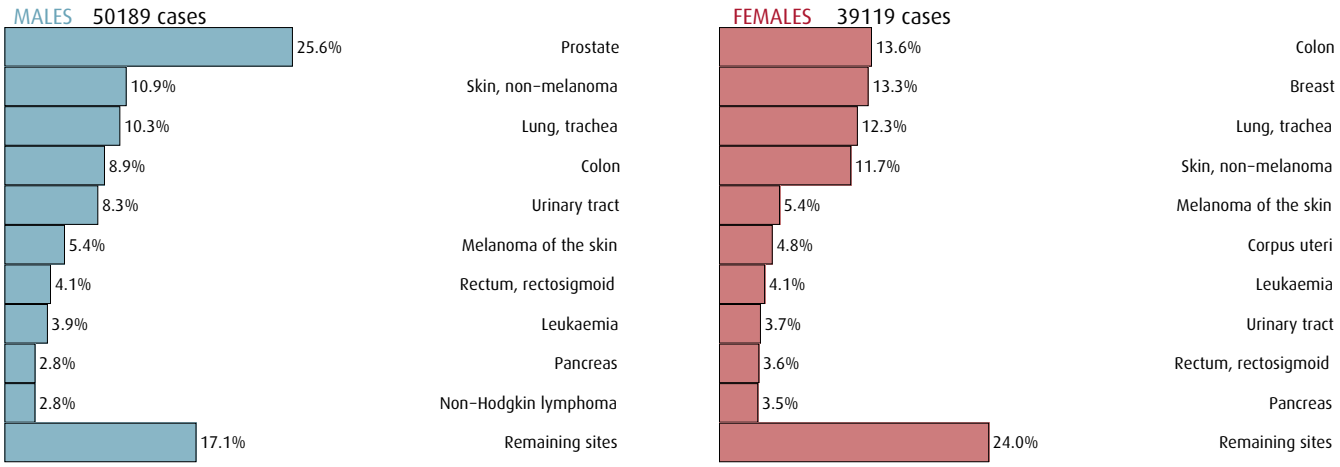


Figure 5.2–F: 70+ years



5.3 Male to female ratios

The age-standardised rates and male to female ratio (M:F) for selected cancer types in 1986–1990 and 2016–2020 are shown in Table 5.3. Men tend to have higher incidence rates for most cancer types in both time periods, except for cancer of thyroid gland, anus and central nervous system. The highest M:F ratios were observed for mesothelioma, several sites of the head and neck and for cancers in the urinary tract.

Some cancers, including cancer of the head and neck, urinary tract, kidney, liver, stomach, rectum and leukaemia, are consistently more common in men. The decline in the M:F ratio for several cancers over the last 30 years is largely a result of a more rapid increase in the incidence rates in women.

For lung cancer, the increase in rate in women has been accompanied by a levelling off and a slight decline in the rate in men, and the M:F ratio is now at 1.2 compared to 3.3 in the late 1980s.

Table 5.3: Sex ratio (male:female) of age-adjusted rates (Norwegian standard) in 1986–1990 and 2016–2020 for selected cancers, sorted in descending order in last period

		1986–90			2016–20		
ICD-10	**Site**	**M**	**F**	**M:F ratio**	**M**	**F**	**M:F ratio**
C00–96	**All sites**	**531.5**	**389.6**	**1.4**	**719.8**	**556.6**	**1.3**
C12–13	Hypopharynx	1.5	0.3	5.1	0.9	0.2	5.4
C45	Mesothelioma	2.2	0.3	7.3	2.5	0.5	5.0
C32	Larynx, epiglottis	6.1	0.5	11.1	3.3	0.7	4.5
C38	Heart, mediastinum and pleura	0.4	0.2	1.9	0.6	0.1	4.2
C65–68	Urinary tract	44.0	11.8	3.7	51.3	15.2	3.4
C15	Oesophagus	5.7	1.6	3.5	9.0	2.7	3.3
C09–10, C01, C14	Oropharynx	1.8	0.6	2.8	6.4	2.1	3.1
C64	Kidney (excl. renal pelvis)	14.4	8.1	1.8	22.9	10.0	2.3
C22	Liver	3.5	1.8	1.9	8.3	4.1	2.0
C88	Immunoproliferative disease	0.5	0.3	1.7	2.1	1.1	2.0
C16	Stomach	31.5	15.3	2.1	11.1	5.8	1.9
C30–31	Nose, sinuses	1.4	0.7	1.9	1.0	0.6	1.8
C11	Nasopharynx	0.6	0.2	3.5	0.4	0.2	1.8
C19–20	Rectum, rectosigmoid	30.6	18.3	1.7	31.0	18.5	1.7
C90	Multiple myeloma	9.7	6.0	1.6	11.3	7.1	1.6
C00	Lip	5.2	0.8	6.3	2.2	1.4	1.6
C17	Small intestine	1.4	1.3	1.1	4.6	3.1	1.5
C91–95	Leukaemia	13.7	8.5	1.6	29.7	20.4	1.5
C44	Skin, non-melanoma	23.4	12.3	1.9	56.9	37.1	1.5
C40–41	Bone	1.0	0.7	1.5	1.2	0.9	1.4
C82–86, C96	Non-Hodgkin lymphoma	14.8	10.6	1.4	22.0	15.4	1.4
C02–06	Oral cavity	4.9	2.6	1.9	4.7	3.3	1.4
C81	Hodgkin lymphoma	2.4	1.6	1.5	3.2	2.4	1.4
C48–49	Soft tissues	2.3	2.2	1.1	2.6	2.0	1.3
C07–08	Salivary glands	0.9	0.6	1.4	1.4	1.0	1.3
C47	Autonomic nervous system	0.4	0.4	0.8	0.2	0.1	1.3
C25	Pancreas	17.0	12.4	1.4	18.2	13.8	1.3
C69	Eye	1.3	1.0	1.3	1.6	1.3	1.2
C33–34	Lung, trachea	64.6	19.7	3.3	64.8	54.2	1.2
C23–24	Gallbladder, bile ducts	2.8	3.4	0.8	3.0	2.8	1.1
C43	Melanoma of the skin	19.5	21.2	0.9	44.3	39.6	1.1
C39, C76, C80	Other or unspecified	16.3	11.7	1.4	6.4	6.0	1.1
C26	Other digestive organs	2.8	3.1	0.9	2.4	2.2	1.1
C18	Colon	43.8	38.4	1.1	57.4	53.1	1.1
C37, C74–75	Other endocrine glands	2.2	1.8	1.2	3.5	3.4	1.0
C70–72	Central nervous system	13.1	12.3	1.1	16.9	19.3	0.9
C21	Anus	0.6	1.3	0.5	1.3	2.4	0.5
C73	Thyroid gland	2.6	6.5	0.4	5.0	11.9	0.4

5.4 Incidence trends

Figure 5.3: Time trends in age-standardised (Norwegian standard) incidence rates for selected cancers, 1961–2020

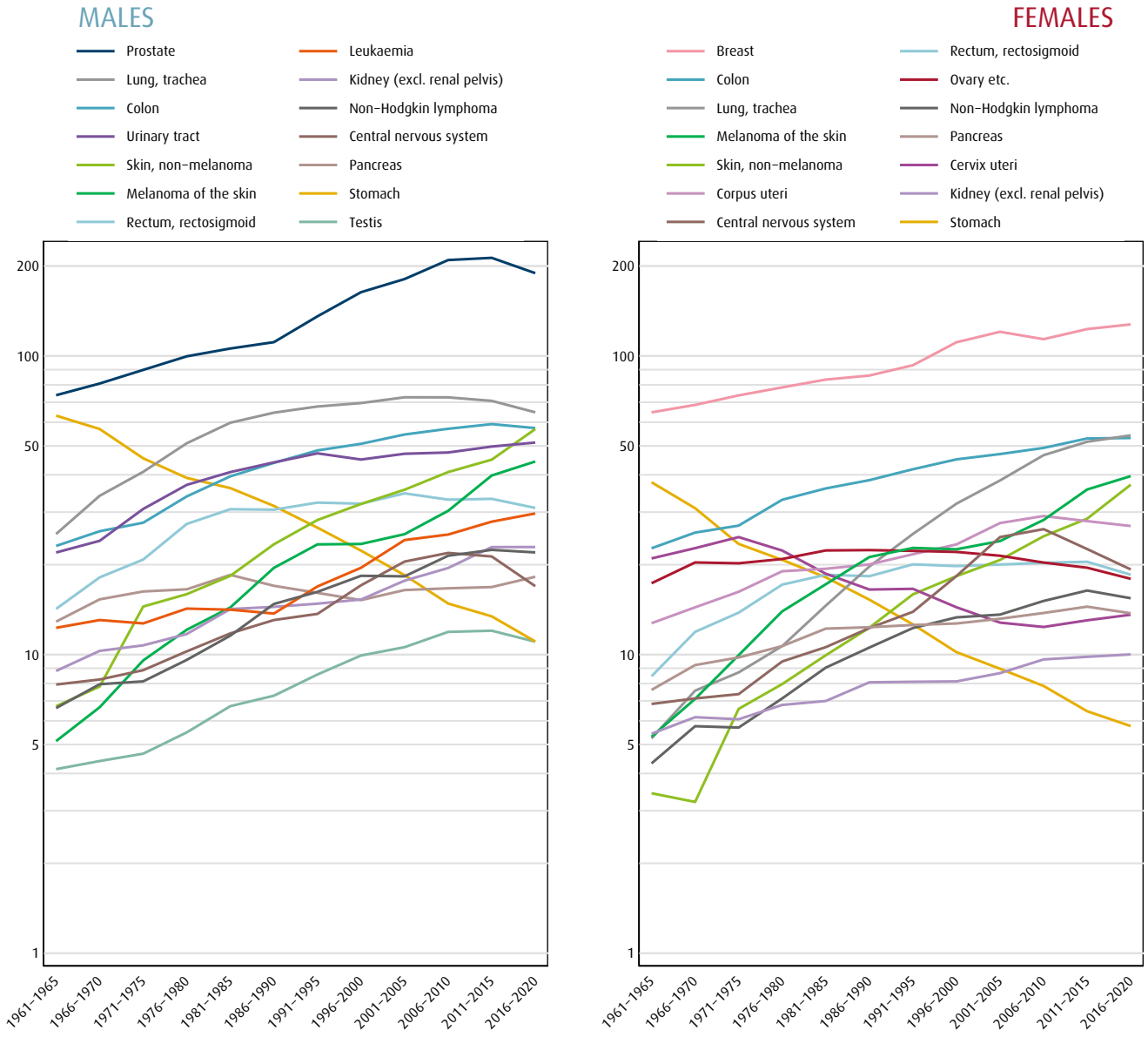


Figure 5.3 depicts time trends in incidence over six decades for some selected cancers. The incidence rates have increased in Norway for most cancer types since the first observation period. The upward trends have been most pronounced for lung cancer among women and skin cancer (both melanoma and non-melanoma) in both genders. Stomach cancer is the only cancer that has had a steady decline in incidence since early 1950s. The rates of ovarian cancer have been fairly stable since the 1950s, while for cervial cancer, the rate declined from mid 1970s to late 1990s, but has stabilised, and even had a small increase in the most recent years. For most cancers, it is difficult to give a proper explanation of the incidence trends over time, even for cancers with known risk factors. Rates may also be influenced by diagnostic methods, screening activities, and changes in life expectancy or age distribution. Below we have given a short description of the trends for selected sites, and listed some known factors that most possibly have influenced the trends.

Stomach cancer is the only cancer that has had a sharp and consistent decline. In the first observation period, stomach cancer was the most common cancer in men and second most common cancer in women, in line with observations of cancer mortality reported by Norwegian general practitioners one hundred years ago[22]. The monotonous drop in incidence over six decades reflects 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 illustrates the vast potential for primary prevention worldwide. Interestingly, the causes of stomach cancer were not adequately known until the 1980s, and the waning of the rates has been a chance phenomenon rather than an intended one.

Prostate cancer has been the most common cancer in men for many decades, and the age-standardised incidence rate has tripled since registration started in the early 1950s. A dramatic upsurge came from around 1990 with changes in diagnostic practice with unorganised screening and testing in the primary health care system. The introduction and subsequent widespread use of the Prostate Specific Antigen (PSA) test, followed by biopsies, are considered the main explanation for the increased rate. The rate is now stable with a yearly incidence of about 200 new cases per 100 000 person-years.

Breast cancer has been the most common cancer in women since the establishment of the Cancer Registry of Norway, and during this period the incidence rate has doubled. There has been a monotonous increase in the rate up to 1990s with a steeper increase in the mid-1990s followed by an slight decline between 2005 and 2009. The Norwegian Breast Cancer Screening Programme started in 1996, and gradually expanded to become nationwide by 2005. The programme invites women aged 50–69 years to biennial mammography. The implementation of the screening programme explains much of the increasing incidence trend from the mid-1990s to 2005. There has been a slight increase in the last ten years, and age-specific rates (not shown) indicate that the increase is primarily limited to the age group 60–79 years.

Lung cancer in women has almost had a tenfolded incidence increase since early 1950s. Some years ago the rate seemed to flatten off, but in 2018 we observed the highest rate ever (details are shown in Table 5.8). In 2019 we observed a slight decline in the rate, but we had only received 73% of the expected number of death certificates, and we assumed that the incomplete number of these certificates could explain the fall. However, this report shows that there was a decline from 2018 to 2019, and it continued in 2020 (and for 2020 we expect the death certificates to be complete). The age-specific rates show reduction in the rates for women in the oldest age groups (70–80 years and 80+). Among younger women, there has been a stabilisation and or a slight decline in rates over the last 10 to 20 years. In men, the incidence has been levelling off over the last two decades, and a slight overall decline is now observed in all age groups (Table 5.7).

Colon and rectum cancer incidence rates are sometimes presented combined. However, the incidence trends for these cancers differ — colon cancer has increased steadily throughout the registration period. Fortunately we are now seeing a decline among men, and a flattening among women. The incidence of rectal cancer has remained relatively stable over the last three decades in both sexes, and a decline is seen in the last few years.

Skin cancer i.e. skin melanoma and non-melanoma are cancers of concern. From being rare in 1953, they now rank among the leading cancers in men and women alike. The rates have had a remarkable increase over the last two decades, especially in the oldest age groups (above 70 years) and are still rising, (Table 5.7 and 5.8) most probably caused by adverse suntanning habits, but might also be influenced by other factors including awareness and diagnostic intensity.

Cervical cancer has had a downward incidence trend since the early 1970s. This is probably 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 Norwegian Childhood Immunisation Programme for girls born in 1997 and after. A catch-up program was implemented in November 2016. In 2018, the programme also offered vaccination to boys. Still, we do not expect this primary prevention to affect the incidence rate for another 15 to 20 years. Furthermore, it is of concern that we have observed a slight increase in the incidence in the last two five-year period.

The incidence rates of **tumours in the central nervous system** has declined in recent years. We believe that this is due to underreporting, and as shown in Tables 5.23–5.24 the reduction in rates is limited to non-malignant cases.

For **testicular cancer** and **non-Hodgkin lymphoma**, for example, genetic factors play a role, while other determinants are largely unknown.

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 aging. The NORDCAN project provides online access to predictions of incidence and mortality in the Nordic countries available at:

http://www-dep.iarc.fr/nordcan.htm

Trends in cancer incidence for all sites are given in Tables 5.15–5.16, and detailed trends in incidence, mortality and survival for 23 cancers are provided in Chapter 9.

5.5 Cumulative risk

Figure 5.4 and Table 5.4 show the cumulative risk of cancer in men and women. About four in ten Norwegians will develop a cancer before the age of 80. The risk of prostate cancer is the highest in men, as 16% will have a diagnosis by the age of 80. The risk of breast cancer is the highest in women, with 10%, indicating that one in ten Norwegian women will be diagnosed with the disease before turning 80. In both gender, lung and colon cancer rank second and third.

5.6 Incidence tables

Tables 5.5–5.28 provide further information on cancer incidence in Norway. The number of incident cases and rates are tabulated according to year of diagnosis (Tables 5.5–5.8), age group (Tables 5.9–5.12), five-year period (Tables 5.13–5.16), county of residence (Tables 5.17–5.20), stage (Tables 5.21–5.24), and continent of birth (Tables 5.25–5.28).

County of residence

There has been a reform of the county structure in Norway, and the original 19 counties are now reduced to 11. The new county Viken is by far the most populous county, and covers 23% of the Norwegian population. Nordland, on the other hand, has the lowest number of inhabitants and covers 4% of the population. Four of the original counties were not affected by reform, and one of these, Rogaland, had, and still has, the highest incidence of cancer (all sites combined) for both men and women. Some of the original counties had clear differences in the cancer incidence, and the merging of counties makes it difficult to keep up with some interesting trends, e.g. the lung cancer rates in men in the former county Finmark, which has had the highest rate of lung cancer for several decades.

Figure 5.4: Cumulative risk of developing cancer (%) by the age of 80 for selected cancers, 2016–2020

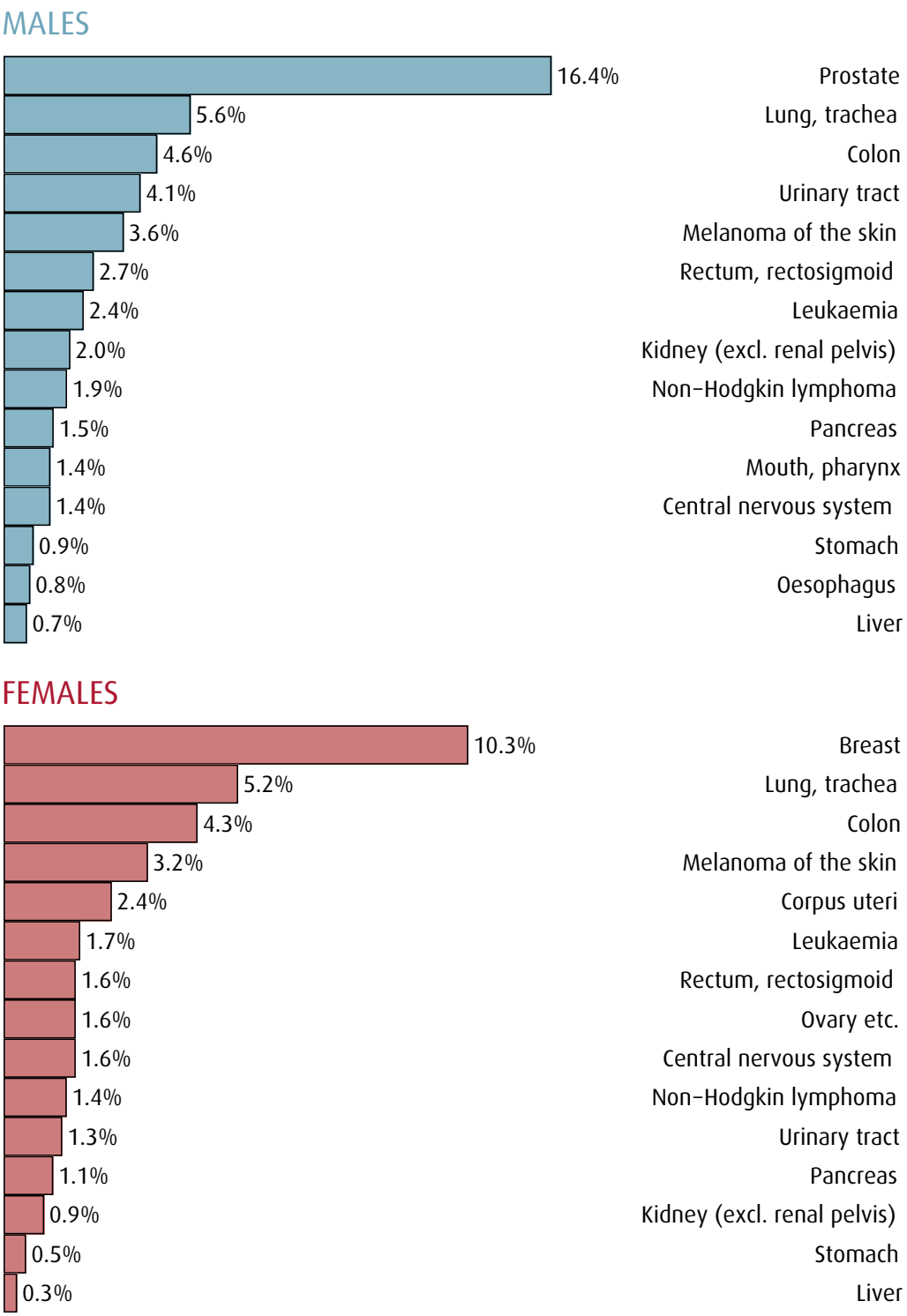


Table 5.4: Cumulative risk of developing cancer (%) by age of 80 by primary site and sex, 2016–2020

ICD-10	Site	Males	Females
C00–96	**All sites**	**45.9**	**37.4**
C00–14	**Mouth, pharynx**	**1.4**	**0.7**
C00	Lip	0.2	0.1
C02–06	Oral cavity	0.4	0.3
C07–08	Salivary glands	0.1	0.1
C09–10, C01, C14	Oropharynx	0.6	0.2
C11	Nasopharynx	0.0	0.0
C12–13	Hypopharynx	0.1	0.0
C15–26	**Digestive organs**	**11.6**	**8.6**
C15	Oesophagus	0.8	0.2
C16	Stomach	0.9	0.5
C17	Small intestine	0.4	0.3
C18	Colon	4.6	4.3
C19–20	Rectum, rectosigmoid	2.7	1.6
C21	Anus	0.1	0.2
C22	Liver	0.7	0.3
C23–24	Gallbladder, bile ducts	0.3	0.2
C25	Pancreas	1.5	1.1
C26	Other digestive organs	0.2	0.2
C30–34, C38	**Respiratory organs**	**6.0**	**5.3**
C30–31	Nose, sinuses	0.1	0.0
C32	Larynx, epiglottis	0.3	0.1
C33–34	Lung, trachea	5.6	5.2
C38	Heart, mediastinum and pleura	0.0	0.0
C40–41	**Bone**	**0.1**	**0.1**
C43	**Melanoma of the skin**	**3.6**	**3.2**
C44	**Skin, non-melanoma**	**3.4**	**2.3**
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**	**10.3**
C51–58	**Female genital organs**		**5.3**
C51–52, C57.7–9	Other female genital		0.3
C53	Cervix uteri		1.1
C54	Corpus uteri		2.4
C55	Uterus, other		0.0
C56, C57.0–4, C48.2	Ovary etc.		1.6
C58	Placenta		0.0
C60–63	**Male genital organs**	**17.3**	
C61	Prostate	16.4	
C62	Testis	0.8	
C60, C63	Other male genital	0.2	
C64–68	**Urinary organs**	**6.1**	**2.2**
C64	Kidney (excl. renal pelvis)	2.0	0.9
C65–68	Urinary tract	4.1	1.3
C69	**Eye**	**0.1**	**0.1**
C70–72	**Central nervous system**	**1.4**	**1.6**
C73	**Thyroid gland**	**0.4**	**1.0**
C37, C74–75	**Other endocrine glands**	**0.3**	**0.3**
C39, C76, C80	**Other or unspecified**	**0.4**	**0.4**
C81–96	**Lymphoid/haematopoietic tissue**	**5.6**	**3.9**
C81	Hodgkin lymphoma	0.3	0.2
C82–86, C96	Non-Hodgkin lymphoma	1.9	1.4
C88	Immunoproliferative disease	0.2	0.1
C90	Multiple myeloma	1.0	0.6
C91–95	Leukaemia	2.4	1.7

Table 5.5: Number of new cases by primary site and year, 2011–2020, **males**

		Year									
ICD-10	**Site**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C00–96	**All sites**	**16 396**	**16 779**	**16 822**	**17 464**	**18 084**	**18 557**	**18 518**	**18 663**	**19 009**	**19 223**
C00–14	**Mouth, pharynx**	**327**	**361**	**337**	**404**	**401**	**407**	**392**	**432**	**423**	**455**
C00	Lip	71	62	48	62	58	50	51	51	53	65
C02–06	Oral cavity	83	108	112	115	119	123	123	138	115	120
C07–08	Salivary glands	18	30	28	45	36	43	28	43	27	37
C09–10, C01, C14	Oropharynx	121	131	126	148	159	161	155	176	197	187
C11	Nasopharynx	12	14	8	11	7	7	11	12	8	11
C12–13	Hypopharynx	22	16	15	23	22	23	24	12	23	35
C15–26	**Digestive organs**	**3 142**	**3 328**	**3 442**	**3 490**	**3 644**	**3 719**	**3 681**	**3 871**	**3 822**	**3 967**
C15	Oesophagus	181	175	200	225	222	214	213	242	230	291
C16	Stomach	325	286	307	307	299	309	289	244	292	287
C17	Small intestine	89	105	90	98	106	117	119	109	126	141
C18	Colon	1 234	1 302	1 336	1 367	1 433	1 451	1 462	1 509	1 462	1 504
C19–20	Rectum, rectosigmoid	700	752	802	813	798	846	800	847	784	821
C21	Anus	21	23	16	29	22	34	34	28	43	38
C22	Liver	131	138	179	147	184	195	190	221	240	245
C23–24	Gallbladder, bile ducts	60	86	96	72	81	85	65	85	79	84
C25	Pancreas	337	406	364	384	441	410	439	505	514	505
C26	Other digestive organs	64	55	52	48	58	58	70	81	52	51
C30–34, C38	**Respiratory organs**	**1 763**	**1 783**	**1 721**	**1 782**	**1 748**	**1 832**	**1 862**	**1 819**	**1 783**	**1 828**
C30–31	Nose, sinuses	23	32	35	30	15	25	28	24	27	30
C32	Larynx, epiglottis	100	98	105	115	87	86	72	107	85	82
C33–34	Lung, trachea	1 630	1 642	1 573	1 627	1 639	1 704	1 747	1 678	1 658	1 704
C38	Heart, mediastinum and pleura	10	11	8	10	7	17	15	10	13	12
C40–41	**Bone**	**30**	**33**	**18**	**29**	**33**	**31**	**27**	**35**	**43**	**27**
C43	**Melanoma of the skin**	**872**	**897**	**851**	**1 038**	**1 044**	**1 081**	**1 171**	**1 176**	**1 212**	**1 180**
C44	**Skin, non-melanoma**	**862**	**895**	**914**	**1 013**	**1 062**	**1 114**	**1 270**	**1 345**	**1 485**	**1 558**
C45	**Mesothelioma**	**64**	**66**	**78**	**58**	**67**	**62**	**75**	**54**	**81**	**53**
C47	**Autonomic nervous system**	**5**	**5**	**5**	**7**	**4**	**2**	**8**	**8**	**3**	**2**
C48–49	**Soft tissues**	**67**	**82**	**79**	**63**	**69**	**56**	**72**	**61**	**84**	**65**
C50	**Breast**	**27**	**27**	**35**	**24**	**24**	**31**	**33**	**28**	**27**	**31**
C60–63	**Male genital organs**	**5 323**	**5 288**	**5 262**	**5 347**	**5 536**	**5 677**	**5 447**	**5 297**	**5 334**	**5 370**
C61	Prostate	4 998	4 923	4 883	4 963	5 184	5 301	5 093	4 910	4 966	5 030
C62	Testis	286	322	332	325	292	290	290	321	303	285
C60, C63	Other male genital	39	43	47	59	60	86	64	66	65	55
C64–68	**Urinary organs**	**1 518**	**1 605**	**1 628**	**1 755**	**1 835**	**1 914**	**1 879**	**1 888**	**1 976**	**2 005**
C64	Kidney (excl. renal pelvis)	515	538	538	581	582	610	587	638	648	595
C65–68	Urinary tract	1 003	1 067	1 090	1 174	1 253	1 304	1 292	1 250	1 328	1 410
C69	**Eye**	**26**	**29**	**34**	**49**	**43**	**40**	**42**	**40**	**40**	**47**
C70–72	**Central nervous system**	**516**	**539**	**512**	**537**	**506**	**435**	**486**	**463**	**438**	**431**
C73	**Thyroid gland**	**76**	**92**	**105**	**115**	**105**	**140**	**136**	**120**	**146**	**130**
C37, C74–75	**Other endocrine glands**	**127**	**147**	**118**	**127**	**94**	**115**	**87**	**93**	**95**	**84**
C39, C76, C80	**Other or unspecified**	**175**	**132**	**152**	**163**	**159**	**149**	**130**	**157**	**155**	**171**
C81–96	**Lymphoid/haematopoietic tissue**	**1 476**	**1 470**	**1 531**	**1 463**	**1 709**	**1 752**	**1 720**	**1 776**	**1 862**	**1 819**
C81	Hodgkin lymphoma	69	85	72	79	109	91	94	92	68	93
C82–86, C96	Non-Hodgkin lymphoma	485	512	533	522	587	574	521	582	626	602
C88	Immunoproliferative disease	36	52	39	41	47	51	51	49	60	56
C90	Multiple myeloma	244	209	238	209	260	269	294	285	300	328
C91–95	Leukaemia	642	612	649	612	706	767	760	768	808	740

Table 5.6: Number of new cases by primary site and year, 2011–2020, **females**

		Year									
ICD-10	**Site**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C00–96	**All sites**	**13 906**	**13 814**	**14 255**	**15 059**	**15 543**	**15 695**	**15 800**	**16 165**	**16 554**	**16 292**
C00–14	**Mouth, pharynx**	**198**	**186**	**191**	**216**	**224**	**242**	**254**	**237**	**228**	**231**
C00	Lip	33	37	41	31	45	46	51	33	46	35
C02–06	Oral cavity	78	67	83	98	80	108	91	108	82	102
C07–08	Salivary glands	29	17	18	27	39	29	40	29	27	23
C09–10, C01, C14	Oropharynx	45	52	38	43	55	49	60	56	63	62
C11	Nasopharynx	5	6	6	8	3	6	9	5	5	3
C12–13	Hypopharynx	8	7	5	9	2	4	3	6	5	6
C15–26	**Digestive organs**	**2 878**	**2 933**	**3 023**	**3 128**	**3 256**	**3 199**	**3 236**	**3 215**	**3 224**	**3 324**
C15	Oesophagus	60	72	63	71	78	72	76	80	85	97
C16	Stomach	198	182	166	189	166	153	194	165	170	175
C17	Small intestine	67	61	50	78	78	75	107	79	82	108
C18	Colon	1 396	1 421	1 461	1 475	1 579	1 647	1 573	1 593	1 576	1 617
C19–20	Rectum, rectosigmoid	528	500	579	575	579	536	537	535	544	552
C21	Anus	39	49	61	70	63	81	55	68	74	68
C22	Liver	82	81	83	89	105	116	119	118	127	132
C23–24	Gallbladder, bile ducts	88	104	104	109	83	76	81	69	93	95
C25	Pancreas	368	396	392	398	452	381	418	449	403	424
C26	Other digestive organs	52	67	64	74	73	62	76	59	70	56
C30–34, C38	**Respiratory organs**	**1 280**	**1 359**	**1 382**	**1 507**	**1 577**	**1 563**	**1 586**	**1 733**	**1 724**	**1 666**
C30–31	Nose, sinuses	20	18	20	19	22	15	10	17	20	19
C32	Larynx, epiglottis	16	19	21	20	20	23	18	24	20	18
C33–34	Lung, trachea	1 236	1 318	1 336	1 463	1 529	1 520	1 554	1 688	1 679	1 627
C38	Heart, mediastinum and pleura	8	4	5	5	6	5	4	4	5	2
C40–41	**Bone**	**23**	**15**	**25**	**29**	**26**	**28**	**27**	**23**	**20**	**19**
C43	**Melanoma of the skin**	**879**	**892**	**899**	**1 011**	**1 001**	**1 060**	**1 063**	**1 166**	**1 134**	**1 158**
C44	**Skin, non-melanoma**	**793**	**787**	**823**	**928**	**849**	**1 013**	**1 046**	**1 126**	**1 258**	**1 343**
C45	**Mesothelioma**	**13**	**16**	**11**	**11**	**13**	**14**	**15**	**14**	**15**	**18**
C47	**Autonomic nervous system**	**1**	**0**	**6**	**8**	**7**	**1**	**4**	**2**	**4**	**6**
C48–49	**Soft tissues**	**59**	**55**	**54**	**49**	**59**	**57**	**45**	**53**	**63**	**57**
C50	**Breast**	**3 077**	**2 936**	**3 183**	**3 322**	**3 421**	**3 390**	**3 588**	**3 560**	**3 718**	**3 424**
C51–58	**Female genital organs**	**1 701**	**1 573**	**1 640**	**1 756**	**1 847**	**1 818**	**1 709**	**1 838**	**1 890**	**1 700**
C51–52, C57.7–9	Other female genital	105	108	103	129	119	125	125	136	117	114
C53	Cervix uteri	294	311	291	358	391	369	332	380	390	328
C54	Corpus uteri	750	651	767	735	786	788	709	805	836	764
C55	Uterus, other	5	6	8	12	7	9	8	11	12	6
C56, C57.0–4, C48.2	Ovary etc.	542	493	469	520	542	523	534	503	532	487
C58	Placenta	5	4	2	2	2	4	1	3	3	1
C64–68	**Urinary organs**	**647**	**672**	**683**	**656**	**781**	**785**	**737**	**746**	**718**	**741**
C64	Kidney (excl. renal pelvis)	257	263	233	237	315	298	293	279	276	299
C65–68	Urinary tract	390	409	450	419	466	487	444	467	442	442
C69	**Eye**	**34**	**31**	**45**	**45**	**41**	**30**	**39**	**41**	**46**	**31**
C70–72	**Central nervous system**	**608**	**611**	**565**	**581**	**557**	**540**	**607**	**479**	**525**	**526**
C73	**Thyroid gland**	**220**	**229**	**249**	**253**	**265**	**325**	**295**	**303**	**315**	**358**
C37, C74–75	**Other endocrine glands**	**140**	**120**	**141**	**122**	**118**	**98**	**98**	**96**	**92**	**77**
C39, C76, C80	**Other or unspecified**	**177**	**169**	**184**	**186**	**164**	**190**	**158**	**183**	**191**	**219**
C81–96	**Lymphoid/haematopoietic tissue**	**1 178**	**1 230**	**1 151**	**1 251**	**1 337**	**1 342**	**1 293**	**1 350**	**1 389**	**1 394**
C81	Hodgkin lymphoma	71	62	55	59	56	77	45	61	78	54
C82–86, C96	Non-Hodgkin lymphoma	439	451	406	442	451	442	427	458	473	460
C88	Immunoproliferative disease	28	33	35	38	21	21	36	33	31	38
C90	Multiple myeloma	147	184	183	197	212	200	195	207	223	228
C91–95	Leukaemia	493	500	472	515	597	602	590	591	584	614

Table 5.7: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and year, 2011–2020, **males**

		Year									
ICD-10	**Site**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C00–96	**All sites**	**742.5**	**741.8**	**725.4**	**737.4**	**746.1**	**748.7**	**729.1**	**713.8**	**712.0**	**697.3**
C00–14	**Mouth, pharynx**	**14.5**	**15.4**	**14.1**	**16.5**	**16.0**	**16.0**	**15.0**	**16.3**	**15.6**	**16.3**
C00	Lip	3.3	2.9	2.1	2.7	2.5	2.1	2.0	2.0	2.1	2.5
C02–06	Oral cavity	3.8	4.7	4.7	4.7	4.7	4.9	4.7	5.2	4.2	4.3
C07–08	Salivary glands	0.8	1.3	1.2	1.9	1.5	1.8	1.0	1.6	1.1	1.4
C09–10, C01, C14	Oropharynx	5.1	5.4	5.1	5.8	6.2	6.1	5.8	6.5	7.1	6.6
C11	Nasopharynx	0.5	0.6	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.4
C12–13	Hypopharynx	0.9	0.7	0.6	0.9	0.9	0.8	0.9	0.4	0.8	1.2
C15–26	**Digestive organs**	**144.2**	**148.9**	**150.0**	**149.0**	**151.9**	**150.7**	**146.0**	**149.0**	**143.1**	**143.5**
C15	Oesophagus	8.1	7.6	8.7	9.5	9.1	8.6	8.3	9.3	8.4	10.3
C16	Stomach	15.0	12.9	13.4	13.2	12.8	12.6	11.6	9.7	11.2	10.5
C17	Small intestine	4.0	4.6	3.8	4.1	4.3	4.6	4.6	4.1	4.6	5.1
C18	Colon	57.6	58.8	59.1	59.6	60.4	59.5	58.9	58.2	55.6	54.9
C19–20	Rectum, rectosigmoid	31.7	33.5	34.2	34.0	32.8	33.6	30.9	32.1	28.9	29.6
C21	Anus	0.9	1.0	0.7	1.2	0.9	1.4	1.3	1.1	1.6	1.4
C22	Liver	5.8	6.0	7.7	6.1	7.5	7.9	7.5	8.5	9.0	8.8
C23–24	Gallbladder, bile ducts	2.7	3.9	4.2	3.0	3.4	3.4	2.6	3.3	3.0	3.0
C25	Pancreas	15.4	18.1	15.9	16.3	18.3	16.8	17.5	19.5	19.0	18.1
C26	Other digestive organs	3.0	2.5	2.3	2.1	2.4	2.4	2.8	3.3	2.0	1.8
C30–34, C38	**Respiratory organs**	**80.3**	**79.7**	**74.7**	**76.1**	**72.5**	**74.3**	**73.3**	**69.1**	**66.4**	**65.4**
C30–31	Nose, sinuses	1.0	1.4	1.5	1.3	0.6	1.0	1.1	0.9	1.0	1.1
C32	Larynx, epiglottis	4.4	4.3	4.5	4.8	3.5	3.4	2.8	4.1	3.2	2.9
C33–34	Lung, trachea	74.4	73.5	68.4	69.5	68.0	69.1	68.8	63.7	61.7	60.9
C38	Heart, mediastinum and pleura	0.5	0.5	0.3	0.4	0.3	0.8	0.6	0.4	0.6	0.5
C40–41	**Bone**	**1.2**	**1.3**	**0.7**	**1.1**	**1.3**	**1.2**	**1.0**	**1.3**	**1.6**	**1.0**
C43	**Melanoma of the skin**	**38.3**	**38.9**	**36.0**	**43.2**	**42.3**	**42.8**	**45.9**	**45.0**	**45.2**	**42.6**
C44	**Skin, non-melanoma**	**42.7**	**43.2**	**43.5**	**47.0**	**48.2**	**50.2**	**55.1**	**56.6**	**60.6**	**61.0**
C45	**Mesothelioma**	**3.0**	**3.0**	**3.5**	**2.5**	**2.9**	**2.5**	**3.0**	**2.0**	**3.2**	**1.9**
C47	**Autonomic nervous system**	**0.2**	**0.2**	**0.2**	**0.3**	**0.2**	**0.1**	**0.3**	**0.3**	**0.1**	**0.1**
C48–49	**Soft tissues**	**2.8**	**3.5**	**3.3**	**2.6**	**2.9**	**2.2**	**2.7**	**2.3**	**3.2**	**2.4**
C50	**Breast**	**1.2**	**1.2**	**1.5**	**1.0**	**1.1**	**1.3**	**1.3**	**1.1**	**1.0**	**1.1**
C60–63	**Male genital organs**	**238.9**	**230.1**	**223.3**	**221.9**	**223.4**	**224.2**	**209.5**	**197.5**	**195.4**	**190.7**
C61	Prostate	225.7	215.7	208.4	206.9	209.9	209.8	196.1	183.1	181.7	178.3
C62	Testis	11.4	12.6	12.8	12.4	11.0	10.9	10.8	11.9	11.2	10.5
C60, C63	Other male genital	1.7	1.8	2.1	2.6	2.4	3.5	2.6	2.5	2.5	2.0
C64–68	**Urinary organs**	**69.2**	**71.5**	**70.7**	**74.7**	**76.8**	**78.0**	**74.4**	**72.2**	**74.0**	**73.1**
C64	Kidney (excl. renal pelvis)	22.6	22.8	22.4	23.5	23.3	23.8	22.4	23.6	23.6	21.3
C65–68	Urinary tract	46.6	48.7	48.3	51.2	53.5	54.2	51.9	48.6	50.4	51.8
C69	**Eye**	**1.2**	**1.2**	**1.4**	**2.0**	**1.7**	**1.6**	**1.6**	**1.5**	**1.5**	**1.7**
C70–72	**Central nervous system**	**21.8**	**22.5**	**20.8**	**21.6**	**20.0**	**16.9**	**18.6**	**17.3**	**16.3**	**15.8**
C73	**Thyroid gland**	**3.2**	**3.8**	**4.3**	**4.6**	**4.1**	**5.5**	**5.1**	**4.4**	**5.3**	**4.7**
C37, C74–75	**Other endocrine glands**	**5.3**	**6.0**	**4.8**	**5.0**	**3.6**	**4.4**	**3.3**	**3.4**	**3.5**	**3.0**
C39, C76, C80	**Other or unspecified**	**8.4**	**6.3**	**7.2**	**7.4**	**7.1**	**6.6**	**5.6**	**6.6**	**6.4**	**6.7**
C81–96	**Lymphoid/haematopoietic tissue**	**66.1**	**64.8**	**65.5**	**61.1**	**70.3**	**70.4**	**67.3**	**67.8**	**69.6**	**66.2**
C81	Hodgkin lymphoma	2.8	3.4	2.8	3.1	4.2	3.4	3.5	3.4	2.4	3.4
C82–86, C96	Non-Hodgkin lymphoma	21.5	22.4	22.5	21.7	23.9	22.7	20.3	21.9	23.2	21.6
C88	Immunoproliferative disease	1.7	2.3	1.6	1.7	1.9	2.1	2.0	2.0	2.2	2.0
C90	Multiple myeloma	11.0	9.6	10.6	8.7	10.9	10.9	11.7	11.2	11.0	11.8
C91–95	Leukaemia	29.2	27.1	28.0	25.8	29.4	31.1	29.9	29.4	30.7	27.4

Table 5.8: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and year, 2011–2020, **females**

		Year									
ICD-10	**Site**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C00–96	**All sites**	**534.7**	**524.8**	**533.4**	**555.4**	**564.7**	**560.3**	**555.5**	**559.1**	**564.8**	**543.6**
C00–14	**Mouth, pharynx**	**7.7**	**6.9**	**7.1**	**8.0**	**8.1**	**8.7**	**8.7**	**8.1**	**7.8**	**7.5**
C00	Lip	1.2	1.3	1.5	1.1	1.5	1.6	1.7	1.1	1.5	1.1
C02–06	Oral cavity	3.0	2.5	3.1	3.6	2.8	3.9	3.1	3.7	2.8	3.2
C07–08	Salivary glands	1.2	0.6	0.7	1.0	1.4	1.0	1.4	1.0	0.9	0.8
C09–10, C01, C14	Oropharynx	1.8	2.0	1.5	1.7	2.1	1.8	2.2	2.0	2.3	2.1
C11	Nasopharynx	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.1
C12–13	Hypopharynx	0.3	0.3	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.2
C15–26	**Digestive organs**	**107.3**	**108.3**	**110.0**	**112.2**	**114.8**	**110.9**	**110.3**	**107.9**	**106.4**	**107.4**
C15	Oesophagus	2.3	2.7	2.3	2.6	2.7	2.5	2.6	2.7	2.8	3.1
C16	Stomach	7.2	6.7	6.0	6.8	5.8	5.3	6.6	5.6	5.7	5.7
C17	Small intestine	2.6	2.3	1.9	2.8	2.9	2.7	3.8	2.8	2.8	3.6
C18	Colon	51.9	52.4	52.5	52.6	55.3	56.6	53.2	52.9	51.7	51.7
C19–20	Rectum, rectosigmoid	20.1	18.7	21.5	21.0	20.9	19.0	18.7	18.3	18.2	18.4
C21	Anus	1.5	1.9	2.3	2.6	2.4	3.0	1.9	2.4	2.6	2.3
C22	Liver	3.0	2.9	3.1	3.2	3.7	4.1	4.1	4.0	4.2	4.4
C23–24	Gallbladder, bile ducts	3.3	3.9	3.8	3.9	2.9	2.6	2.7	2.3	3.1	3.0
C25	Pancreas	13.6	14.5	14.2	14.2	15.7	13.1	14.2	15.0	13.1	13.4
C26	Other digestive organs	1.9	2.4	2.3	2.5	2.6	2.2	2.6	1.9	2.3	1.8
C30–34, C38	**Respiratory organs**	**49.8**	**51.9**	**51.9**	**55.5**	**56.9**	**55.0**	**54.6**	**58.3**	**56.8**	**53.4**
C30–31	Nose, sinuses	0.8	0.7	0.7	0.7	0.8	0.5	0.4	0.6	0.7	0.6
C32	Larynx, epiglottis	0.6	0.7	0.8	0.7	0.7	0.8	0.6	0.9	0.7	0.6
C33–34	Lung, trachea	48.1	50.4	50.2	53.9	55.2	53.4	53.5	56.7	55.3	52.1
C38	Heart, mediastinum and pleura	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1
C40–41	**Bone**	**0.9**	**0.6**	**0.9**	**1.1**	**1.0**	**1.1**	**1.0**	**0.8**	**0.7**	**0.7**
C43	**Melanoma of the skin**	**34.3**	**34.7**	**34.3**	**38.0**	**37.2**	**38.7**	**38.5**	**41.2**	**39.6**	**39.8**
C44	**Skin, non-melanoma**	**27.4**	**27.3**	**28.0**	**31.4**	**28.4**	**33.2**	**34.2**	**35.9**	**40.0**	**41.5**
C45	**Mesothelioma**	**0.5**	**0.6**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.6**
C47	**Autonomic nervous system**	**0.0**	**0.0**	**0.2**	**0.3**	**0.3**	**0.0**	**0.2**	**0.1**	**0.2**	**0.2**
C48–49	**Soft tissues**	**2.3**	**2.1**	**2.1**	**1.9**	**2.1**	**2.1**	**1.6**	**1.9**	**2.2**	**2.0**
C50	**Breast**	**122.5**	**114.8**	**122.8**	**126.4**	**128.2**	**125.9**	**131.0**	**128.3**	**132.7**	**120.0**
C51–58	**Female genital organs**	**66.7**	**60.9**	**62.7**	**66.0**	**68.7**	**66.0**	**61.2**	**65.0**	**65.6**	**57.8**
C51–52, C57.7–9	Other female genital	3.9	4.0	3.7	4.5	4.3	4.4	4.3	4.6	3.9	3.7
C53	Cervix uteri	11.9	12.4	11.5	14.1	15.2	14.2	12.6	14.5	14.5	12.3
C54	Corpus uteri	29.3	25.1	29.2	27.4	28.9	28.1	25.0	28.0	28.5	25.4
C55	Uterus, other	0.2	0.2	0.3	0.4	0.2	0.3	0.3	0.3	0.4	0.2
C56, C57.0–4, C48.2	Ovary etc.	21.2	19.0	17.9	19.5	20.0	18.9	19.0	17.5	18.2	16.2
C58	Placenta	0.2	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.0
C64–68	**Urinary organs**	**24.3**	**24.9**	**25.0**	**23.9**	**27.9**	**27.4**	**25.5**	**25.2**	**23.9**	**24.2**
C64	Kidney (excl. renal pelvis)	9.9	10.1	8.7	8.8	11.5	10.6	10.4	9.7	9.4	10.0
C65–68	Urinary tract	14.4	14.8	16.3	15.1	16.4	16.9	15.1	15.5	14.6	14.2
C69	**Eye**	**1.3**	**1.2**	**1.7**	**1.7**	**1.6**	**1.1**	**1.4**	**1.5**	**1.6**	**1.1**
C70–72	**Central nervous system**	**24.0**	**24.0**	**21.8**	**22.1**	**20.9**	**20.0**	**22.1**	**17.3**	**18.7**	**18.5**
C73	**Thyroid gland**	**8.9**	**9.2**	**9.8**	**9.8**	**10.1**	**12.3**	**11.1**	**11.2**	**11.6**	**13.2**
C37, C74–75	**Other endocrine glands**	**5.6**	**4.8**	**5.6**	**4.7**	**4.5**	**3.7**	**3.7**	**3.5**	**3.4**	**2.8**
C39, C76, C80	**Other or unspecified**	**6.0**	**5.9**	**6.2**	**6.2**	**5.5**	**6.3**	**5.0**	**6.0**	**6.1**	**6.8**
C81–96	**Lymphoid/haematopoietic tissue**	**45.1**	**46.6**	**42.7**	**45.7**	**48.2**	**47.5**	**44.8**	**46.4**	**46.9**	**46.2**
C81	Hodgkin lymphoma	2.9	2.5	2.2	2.3	2.2	2.9	1.7	2.3	2.9	2.0
C82–86, C96	Non-Hodgkin lymphoma	16.9	17.3	15.2	16.3	16.3	15.6	14.8	15.7	15.8	15.3
C88	Immunoproliferative disease	1.1	1.2	1.3	1.4	0.8	0.7	1.2	1.1	1.0	1.2
C90	Multiple myeloma	5.5	6.9	6.6	7.1	7.5	7.0	6.6	7.1	7.4	7.4
C91–95	Leukaemia	18.6	18.7	17.3	18.7	21.4	21.3	20.5	20.3	19.8	20.3

Table 5.9: Average annual number of new cases by primary site and five-year age group, 2016–2020, **males**

ICD-10	Site	0–4	5–9	10–14	15–19	20–24	25–29	30–34
C00–96	**All sites**	**37**	**26**	**25**	**42**	**76**	**116**	**154**
C00–14	**Mouth, pharynx**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
C00	Lip	0	0	0	0	0	0	0
C02–06	Oral cavity	0	0	0	0	0	1	1
C07–08	Salivary glands	0	0	0	0	0	0	0
C09–10, C01, C14	Oropharynx	0	0	0	0	0	0	0
C11	Nasopharynx	0	0	0	0	0	0	0
C12–13	Hypopharynx	0	0	0	0	0	0	0
C15–26	**Digestive organs**	**0**	**0**	**1**	**3**	**5**	**9**	**17**
C15	Oesophagus	0	0	0	0	0	0	1
C16	Stomach	0	0	0	0	0	1	1
C17	Small intestine	0	0	0	0	0	0	2
C18	Colon	0	0	1	3	4	4	7
C19–20	Rectum, rectosigmoid	0	0	0	0	0	2	4
C21	Anus	0	0	0	0	0	0	0
C22	Liver	0	0	0	0	1	1	0
C23–24	Gallbladder, bile ducts	0	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	1	1
C26	Other digestive organs	0	0	0	0	0	0	0
C30–34, C38	**Respiratory organs**	**1**	**0**	**0**	**1**	**0**	**2**	**2**
C30–31	Nose, sinuses	0	0	0	0	0	1	0
C32	Larynx, epiglottis	0	0	0	0	0	0	0
C33–34	Lung, trachea	1	0	0	0	0	1	2
C38	Heart, mediastinum and pleura	0	0	0	0	0	0	0
C40–41	**Bone**	**0**	**1**	**2**	**3**	**3**	**2**	**2**
C43	**Melanoma of the skin**	**0**	**0**	**0**	**1**	**5**	**9**	**15**
C44	**Skin, non-melanoma**	**1**	**0**	**0**	**1**	**1**	**1**	**3**
C45	**Mesothelioma**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
C48–49	**Soft tissues**	**1**	**1**	**0**	**0**	**1**	**1**	**2**
C50	**Breast**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C60–63	**Male genital organs**	**1**	**0**	**0**	**9**	**28**	**47**	**51**
C61	Prostate	0	0	0	0	0	0	0
C62	Testis	1	0	0	8	28	47	51
C60, C63	Other male genital	0	0	0	0	0	0	0
C64–68	**Urinary organs**	**2**	**1**	**0**	**1**	**1**	**4**	**7**
C64	Kidney (excl. renal pelvis)	2	1	0	0	1	2	5
C65–68	Urinary tract	0	0	0	0	1	1	2
C69	**Eye**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
C70–72	**Central nervous system**	**9**	**9**	**8**	**8**	**8**	**13**	**17**
C73	**Thyroid gland**	**0**	**0**	**0**	**1**	**2**	**5**	**7**
C37, C74–75	**Other endocrine glands**	**3**	**0**	**0**	**2**	**2**	**2**	**3**
C39, C76, C80	**Other or unspecified**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C81–96	**Lymphoid/haematopoietic tissue**	**15**	**13**	**11**	**13**	**16**	**21**	**26**
C81	Hodgkin lymphoma	0	1	2	4	8	9	7
C82–86, C96	Non-Hodgkin lymphoma	2	4	4	3	3	4	8
C88	Immunoproliferative disease	0	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0	1
C91–95	Leukaemia	13	8	6	7	5	8	11

35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
197	**271**	**472**	**832**	**1 376**	**2 114**	**3 018**	**3 571**	**2 773**	**1 924**	**1 770**
5	**7**	**19**	**36**	**53**	**64**	**71**	**63**	**46**	**27**	**25**
0	0	1	2	2	5	7	10	10	7	10
2	2	5	9	14	15	23	20	14	10	7
1	2	2	3	2	4	4	6	4	3	4
1	2	10	21	32	36	30	21	15	4	4
0	0	2	1	1	1	1	1	0	1	0
0	0	0	1	2	3	6	6	4	2	1
32	**52**	**98**	**183**	**276**	**417**	**578**	**728**	**599**	**441**	**373**
1	2	6	11	17	33	45	50	31	22	18
3	5	6	12	18	29	41	54	46	32	36
3	2	8	9	11	14	19	20	17	11	7
14	20	33	57	92	138	209	282	252	192	171
6	16	25	52	67	106	127	154	119	86	57
0	1	2	3	4	5	7	5	5	1	3
1	3	4	11	24	29	34	38	31	22	19
1	1	1	4	6	6	12	19	13	8	8
1	3	11	22	33	52	74	96	76	57	48
0	1	1	3	4	5	10	10	11	11	7
5	**10**	**23**	**55**	**102**	**197**	**328**	**410**	**308**	**216**	**166**
0	1	1	1	2	4	4	4	4	2	2
1	1	1	4	6	11	16	17	14	9	6
3	8	20	50	93	182	307	387	288	203	155
0	1	1	1	0	1	1	1	1	3	3
1	**1**	**1**	**1**	**2**	**1**	**3**	**4**	**2**	**1**	**1**
27	**41**	**60**	**83**	**110**	**124**	**148**	**195**	**146**	**103**	**95**
3	**6**	**11**	**19**	**31**	**68**	**118**	**221**	**254**	**268**	**348**
0	**0**	**0**	**1**	**2**	**4**	**10**	**13**	**17**	**10**	**8**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**3**	**4**	**6**	**6**	**8**	**7**	**9**	**7**	**5**	**5**
0	**1**	**1**	**1**	**2**	**3**	**4**	**6**	**6**	**3**	**3**
47	**50**	**88**	**191**	**432**	**758**	**1 108**	**1 136**	**759**	**389**	**330**
2	8	50	169	419	745	1 095	1 121	749	381	321
44	41	35	17	9	8	3	3	1	1	1
1	2	3	5	4	5	9	12	9	7	8
13	**26**	**52**	**93**	**162**	**194**	**292**	**368**	**301**	**230**	**186**
10	18	30	48	75	80	95	110	68	41	28
4	8	21	45	87	113	197	258	232	189	158
1	**1**	**2**	**3**	**5**	**6**	**7**	**5**	**3**	**2**	**3**
18	**20**	**29**	**40**	**41**	**43**	**45**	**54**	**39**	**27**	**23**
9	**7**	**11**	**14**	**13**	**15**	**15**	**16**	**9**	**6**	**5**
4	**4**	**7**	**11**	**10**	**11**	**11**	**11**	**9**	**3**	**3**
0	**1**	**2**	**5**	**6**	**13**	**18**	**24**	**21**	**22**	**39**
29	**40**	**65**	**92**	**123**	**187**	**255**	**308**	**245**	**170**	**156**
4	5	6	5	7	7	6	8	5	1	1
10	14	23	34	43	63	90	102	83	51	41
0	0	1	2	1	6	7	10	11	8	7
2	3	10	10	22	36	46	58	47	30	29
13	17	24	40	49	75	106	130	99	80	79

Table 5.10: Average annual number of new cases by primary site and five-year age group, 2016–2020, **females**

ICD-10	Site	0–4	5–9	10–14	15–19	20–24	25–29	30–34
C00–96	**All sites**	**32**	**20**	**24**	**38**	**73**	**146**	**222**
C00–14	**Mouth, pharynx**	**0**	**0**	**0**	**1**	**1**	**1**	**4**
C00	Lip	0	0	0	0	0	0	0
C02–06	Oral cavity	0	0	0	0	0	0	2
C07–08	Salivary glands	0	0	0	0	0	0	1
C09–10, C01, C14	Oropharynx	0	0	0	0	0	0	0
C11	Nasopharynx	0	0	0	0	0	0	0
C12–13	Hypopharynx	0	0	0	0	0	0	0
C15–26	**Digestive organs**	**1**	**1**	**3**	**5**	**6**	**8**	**17**
C15	Oesophagus	0	0	0	0	0	0	0
C16	Stomach	0	0	0	0	1	0	2
C17	Small intestine	0	0	0	0	0	0	1
C18	Colon	0	0	2	3	3	4	8
C19–20	Rectum, rectosigmoid	0	0	0	0	1	1	4
C21	Anus	0	0	0	0	0	0	0
C22	Liver	1	0	0	0	0	1	1
C23–24	Gallbladder, bile ducts	0	0	0	0	0	0	0
C25	Pancreas	0	0	0	1	0	1	1
C26	Other digestive organs	0	0	0	0	0	0	0
C30–34, C38	**Respiratory organs**	**1**	**0**	**0**	**0**	**0**	**2**	**3**
C30–31	Nose, sinuses	0	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0	0
C33–34	Lung, trachea	1	0	0	0	0	1	2
C38	Heart, mediastinum and pleura	0	0	0	0	0	0	0
C40–41	**Bone**	**0**	**1**	**2**	**2**	**1**	**0**	**1**
C43	**Melanoma of the skin**	**0**	**0**	**1**	**2**	**14**	**20**	**30**
C44	**Skin, non-melanoma**	**0**	**1**	**0**	**1**	**3**	**1**	**3**
C45	**Mesothelioma**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
C48–49	**Soft tissues**	**1**	**1**	**1**	**1**	**1**	**1**	**2**
C50	**Breast**	**0**	**0**	**0**	**0**	**2**	**17**	**50**
C51–58	**Female genital organs**	**0**	**0**	**1**	**3**	**8**	**40**	**48**
C51–52, C57.7–9	Other female genital	0	0	0	0	0	0	2
C53	Cervix uteri	0	0	0	0	6	33	36
C54	Corpus uteri	0	0	0	0	0	2	4
C55	Uterus, other	0	0	0	0	0	0	0
C56, C57.0–4, C48.2	Ovary etc.	0	0	1	2	1	5	6
C58	Placenta	0	0	0	0	0	0	1
C64–68	**Urinary organs**	**3**	**1**	**0**	**0**	**1**	**2**	**3**
C64	Kidney (excl. renal pelvis)	3	1	0	0	0	1	2
C65–68	Urinary tract	0	0	0	0	1	2	1
C69	**Eye**	**1**	**0**	**0**	**0**	**0**	**1**	**1**
C70–72	**Central nervous system**	**7**	**7**	**8**	**7**	**7**	**13**	**17**
C73	**Thyroid gland**	**0**	**0**	**0**	**4**	**9**	**16**	**21**
C37, C74–75	**Other endocrine glands**	**1**	**0**	**1**	**2**	**4**	**4**	**6**
C39, C76, C80	**Other or unspecified**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
C81–96	**Lymphoid/haematopoietic tissue**	**15**	**8**	**8**	**10**	**16**	**18**	**17**
C81	Hodgkin lymphoma	0	0	3	5	8	6	6
C82–86, C96	Non-Hodgkin lymphoma	3	2	1	1	3	4	4
C88	Immunoproliferative disease	0	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0	0
C91–95	Leukaemia	12	6	4	5	5	8	7

35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
353	**517**	**836**	**1 102**	**1 243**	**1 652**	**2 018**	**2 309**	**1 973**	**1 577**	**1 965**
3	**6**	**10**	**16**	**21**	**29**	**26**	**37**	**31**	**22**	**31**
0	0	0	1	2	4	5	7	7	7	9
1	3	3	5	7	10	12	17	14	10	14
1	2	2	3	1	3	2	4	3	2	5
0	1	4	7	10	11	7	7	6	3	2
0	0	1	1	1	1	0	1	0	0	0
0	0	0	0	0	0	0	1	1	0	1
32	**50**	**89**	**137**	**193**	**293**	**396**	**535**	**492**	**444**	**539**
0	1	2	3	3	8	11	18	13	10	13
1	4	5	10	12	13	19	25	24	23	31
2	2	3	5	9	9	13	15	12	11	8
16	23	36	52	76	125	190	263	265	240	294
8	11	22	36	44	65	68	86	69	58	67
1	2	4	5	8	10	11	9	8	6	5
1	2	4	5	9	11	16	19	16	15	21
0	1	2	3	5	7	10	13	12	14	16
2	3	7	17	24	36	50	75	65	58	74
0	1	2	2	4	8	9	12	8	8	11
5	**9**	**26**	**56**	**99**	**184**	**286**	**379**	**289**	**173**	**143**
0	1	1	1	1	1	2	3	2	2	2
0	0	1	1	3	4	3	4	3	1	0
4	8	24	53	94	179	281	371	284	170	139
0	0	0	0	0	0	1	0	1	0	1
2	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**1**	**1**	**1**
42	**61**	**92**	**100**	**106**	**109**	**116**	**135**	**107**	**81**	**101**
4	**7**	**19**	**22**	**35**	**53**	**92**	**147**	**168**	**205**	**399**
0	**0**	**0**	**1**	**1**	**2**	**1**	**4**	**2**	**2**	**2**
0	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**3**	**4**	**4**	**4**	**4**	**6**	**9**	**6**	**3**	**4**
101	**191**	**336**	**444**	**395**	**471**	**488**	**338**	**290**	**195**	**217**
76	**79**	**99**	**131**	**153**	**200**	**224**	**255**	**190**	**142**	**142**
3	4	5	7	8	12	15	14	14	16	25
53	46	39	27	25	25	24	20	10	9	7
8	16	31	55	74	108	110	136	101	75	62
0	0	0	0	0	0	1	1	1	1	3
11	13	24	43	46	56	74	84	64	41	43
1	0	0	0	0	0	0	0	0	0	0
6	**13**	**23**	**33**	**53**	**77**	**101**	**131**	**112**	**83**	**101**
5	8	16	17	22	33	44	51	36	22	27
1	5	7	16	31	43	57	80	76	60	74
1	**1**	**2**	**3**	**4**	**4**	**6**	**4**	**3**	**2**	**3**
19	**27**	**47**	**45**	**53**	**54**	**52**	**64**	**45**	**32**	**30**
31	**32**	**32**	**31**	**25**	**27**	**32**	**26**	**15**	**10**	**9**
6	**6**	**9**	**6**	**7**	**8**	**9**	**10**	**7**	**3**	**2**
1	**1**	**3**	**6**	**6**	**10**	**13**	**20**	**26**	**29**	**72**
22	**31**	**43**	**65**	**86**	**126**	**165**	**213**	**189**	**152**	**168**
4	2	2	3	3	3	4	3	4	3	1
8	12	11	20	33	47	59	81	67	49	48
0	0	1	1	1	4	4	7	6	5	4
1	1	7	9	16	21	30	35	31	28	30
9	15	23	32	32	50	68	88	80	67	85

Table 5.11: Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2016–2020, **males**

ICD-10	Site	0–4	5–9	10–14	15–19	20–24	25–29	30–34
C00–96	**All sites**	**24.5**	**16.1**	**15.5**	**25.5**	**42.9**	**61.3**	**82.5**
C00–14	**Mouth, pharynx**	**0.3**	**0.0**	**0.1**	**0.1**	**0.6**	**0.6**	**1.1**
C00	Lip	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C02–06	Oral cavity	0.0	0.0	0.1	0.1	0.1	0.4	0.6
C07–08	Salivary glands	0.3	0.0	0.0	0.0	0.0	0.2	0.2
C09–10, C01, C14	Oropharynx	0.0	0.0	0.0	0.0	0.2	0.0	0.0
C11	Nasopharynx	0.0	0.0	0.0	0.0	0.2	0.0	0.2
C12–13	Hypopharynx	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C15–26	**Digestive organs**	**0.0**	**0.2**	**0.5**	**1.8**	**3.1**	**4.6**	**9.1**
C15	Oesophagus	0.0	0.0	0.0	0.1	0.1	0.2	0.4
C16	Stomach	0.0	0.0	0.0	0.0	0.2	0.4	0.8
C17	Small intestine	0.0	0.0	0.0	0.0	0.2	0.0	0.9
C18	Colon	0.0	0.1	0.4	1.6	2.0	1.9	4.0
C19–20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.0	1.0	2.4
C21	Anus	0.0	0.0	0.0	0.0	0.0	0.1	0.0
C22	Liver	0.0	0.1	0.1	0.1	0.5	0.3	0.2
C23–24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C25	Pancreas	0.0	0.0	0.0	0.0	0.0	0.3	0.3
C26	Other digestive organs	0.0	0.0	0.0	0.0	0.0	0.2	0.1
C30–34, C38	**Respiratory organs**	**0.4**	**0.0**	**0.1**	**0.5**	**0.2**	**0.8**	**1.0**
C30–31	Nose, sinuses	0.0	0.0	0.1	0.0	0.2	0.3	0.1
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C33–34	Lung, trachea	0.4	0.0	0.0	0.2	0.0	0.4	0.9
C38	Heart, mediastinum and pleura	0.0	0.0	0.0	0.2	0.0	0.1	0.0
C40–41	**Bone**	**0.1**	**0.6**	**1.2**	**1.9**	**1.5**	**1.1**	**1.1**
C43	**Melanoma of the skin**	**0.0**	**0.1**	**0.2**	**0.7**	**2.9**	**4.6**	**8.0**
C44	**Skin, non-melanoma**	**0.4**	**0.2**	**0.0**	**0.4**	**0.8**	**0.7**	**1.5**
C45	**Mesothelioma**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
C47	**Autonomic nervous system**	**1.6**	**0.0**	**0.1**	**0.0**	**0.2**	**0.1**	**0.0**
C48–49	**Soft tissues**	**0.8**	**0.5**	**0.2**	**0.0**	**0.8**	**0.5**	**1.0**
C50	**Breast**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
C60–63	**Male genital organs**	**0.9**	**0.1**	**0.1**	**5.2**	**16.0**	**24.8**	**27.4**
C61	Prostate	0.0	0.0	0.1	0.0	0.1	0.0	0.0
C62	Testis	0.8	0.1	0.0	5.1	15.7	24.7	27.4
C60, C63	Other male genital	0.1	0.0	0.0	0.1	0.1	0.1	0.0
C64–68	**Urinary organs**	**1.0**	**0.5**	**0.0**	**0.5**	**0.8**	**1.9**	**3.5**
C64	Kidney (excl. renal pelvis)	1.0	0.5	0.0	0.2	0.3	1.2	2.5
C65–68	Urinary tract	0.0	0.0	0.0	0.2	0.5	0.7	1.1
C69	**Eye**	**1.2**	**0.2**	**0.1**	**0.0**	**0.1**	**0.0**	**0.1**
C70–72	**Central nervous system**	**5.8**	**5.6**	**5.2**	**5.0**	**4.3**	**7.0**	**9.2**
C73	**Thyroid gland**	**0.0**	**0.0**	**0.1**	**0.5**	**1.2**	**2.5**	**4.0**
C37, C74–75	**Other endocrine glands**	**2.0**	**0.1**	**0.2**	**1.1**	**1.0**	**0.8**	**1.4**
C39, C76, C80	**Other or unspecified**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
C81–96	**Lymphoid/haematopoietic tissue**	**10.1**	**7.8**	**7.0**	**7.7**	**9.3**	**11.0**	**14.1**
C81	Hodgkin lymphoma	0.0	0.6	1.1	2.2	4.8	4.7	3.7
C82–86, C96	Non-Hodgkin lymphoma	1.6	2.2	2.5	1.6	1.9	2.2	4.2
C88	Immunoproliferative disease	0.0	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	0.1	0.4
C91–95	Leukaemia	8.5	5.0	3.4	4.0	2.6	4.0	5.8

35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
108.7	**148.7**	**243.8**	**448.4**	**828.9**	**1 393.3**	**2 202.7**	**2 967.8**	**3 664.0**	**4 109.0**	**4 422.4**
2.7	**4.1**	**9.8**	**19.5**	**31.8**	**42.1**	**52.0**	**52.5**	**61.0**	**58.1**	**62.5**
0.1	0.2	0.5	0.9	1.4	3.0	5.0	8.3	13.2	15.8	24.0
1.2	1.2	2.5	5.1	8.2	9.8	16.8	16.5	18.2	21.8	18.5
0.6	1.1	0.9	1.4	1.3	2.8	2.8	5.0	5.0	7.3	9.0
0.6	1.3	5.0	11.1	19.3	23.7	22.2	17.3	19.3	8.1	9.0
0.2	0.2	0.9	0.5	0.5	0.9	0.6	0.8	0.5	1.7	0.5
0.0	0.0	0.0	0.5	1.1	1.8	4.7	4.7	4.8	3.4	1.5
17.6	**28.6**	**50.6**	**98.4**	**166.2**	**274.8**	**421.7**	**604.9**	**792.0**	**942.2**	**932.4**
0.8	1.0	3.3	6.1	10.1	21.8	32.8	41.9	40.4	46.6	44.5
1.4	2.5	3.1	6.3	11.1	19.4	30.2	44.7	60.5	68.3	89.9
1.8	1.3	4.0	4.7	6.6	9.0	13.7	16.3	22.2	23.5	18.5
7.7	11.2	17.2	30.5	55.4	91.0	152.3	234.2	332.7	410.9	426.2
3.3	8.5	12.9	28.0	40.5	69.7	92.4	128.3	156.7	182.8	141.4
0.2	0.3	1.2	1.4	2.4	3.2	5.3	4.2	6.1	1.7	7.0
0.8	1.4	2.1	5.9	14.7	19.1	24.7	31.4	40.7	46.6	48.0
0.6	0.3	0.5	2.3	3.4	4.2	8.8	15.6	17.4	17.1	21.0
0.8	1.6	5.8	11.6	19.9	34.1	54.0	80.1	101.0	121.7	118.9
0.2	0.3	0.4	1.5	2.2	3.3	7.6	8.1	14.3	23.1	17.0
2.7	**5.7**	**11.7**	**29.6**	**61.2**	**129.7**	**239.3**	**340.6**	**407.5**	**461.3**	**415.3**
0.2	0.4	0.4	0.5	1.4	2.4	2.9	3.5	5.8	3.8	5.0
0.7	0.5	0.6	2.0	3.6	7.1	11.5	14.5	19.0	18.4	15.5
1.5	4.2	10.2	26.7	56.0	119.7	224.1	321.7	381.1	433.5	387.3
0.2	0.5	0.4	0.3	0.1	0.5	0.7	1.0	1.6	5.6	7.5
0.8	**0.3**	**0.7**	**0.8**	**1.1**	**0.9**	**2.2**	**3.7**	**2.9**	**3.0**	**1.5**
14.8	**22.7**	**31.1**	**44.5**	**66.5**	**81.9**	**108.0**	**162.1**	**193.2**	**220.8**	**238.4**
1.7	**3.4**	**5.7**	**10.5**	**18.8**	**44.8**	**86.4**	**183.3**	**335.4**	**571.4**	**869.5**
0.0	**0.0**	**0.0**	**0.4**	**1.1**	**2.9**	**7.2**	**10.8**	**22.5**	**21.4**	**20.5**
0.0	**0.2**	**0.0**	**0.1**	**0.1**	**0.0**	**0.1**	**0.2**	**0.0**	**0.4**	**0.0**
1.0	**1.6**	**2.1**	**3.2**	**3.4**	**5.1**	**5.3**	**7.5**	**9.0**	**9.8**	**13.0**
0.1	**0.4**	**0.4**	**0.5**	**1.4**	**2.2**	**2.9**	**5.0**	**7.7**	**6.4**	**6.5**
25.9	**27.6**	**45.5**	**102.7**	**260.4**	**499.9**	**808.7**	**944.0**	**1 003.2**	**830.7**	**824.0**
0.9	4.3	25.6	91.0	252.6	491.2	799.5	931.9	989.2	813.2	802.5
24.2	22.4	18.2	9.2	5.4	5.1	2.5	2.2	1.6	2.1	2.0
0.8	1.0	1.8	2.6	2.4	3.6	6.7	10.0	12.4	15.4	19.5
7.4	**14.4**	**26.6**	**50.1**	**97.8**	**127.6**	**213.3**	**306.0**	**397.2**	**491.2**	**465.7**
5.4	9.9	15.6	25.9	45.4	53.0	69.6	91.6	90.4	88.4	70.5
2.0	4.5	11.0	24.2	52.4	74.6	143.6	214.4	306.8	402.7	395.3
0.7	**0.4**	**0.8**	**1.7**	**3.0**	**4.1**	**5.3**	**4.5**	**4.5**	**4.7**	**7.0**
10.1	**10.7**	**14.9**	**21.3**	**24.7**	**28.3**	**32.7**	**45.0**	**51.8**	**57.2**	**57.0**
5.1	**3.7**	**5.7**	**7.3**	**7.6**	**10.0**	**10.7**	**13.3**	**12.4**	**12.4**	**12.0**
2.1	**2.3**	**3.8**	**5.7**	**6.0**	**7.1**	**7.9**	**9.0**	**11.4**	**6.4**	**8.5**
0.2	**0.4**	**0.8**	**2.6**	**3.6**	**8.4**	**13.1**	**19.8**	**28.3**	**47.8**	**98.4**
16.0	**22.0**	**33.6**	**49.4**	**74.1**	**123.3**	**186.0**	**255.7**	**324.0**	**363.9**	**390.3**
2.3	2.8	3.2	2.8	4.5	4.9	4.5	6.5	7.1	3.0	2.0
5.5	7.8	11.9	18.2	26.0	41.4	65.4	84.6	109.1	109.3	101.9
0.0	0.1	0.5	1.3	0.8	3.7	5.4	8.5	14.0	17.1	16.5
0.9	1.9	5.4	5.6	13.3	24.0	33.3	48.0	62.4	64.1	73.5
7.3	9.4	12.6	21.4	29.5	49.3	77.4	108.0	131.3	170.4	196.4

Table 5.12: Age-specific incidence rates per 100 000 person-years by primary site and five-year age group, 2016–2020, **females**

ICD-10	Site	0–4	5–9	10–14	15–19	20–24	25–29	30–34
C00–96	**All sites**	**22.1**	**13.1**	**15.6**	**24.4**	**44.4**	**80.9**	**125.3**
C00–14	**Mouth, pharynx**	**0.1**	**0.0**	**0.1**	**0.4**	**0.5**	**0.6**	**2.0**
C00	Lip	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C02–06	Oral cavity	0.0	0.0	0.0	0.3	0.2	0.2	1.1
C07–08	Salivary glands	0.0	0.0	0.1	0.0	0.2	0.1	0.7
C09–10, C01, C14	Oropharynx	0.0	0.0	0.0	0.0	0.0	0.1	0.0
C11	Nasopharynx	0.1	0.0	0.0	0.1	0.0	0.1	0.1
C12–13	Hypopharynx	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C15–26	**Digestive organs**	**0.7**	**0.5**	**1.7**	**3.0**	**3.5**	**4.6**	**9.4**
C15	Oesophagus	0.0	0.0	0.0	0.0	0.0	0.0	0.2
C16	Stomach	0.0	0.0	0.0	0.1	0.4	0.2	1.0
C17	Small intestine	0.0	0.0	0.0	0.0	0.1	0.0	0.6
C18	Colon	0.0	0.3	1.2	2.1	2.1	2.4	4.5
C19–20	Rectum, rectosigmoid	0.0	0.0	0.0	0.0	0.5	0.6	2.0
C21	Anus	0.0	0.0	0.0	0.1	0.0	0.0	0.0
C22	Liver	0.7	0.3	0.1	0.1	0.2	0.4	0.5
C23–24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.0	0.1	0.2
C25	Pancreas	0.0	0.0	0.3	0.5	0.2	0.7	0.3
C26	Other digestive organs	0.0	0.0	0.1	0.0	0.0	0.2	0.0
C30–34, C38	**Respiratory organs**	**0.7**	**0.0**	**0.0**	**0.0**	**0.2**	**1.0**	**1.6**
C30–31	Nose, sinuses	0.1	0.0	0.0	0.0	0.0	0.1	0.2
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C33–34	Lung, trachea	0.6	0.0	0.0	0.0	0.2	0.8	1.2
C38	Heart, mediastinum and pleura	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C40–41	**Bone**	**0.0**	**0.9**	**1.4**	**1.0**	**0.7**	**0.1**	**0.5**
C43	**Melanoma of the skin**	**0.0**	**0.0**	**0.4**	**1.5**	**8.2**	**11.0**	**16.7**
C44	**Skin, non-melanoma**	**0.1**	**0.4**	**0.0**	**0.5**	**1.6**	**0.8**	**1.5**
C45	**Mesothelioma**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.2**
C47	**Autonomic nervous system**	**1.0**	**0.4**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**
C48–49	**Soft tissues**	**0.7**	**0.4**	**0.5**	**0.4**	**0.5**	**0.7**	**0.9**
C50	**Breast**	**0.0**	**0.0**	**0.0**	**0.3**	**1.3**	**9.6**	**28.4**
C51–58	**Female genital organs**	**0.0**	**0.1**	**0.6**	**1.8**	**4.8**	**22.2**	**26.9**
C51–52, C57.7–9	Other female genital	0.0	0.0	0.0	0.0	0.1	0.2	1.1
C53	Cervix uteri	0.0	0.0	0.1	0.1	3.8	18.5	20.1
C54	Corpus uteri	0.0	0.0	0.0	0.0	0.0	0.9	2.0
C55	Uterus, other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C56, C57.0–4, C48.2	Ovary etc.	0.0	0.1	0.5	1.5	0.8	2.5	3.3
C58	Placenta	0.0	0.0	0.0	0.1	0.1	0.1	0.5
C64–68	**Urinary organs**	**2.1**	**0.4**	**0.0**	**0.3**	**0.8**	**1.3**	**1.8**
C64	Kidney (excl. renal pelvis)	1.9	0.4	0.0	0.1	0.2	0.4	1.2
C65–68	Urinary tract	0.1	0.0	0.0	0.1	0.6	0.9	0.6
C69	**Eye**	**0.6**	**0.3**	**0.0**	**0.0**	**0.1**	**0.3**	**0.3**
C70–72	**Central nervous system**	**4.7**	**4.4**	**5.3**	**4.5**	**4.2**	**7.2**	**9.8**
C73	**Thyroid gland**	**0.0**	**0.0**	**0.1**	**2.4**	**5.3**	**8.7**	**12.1**
C37, C74–75	**Other endocrine glands**	**0.7**	**0.1**	**0.4**	**1.4**	**2.3**	**2.2**	**3.3**
C39, C76, C80	**Other or unspecified**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	**0.2**	**0.2**
C81–96	**Lymphoid/haematopoietic tissue**	**10.6**	**5.3**	**5.0**	**6.7**	**9.9**	**10.2**	**9.8**
C81	Hodgkin lymphoma	0.1	0.1	1.7	3.2	5.1	3.5	3.4
C82–86, C96	Non-Hodgkin lymphoma	2.1	1.0	0.6	0.4	1.9	2.0	2.3
C88	Immunoproliferative disease	0.0	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	0.2	0.1
C91–95	Leukaemia	8.3	4.1	2.7	3.1	2.9	4.4	4.1

35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
207.4	**300.1**	**454.6**	**626.5**	**779.7**	**1 101.2**	**1 466.5**	**1 838.9**	**2 278.1**	**2 537.8**	**2 560.9**
1.9	**3.2**	**5.2**	**9.3**	**13.2**	**19.5**	**18.9**	**29.6**	**35.6**	**34.8**	**40.9**
0.0	0.1	0.2	0.8	1.5	2.4	3.3	5.7	8.1	10.9	11.2
0.7	1.5	1.5	2.6	4.4	6.9	8.4	13.4	16.2	15.4	18.8
0.8	1.0	0.9	1.6	0.6	1.9	1.2	3.3	3.7	3.2	6.8
0.2	0.3	2.2	3.9	6.1	7.5	5.4	5.6	6.5	4.5	2.9
0.1	0.1	0.3	0.3	0.5	0.5	0.3	0.6	0.0	0.3	0.3
0.0	0.1	0.1	0.1	0.0	0.3	0.3	1.0	1.2	0.3	1.0
18.8	**29.0**	**48.3**	**77.9**	**121.3**	**195.1**	**287.8**	**426.1**	**568.0**	**713.8**	**703.0**
0.0	0.5	1.1	1.8	2.0	5.5	8.1	14.0	14.6	16.4	16.4
0.7	2.6	2.9	5.7	7.4	8.4	14.1	20.1	27.7	37.0	40.9
1.3	1.0	1.8	2.6	5.6	6.0	9.4	11.6	13.9	18.0	10.7
9.3	13.3	19.5	29.7	47.4	83.4	137.8	209.8	306.5	386.8	382.6
4.8	6.6	12.2	20.2	27.7	43.5	49.7	68.6	79.7	93.3	87.1
0.8	0.9	2.4	3.0	4.8	6.9	7.8	7.3	8.8	9.0	6.8
0.4	1.4	2.0	2.7	5.9	7.5	11.3	15.0	18.9	23.8	27.4
0.2	0.5	1.2	1.5	2.9	4.9	7.0	10.4	13.6	22.8	20.3
1.2	1.5	4.0	9.8	15.2	24.0	36.1	60.0	75.3	93.6	96.2
0.1	0.7	1.2	0.9	2.4	5.1	6.4	9.2	9.0	12.9	14.6
2.7	**5.5**	**14.1**	**31.6**	**61.8**	**122.8**	**208.0**	**301.5**	**334.0**	**279.0**	**185.8**
0.2	0.3	0.3	0.5	0.8	0.9	1.5	2.4	2.1	2.6	2.6
0.1	0.1	0.5	0.8	1.9	2.4	2.2	3.3	3.0	1.9	0.3
2.4	4.9	13.2	30.4	59.1	119.4	204.0	295.6	328.0	273.9	181.7
0.0	0.1	0.1	0.0	0.1	0.0	0.4	0.2	0.9	0.6	1.3
1.1	**0.3**	**0.7**	**0.6**	**1.1**	**1.1**	**1.7**	**1.4**	**1.6**	**1.6**	**1.8**
24.8	**35.2**	**49.9**	**56.9**	**66.6**	**72.9**	**84.3**	**107.4**	**123.3**	**130.7**	**131.9**
2.1	**3.9**	**10.1**	**12.6**	**21.8**	**35.2**	**66.7**	**117.2**	**193.8**	**329.2**	**519.7**
0.1	**0.0**	**0.1**	**0.5**	**0.6**	**1.1**	**1.0**	**2.9**	**1.8**	**2.9**	**3.1**
0.0	**0.6**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**	**0.0**
1.3	**1.9**	**2.1**	**2.4**	**2.3**	**2.7**	**4.5**	**6.8**	**6.5**	**4.8**	**5.2**
59.3	**110.9**	**182.8**	**252.3**	**248.0**	**313.8**	**354.7**	**268.9**	**334.7**	**313.4**	**283.1**
44.4	**46.0**	**54.0**	**74.7**	**96.1**	**133.4**	**162.7**	**203.1**	**219.2**	**227.8**	**184.8**
1.5	2.2	2.6	3.8	4.8	7.7	10.6	11.5	15.9	25.4	32.8
31.0	26.7	21.0	15.4	15.6	16.4	17.6	15.8	11.5	14.5	9.6
4.8	9.1	17.0	31.0	46.7	72.0	79.8	108.0	116.2	120.4	81.3
0.2	0.1	0.2	0.2	0.1	0.1	0.6	0.8	1.4	1.6	4.4
6.5	7.7	13.3	24.3	29.0	37.2	54.1	67.1	74.1	66.0	56.6
0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.5	**7.3**	**12.7**	**18.9**	**33.4**	**51.2**	**73.6**	**104.6**	**129.8**	**133.2**	**132.1**
2.9	4.6	8.7	9.6	13.8	22.3	32.1	40.8	41.6	36.0	35.2
0.6	2.7	4.0	9.3	19.6	28.9	41.4	63.9	88.2	97.2	97.0
0.8	**0.3**	**1.3**	**1.7**	**2.6**	**2.9**	**4.7**	**3.5**	**3.9**	**3.2**	**3.4**
11.3	**15.7**	**25.7**	**25.8**	**33.2**	**35.9**	**38.1**	**51.1**	**52.4**	**50.8**	**39.1**
18.3	**18.3**	**17.6**	**17.6**	**15.6**	**17.7**	**23.5**	**21.0**	**16.9**	**15.4**	**11.2**
3.8	**3.7**	**4.7**	**3.3**	**4.4**	**5.6**	**6.4**	**8.1**	**8.3**	**5.5**	**3.1**
0.4	**0.3**	**1.6**	**3.6**	**4.0**	**6.8**	**9.6**	**15.6**	**30.0**	**47.0**	**93.3**
12.8	**17.9**	**23.6**	**36.8**	**53.7**	**83.7**	**120.2**	**170.0**	**218.0**	**244.6**	**219.2**
2.5	1.4	0.9	1.9	2.0	2.0	3.1	2.7	4.9	5.1	1.8
4.5	7.0	6.2	11.4	20.7	31.6	42.7	64.2	77.8	79.2	62.0
0.0	0.0	0.7	0.3	0.6	2.7	2.6	5.4	7.2	7.7	4.7
0.8	0.8	3.6	5.0	10.3	14.0	22.1	27.9	35.6	44.7	39.6
5.1	8.7	12.3	18.2	20.1	33.5	49.7	69.8	92.6	107.8	111.0

Table 5.13: Average annual number of new cases by primary site and five-year period, 1961–2020, **males**

ICD-10	Site	1961–65	1966–70	1971–75	1976–80	1981–85
C00–96	**All sites**	**4 606**	**5 398**	**6 293**	**7 418**	**8 441**
C00–14	**Mouth, pharynx**	**187**	**203**	**244**	**239**	**246**
C00	Lip	89	99	115	109	91
C02–06	Oral cavity	36	52	54	65	80
C07–08	Salivary glands	13	14	13	14	14
C09–10, C01, C14	Oropharynx	23	14	29	25	27
C11	Nasopharynx	9	9	12	8	12
C12–13	Hypopharynx	18	14	21	19	22
C15–26	**Digestive organs**	**1 724**	**1 863**	**1 948**	**2 149**	**2 358**
C15	Oesophagus	80	77	83	87	87
C16	Stomach	793	769	661	601	588
C17	Small intestine	11	18	16	19	31
C18	Colon	290	357	401	521	648
C19–20	Rectum, rectosigmoid	182	250	310	428	507
C21	Anus	7	6	6	9	12
C22	Liver	23	36	55	50	65
C23–24	Gallbladder, bile ducts	22	27	28	38	43
C25	Pancreas	176	218	250	264	299
C26	Other digestive organs	140	106	140	131	78
C30–34, C38	**Respiratory organs**	**451**	**633**	**787**	**1 008**	**1 193**
C30–31	Nose, sinuses	22	21	22	24	22
C32	Larynx, epiglottis	46	67	70	90	105
C33–34	Lung, trachea	373	532	678	874	1 051
C38	Heart, mediastinum and pleura	10	13	17	19	15
C40–41	**Bone**	**16**	**17**	**21**	**20**	**24**
C43	**Melanoma of the skin**	**76**	**103**	**157**	**206**	**254**
C44	**Skin, non-melanoma**	**73**	**90**	**177**	**221**	**273**
C45	**Mesothelioma**	**3**	**3**	**8**	**19**	**25**
C47	**Autonomic nervous system**	**14**	**16**	**11**	**9**	**8**
C48–49	**Soft tissues**	**28**	**39**	**47**	**58**	**47**
C50	**Breast**	**8**	**9**	**9**	**10**	**13**
C60–63	**Male genital organs**	**930**	**1 104**	**1 331**	**1 607**	**1 861**
C61	Prostate	840	1 008	1 223	1 475	1 692
C62	Testis	68	75	85	107	141
C60, C63	Other male genital	23	21	23	26	29
C64–68	**Urinary organs**	**409**	**500**	**642**	**792**	**928**
C64	Kidney (excl. renal pelvis)	124	154	174	199	244
C65–68	Urinary tract	285	346	468	593	684
C69	**Eye**	**18**	**23**	**18**	**26**	**25**
C70–72	**Central nervous system**	**135**	**145**	**161**	**189**	**220**
C73	**Thyroid gland**	**23**	**35**	**34**	**43**	**45**
C37, C74–75	**Other endocrine glands**	**10**	**16**	**27**	**27**	**44**
C39, C76, C80	**Other or unspecified**	**85**	**125**	**146**	**181**	**221**
C81–96	**Lymphoid/haematopoietic tissue**	**415**	**474**	**526**	**614**	**655**
C81	Hodgkin lymphoma	52	60	63	67	56
C82–86, C96	Non-Hodgkin lymphoma	98	122	133	159	200
C88	Immunoproliferative disease	0	2	6	7	10
C90	Multiple myeloma	83	90	117	149	152
C91–95	Leukaemia	182	201	207	232	237

1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
9 157	**10 285**	**11 321**	**12 605**	**14 687**	**17 109**	**18 794**
253	**252**	**266**	**250**	**296**	**366**	**422**
87	68	56	40	59	60	54
82	88	90	81	91	107	124
16	21	22	21	21	31	36
31	43	62	75	97	137	175
11	9	11	11	7	10	10
26	24	26	21	21	20	23
2 367	**2 445**	**2 500**	**2 705**	**2 938**	**3 409**	**3 812**
99	107	118	133	156	201	238
528	460	399	342	301	305	284
25	33	41	53	71	98	122
739	840	917	1 022	1 155	1 334	1 478
526	565	579	654	685	773	820
11	17	19	19	22	22	35
58	60	68	80	102	156	218
49	54	57	66	69	79	80
292	281	274	308	339	386	475
42	28	27	27	40	55	62
1 293	**1 361**	**1 427**	**1 535**	**1 639**	**1 759**	**1 825**
24	20	22	23	22	27	27
107	103	106	106	100	101	86
1 155	1 222	1 285	1 391	1 506	1 622	1 698
7	16	14	15	11	9	13
21	**22**	**21**	**25**	**26**	**29**	**33**
351	**436**	**455**	**506**	**653**	**940**	**1 164**
368	**471**	**546**	**640**	**784**	**949**	**1 354**
38	**39**	**55**	**67**	**66**	**67**	**65**
7	**7**	**6**	**5**	**7**	**5**	**5**
43	**47**	**49**	**54**	**60**	**72**	**68**
12	**12**	**15**	**15**	**16**	**27**	**30**
2 044	**2 570**	**3 143**	**3 621**	**4 622**	**5 351**	**5 425**
1 857	2 344	2 880	3 332	4 291	4 990	5 060
161	196	232	249	286	311	298
25	31	31	40	45	50	67
1 000	**1 093**	**1 096**	**1 229**	**1 381**	**1 668**	**1 932**
252	267	285	347	417	551	616
748	826	811	882	964	1 117	1 317
24	**26**	**30**	**31**	**34**	**36**	**42**
246	**263**	**345**	**430**	**488**	**522**	**451**
49	**45**	**47**	**56**	**71**	**99**	**134**
42	**53**	**66**	**89**	**125**	**123**	**95**
270	**310**	**306**	**238**	**178**	**156**	**152**
729	**831**	**949**	**1 112**	**1 301**	**1 530**	**1 786**
50	50	59	67	77	83	88
265	302	347	363	459	528	581
8	18	26	35	34	43	53
162	158	157	182	201	232	295
244	304	360	465	530	644	769

Table 5.14: Average annual number of new cases by primary site and five-year period, 1961–2020, **females**

ICD-10	Site	1961–65	1966–70	1971–75	1976–80	1981–85
C00–96	**All sites**	**4 573**	**5 294**	**5 969**	**6 934**	**7 724**
C00–14	**Mouth, pharynx**	**67**	**74**	**78**	**88**	**100**
C00	Lip	5	6	7	9	13
C02–06	Oral cavity	22	33	34	42	50
C07–08	Salivary glands	14	14	12	13	14
C09–10, C01, C14	Oropharynx	12	9	12	14	12
C11	Nasopharynx	5	4	5	5	4
C12–13	Hypopharynx	10	8	7	6	6
C15–26	**Digestive organs**	**1 435**	**1 578**	**1 688**	**1 982**	**2 143**
C15	Oesophagus	29	30	30	31	35
C16	Stomach	538	501	423	410	391
C17	Small intestine	11	13	19	19	28
C18	Colon	337	427	494	655	771
C19–20	Rectum, rectosigmoid	130	200	253	338	395
C21	Anus	8	13	12	20	23
C22	Liver	14	19	30	33	44
C23–24	Gallbladder, bile ducts	52	61	49	70	83
C25	Pancreas	119	156	183	218	266
C26	Other digestive organs	198	158	195	188	109
C30–34, C38	**Respiratory organs**	**108**	**156**	**194**	**242**	**330**
C30–31	Nose, sinuses	13	12	14	13	12
C32	Larynx, epiglottis	4	6	7	10	12
C33–34	Lung, trachea	84	132	165	213	302
C38	Heart, mediastinum and pleura	7	6	8	6	4
C40–41	**Bone**	**10**	**12**	**14**	**13**	**13**
C43	**Melanoma of the skin**	**88**	**120**	**177**	**258**	**337**
C44	**Skin, non-melanoma**	**46**	**49**	**110**	**145**	**207**
C45	**Mesothelioma**	**1**	**1**	**2**	**3**	**4**
C47	**Autonomic nervous system**	**11**	**14**	**10**	**7**	**5**
C48–49	**Soft tissues**	**26**	**29**	**38**	**44**	**47**
C50	**Breast**	**1 044**	**1 189**	**1 338**	**1 489**	**1 660**
C51–58	**Female genital organs**	**948**	**1 095**	**1 202**	**1 274**	**1 279**
C51–52, C57.7–9	Other female genital	63	59	69	82	79
C53	Cervix uteri	356	394	436	410	364
C54	Corpus uteri	216	260	308	368	382
C55	Uterus, other	21	14	9	7	6
C56, C57.0–4, C48.2	Ovary etc.	289	364	378	404	443
C58	Placenta	2	4	2	2	4
C64–68	**Urinary organs**	**219**	**261**	**314**	**370**	**405**
C64	Kidney (excl. renal pelvis)	89	110	116	137	149
C65–68	Urinary tract	129	151	198	233	256
C69	**Eye**	**17**	**17**	**18**	**23**	**21**
C70–72	**Central nervous system**	**119**	**131**	**140**	**186**	**213**
C73	**Thyroid gland**	**57**	**85**	**107**	**129**	**142**
C37, C74–75	**Other endocrine glands**	**7**	**10**	**16**	**29**	**48**
C39, C76, C80	**Other or unspecified**	**70**	**97**	**103**	**162**	**220**
C81–96	**Lymphoid/haematopoietic tissue**	**298**	**376**	**421**	**490**	**550**
C81	Hodgkin lymphoma	37	45	42	45	37
C82–86, C96	Non-Hodgkin lymphoma	70	101	105	141	190
C88	Immunoproliferative disease	0	0	4	3	6
C90	Multiple myeloma	58	77	106	124	129
C91–95	Leukaemia	132	153	164	177	188

1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
8 414	**9 371**	**10 453**	**11 669**	**12 816**	**14 515**	**16 101**
110	**120**	**130**	**143**	**182**	**203**	**238**
19	20	15	20	36	37	42
56	60	62	65	75	81	98
13	17	20	20	24	26	30
13	15	24	27	38	47	58
4	3	3	4	5	6	6
6	5	5	7	5	6	5
2 202	**2 311**	**2 413**	**2 527**	**2 729**	**3 044**	**3 240**
36	42	47	54	56	69	82
353	305	254	229	209	180	171
28	31	40	49	58	67	90
870	984	1 095	1 176	1 290	1 466	1 601
413	460	471	490	516	552	541
26	38	35	44	46	56	69
41	45	44	47	61	88	122
78	71	83	74	85	98	83
286	303	319	335	363	401	415
70	31	26	29	44	66	65
451	**587**	**744**	**921**	**1 189**	**1 421**	**1 654**
16	17	15	17	20	20	16
11	18	20	18	18	19	21
420	546	700	878	1 144	1 376	1 614
4	6	7	7	7	6	4
15	**16**	**20**	**19**	**24**	**24**	**23**
432	**485**	**502**	**556**	**691**	**936**	**1 116**
281	**382**	**466**	**551**	**692**	**836**	**1 157**
6	**10**	**9**	**10**	**14**	**13**	**15**
9	**7**	**6**	**4**	**6**	**4**	**3**
46	**45**	**50**	**58**	**64**	**55**	**55**
1 791	**1 998**	**2 409**	**2 720**	**2 745**	**3 188**	**3 536**
1 302	**1 383**	**1 418**	**1 543**	**1 616**	**1 703**	**1 791**
88	92	93	102	104	113	123
336	353	317	297	299	329	360
408	454	505	634	705	738	780
6	8	9	9	7	8	9
460	471	489	497	498	513	516
5	5	4	4	2	3	2
448	**475**	**495**	**553**	**599**	**688**	**745**
179	187	191	211	241	261	289
269	288	304	342	359	427	456
23	**30**	**28**	**32**	**32**	**39**	**37**
253	**297**	**409**	**566**	**639**	**584**	**535**
136	**138**	**122**	**150**	**175**	**243**	**319**
37	**49**	**60**	**95**	**135**	**128**	**92**
269	**337**	**350**	**311**	**225**	**176**	**188**
602	**700**	**823**	**913**	**1 057**	**1 229**	**1 354**
37	31	44	45	49	61	63
229	275	306	325	376	438	452
7	14	13	20	23	31	32
138	136	141	158	166	185	211
191	244	318	364	443	515	596

Table 5.15: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and five-year period, 1961–2020, **males**

ICD-10	Site	1961–65	1966–70	1971–75	1976–80	1981–85
C00–96	**All sites**	**354.7**	**385.3**	**420.2**	**467.7**	**506.3**
C00–14	**Mouth, pharynx**	**14.4**	**14.7**	**16.2**	**15.0**	**14.7**
C00	Lip	7.0	7.5	7.8	6.9	5.6
C02–06	Oral cavity	2.9	3.7	3.6	4.1	4.8
C07–08	Salivary glands	0.9	0.9	0.9	0.9	0.8
C09–10, C01, C14	Oropharynx	1.7	0.9	1.8	1.4	1.6
C11	Nasopharynx	0.6	0.6	0.7	0.5	0.6
C12–13	Hypopharynx	1.3	1.0	1.4	1.1	1.2
C15–26	**Digestive organs**	**136.3**	**135.9**	**133.1**	**138.8**	**144.6**
C15	Oesophagus	6.5	5.6	5.7	5.5	5.2
C16	Stomach	63.1	56.9	45.4	39.1	36.1
C17	Small intestine	0.8	1.2	1.0	1.2	1.9
C18	Colon	23.1	25.9	27.7	33.9	39.5
C19–20	Rectum, rectosigmoid	14.2	18.1	20.8	27.4	30.7
C21	Anus	0.6	0.4	0.4	0.5	0.7
C22	Liver	1.6	2.4	3.4	3.1	3.8
C23–24	Gallbladder, bile ducts	1.6	2.0	1.9	2.5	2.6
C25	Pancreas	12.9	15.3	16.3	16.5	18.5
C26	Other digestive organs	11.9	8.0	10.5	9.1	5.5
C30–34, C38	**Respiratory organs**	**31.0**	**40.6**	**47.6**	**58.9**	**67.9**
C30–31	Nose, sinuses	1.7	1.4	1.4	1.4	1.3
C32	Larynx, epiglottis	3.2	4.3	4.2	5.3	5.9
C33–34	Lung, trachea	25.3	34.0	40.9	51.0	59.8
C38	Heart, mediastinum and pleura	0.7	0.8	1.0	1.2	0.9
C40–41	**Bone**	**0.9**	**0.9**	**1.1**	**1.1**	**1.2**
C43	**Melanoma of the skin**	**5.1**	**6.7**	**9.6**	**12.1**	**14.4**
C44	**Skin, non-melanoma**	**6.7**	**7.8**	**14.5**	**15.9**	**18.4**
C45	**Mesothelioma**	**0.2**	**0.2**	**0.4**	**1.1**	**1.4**
C47	**Autonomic nervous system**	**0.8**	**0.9**	**0.6**	**0.5**	**0.4**
C48–49	**Soft tissues**	**1.9**	**2.6**	**3.0**	**3.5**	**2.7**
C50	**Breast**	**0.7**	**0.7**	**0.6**	**0.7**	**0.9**
C60–63	**Male genital organs**	**80.0**	**86.9**	**96.1**	**106.9**	**114.4**
C61	Prostate	73.9	80.9	89.8	99.7	105.9
C62	Testis	4.1	4.4	4.7	5.5	6.7
C60, C63	Other male genital	2.0	1.7	1.6	1.7	1.8
C64–68	**Urinary organs**	**30.8**	**34.3**	**41.5**	**48.7**	**55.1**
C64	Kidney (excl. renal pelvis)	8.8	10.3	10.7	11.7	14.2
C65–68	Urinary tract	22.0	24.0	30.7	37.0	40.9
C69	**Eye**	**1.2**	**1.4**	**1.0**	**1.5**	**1.4**
C70–72	**Central nervous system**	**7.9**	**8.3**	**8.9**	**10.3**	**11.8**
C73	**Thyroid gland**	**1.6**	**2.3**	**2.2**	**2.5**	**2.5**
C37, C74–75	**Other endocrine glands**	**0.6**	**0.9**	**1.4**	**1.4**	**2.3**
C39, C76, C80	**Other or unspecified**	**6.3**	**9.1**	**10.0**	**11.4**	**13.8**
C81–96	**Lymphoid/haematopoietic tissue**	**28.2**	**31.1**	**32.6**	**37.4**	**38.5**
C81	Hodgkin lymphoma	3.2	3.5	3.6	3.6	2.9
C82–86, C96	Non-Hodgkin lymphoma	6.6	8.0	8.1	9.6	11.6
C88	Immunoproliferative disease	0.0	0.1	0.4	0.4	0.6
C90	Multiple myeloma	6.0	6.4	7.8	9.5	9.2
C91–95	Leukaemia	12.3	13.1	12.7	14.3	14.1

1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
531.5	**580.6**	**621.3**	**663.8**	**709.1**	**738.6**	**719.8**
14.8	**14.2**	**14.5**	**12.8**	**13.8**	**15.3**	**15.9**
5.2	3.9	3.2	2.2	2.9	2.7	2.2
4.9	4.9	4.9	4.1	4.2	4.5	4.7
0.9	1.2	1.2	1.1	1.0	1.4	1.4
1.8	2.4	3.2	3.8	4.3	5.5	6.4
0.6	0.5	0.6	0.5	0.3	0.4	0.4
1.5	1.4	1.5	1.1	1.0	0.8	0.9
139.7	**140.3**	**138.7**	**144.0**	**143.7**	**148.9**	**146.4**
5.7	6.2	6.6	7.1	7.5	8.6	9.0
31.5	26.6	22.3	18.5	14.8	13.4	11.1
1.4	1.8	2.2	2.7	3.3	4.2	4.6
43.8	48.3	50.8	54.6	57.1	59.1	57.4
30.6	32.3	32.0	34.7	33.0	33.2	31.0
0.6	1.0	1.0	1.0	1.0	0.9	1.3
3.5	3.3	3.7	4.2	4.9	6.6	8.3
2.8	3.1	3.3	3.4	3.4	3.4	3.0
17.0	16.1	15.2	16.5	16.7	16.8	18.2
2.8	1.7	1.6	1.5	2.0	2.4	2.4
72.4	**75.5**	**77.2**	**80.2**	**79.0**	**76.6**	**69.6**
1.4	1.2	1.1	1.2	1.0	1.1	1.0
6.1	5.7	5.8	5.5	4.8	4.3	3.3
64.6	67.7	69.6	72.7	72.7	70.7	64.8
0.4	0.9	0.8	0.8	0.5	0.4	0.6
1.0	**1.1**	**1.0**	**1.2**	**1.1**	**1.2**	**1.2**
19.5	**23.4**	**23.5**	**25.3**	**30.3**	**39.8**	**44.3**
23.4	**28.2**	**31.9**	**35.7**	**40.9**	**45.0**	**56.9**
2.2	**2.2**	**3.0**	**3.5**	**3.3**	**3.0**	**2.5**
0.4	**0.3**	**0.3**	**0.2**	**0.3**	**0.2**	**0.2**
2.3	**2.6**	**2.6**	**2.6**	**2.8**	**3.0**	**2.6**
0.7	**0.7**	**0.9**	**0.8**	**0.8**	**1.2**	**1.1**
120.1	**146.1**	**175.2**	**193.7**	**223.6**	**227.3**	**203.1**
111.2	135.7	163.5	181.0	209.6	213.1	189.4
7.3	8.6	9.9	10.6	11.9	12.0	11.0
1.5	1.8	1.7	2.1	2.1	2.1	2.6
58.5	**62.0**	**60.3**	**64.7**	**67.0**	**72.7**	**74.2**
14.4	14.8	15.3	17.7	19.5	22.9	22.9
44.0	47.2	45.0	47.1	47.5	49.7	51.3
1.3	**1.4**	**1.6**	**1.5**	**1.6**	**1.5**	**1.6**
13.1	**13.7**	**17.1**	**20.5**	**21.9**	**21.3**	**16.9**
2.6	**2.4**	**2.3**	**2.6**	**3.2**	**4.0**	**5.0**
2.2	**2.7**	**3.3**	**4.2**	**5.5**	**5.0**	**3.5**
16.3	**18.4**	**17.3**	**13.2**	**9.1**	**7.2**	**6.4**
41.1	**45.5**	**50.8**	**57.0**	**61.3**	**65.6**	**68.3**
2.4	2.3	2.7	3.1	3.3	3.3	3.2
14.8	16.2	18.4	18.3	21.4	22.4	22.0
0.5	1.0	1.4	1.9	1.7	1.9	2.1
9.7	9.0	8.7	9.6	9.7	10.2	11.3
13.7	16.9	19.5	24.2	25.2	27.9	29.7

Table 5.16: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and five-year period, 1961–2020, **females**

ICD-10	Site	1961–65	1966–70	1971–75	1976–80	1981–85
C00–96	**All sites**	**291.0**	**309.7**	**326.8**	**357.7**	**375.1**
C00–14	**Mouth, pharynx**	**4.5**	**4.5**	**4.3**	**4.6**	**4.8**
C00	Lip	0.3	0.4	0.4	0.4	0.7
C02–06	Oral cavity	1.5	2.0	1.9	2.2	2.3
C07–08	Salivary glands	0.9	0.8	0.7	0.7	0.7
C09–10, C01, C14	Oropharynx	0.8	0.6	0.7	0.7	0.6
C11	Nasopharynx	0.3	0.2	0.3	0.3	0.2
C12–13	Hypopharynx	0.6	0.4	0.4	0.3	0.3
C15–26	**Digestive organs**	**98.3**	**96.1**	**93.1**	**100.2**	**100.1**
C15	Oesophagus	2.0	1.9	1.6	1.6	1.7
C16	Stomach	37.8	30.9	23.5	20.8	18.1
C17	Small intestine	0.6	0.7	1.0	0.9	1.3
C18	Colon	22.7	25.6	27.0	33.0	36.0
C19–20	Rectum, rectosigmoid	8.5	11.9	13.8	17.2	18.5
C21	Anus	0.5	0.8	0.7	1.0	1.2
C22	Liver	0.9	1.1	1.6	1.7	2.1
C23–24	Gallbladder, bile ducts	3.4	3.6	2.6	3.4	3.8
C25	Pancreas	7.6	9.2	9.8	10.7	12.2
C26	Other digestive organs	14.3	10.3	11.4	10.0	5.2
C30–34, C38	**Respiratory organs**	**6.9**	**9.0**	**10.3**	**12.1**	**15.9**
C30–31	Nose, sinuses	0.9	0.8	0.8	0.7	0.6
C32	Larynx, epiglottis	0.3	0.3	0.4	0.5	0.5
C33–34	Lung, trachea	5.2	7.6	8.7	10.7	14.6
C38	Heart, mediastinum and pleura	0.5	0.3	0.4	0.3	0.2
C40–41	**Bone**	**0.5**	**0.6**	**0.7**	**0.6**	**0.6**
C43	**Melanoma of the skin**	**5.3**	**7.1**	**10.0**	**14.0**	**17.2**
C44	**Skin, non-melanoma**	**3.4**	**3.2**	**6.6**	**8.0**	**9.9**
C45	**Mesothelioma**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**
C47	**Autonomic nervous system**	**0.6**	**0.7**	**0.5**	**0.3**	**0.3**
C48–49	**Soft tissues**	**1.7**	**1.6**	**2.2**	**2.2**	**2.2**
C50	**Breast**	**64.8**	**68.6**	**73.8**	**78.5**	**83.3**
C51–58	**Female genital organs**	**56.8**	**62.2**	**65.5**	**67.0**	**64.7**
C51–52, C57.7–9	Other female genital	4.1	3.5	3.7	4.3	3.8
C53	Cervix uteri	21.0	22.7	24.7	22.3	18.7
C54	Corpus uteri	12.7	14.4	16.2	19.0	19.4
C55	Uterus, other	1.4	1.0	0.5	0.4	0.3
C56, C57.0–4, C48.2	Ovary etc.	17.3	20.4	20.2	20.9	22.3
C58	Placenta	0.1	0.2	0.1	0.1	0.2
C64–68	**Urinary organs**	**14.0**	**15.2**	**16.8**	**18.4**	**18.9**
C64	Kidney (excl. renal pelvis)	5.4	6.2	6.1	6.8	7.0
C65–68	Urinary tract	8.6	9.0	10.7	11.6	11.9
C69	**Eye**	**1.0**	**1.0**	**0.9**	**1.1**	**1.1**
C70–72	**Central nervous system**	**6.8**	**7.1**	**7.4**	**9.5**	**10.6**
C73	**Thyroid gland**	**3.6**	**4.9**	**5.9**	**6.9**	**7.1**
C37, C74–75	**Other endocrine glands**	**0.4**	**0.6**	**0.8**	**1.5**	**2.4**
C39, C76, C80	**Other or unspecified**	**4.4**	**5.8**	**5.7**	**8.2**	**10.2**
C81–96	**Lymphoid/haematopoietic tissue**	**17.9**	**21.3**	**22.3**	**24.5**	**25.7**
C81	Hodgkin lymphoma	2.2	2.5	2.2	2.2	1.7
C82–86, C96	Non-Hodgkin lymphoma	4.3	5.8	5.7	7.1	9.0
C88	Immunoproliferative disease	0.0	0.0	0.2	0.2	0.3
C90	Multiple myeloma	3.6	4.5	5.5	6.1	6.0
C91–95	Leukaemia	7.7	8.6	8.7	8.9	8.7

1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
389.6	**419.8**	**455.7**	**490.8**	**512.1**	**542.9**	**556.6**
5.1	**5.4**	**5.7**	**6.0**	**7.3**	**7.6**	**8.2**
0.8	0.9	0.6	0.8	1.4	1.3	1.4
2.6	2.7	2.7	2.7	3.0	3.0	3.3
0.6	0.8	0.9	0.8	1.0	1.0	1.0
0.6	0.7	1.1	1.2	1.6	1.8	2.1
0.2	0.1	0.1	0.2	0.2	0.2	0.2
0.3	0.2	0.3	0.3	0.2	0.2	0.2
96.7	**98.1**	**99.1**	**101.2**	**104.7**	**110.6**	**108.5**
1.6	1.8	1.9	2.2	2.1	2.5	2.7
15.3	12.6	10.2	9.0	7.9	6.5	5.8
1.3	1.4	1.7	2.1	2.3	2.5	3.1
38.4	41.8	45.1	46.9	49.2	52.9	53.1
18.3	20.1	19.8	20.0	20.3	20.5	18.5
1.3	1.8	1.5	1.9	1.9	2.1	2.4
1.8	1.9	1.8	1.9	2.3	3.2	4.1
3.4	3.0	3.3	2.9	3.3	3.5	2.8
12.4	12.6	12.7	13.2	13.8	14.5	13.8
3.1	1.3	1.0	1.1	1.6	2.4	2.2
21.2	**27.2**	**33.9**	**40.1**	**48.3**	**53.3**	**55.6**
0.7	0.7	0.7	0.7	0.8	0.7	0.6
0.5	0.8	0.9	0.8	0.7	0.7	0.7
19.7	25.4	32.0	38.3	46.5	51.6	54.2
0.2	0.2	0.3	0.3	0.3	0.2	0.1
0.7	**0.8**	**0.9**	**0.8**	**1.0**	**0.9**	**0.9**
21.2	**22.8**	**22.5**	**24.0**	**28.2**	**35.7**	**39.6**
12.3	**15.9**	**18.3**	**20.7**	**24.9**	**28.5**	**37.1**
0.3	**0.4**	**0.4**	**0.4**	**0.6**	**0.5**	**0.5**
0.4	**0.3**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**
2.2	**2.0**	**2.2**	**2.5**	**2.6**	**2.1**	**2.0**
86.0	**93.1**	**111.2**	**120.5**	**113.8**	**123.1**	**127.6**
63.4	**65.1**	**64.2**	**66.4**	**66.1**	**65.0**	**63.1**
3.9	4.0	3.8	4.1	4.0	4.1	4.2
16.5	16.6	14.4	12.8	12.4	13.0	13.6
20.0	21.7	23.4	27.6	29.1	28.0	27.0
0.3	0.3	0.4	0.3	0.3	0.3	0.3
22.4	22.3	22.1	21.4	20.3	19.5	17.9
0.2	0.2	0.2	0.2	0.1	0.1	0.1
19.9	**20.3**	**20.6**	**22.4**	**23.5**	**25.3**	**25.2**
8.1	8.1	8.1	8.7	9.6	9.8	10.0
11.8	12.2	12.5	13.7	13.9	15.4	15.2
1.0	**1.4**	**1.2**	**1.3**	**1.3**	**1.5**	**1.3**
12.3	**13.9**	**18.3**	**24.7**	**26.3**	**22.6**	**19.3**
6.5	**6.4**	**5.4**	**6.4**	**7.3**	**9.6**	**11.9**
1.8	**2.3**	**2.8**	**4.2**	**5.7**	**5.0**	**3.4**
11.7	**14.1**	**13.9**	**11.6**	**8.1**	**5.9**	**6.0**
27.0	**30.4**	**34.7**	**37.3**	**41.9**	**45.6**	**46.4**
1.6	1.4	1.9	1.9	2.1	2.4	2.4
10.6	12.3	13.3	13.6	15.1	16.4	15.4
0.3	0.6	0.5	0.8	0.9	1.1	1.1
6.0	5.6	5.8	6.4	6.5	6.7	7.1
8.5	10.4	13.2	14.6	17.4	19.0	20.4

Table 5.17: Average annual number of new cases by primary site and county, 2016–2020, **males**

ICD-10	Site	Norway	Viken	Oslo	Innlandet
C00–96	**All sites**	**18 794**	**4 376**	**1 757**	**1 476**
C00–14	**Mouth, pharynx**	**422**	**100**	**47**	**30**
C00	Lip	54	10	5	5
C02–06	Oral cavity	124	31	12	10
C07–08	Salivary glands	36	11	3	2
C09–10, C01, C14	Oropharynx	175	44	21	11
C11	Nasopharynx	10	1	2	1
C12–13	Hypopharynx	23	3	4	2
C15–26	**Digestive organs**	**3 812**	**835**	**344**	**316**
C15	Oesophagus	238	50	22	21
C16	Stomach	284	60	23	19
C17	Small intestine	122	26	11	9
C18	Colon	1 478	328	122	119
C19–20	Rectum, rectosigmoid	820	170	70	77
C21	Anus	35	7	7	3
C22	Liver	218	47	24	20
C23–24	Gallbladder, bile ducts	80	20	8	6
C25	Pancreas	475	111	48	36
C26	Other digestive organs	62	14	8	5
C30–34, C38	**Respiratory organs**	**1 825**	**388**	**157**	**148**
C30–31	Nose, sinuses	27	4	4	3
C32	Larynx, epiglottis	86	17	10	5
C33–34	Lung, trachea	1 698	362	142	138
C38	Heart, mediastinum and pleura	13	5	2	1
C40–41	**Bone**	**33**	**6**	**5**	**2**
C43	**Melanoma of the skin**	**1 164**	**289**	**116**	**86**
C44	**Skin, non-melanoma**	**1 354**	**337**	**115**	**89**
C45	**Mesothelioma**	**65**	**18**	**3**	**4**
C47	**Autonomic nervous system**	**5**	**1**	**1**	**0**
C48–49	**Soft tissues**	**68**	**17**	**7**	**5**
C50	**Breast**	**30**	**6**	**3**	**2**
C60–63	**Male genital organs**	**5 425**	**1 324**	**499**	**431**
C61	Prostate	5 060	1 249	454	404
C62	Testis	298	61	38	23
C60, C63	Other male genital	67	14	7	5
C64–68	**Urinary organs**	**1 932**	**444**	**179**	**155**
C64	Kidney (excl. renal pelvis)	616	142	57	46
C65–68	Urinary tract	1 317	302	122	109
C69	**Eye**	**42**	**9**	**4**	**4**
C70–72	**Central nervous system**	**451**	**103**	**47**	**29**
C73	**Thyroid gland**	**134**	**26**	**17**	**7**
C37, C74–75	**Other endocrine glands**	**95**	**26**	**7**	**5**
C39, C76, C80	**Other or unspecified**	**152**	**39**	**11**	**12**
C81–96	**Lymphoid/haematopoietic tissue**	**1 786**	**409**	**192**	**152**
C81	Hodgkin lymphoma	88	21	10	6
C82–86, C96	Non-Hodgkin lymphoma	581	126	64	52
C88	Immunoproliferative disease	53	10	6	2
C90	Multiple myeloma	295	71	28	29
C91–95	Leukaemia	769	182	84	63

Vestfold og Telemark	Agder	Rogaland	Vestland	Møre og Romsdal	Trøndelag	Nordland	Troms og Finnmark
1 667	**1 088**	**1 712**	**2 281**	**1 008**	**1 574**	**965**	**891**
41	**24**	**32**	**47**	**21**	**32**	**23**	**24**
5	4	7	7	2	5	2	3
14	8	9	12	8	6	6	7
3	3	2	5	1	3	1	1
16	8	12	19	8	14	11	11
1	0	1	1	1	1	0	1
3	1	2	4	0	2	2	1
330	**211**	**310**	**480**	**235**	**337**	**216**	**198**
23	16	23	25	12	21	12	12
24	16	19	39	19	24	21	20
11	7	10	18	7	11	5	7
130	80	124	193	98	134	82	67
68	39	68	108	49	74	54	41
3	1	3	4	2	2	2	2
18	14	17	22	14	20	10	11
7	3	6	12	4	5	3	6
42	30	35	53	26	41	25	27
5	5	4	7	3	4	2	4
163	**124**	**164**	**228**	**103**	**140**	**104**	**107**
3	2	2	3	1	2	1	2
9	5	5	13	6	7	5	3
149	117	156	210	96	131	96	102
1	1	1	1	0	0	1	0
2	**2**	**3**	**4**	**1**	**5**	**1**	**2**
124	**75**	**101**	**144**	**39**	**114**	**37**	**38**
143	**105**	**131**	**186**	**45**	**102**	**54**	**47**
6	**6**	**7**	**10**	**2**	**4**	**4**	**1**
1	**0**	**1**	**1**	**0**	**0**	**0**	**0**
6	**4**	**4**	**6**	**5**	**4**	**4**	**5**
1	**3**	**3**	**4**	**2**	**3**	**1**	**1**
424	**289**	**564**	**629**	**291**	**448**	**280**	**246**
392	266	530	583	273	420	265	225
25	21	28	37	14	22	13	16
7	2	6	9	4	5	3	6
183	**106**	**152**	**220**	**122**	**157**	**116**	**98**
59	37	45	74	35	54	37	29
124	68	108	146	88	103	79	69
4	**2**	**3**	**4**	**3**	**4**	**2**	**2**
36	**25**	**50**	**54**	**19**	**37**	**28**	**22**
12	**8**	**9**	**17**	**5**	**15**	**7**	**11**
8	**5**	**12**	**16**	**3**	**6**	**4**	**4**
16	**9**	**12**	**19**	**9**	**12**	**8**	**6**
165	**89**	**156**	**211**	**103**	**155**	**76**	**78**
8	6	6	10	6	6	4	4
49	32	49	71	34	51	24	30
8	1	5	5	5	7	4	3
30	13	23	39	16	23	12	11
69	38	73	87	43	68	32	30

Table 5.18: Average annual number of new cases by primary site and county, 2016–2020, **females**

ICD-10	Site	Norway	Viken	Oslo	Innlandet
C00–96	**All sites**	**16 101**	**3 770**	**1 664**	**1 275**
C00–14	**Mouth, pharynx**	**238**	**54**	**28**	**20**
C00	Lip	42	8	5	3
C02–06	Oral cavity	98	19	12	9
C07–08	Salivary glands	30	10	3	2
C09–10, C01, C14	Oropharynx	58	15	7	7
C11	Nasopharynx	6	1	0	0
C12–13	Hypopharynx	5	1	2	0
C15–26	**Digestive organs**	**3 240**	**724**	**315**	**271**
C15	Oesophagus	82	17	10	8
C16	Stomach	171	36	18	13
C17	Small intestine	90	22	9	8
C18	Colon	1 601	356	145	132
C19–20	Rectum, rectosigmoid	541	119	53	44
C21	Anus	69	17	8	5
C22	Liver	122	25	14	14
C23–24	Gallbladder, bile ducts	83	18	9	9
C25	Pancreas	415	98	41	34
C26	Other digestive organs	65	17	8	5
C30–34, C38	**Respiratory organs**	**1 654**	**383**	**160**	**137**
C30–31	Nose, sinuses	16	3	2	2
C32	Larynx, epiglottis	21	4	3	2
C33–34	Lung, trachea	1 614	374	154	134
C38	Heart, mediastinum and pleura	4	1	1	0
C40–41	**Bone**	**23**	**6**	**2**	**1**
C43	**Melanoma of the skin**	**1 116**	**259**	**109**	**81**
C44	**Skin, non-melanoma**	**1 157**	**280**	**93**	**68**
C45	**Mesothelioma**	**15**	**3**	**2**	**2**
C47	**Autonomic nervous system**	**3**	**1**	**0**	**0**
C48–49	**Soft tissues**	**55**	**12**	**9**	**5**
C50	**Breast**	**3 536**	**875**	**405**	**267**
C51–58	**Female genital organs**	**1 791**	**417**	**192**	**160**
C51–52, C57.7–9	Other female genital	123	27	13	10
C53	Cervix uteri	360	82	46	30
C54	Corpus uteri	780	185	79	74
C55	Uterus, other	9	2	1	0
C56, C57.0–4, C48.2	Ovary etc.	516	120	53	45
C58	Placenta	2	0	0	0
C64–68	**Urinary organs**	**745**	**173**	**68**	**60**
C64	Kidney (excl. renal pelvis)	289	70	21	22
C65–68	Urinary tract	456	103	47	38
C69	**Eye**	**37**	**9**	**4**	**4**
C70–72	**Central nervous system**	**535**	**119**	**54**	**43**
C73	**Thyroid gland**	**319**	**66**	**49**	**18**
C37, C74–75	**Other endocrine glands**	**92**	**24**	**10**	**6**
C39, C76, C80	**Other or unspecified**	**188**	**41**	**17**	**19**
C81–96	**Lymphoid/haematopoietic tissue**	**1 354**	**323**	**145**	**112**
C81	Hodgkin lymphoma	63	14	8	5
C82–86, C96	Non-Hodgkin lymphoma	452	98	43	38
C88	Immunoproliferative disease	32	6	4	1
C90	Multiple myeloma	211	54	19	20
C91–95	Leukaemia	596	151	70	47

Vestfold og Telemark	Agder	Rogaland	Vestland	Møre og Romsdal	Trøndelag	Nordland	Troms og Finnmark
1 459	**954**	**1 332**	**1 921**	**796**	**1 374**	**814**	**743**
20	**13**	**18**	**26**	**11**	**23**	**12**	**12**
5	4	3	5	2	6	1	1
8	5	8	13	5	8	6	6
2	2	2	3	2	2	2	1
5	3	4	4	2	6	2	4
0	0	1	1	0	1	0	0
1	0	0	0	0	0	0	0
289	**182**	**246**	**392**	**191**	**290**	**184**	**156**
8	6	4	6	6	8	6	4
13	11	9	22	10	18	10	10
7	6	8	10	5	10	4	2
147	92	126	197	103	139	89	74
53	24	40	68	32	53	31	24
9	3	5	8	2	3	5	3
8	7	10	14	4	13	6	8
6	4	8	10	3	8	4	5
35	25	30	51	22	33	24	23
4	5	4	6	4	5	3	3
136	**110**	**136**	**179**	**86**	**142**	**99**	**87**
2	1	2	1	0	1	1	1
1	1	1	2	1	2	2	1
133	108	133	175	84	139	96	85
0	0	0	1	0	0	0	0
2	**1**	**2**	**2**	**2**	**2**	**1**	**1**
118	**80**	**104**	**137**	**40**	**118**	**32**	**39**
126	**100**	**115**	**177**	**36**	**75**	**47**	**40**
1	**1**	**1**	**1**	**1**	**1**	**1**	**0**
0	**0**	**0**	**0**	**0**	**1**	**0**	**0**
5	**3**	**3**	**5**	**3**	**5**	**2**	**1**
304	**193**	**294**	**411**	**191**	**296**	**162**	**139**
161	**101**	**144**	**218**	**80**	**145**	**85**	**87**
12	7	8	16	5	12	8	5
34	17	32	43	13	27	17	18
68	45	57	100	33	68	36	34
1	1	1	1	1	0	0	1
46	30	46	58	28	38	24	28
0	0	0	0	0	0	0	1
71	**39**	**57**	**75**	**36**	**67**	**52**	**49**
27	16	23	33	13	28	20	17
44	24	34	42	23	39	31	31
4	**2**	**2**	**4**	**1**	**4**	**2**	**2**
49	**26**	**52**	**70**	**21**	**40**	**32**	**30**
31	**14**	**19**	**37**	**15**	**33**	**19**	**20**
6	**6**	**11**	**13**	**2**	**4**	**3**	**4**
17	**11**	**14**	**23**	**9**	**13**	**14**	**10**
119	**72**	**113**	**151**	**72**	**115**	**66**	**66**
4	4	6	8	4	5	3	3
41	26	37	54	24	40	26	25
3	1	3	4	1	5	3	1
19	10	16	23	11	14	14	11
52	30	52	63	32	51	22	26

Table 5.19: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and county, 2016–2020, **males**

ICD-10	Site	Norway	Viken	Oslo	Innlandet
C00–96	**All sites**	**719.8**	**726.8**	**701.3**	**669.2**
C00–14	**Mouth, pharynx**	**15.9**	**16.1**	**18.1**	**14.0**
C00	Lip	2.2	1.7	2.2	2.4
C02–06	Oral cavity	4.7	5.0	4.5	4.4
C07–08	Salivary glands	1.4	1.8	1.2	1.0
C09–10, C01, C14	Oropharynx	6.4	6.8	7.8	5.2
C11	Nasopharynx	0.4	0.2	0.6	0.3
C12–13	Hypopharynx	0.9	0.5	1.7	0.7
C15–26	**Digestive organs**	**146.4**	**139.0**	**138.8**	**142.6**
C15	Oesophagus	9.0	8.1	8.8	9.5
C16	Stomach	11.1	10.1	9.1	8.5
C17	Small intestine	4.6	4.1	3.9	4.2
C18	Colon	57.4	55.6	50.3	53.9
C19–20	Rectum, rectosigmoid	31.0	27.8	27.7	34.8
C21	Anus	1.3	1.2	2.7	1.2
C22	Liver	8.3	7.7	9.4	9.1
C23–24	Gallbladder, bile ducts	3.0	3.4	3.1	2.7
C25	Pancreas	18.2	18.5	20.2	16.3
C26	Other digestive organs	2.4	2.5	3.5	2.3
C30–34, C38	**Respiratory organs**	**69.6**	**64.4**	**64.8**	**64.7**
C30–31	Nose, sinuses	1.0	0.6	1.4	1.4
C32	Larynx, epiglottis	3.3	2.8	4.0	2.2
C33–34	Lung, trachea	64.8	60.1	58.5	60.6
C38	Heart, mediastinum and pleura	0.6	0.9	0.8	0.5
C40–41	**Bone**	**1.2**	**1.0**	**1.6**	**1.4**
C43	**Melanoma of the skin**	**44.3**	**47.7**	**45.0**	**39.8**
C44	**Skin, non-melanoma**	**56.9**	**61.7**	**55.3**	**41.9**
C45	**Mesothelioma**	**2.5**	**3.1**	**1.5**	**1.7**
C47	**Autonomic nervous system**	**0.2**	**0.2**	**0.2**	**0.1**
C48–49	**Soft tissues**	**2.6**	**2.8**	**2.5**	**2.4**
C50	**Breast**	**1.1**	**1.0**	**1.2**	**0.7**
C60–63	**Male genital organs**	**203.1**	**215.4**	**194.2**	**193.0**
C61	Prostate	189.4	202.8	182.1	177.5
C62	Testis	11.0	10.3	9.4	13.3
C60, C63	Other male genital	2.6	2.3	2.8	2.2
C64–68	**Urinary organs**	**74.2**	**73.7**	**72.6**	**69.9**
C64	Kidney (excl. renal pelvis)	22.9	22.7	21.9	20.9
C65–68	Urinary tract	51.3	51.0	50.7	48.9
C69	**Eye**	**1.6**	**1.6**	**1.4**	**1.8**
C70–72	**Central nervous system**	**16.9**	**16.7**	**15.9**	**13.9**
C73	**Thyroid gland**	**5.0**	**4.1**	**5.8**	**3.3**
C37, C74–75	**Other endocrine glands**	**3.5**	**4.2**	**2.7**	**2.3**
C39, C76, C80	**Other or unspecified**	**6.4**	**7.0**	**5.0**	**5.6**
C81–96	**Lymphoid/haematopoietic tissue**	**68.3**	**67.2**	**74.8**	**70.2**
C81	Hodgkin lymphoma	3.2	3.3	3.0	3.4
C82–86, C96	Non-Hodgkin lymphoma	22.0	20.3	24.9	23.9
C88	Immunoproliferative disease	2.1	1.7	2.5	0.7
C90	Multiple myeloma	11.3	11.9	11.1	12.7
C91–95	Leukaemia	29.7	30.0	33.3	29.5

Vestfold og Telemark	Agder	Rogaland	Vestland	Møre og Romsdal	Trøndelag	Nordland	Troms og Finnmark
735.6	**730.2**	**823.7**	**737.3**	**697.6**	**676.7**	**695.4**	**702.5**
17.7	**16.2**	**14.9**	**15.0**	**14.6**	**13.8**	**16.2**	**18.6**
2.2	2.8	3.4	2.2	1.5	2.3	1.2	2.1
6.1	5.3	4.2	4.0	5.7	2.9	4.5	5.3
1.0	1.9	0.8	1.5	1.0	1.5	1.2	1.2
6.7	5.6	5.2	6.0	5.7	5.8	8.0	8.4
0.4	0.0	0.4	0.2	0.5	0.5	0.3	0.9
1.2	0.5	0.8	1.1	0.2	0.7	1.1	0.9
145.3	**141.8**	**151.0**	**155.2**	**164.1**	**145.4**	**155.4**	**154.9**
9.9	10.5	11.2	7.9	7.9	9.2	9.0	9.2
11.1	10.7	9.4	12.9	13.8	10.4	15.2	15.4
5.0	4.3	4.9	5.7	4.9	4.7	4.0	5.6
57.2	55.1	61.6	62.9	68.2	57.9	58.9	52.8
29.7	26.6	31.9	34.6	33.5	31.3	38.3	31.9
1.3	0.6	1.4	1.2	1.7	0.7	1.4	1.5
7.8	9.1	8.2	7.2	10.1	9.1	7.5	9.1
2.8	2.0	3.1	3.7	3.1	2.3	1.8	4.3
18.0	19.8	17.4	16.8	18.5	17.8	18.1	21.4
2.4	3.2	1.9	2.3	2.4	1.8	1.1	3.6
69.8	**81.4**	**80.0**	**73.6**	**70.5**	**59.2**	**73.6**	**85.0**
1.3	1.1	0.9	1.1	0.6	0.9	0.8	1.4
4.1	2.9	2.6	4.2	4.0	2.8	4.0	2.5
63.8	77.0	76.2	67.8	65.7	55.4	68.2	80.7
0.6	0.5	0.4	0.4	0.3	0.2	0.4	0.3
1.0	**1.4**	**1.2**	**1.2**	**0.6**	**1.9**	**0.5**	**1.4**
54.7	**50.0**	**48.3**	**46.5**	**26.9**	**48.9**	**27.3**	**29.6**
68.4	**77.1**	**70.9**	**64.7**	**33.7**	**47.8**	**41.7**	**40.2**
2.5	**4.2**	**3.8**	**3.2**	**1.5**	**1.6**	**2.5**	**0.7**
0.4	**0.0**	**0.2**	**0.3**	**0.0**	**0.1**	**0.2**	**0.0**
2.9	**3.0**	**2.0**	**1.8**	**3.5**	**1.8**	**2.8**	**3.8**
0.4	**2.3**	**1.4**	**1.5**	**1.4**	**1.1**	**0.9**	**1.2**
184.2	**188.8**	**262.3**	**199.2**	**196.4**	**187.7**	**197.5**	**188.5**
168.4	173.3	248.1	184.8	182.5	176.1	184.5	171.3
12.6	13.8	11.4	11.3	11.1	9.5	11.0	12.6
3.2	1.7	2.8	3.1	2.8	2.1	2.1	4.6
80.7	**70.4**	**74.8**	**71.1**	**85.0**	**68.0**	**84.3**	**79.0**
25.9	23.7	20.8	23.2	24.2	23.2	26.9	21.6
54.7	46.8	53.9	47.9	60.7	44.8	57.4	57.4
1.9	**1.5**	**1.4**	**1.4**	**1.8**	**1.8**	**1.4**	**1.4**
16.3	**16.4**	**22.3**	**17.4**	**13.2**	**16.2**	**20.8**	**17.7**
5.5	**5.5**	**4.0**	**5.5**	**3.9**	**6.2**	**5.3**	**8.7**
3.6	**3.1**	**5.1**	**5.0**	**1.8**	**2.5**	**3.2**	**3.0**
7.5	**6.8**	**6.4**	**6.5**	**6.7**	**5.4**	**6.3**	**5.9**
72.8	**60.3**	**73.7**	**68.3**	**72.1**	**67.4**	**55.5**	**62.9**
3.8	3.9	2.6	3.2	4.2	2.6	3.4	3.0
21.7	21.7	22.1	22.8	23.4	21.4	17.4	24.0
3.3	0.5	2.3	1.5	3.4	3.0	2.8	2.3
13.2	8.9	11.0	12.5	10.8	10.3	8.8	9.3
30.8	25.3	35.7	28.3	30.3	30.1	23.0	24.4

Table 5.20: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and county, 2016–2020, **females**

ICD-10	Site	Norway	Viken	Oslo	Innlandet
C00–96	**All sites**	**556.6**	**557.2**	**545.9**	**535.3**
C00–14	**Mouth, pharynx**	**8.2**	**7.9**	**9.3**	**8.6**
C00	Lip	1.4	1.1	1.7	1.1
C02–06	Oral cavity	3.3	2.7	3.8	3.6
C07–08	Salivary glands	1.0	1.5	0.9	0.8
C09–10, C01, C14	Oropharynx	2.1	2.2	2.4	3.0
C11	Nasopharynx	0.2	0.2	0.1	0.1
C12–13	Hypopharynx	0.2	0.2	0.5	0.1
C15–26	**Digestive organs**	**108.5**	**104.4**	**104.7**	**107.1**
C15	Oesophagus	2.7	2.4	3.6	2.9
C16	Stomach	5.8	5.2	6.0	5.2
C17	Small intestine	3.1	3.2	3.0	3.5
C18	Colon	53.1	51.1	47.6	51.4
C19–20	Rectum, rectosigmoid	18.5	17.4	17.9	18.0
C21	Anus	2.4	2.6	2.7	1.9
C22	Liver	4.1	3.6	4.5	5.7
C23–24	Gallbladder, bile ducts	2.8	2.5	2.9	3.5
C25	Pancreas	13.8	14.0	13.7	12.9
C26	Other digestive organs	2.2	2.5	2.7	2.1
C30–34, C38	**Respiratory organs**	**55.6**	**54.8**	**53.8**	**54.0**
C30–31	Nose, sinuses	0.6	0.5	0.7	0.8
C32	Larynx, epiglottis	0.7	0.6	1.2	0.7
C33–34	Lung, trachea	54.2	53.5	51.7	52.4
C38	Heart, mediastinum and pleura	0.1	0.2	0.2	0.1
C40–41	**Bone**	**0.9**	**1.0**	**0.8**	**0.7**
C43	**Melanoma of the skin**	**39.6**	**39.2**	**34.7**	**36.0**
C44	**Skin, non-melanoma**	**37.1**	**39.2**	**29.2**	**24.5**
C45	**Mesothelioma**	**0.5**	**0.4**	**0.7**	**0.9**
C47	**Autonomic nervous system**	**0.1**	**0.1**	**0.1**	**0.0**
C48–49	**Soft tissues**	**2.0**	**1.9**	**3.0**	**2.0**
C50	**Breast**	**127.6**	**133.3**	**134.7**	**120.0**
C51–58	**Female genital organs**	**63.1**	**62.2**	**62.2**	**70.7**
C51–52, C57.7–9	Other female genital	4.2	4.0	4.5	4.2
C53	Cervix uteri	13.6	13.3	13.1	16.5
C54	Corpus uteri	27.0	27.0	26.8	30.9
C55	Uterus, other	0.3	0.2	0.2	0.1
C56, C57.0–4, C48.2	Ovary etc.	17.9	17.6	17.6	19.0
C58	Placenta	0.1	0.1	0.1	0.0
C64–68	**Urinary organs**	**25.2**	**25.1**	**22.8**	**24.0**
C64	Kidney (excl. renal pelvis)	10.0	10.4	7.0	9.1
C65–68	Urinary tract	15.2	14.7	15.8	14.9
C69	**Eye**	**1.3**	**1.4**	**1.3**	**1.8**
C70–72	**Central nervous system**	**19.3**	**18.4**	**17.4**	**19.4**
C73	**Thyroid gland**	**11.9**	**10.5**	**14.6**	**9.4**
C37, C74–75	**Other endocrine glands**	**3.4**	**3.9**	**3.3**	**3.1**
C39, C76, C80	**Other or unspecified**	**6.0**	**5.7**	**5.4**	**7.4**
C81–96	**Lymphoid/haematopoietic tissue**	**46.4**	**47.5**	**47.9**	**45.9**
C81	Hodgkin lymphoma	2.4	2.3	2.3	2.6
C82–86, C96	Non-Hodgkin lymphoma	15.4	14.3	14.5	15.6
C88	Immunoproliferative disease	1.1	0.8	1.4	0.5
C90	Multiple myeloma	7.1	7.9	6.5	7.7
C91–95	Leukaemia	20.4	22.2	23.1	19.4

Vestfold og Telemark	Agder	Rogaland	Vestland	Møre og Romsdal	Trøndelag	Nordland	Troms og Finnmark
575.7	**575.2**	**580.8**	**566.2**	**521.5**	**546.8**	**557.6**	**557.6**
8.0	**7.5**	**7.8**	**7.9**	**6.9**	**8.8**	**7.9**	**9.0**
1.8	2.1	1.5	1.4	0.9	2.1	0.8	0.4
3.0	2.7	3.6	3.8	3.1	3.1	4.2	4.2
0.8	0.9	0.7	0.9	1.0	0.8	1.0	1.0
2.1	1.7	1.7	1.2	1.6	2.4	1.6	3.1
0.1	0.1	0.4	0.4	0.2	0.3	0.0	0.2
0.2	0.0	0.0	0.1	0.1	0.1	0.3	0.0
108.9	**105.9**	**106.3**	**111.2**	**117.8**	**110.3**	**119.1**	**113.3**
2.8	3.3	2.0	1.7	3.5	2.8	3.7	2.8
5.0	6.7	4.0	6.2	6.0	6.8	6.7	7.6
2.7	3.7	3.4	2.8	3.3	3.9	3.0	1.3
55.0	53.3	54.1	55.6	62.5	52.0	56.9	52.9
20.4	14.1	17.7	19.9	20.9	20.6	20.9	17.5
3.5	1.9	2.2	2.6	1.6	1.3	3.9	2.6
3.0	3.9	4.5	3.9	2.7	5.2	3.7	6.0
2.2	2.2	3.6	2.8	1.6	3.1	2.7	3.3
12.9	14.1	13.2	14.0	13.2	12.4	15.3	17.1
1.4	2.9	1.6	1.8	2.5	2.1	2.2	2.1
51.3	**64.6**	**59.7**	**51.4**	**54.2**	**54.0**	**64.3**	**62.4**
0.8	0.4	0.8	0.3	0.1	0.4	0.6	0.6
0.6	0.8	0.6	0.5	0.7	0.7	1.1	1.1
49.9	63.4	58.3	50.2	53.2	52.9	62.7	60.6
0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.2
0.6	**0.7**	**0.9**	**0.8**	**1.3**	**0.9**	**0.8**	**0.9**
48.5	**50.5**	**45.6**	**41.2**	**27.6**	**48.9**	**23.9**	**30.2**
45.0	**56.4**	**48.6**	**47.1**	**20.5**	**27.8**	**29.3**	**29.1**
0.2	**0.5**	**0.6**	**0.2**	**0.8**	**0.3**	**0.9**	**0.3**
0.2	**0.1**	**0.2**	**0.0**	**0.2**	**0.4**	**0.2**	**0.1**
2.0	**2.1**	**1.5**	**1.6**	**2.0**	**2.2**	**1.7**	**0.9**
126.2	**122.0**	**130.1**	**128.2**	**133.4**	**123.6**	**119.3**	**109.5**
65.9	**61.8**	**63.3**	**66.1**	**54.4**	**59.3**	**60.6**	**67.9**
4.5	4.4	3.6	4.6	2.8	4.6	5.2	3.8
15.9	11.5	13.9	14.2	10.6	12.1	14.4	15.6
26.6	26.7	25.2	29.6	21.9	27.2	24.1	26.1
0.4	0.8	0.3	0.4	0.5	0.0	0.1	0.6
18.4	18.3	20.4	17.3	18.5	15.3	16.6	21.2
0.1	0.1	0.0	0.0	0.2	0.1	0.2	0.5
26.8	**23.2**	**24.9**	**21.5**	**22.5**	**25.8**	**34.2**	**35.2**
10.6	9.5	10.1	9.6	8.5	11.0	14.2	12.4
16.2	13.7	14.8	11.9	14.1	14.8	20.0	22.8
1.5	**0.9**	**1.1**	**1.1**	**0.7**	**1.8**	**1.5**	**1.6**
20.8	**16.6**	**22.4**	**21.9**	**14.3**	**16.7**	**23.3**	**23.2**
13.8	**8.9**	**8.3**	**12.0**	**11.2**	**14.2**	**14.7**	**16.1**
2.7	**4.2**	**4.9**	**4.2**	**1.8**	**1.8**	**2.6**	**3.0**
6.4	**6.2**	**5.8**	**6.0**	**5.0**	**4.7**	**8.5**	**6.8**
46.8	**42.9**	**48.9**	**43.9**	**46.8**	**45.4**	**44.9**	**48.1**
1.8	2.9	2.4	2.4	2.9	2.3	2.2	2.7
16.3	15.6	16.2	15.8	15.4	15.5	17.3	17.7
1.0	0.6	1.1	1.0	0.9	2.1	1.7	0.7
7.3	5.9	7.0	6.6	6.5	5.5	8.7	7.6
20.5	17.9	22.1	18.1	21.1	20.1	15.0	19.3

Table 5.21: Average annual number of new cases for selected cancers by stage and period of diagnosis, 1961–2020, **males**

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C00–14	Mouth, pharynx	**Total**	**187**	**203**	**244**	**239**
		Localised	131	131	160	154
		Regional	45	44	65	70
		Distant	6	9	10	9
		Unknown	6	18	9	6
C15	Oesophagus	**Total**	**80**	**77**	**83**	**87**
		Localised	47	43	38	42
		Regional	11	10	18	17
		Distant	18	18	22	22
		Unknown	4	6	5	5
C16	Stomach	**Total**	**793**	**769**	**661**	**601**
		Localised	221	199	163	174
		Regional	175	152	150	146
		Distant	346	333	301	243
		Unknown	52	85	46	38
C18	Colon	**Total**	**290**	**357**	**401**	**521**
		Localised	117	139	138	155
		Regional	70	82	117	194
		Distant	90	117	131	153
		Unknown	13	19	15	20
C19–20	Rectum, rectosigmoid	**Total**	**182**	**250**	**310**	**428**
		Localised	89	114	145	192
		Regional	45	69	86	143
		Distant	40	55	69	84
		Unknown	7	12	9	9
C22	Liver	**Total**	**23**	**36**	**55**	**50**
		Localised	11	18	25	23
		Regional	1	1	4	4
		Distant	9	14	21	19
		Unknown	1	3	4	4
C23–24	Gallbladder, bile ducts	**Total**	**22**	**27**	**28**	**38**
		Localised	9	8	9	11
		Regional	3	5	5	9
		Distant	10	11	12	17
		Unknown	1	2	1	2
C25	Pancreas	**Total**	**176**	**218**	**250**	**264**
		Localised	54	54	51	41
		Regional	19	29	34	34
		Distant	94	119	144	159
		Unknown	9	15	22	29
C33–34	Lung, trachea	**Total**	**373**	**532**	**678**	**874**
		Localised	130	172	218	288
		Regional	80	103	129	155
		Distant	141	226	284	372
		Unknown	22	31	47	60
C43	Melanoma of the skin	**Total**	**76**	**103**	**157**	**206**
		Localised	49	65	121	169
		Regional	10	13	16	16
		Distant	16	15	15	16
		Unknown	1	10	5	4
C61	Prostate	**Total**	**840**	**1 008**	**1 223**	**1 475**
		Localised	547	638	806	990
		Regional	31	37	68	69
		Distant	205	229	263	316
		Unknown	57	104	86	101

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20	2016–20 (%)
246	**253**	**252**	**266**	**250**	**296**	**366**	**422**	***100.0***
147	146	124	99	80	105	135	138	*32.7*
86	81	89	100	113	141	183	200	*47.4*
5	8	12	12	12	13	16	10	*2.4*
8	18	28	55	45	37	31	74	*17.5*
87	**99**	**107**	**118**	**133**	**156**	**201**	**238**	***100.0***
40	30	22	20	24	29	31	23	*9.7*
20	24	25	25	33	45	57	76	*32.1*
22	30	28	33	44	46	55	58	*24.3*
5	14	33	40	32	35	58	81	*33.9*
588	**528**	**460**	**399**	**342**	**301**	**305**	**284**	***100.0***
172	144	97	62	58	60	56	41	*14.5*
163	144	133	116	106	84	92	85	*29.9*
211	181	149	136	122	100	97	80	*28.0*
42	59	81	85	56	56	60	78	*27.6*
648	**739**	**840**	**917**	**1 022**	**1 155**	**1 334**	**1 478**	***100.0***
194	218	239	163	181	177	228	275	*18.6*
265	286	331	447	508	605	677	767	*51.9*
163	203	222	239	265	307	358	346	*23.4*
26	31	48	67	68	65	71	90	*6.1*
507	**526**	**565**	**579**	**654**	**685**	**773**	**820**	***100.0***
229	204	211	163	164	135	176	197	*24.0*
168	203	207	229	280	347	379	383	*46.8*
92	95	104	112	134	143	154	164	*20.0*
19	24	44	75	77	60	63	75	*9.2*
65	**58**	**60**	**68**	**80**	**102**	**156**	**218**	***100.0***
32	27	23	21	27	36	51	49	*22.5*
5	4	3	5	6	11	19	21	*9.6*
18	13	11	15	19	27	38	35	*16.1*
10	14	23	28	28	28	47	113	*51.7*
43	**49**	**54**	**57**	**66**	**69**	**79**	**80**	***100.0***
14	17	12	8	12	13	11	8	*10.3*
10	10	10	12	22	24	36	35	*44.0*
15	13	16	17	18	20	21	17	*20.9*
4	9	15	21	15	12	11	20	*24.9*
299	**292**	**281**	**274**	**308**	**339**	**386**	**475**	***100.0***
57	58	39	17	24	27	31	34	*7.1*
42	29	31	35	67	77	83	105	*22.0*
159	157	134	132	160	188	205	215	*45.3*
42	47	78	90	57	47	67	121	*25.5*
1 051	**1 155**	**1 222**	**1 285**	**1 391**	**1 506**	**1 622**	**1 698**	***100.0***
335	328	295	207	183	206	286	315	*18.6*
197	240	238	320	389	438	462	482	*28.4*
431	455	472	542	664	707	711	698	*41.1*
88	131	217	216	155	156	163	203	*12.0*
254	**351**	**436**	**455**	**506**	**653**	**940**	**1 164**	***100.0***
208	300	369	296	288	395	797	967	*83.1*
19	16	16	14	23	31	64	107	*9.2*
16	23	26	26	35	31	35	41	*3.5*
11	13	24	118	161	196	44	48	*4.1*
1 692	**1 857**	**2 344**	**2 880**	**3 332**	**4 291**	**4 990**	**5 060**	***100.0***
1 093	1 184	1 184	894	1 386	1 949	2 499	1 907	*37.7*
64	57	99	117	207	708	1 349	1 426	*28.2*
416	484	402	409	413	410	392	394	*7.8*
119	133	659	1 460	1 326	1 224	751	1 333	*26.3*

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Table 5.21: Average annual number of new cases for selected cancers by stage and period of diagnosis, 1961–2020, **males** (Continued)

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C62	Testis	**Total**	**68**	**75**	**85**	**107**
		Localised	43	49	44	61
		Regional	4	5	16	22
		Distant	18	18	23	22
		Unknown	2	3	1	1
C64	Kidney (excl. renal pelvis)	**Total**	**124**	**154**	**174**	**199**
		Localised	66	77	71	80
		Regional	16	20	37	48
		Distant	38	52	62	66
		Unknown	4	5	3	4
C65–68	Urinary tract	**Total**	**285**	**346**	**468**	**593**
		Localised	242	274	366	480
		Regional	22	36	59	64
		Distant	15	21	31	37
		Unknown	6	14	13	12
C70–72	Central nervous system	**Total**	**135**	**145**	**161**	**189**
		Non-malignant	38	42	44	57
		Malignant	97	104	117	132
C73	Thyroid gland	**Total**	**23**	**35**	**34**	**43**
		Localised	5	12	14	21
		Regional	11	13	15	16
		Distant	7	9	5	6
		Unknown	0	1	1	0

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20	2016–20 (%)
141	**161**	**196**	**232**	**249**	**286**	**311**	**298**	***100.0***
76	106	133	134	143	192	255	225	*75.6*
39	29	36	35	45	39	32	54	*18.1*
23	23	22	30	27	29	23	16	*5.4*
3	3	5	33	34	26	2	3	*0.9*
244	**252**	**267**	**285**	**347**	**417**	**551**	**616**	***100.0***
106	113	133	109	157	216	384	397	*64.5*
47	48	37	44	43	39	50	78	*12.7*
81	79	70	75	80	88	82	73	*11.9*
10	12	28	57	68	74	34	67	*10.8*
684	**748**	**826**	**811**	**882**	**964**	**1 117**	**1 317**	***100.0***
558	615	655	443	486	616	982	1 139	*86.5*
62	55	48	46	68	78	72	92	*7.0*
30	32	29	37	38	46	39	50	*3.8*
34	45	94	285	290	223	24	36	*2.7*
220	**246**	**263**	**345**	**430**	**488**	**522**	**451**	***100.0***
71	75	112	160	231	267	275	189	*41.9*
149	171	151	185	199	221	247	262	*58.1*
45	**49**	**45**	**47**	**56**	**71**	**99**	**134**	***100.0***
20	26	21	19	19	22	46	57	*42.3*
16	14	14	16	23	35	39	53	*39.1*
8	8	8	7	7	8	6	7	*5.4*
1	1	2	5	7	6	8	18	*13.2*

Table 5.22: Average annual number of new cases for selected cancers by stage and period of diagnosis, 1961–2020, **females**

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C00–14	Mouth, pharynx	**Total**	**67**	**74**	**78**	**88**
		Localised	39	42	40	51
		Regional	22	28	27	29
		Distant	4	1	5	4
		Unknown	3	3	5	5
C15	Oesophagus	**Total**	**29**	**30**	**30**	**31**
		Localised	19	18	16	18
		Regional	3	4	6	5
		Distant	4	6	5	7
		Unknown	3	3	3	2
C16	Stomach	**Total**	**538**	**501**	**423**	**410**
		Localised	153	117	101	114
		Regional	97	91	84	104
		Distant	224	226	203	157
		Unknown	64	67	35	35
C18	Colon	**Total**	**337**	**427**	**494**	**655**
		Localised	141	164	169	189
		Regional	78	108	151	252
		Distant	100	131	153	187
		Unknown	18	24	21	27
C19–20	Rectum, rectosigmoid	**Total**	**130**	**200**	**253**	**338**
		Localised	62	88	119	152
		Regional	32	54	73	108
		Distant	28	48	54	69
		Unknown	7	11	6	10
C22	Liver	**Total**	**14**	**19**	**30**	**33**
		Localised	6	8	15	16
		Regional	0	1	1	1
		Distant	7	9	12	14
		Unknown	1	1	2	3
C23–24	Gallbladder, bile ducts	**Total**	**52**	**61**	**49**	**70**
		Localised	15	15	14	20
		Regional	9	8	10	11
		Distant	26	36	22	34
		Unknown	2	2	3	4
C25	Pancreas	**Total**	**119**	**156**	**183**	**218**
		Localised	38	42	41	46
		Regional	11	17	24	28
		Distant	63	84	98	121
		Unknown	7	14	20	23
C33–34	Lung, trachea	**Total**	**84**	**132**	**165**	**213**
		Localised	25	42	50	63
		Regional	11	19	27	31
		Distant	42	62	76	102
		Unknown	6	8	12	18
C43	Melanoma of the skin	**Total**	**88**	**120**	**177**	**258**
		Localised	73	85	154	232
		Regional	6	8	9	8
		Distant	6	14	10	13
		Unknown	3	14	5	5

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20	2016–20 (%)
100	**110**	**120**	**130**	**143**	**182**	**203**	**238**	***100.0***
54	66	66	55	49	77	95	104	*43.5*
39	32	35	39	54	72	85	85	*35.8*
2	5	3	6	6	6	4	6	*2.4*
4	7	16	29	34	28	20	43	*18.2*
35	**36**	**42**	**47**	**54**	**56**	**69**	**82**	***100.0***
16	14	10	9	11	13	16	10	*11.7*
9	8	7	8	13	14	14	21	*25.9*
6	8	7	10	13	13	14	14	*17.6*
5	6	18	20	17	16	24	37	*44.9*
391	**353**	**305**	**254**	**229**	**209**	**180**	**171**	***100.0***
122	107	69	45	43	45	32	25	*14.4*
96	93	75	64	65	46	44	40	*23.1*
131	110	103	81	78	78	54	51	*30.0*
41	43	59	65	43	41	51	56	*32.6*
771	**870**	**984**	**1 095**	**1 176**	**1 290**	**1 466**	**1 601**	***100.0***
231	254	284	201	213	207	245	283	*17.6*
316	357	399	542	587	694	786	832	*52.0*
187	217	231	250	288	312	342	363	*22.6*
37	41	70	103	88	78	93	124	*7.7*
395	**413**	**460**	**471**	**490**	**516**	**552**	**541**	***100.0***
175	169	180	137	133	110	141	132	*24.4*
130	142	155	181	203	252	250	249	*46.0*
70	75	76	87	90	101	107	103	*19.1*
20	27	49	66	64	53	54	56	*10.4*
44	**41**	**45**	**44**	**47**	**61**	**88**	**122**	***100.0***
18	19	14	10	13	19	29	23	*18.5*
4	1	3	4	6	8	10	16	*13.2*
16	10	8	10	8	15	21	24	*19.3*
7	10	20	20	21	18	28	60	*49.0*
83	**78**	**71**	**83**	**74**	**85**	**98**	**83**	***100.0***
24	25	17	11	12	15	12	7	*8.2*
19	14	12	16	15	24	36	29	*35.0*
33	25	22	27	27	31	35	24	*28.7*
8	15	21	30	20	15	14	23	*28.0*
266	**286**	**303**	**319**	**335**	**363**	**401**	**415**	***100.0***
54	67	49	23	28	43	40	31	*7.4*
34	31	31	37	62	77	84	91	*21.9*
137	140	119	144	164	178	189	166	*39.9*
41	49	104	115	81	65	87	128	*30.7*
302	**420**	**546**	**700**	**878**	**1 144**	**1 376**	**1 614**	***100.0***
81	109	119	105	124	194	282	356	*22.1*
49	79	108	158	228	291	366	424	*26.3*
142	183	216	306	433	540	583	633	*39.2*
30	49	104	131	92	119	145	201	*12.5*
337	**432**	**485**	**502**	**556**	**691**	**936**	**1 116**	***100.0***
298	398	434	335	337	441	837	982	*88.0*
16	12	11	11	14	23	41	75	*6.7*
12	12	15	21	21	18	20	24	*2.2*
10	10	24	135	184	210	38	35	*3.1*

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Table 5.22: Average annual number of new cases for selected cancers by stage and period of diagnosis, 1961–2020, **females** (Continued)

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C50	Breast	**Total**	**1 044**	**1 189**	**1 338**	**1 489**
		I	486	575	657	799
		II	347	371	425	421
		III	89	79	104	94
		IV	95	118	109	113
		Unknown	27	46	43	62
C53	Cervix uteri	**Total**	**356**	**394**	**436**	**410**
		I	141	190	227	213
		II	125	130	116	89
		III	54	41	62	56
		IV	23	19	23	23
		Unknown	13	14	8	30
C54	Corpus uteri	**Total**	**216**	**260**	**308**	**368**
		Localised	181	204	257	289
		Regional	11	16	20	41
		Distant	20	37	27	33
		Unknown	3	4	4	5
C56, C57.0–4, C48.2	Ovary etc.	**Total**	**289**	**364**	**378**	**404**
		Localised	96	111	137	99
		Regional	15	20	24	32
		Distant	166	224	208	263
		Unknown	12	8	9	11
C64	Kidney (excl. renal pelvis)	**Total**	**89**	**110**	**116**	**137**
		Localised	52	59	59	65
		Regional	9	13	23	27
		Distant	27	34	30	42
		Unknown	2	4	4	3
C65–68	Urinary tract	**Total**	**129**	**151**	**198**	**233**
		Localised	81	101	128	164
		Regional	21	21	31	32
		Distant	20	21	27	26
		Unknown	8	8	12	11
C70–72	Central nervous system	**Total**	**119**	**131**	**140**	**186**
		Non-malignant	53	60	59	80
		Malignant	66	70	81	106
C73	Thyroid gland	**Total**	**57**	**85**	**107**	**129**
		Localised	26	47	59	84
		Regional	22	26	30	30
		Distant	9	9	14	13
		Unknown	1	3	4	2

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20	2016–20 (%)
1 660	**1 791**	**1 998**	**2 409**	**2 720**	**2 745**	**3 188**	**3 536**	***100.0***
893	316	406	746	1 032	1 153	1 417	1 546	*43.7*
487	687	657	888	1 121	1 008	1 023	1 085	*30.7*
95	122	76	122	163	221	344	366	*10.4*
106	122	120	132	141	114	112	152	*4.3*
79	543	739	520	263	249	291	387	*10.9*
364	**336**	**353**	**317**	**297**	**299**	**329**	**360**	***100.0***
199	129	129	158	152	144	130	182	*50.6*
75	72	55	65	55	67	63	50	*13.9*
54	41	36	34	32	24	23	28	*7.7*
23	14	13	22	22	24	19	22	*6.1*
13	80	120	38	36	40	94	78	*21.7*
382	**408**	**454**	**505**	**634**	**705**	**738**	**780**	***100.0***
285	300	325	322	385	483	554	561	*71.9*
46	47	44	58	74	66	47	71	*9.0*
36	48	55	69	82	97	93	82	*10.5*
15	12	30	57	93	59	43	66	*8.5*
443	**460**	**471**	**489**	**497**	**498**	**513**	**516**	***100.0***
116	124	129	94	88	89	106	103	*20.0*
40	24	16	15	13	17	15	148	*28.7*
270	297	301	325	339	350	360	227	*44.0*
17	15	26	55	56	42	32	38	*7.3*
149	**179**	**187**	**191**	**211**	**241**	**261**	**289**	***100.0***
66	87	102	74	94	130	185	184	*63.8*
32	28	21	22	24	20	17	31	*10.6*
44	50	43	51	42	41	35	30	*10.4*
7	14	22	43	51	49	24	44	*15.2*
256	**269**	**288**	**304**	**342**	**359**	**427**	**456**	***100.0***
189	209	203	141	174	217	346	364	*79.8*
31	22	20	24	34	35	36	47	*10.3*
17	19	18	23	26	24	23	21	*4.5*
20	19	46	116	108	82	22	25	*5.4*
213	**253**	**297**	**409**	**566**	**639**	**584**	**535**	***100.0***
95	133	171	265	409	472	412	353	*65.9*
119	120	126	145	157	167	172	182	*34.1*
142	**136**	**138**	**122**	**150**	**175**	**243**	**319**	***100.0***
94	91	84	57	70	88	145	183	*57.5*
34	32	36	37	47	56	75	86	*26.9*
10	9	11	10	10	7	9	7	*2.1*
4	4	7	17	22	24	14	43	*13.6*

Table 5.23: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected cancers by stage and period of diagnosis, 1961–2020, **males**

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C00–14	Mouth, pharynx	**Total**	**14.4**	**14.7**	**16.2**	**15.0**
		Localised	10.2	9.6	10.7	9.7
		Regional	3.2	3.2	4.3	4.3
		Distant	0.5	0.6	0.6	0.5
		Unknown	0.4	1.3	0.6	0.4
C15	Oesophagus	**Total**	**6.5**	**5.6**	**5.7**	**5.5**
		Localised	4.0	3.2	2.6	2.8
		Regional	0.7	0.7	1.2	1.0
		Distant	1.2	1.2	1.4	1.3
		Unknown	0.5	0.5	0.4	0.4
C16	Stomach	**Total**	**63.1**	**56.9**	**45.4**	**39.1**
		Localised	18.7	16.0	12.0	11.9
		Regional	12.7	10.1	9.7	9.1
		Distant	26.2	23.2	19.6	15.2
		Unknown	5.6	7.7	4.1	2.9
C18	Colon	**Total**	**23.1**	**25.9**	**27.7**	**33.9**
		Localised	9.8	10.2	9.7	10.2
		Regional	5.0	5.7	7.7	12.3
		Distant	6.9	8.3	8.9	9.7
		Unknown	1.4	1.7	1.3	1.6
C19–20	Rectum, rectosigmoid	**Total**	**14.2**	**18.1**	**20.8**	**27.4**
		Localised	7.1	8.5	9.9	12.8
		Regional	3.5	4.7	5.6	8.7
		Distant	2.9	3.9	4.5	5.2
		Unknown	0.8	1.1	0.8	0.7
C22	Liver	**Total**	**1.6**	**2.4**	**3.4**	**3.1**
		Localised	0.8	1.3	1.5	1.4
		Regional	0.1	0.1	0.3	0.2
		Distant	0.6	0.9	1.3	1.1
		Unknown	0.0	0.2	0.3	0.3
C23–24	Gallbladder, bile ducts	**Total**	**1.6**	**2.0**	**1.9**	**2.5**
		Localised	0.6	0.6	0.6	0.8
		Regional	0.2	0.3	0.3	0.5
		Distant	0.8	0.8	0.9	1.1
		Unknown	0.1	0.2	0.1	0.1
C25	Pancreas	**Total**	**12.9**	**15.3**	**16.3**	**16.5**
		Localised	4.1	3.9	3.4	2.7
		Regional	1.4	2.0	2.2	2.1
		Distant	6.7	8.3	9.2	9.9
		Unknown	0.8	1.1	1.4	1.9
C33–34	Lung, trachea	**Total**	**25.3**	**34.0**	**40.9**	**51.0**
		Localised	8.8	11.2	13.3	16.9
		Regional	5.3	6.3	7.5	8.7
		Distant	9.6	14.4	17.2	21.4
		Unknown	1.7	2.2	3.0	4.0
C43	Melanoma of the skin	**Total**	**5.1**	**6.7**	**9.6**	**12.1**
		Localised	3.4	4.2	7.4	9.9
		Regional	0.6	0.8	0.9	1.0
		Distant	1.0	1.0	0.9	1.0
		Unknown	0.1	0.7	0.3	0.3

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
14.7	**14.8**	**14.2**	**14.5**	**12.8**	**13.8**	**15.3**	**15.9**
8.9	8.6	6.9	5.4	4.2	5.0	5.8	5.3
5.0	4.6	5.0	5.3	5.6	6.4	7.5	7.4
0.3	0.4	0.6	0.6	0.6	0.6	0.7	0.4
0.5	1.1	1.7	3.1	2.3	1.8	1.4	2.8
5.2	**5.7**	**6.2**	**6.6**	**7.1**	**7.5**	**8.6**	**9.0**
2.5	1.8	1.3	1.1	1.3	1.4	1.4	0.9
1.1	1.4	1.4	1.4	1.8	2.1	2.4	2.8
1.2	1.7	1.5	1.8	2.3	2.2	2.3	2.2
0.3	0.9	2.0	2.3	1.7	1.7	2.6	3.1
36.1	**31.5**	**26.6**	**22.3**	**18.5**	**14.8**	**13.4**	**11.1**
11.4	9.1	5.7	3.5	3.2	3.1	2.5	1.6
9.4	8.0	7.4	6.4	5.5	4.0	4.0	3.2
12.4	10.4	8.3	7.4	6.5	4.8	4.3	3.0
2.9	3.9	5.3	5.1	3.3	2.9	2.7	3.2
39.5	**43.8**	**48.3**	**50.8**	**54.6**	**57.1**	**59.1**	**57.4**
12.1	12.7	13.7	8.9	9.7	8.7	10.0	10.6
15.8	16.9	18.9	24.8	26.9	30.0	29.9	29.7
9.8	12.1	12.4	13.1	14.0	14.9	15.7	13.2
1.8	2.2	3.2	4.0	3.9	3.5	3.5	3.9
30.7	**30.6**	**32.3**	**32.0**	**34.7**	**33.0**	**33.2**	**31.0**
14.1	11.9	12.0	8.9	8.7	6.5	7.5	7.4
9.7	11.5	11.5	12.5	14.6	16.7	16.2	14.3
5.5	5.4	5.9	6.2	7.1	6.8	6.6	6.2
1.4	1.7	2.9	4.4	4.2	3.0	2.9	3.0
3.8	**3.5**	**3.3**	**3.7**	**4.2**	**4.9**	**6.6**	**8.3**
1.9	1.6	1.2	1.1	1.4	1.8	2.2	1.8
0.3	0.2	0.1	0.3	0.3	0.5	0.8	0.8
1.1	0.7	0.6	0.7	1.0	1.3	1.6	1.3
0.6	0.8	1.3	1.5	1.5	1.4	2.1	4.4
2.6	**2.8**	**3.1**	**3.3**	**3.4**	**3.4**	**3.4**	**3.0**
0.9	1.1	0.7	0.4	0.6	0.7	0.5	0.3
0.5	0.5	0.6	0.7	1.1	1.1	1.5	1.3
0.9	0.7	0.9	0.9	0.9	1.0	0.9	0.6
0.3	0.5	0.9	1.3	0.8	0.6	0.5	0.8
18.5	**17.0**	**16.1**	**15.2**	**16.5**	**16.7**	**16.8**	**18.2**
3.9	3.5	2.4	0.9	1.3	1.3	1.4	1.3
2.5	1.7	1.7	1.9	3.5	3.8	3.6	3.9
9.3	9.0	7.4	7.2	8.4	9.1	8.8	8.1
2.9	2.8	4.7	5.2	3.2	2.5	3.1	5.0
59.8	**64.6**	**67.7**	**69.6**	**72.7**	**72.7**	**70.7**	**64.8**
19.2	18.3	16.2	11.1	9.5	10.0	12.4	11.8
11.0	13.3	13.0	17.0	20.2	21.0	19.9	18.0
24.4	25.4	26.0	29.3	34.5	33.9	30.7	26.5
5.3	7.6	12.5	12.2	8.4	7.7	7.7	8.5
14.4	**19.5**	**23.4**	**23.5**	**25.3**	**30.3**	**39.8**	**44.3**
11.8	16.5	19.7	15.2	14.3	18.2	33.6	36.7
1.1	0.9	0.9	0.7	1.2	1.5	2.8	4.1
0.9	1.3	1.5	1.4	1.7	1.5	1.5	1.6
0.7	0.8	1.4	6.1	8.1	9.1	1.9	1.9

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Table 5.23: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected cancers by stage and period of diagnosis, 1961–2020, **males** (Continued)

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C61	Prostate	**Total**	**73.9**	**80.9**	**89.8**	**99.7**
		Localised	48.2	50.8	58.1	66.1
		Regional	2.8	3.1	5.1	4.6
		Distant	17.4	17.8	19.3	21.3
		Unknown	5.4	9.2	7.3	7.7
C62	Testis	**Total**	**4.1**	**4.4**	**4.7**	**5.5**
		Localised	2.6	2.9	2.5	3.1
		Regional	0.3	0.3	0.8	1.2
		Distant	1.1	1.0	1.3	1.1
		Unknown	0.1	0.2	0.1	0.1
C64	Kidney (excl. renal pelvis)	**Total**	**8.8**	**10.3**	**10.7**	**11.7**
		Localised	4.7	5.3	4.5	4.8
		Regional	1.1	1.2	2.3	2.8
		Distant	2.7	3.4	3.8	3.9
		Unknown	0.3	0.4	0.2	0.3
C65–68	Urinary tract	**Total**	**22.0**	**24.0**	**30.7**	**37.0**
		Localised	18.6	18.8	23.8	29.8
		Regional	1.7	2.6	3.9	3.8
		Distant	1.2	1.5	2.1	2.4
		Unknown	0.5	1.1	0.9	0.9
C70–72	Central nervous system	**Total**	**7.9**	**8.3**	**8.9**	**10.3**
		Non-malignant	2.3	2.5	2.5	3.2
		Malignant	5.6	5.8	6.3	7.1
C73	Thyroid gland	**Total**	**1.6**	**2.3**	**2.2**	**2.5**
		Localised	0.3	0.8	0.9	1.2
		Regional	0.7	0.8	0.9	0.9
		Distant	0.5	0.6	0.3	0.4
		Unknown	0.0	0.1	0.0	0.0

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
105.9	**111.2**	**135.7**	**163.5**	**181.0**	**209.6**	**213.1**	**189.4**
67.7	70.3	67.9	49.9	74.4	93.3	104.0	69.7
3.9	3.3	5.8	6.8	11.2	34.8	57.9	52.8
26.3	29.0	23.2	23.3	22.6	20.9	18.0	16.0
8.0	8.7	38.8	83.5	72.7	60.6	33.2	51.0
6.7	**7.3**	**8.6**	**9.9**	**10.6**	**11.9**	**12.0**	**11.0**
3.7	4.8	5.8	5.7	6.1	8.0	9.8	8.3
1.9	1.3	1.6	1.5	1.9	1.6	1.2	2.0
1.1	1.0	0.9	1.3	1.2	1.2	0.9	0.6
0.1	0.2	0.2	1.4	1.4	1.1	0.1	0.1
14.2	**14.4**	**14.8**	**15.3**	**17.7**	**19.5**	**22.9**	**22.9**
6.2	6.4	7.3	5.7	7.9	9.9	15.7	14.6
2.7	2.7	2.1	2.3	2.1	1.8	2.1	2.9
4.6	4.6	3.8	4.0	4.1	4.2	3.5	2.8
0.6	0.8	1.6	3.2	3.6	3.5	1.6	2.7
40.9	**44.0**	**47.2**	**45.0**	**47.1**	**47.5**	**49.7**	**51.3**
33.2	36.2	37.2	24.5	25.7	30.2	43.6	44.3
3.5	3.1	2.8	2.5	3.6	3.8	3.2	3.5
1.7	1.9	1.7	2.0	2.0	2.3	1.8	2.0
2.3	2.8	5.5	16.0	15.7	11.2	1.2	1.5
11.8	**13.1**	**13.7**	**17.1**	**20.5**	**21.9**	**21.3**	**16.9**
4.0	4.1	5.8	7.9	10.9	11.9	11.2	7.1
7.8	9.0	7.9	9.2	9.6	10.0	10.1	9.8
2.5	**2.6**	**2.4**	**2.3**	**2.6**	**3.2**	**4.0**	**5.0**
1.1	1.4	1.1	0.9	0.9	1.0	1.8	2.1
0.9	0.7	0.7	0.8	1.0	1.5	1.6	2.0
0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.3
0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.7

Table 5.24: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected cancers by stage and period of diagnosis, 1961–2020, **females**

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C00–14	Mouth, pharynx	**Total**	**4.5**	**4.5**	**4.3**	**4.6**
		Localised	2.5	2.6	2.3	2.7
		Regional	1.5	1.7	1.5	1.5
		Distant	0.2	0.1	0.3	0.2
		Unknown	0.2	0.2	0.3	0.3
C15	Oesophagus	**Total**	**2.0**	**1.9**	**1.6**	**1.6**
		Localised	1.3	1.1	0.8	0.9
		Regional	0.2	0.2	0.3	0.2
		Distant	0.3	0.4	0.3	0.3
		Unknown	0.2	0.2	0.2	0.1
C16	Stomach	**Total**	**37.8**	**30.9**	**23.5**	**20.8**
		Localised	11.1	7.6	5.8	6.0
		Regional	6.0	5.1	4.4	5.1
		Distant	15.0	13.3	11.1	7.8
		Unknown	5.7	4.9	2.2	2.0
C18	Colon	**Total**	**22.7**	**25.6**	**27.0**	**33.0**
		Localised	9.6	10.0	9.4	9.5
		Regional	4.9	6.1	8.0	12.6
		Distant	6.5	7.7	8.2	9.3
		Unknown	1.6	1.8	1.5	1.6
C19–20	Rectum, rectosigmoid	**Total**	**8.5**	**11.9**	**13.8**	**17.2**
		Localised	4.0	5.3	6.6	7.8
		Regional	2.0	3.1	3.9	5.3
		Distant	1.9	2.8	2.9	3.5
		Unknown	0.6	0.8	0.4	0.6
C22	Liver	**Total**	**0.9**	**1.1**	**1.6**	**1.7**
		Localised	0.4	0.5	0.8	0.8
		Regional	0.0	0.1	0.1	0.0
		Distant	0.4	0.5	0.7	0.7
		Unknown	0.0	0.1	0.1	0.2
C23–24	Gallbladder, bile ducts	**Total**	**3.4**	**3.6**	**2.6**	**3.4**
		Localised	1.0	0.9	0.8	1.0
		Regional	0.6	0.5	0.5	0.5
		Distant	1.7	2.1	1.2	1.7
		Unknown	0.1	0.1	0.2	0.2
C25	Pancreas	**Total**	**7.6**	**9.2**	**9.8**	**10.7**
		Localised	2.5	2.4	2.2	2.3
		Regional	0.7	1.0	1.2	1.4
		Distant	3.9	4.9	5.2	5.8
		Unknown	0.5	0.9	1.1	1.2
C33–34	Lung, trachea	**Total**	**5.2**	**7.6**	**8.7**	**10.7**
		Localised	1.6	2.5	2.6	3.1
		Regional	0.6	1.1	1.4	1.5
		Distant	2.6	3.5	4.0	5.1
		Unknown	0.4	0.5	0.7	1.0
C43	Melanoma of the skin	**Total**	**5.3**	**7.1**	**10.0**	**14.0**
		Localised	4.4	5.0	8.6	12.6
		Regional	0.4	0.5	0.5	0.4
		Distant	0.4	0.8	0.5	0.7
		Unknown	0.2	0.8	0.3	0.2

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
4.8	**5.1**	**5.4**	**5.7**	**6.0**	**7.3**	**7.6**	**8.2**
2.6	3.0	3.0	2.4	2.1	3.1	3.5	3.6
1.9	1.5	1.6	1.7	2.3	2.9	3.2	3.0
0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.2
0.2	0.4	0.7	1.3	1.4	1.1	0.7	1.5
1.7	**1.6**	**1.8**	**1.9**	**2.2**	**2.1**	**2.5**	**2.7**
0.8	0.6	0.4	0.4	0.4	0.5	0.6	0.3
0.4	0.4	0.3	0.4	0.6	0.6	0.5	0.7
0.2	0.4	0.3	0.4	0.6	0.5	0.5	0.5
0.2	0.3	0.7	0.8	0.6	0.6	0.9	1.2
18.1	**15.3**	**12.6**	**10.2**	**9.0**	**7.9**	**6.5**	**5.8**
5.7	4.7	2.8	1.8	1.7	1.7	1.1	0.8
4.3	4.1	3.1	2.6	2.6	1.7	1.6	1.4
6.0	4.7	4.3	3.4	3.1	3.0	2.0	1.8
2.1	1.8	2.4	2.4	1.6	1.5	1.8	1.8
36.0	**38.4**	**41.8**	**45.1**	**46.9**	**49.2**	**52.9**	**53.1**
10.8	11.2	12.0	8.3	8.4	7.9	9.0	9.4
14.7	15.7	17.0	22.3	23.6	26.6	28.4	27.5
8.8	9.7	10.0	10.4	11.6	12.1	12.6	12.2
1.8	1.8	2.8	4.0	3.3	2.6	3.0	3.9
18.5	**18.3**	**20.1**	**19.8**	**20.0**	**20.3**	**20.5**	**18.5**
8.4	7.5	7.8	5.8	5.4	4.4	5.3	4.5
6.0	6.3	6.9	7.7	8.4	9.9	9.3	8.6
3.2	3.3	3.3	3.6	3.7	4.0	4.0	3.6
1.0	1.2	2.0	2.6	2.5	1.9	1.9	1.9
2.1	**1.8**	**1.9**	**1.8**	**1.9**	**2.3**	**3.2**	**4.1**
0.8	0.8	0.6	0.4	0.5	0.7	1.1	0.8
0.2	0.1	0.1	0.2	0.3	0.3	0.4	0.6
0.7	0.4	0.3	0.4	0.3	0.6	0.8	0.8
0.4	0.4	0.8	0.8	0.8	0.7	1.0	2.0
3.8	**3.4**	**3.0**	**3.3**	**2.9**	**3.3**	**3.5**	**2.8**
1.1	1.1	0.7	0.4	0.5	0.6	0.4	0.2
0.9	0.6	0.5	0.7	0.6	1.0	1.4	1.0
1.5	1.1	0.9	1.1	1.1	1.2	1.3	0.8
0.4	0.6	0.8	1.1	0.7	0.5	0.5	0.7
12.2	**12.4**	**12.6**	**12.7**	**13.2**	**13.8**	**14.5**	**13.8**
2.5	2.9	2.0	0.9	1.0	1.5	1.4	1.1
1.6	1.4	1.4	1.5	2.5	3.0	3.1	3.1
6.3	6.1	5.2	6.0	6.7	7.0	6.9	5.5
1.9	2.0	4.0	4.3	3.0	2.3	3.0	4.1
14.6	**19.7**	**25.4**	**32.0**	**38.3**	**46.5**	**51.6**	**54.2**
3.8	5.0	5.5	4.8	5.5	8.0	10.7	12.0
2.5	3.8	5.1	7.4	10.0	11.9	13.9	14.3
7.0	8.7	10.4	14.2	19.1	22.1	22.0	21.5
1.4	2.2	4.4	5.6	3.7	4.6	5.1	6.5
17.2	**21.2**	**22.8**	**22.5**	**24.0**	**28.2**	**35.7**	**39.6**
15.3	19.6	20.4	15.1	14.7	18.1	32.1	35.0
0.8	0.5	0.5	0.5	0.6	0.9	1.5	2.6
0.6	0.6	0.7	0.9	0.9	0.7	0.8	0.8
0.5	0.5	1.1	6.1	7.8	8.6	1.4	1.1

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Table 5.24: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years for selected cancers by stage and period of diagnosis, 1961–2020, **females** (Continued)

ICD-10	Site	Stage	1961–65	1966–70	1971–75	1976–80
C50	Breast	**Total**	**64.8**	**68.6**	**73.8**	**78.5**
		I	30.0	33.2	36.3	42.0
		II	20.8	20.8	23.1	22.2
		III	6.0	4.7	5.8	4.9
		IV	6.1	7.0	6.0	5.8
		Unknown	1.9	2.9	2.6	3.6
C53	Cervix uteri	**Total**	**21.0**	**22.7**	**24.7**	**22.3**
		I	8.2	11.1	13.4	11.9
		II	7.3	7.3	6.4	4.7
		III	3.3	2.3	3.3	2.9
		IV	1.4	1.1	1.2	1.2
		Unknown	0.8	0.9	0.4	1.6
C54	Corpus uteri	**Total**	**12.7**	**14.4**	**16.2**	**19.0**
		Localised	10.6	11.3	13.5	15.0
		Regional	0.7	0.9	1.1	2.1
		Distant	1.2	2.0	1.4	1.7
		Unknown	0.2	0.2	0.2	0.3
C56, C57.0–4, C48.2	Ovary etc.	**Total**	**17.3**	**20.4**	**20.2**	**20.9**
		Localised	5.8	6.2	7.4	5.2
		Regional	0.9	1.1	1.3	1.6
		Distant	9.9	12.5	11.0	13.5
		Unknown	0.7	0.6	0.5	0.5
C64	Kidney (excl. renal pelvis)	**Total**	**5.4**	**6.2**	**6.1**	**6.8**
		Localised	3.2	3.4	3.1	3.3
		Regional	0.5	0.7	1.2	1.3
		Distant	1.6	1.9	1.6	2.1
		Unknown	0.1	0.2	0.2	0.2
C65–68	Urinary tract	**Total**	**8.6**	**9.0**	**10.7**	**11.6**
		Localised	5.4	5.9	6.8	8.2
		Regional	1.3	1.2	1.7	1.6
		Distant	1.3	1.3	1.4	1.3
		Unknown	0.6	0.6	0.7	0.6
C70–72	Central nervous system	**Total**	**6.8**	**7.1**	**7.4**	**9.5**
		Non-malignant	3.1	3.3	3.2	4.2
		Malignant	3.7	3.8	4.2	5.3
C73	Thyroid gland	**Total**	**3.6**	**4.9**	**5.9**	**6.9**
		Localised	1.6	2.7	3.3	4.6
		Regional	1.4	1.5	1.7	1.5
		Distant	0.6	0.5	0.7	0.6
		Unknown	0.1	0.2	0.2	0.1

1981–85	1986–90	1991–95	1996–00	2001–05	2006–10	2011–15	2016–20
83.3	**86.0**	**93.1**	**111.2**	**120.5**	**113.8**	**123.1**	**127.6**
44.4	15.2	19.4	35.8	48.3	49.4	55.8	56.7
24.7	33.4	31.0	41.1	49.5	41.7	39.5	39.0
4.6	5.8	3.4	5.4	6.8	9.1	13.2	13.2
5.2	5.7	5.7	5.9	6.0	4.6	4.3	5.4
4.3	25.9	33.6	23.0	9.9	9.1	10.2	13.4
18.7	**16.5**	**16.6**	**14.4**	**12.8**	**12.4**	**13.0**	**13.6**
10.3	6.3	6.1	7.2	6.6	6.0	5.2	7.0
3.9	3.6	2.7	3.0	2.4	2.8	2.5	1.8
2.7	2.0	1.7	1.5	1.3	1.0	0.9	1.0
1.1	0.7	0.6	1.0	1.0	1.0	0.7	0.8
0.7	3.9	5.6	1.7	1.5	1.6	3.7	2.9
19.4	**20.0**	**21.7**	**23.4**	**27.6**	**29.1**	**28.0**	**27.0**
14.7	14.9	15.7	15.2	17.0	20.0	21.2	19.6
2.2	2.2	2.1	2.7	3.1	2.7	1.8	2.4
1.7	2.3	2.5	3.1	3.5	4.0	3.5	2.8
0.7	0.6	1.3	2.4	3.9	2.4	1.5	2.2
22.3	**22.4**	**22.3**	**22.1**	**21.4**	**20.3**	**19.5**	**17.9**
6.0	6.1	6.2	4.4	3.9	3.7	4.1	3.7
2.1	1.2	0.7	0.7	0.6	0.7	0.6	5.1
13.5	14.4	14.2	14.7	14.6	14.4	13.8	7.9
0.8	0.7	1.1	2.3	2.3	1.6	1.1	1.2
7.0	**8.1**	**8.1**	**8.1**	**8.7**	**9.6**	**9.8**	**10.0**
3.2	3.9	4.5	3.3	4.0	5.3	7.1	6.5
1.5	1.3	0.9	0.9	1.0	0.8	0.7	1.1
2.0	2.3	1.8	2.1	1.7	1.6	1.3	1.0
0.3	0.6	0.8	1.8	2.0	1.9	0.8	1.4
11.9	**11.8**	**12.2**	**12.5**	**13.7**	**13.9**	**15.4**	**15.2**
8.8	9.2	8.7	6.0	7.1	8.4	12.6	12.2
1.4	1.0	0.9	1.0	1.4	1.4	1.3	1.6
0.8	0.8	0.8	1.0	1.0	0.9	0.8	0.7
0.9	0.8	1.9	4.6	4.2	3.1	0.7	0.8
10.6	**12.3**	**13.9**	**18.3**	**24.7**	**26.3**	**22.6**	**19.3**
4.7	6.5	8.0	11.8	17.9	19.4	16.0	12.8
5.9	5.8	5.9	6.5	6.8	6.9	6.6	6.5
7.1	**6.5**	**6.4**	**5.4**	**6.4**	**7.3**	**9.6**	**11.9**
4.8	4.4	4.0	2.6	3.1	3.7	5.8	6.9
1.6	1.4	1.7	1.6	2.0	2.3	2.9	3.2
0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.2
0.2	0.2	0.3	0.7	1.0	1.0	0.5	1.6

Table 5.25: Average annual number of new cases by primary site and origin, 2016–2020, **males**

ICD-10	Site	Norwegian born	Nordic countries	W Europe, North America and Oceania	Other European Countries	Middle East and Africa	Asia
C00–96	**All sites**	**17 346**	**280**	**310**	**288**	**187**	**144**
C00–14	**Mouth, pharynx**	**384**	**8**	**7**	**8**	**5**	**4**
C00	Lip	51	0	1	1	0	0
C02–06	Oral cavity	112	3	2	1	1	2
C07–08	Salivary glands	32	1	0	1	1	1
C09–10, C01, C14	Oropharynx	161	3	3	4	1	1
C11	Nasopharynx	6	0	0	1	2	0
C12–13	Hypopharynx	22	0	0	0	1	0
C15–26	**Digestive organs**	**3 521**	**53**	**57**	**53**	**42**	**32**
C15	Oesophagus	220	6	4	3	1	0
C16	Stomach	249	2	6	10	7	4
C17	Small intestine	114	2	2	2	1	0
C18	Colon	1 387	17	18	17	12	8
C19–20	Rectum, rectosigmoid	764	13	10	9	7	6
C21	Anus	33	0	1	0	0	0
C22	Liver	188	4	4	4	6	8
C23–24	Gallbladder, bile ducts	72	2	2	1	0	1
C25	Pancreas	437	7	9	6	5	4
C26	Other digestive organs	57	1	1	0	1	1
C30–34, C38	**Respiratory organs**	**1 665**	**32**	**32**	**42**	**17**	**14**
C30–31	Nose, sinuses	24	1	0	1	0	0
C32	Larynx, epiglottis	78	1	1	3	1	1
C33–34	Lung, trachea	1 551	30	30	38	15	13
C38	Heart, mediastinum and pleura	12	0	0	0	0	0
C40–41	**Bone**	**27**	**0**	**1**	**2**	**1**	**1**
C43	**Melanoma of the skin**	**1 104**	**17**	**17**	**11**	**1**	**1**
C44	**Skin, non-melanoma**	**1 288**	**17**	**20**	**5**	**5**	**3**
C45	**Mesothelioma**	**61**	**1**	**1**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**4**	**0**	**0**	**0**	**0**	**0**
C48–49	**Soft tissues**	**60**	**2**	**1**	**2**	**2**	**1**
C50	**Breast**	**27**	**0**	**1**	**1**	**1**	**0**
C60–63	**Male genital organs**	**5 056**	**85**	**88**	**54**	**41**	**32**
C61	Prostate	4 724	78	79	44	38	31
C62	Testis	269	5	8	9	3	1
C60, C63	Other male genital	63	1	1	1	0	0
C64–68	**Urinary organs**	**1 755**	**30**	**34**	**48**	**24**	**17**
C64	Kidney (excl. renal pelvis)	549	9	11	22	7	7
C65–68	Urinary tract	1 205	21	23	26	17	10
C69	**Eye**	**39**	**0**	**1**	**1**	**0**	**1**
C70–72	**Central nervous system**	**397**	**8**	**8**	**18**	**10**	**6**
C73	**Thyroid gland**	**113**	**2**	**3**	**5**	**5**	**3**
C37, C74–75	**Other endocrine glands**	**80**	**1**	**1**	**4**	**4**	**4**
C39, C76, C80	**Other or unspecified**	**143**	**1**	**2**	**3**	**1**	**1**
C81–96	**Lymphoid/haematopoietic tissue**	**1 622**	**23**	**35**	**32**	**29**	**24**
C81	Hodgkin lymphoma	77	1	2	2	3	2
C82–86, C96	Non-Hodgkin lymphoma	523	8	13	12	10	9
C88	Immunoproliferative disease	51	1	0	1	0	0
C90	Multiple myeloma	274	3	5	3	4	3
C91–95	Leukaemia	697	10	15	15	13	10

Table 5.26: Average annual number of new cases by primary site and origin, 2016–2020, **females**

ICD-10	Site	Norwegian born	Nordic countries	W Europe, North America and Oceania	Other European Countries	Middle East and Africa	Asia
C00–96	**All sites**	**14 718**	**254**	**230**	**317**	**151**	**238**
C00–14	**Mouth, pharynx**	**217**	**4**	**4**	**4**	**2**	**5**
C00	Lip	40	1	1	0	0	0
C02–06	Oral cavity	90	2	2	1	0	1
C07–08	Salivary glands	26	0	0	1	1	2
C09–10, C01, C14	Oropharynx	53	1	1	1	0	1
C11	Nasopharynx	4	0	0	0	1	0
C12–13	Hypopharynx	4	0	0	0	0	0
C15–26	**Digestive organs**	**3 014**	**45**	**38**	**44**	**23**	**35**
C15	Oesophagus	75	1	2	1	1	1
C16	Stomach	149	2	3	7	2	5
C17	Small intestine	84	1	1	1	1	1
C18	Colon	1 508	24	18	16	8	11
C19–20	Rectum, rectosigmoid	504	8	6	7	3	7
C21	Anus	64	2	1	1	0	0
C22	Liver	108	1	1	3	2	5
C23–24	Gallbladder, bile ducts	76	1	1	1	1	1
C25	Pancreas	388	5	5	5	2	3
C26	Other digestive organs	58	1	1	2	1	1
C30–34, C38	**Respiratory organs**	**1 548**	**23**	**19**	**22**	**6**	**14**
C30–31	Nose, sinuses	15	0	0	0	0	0
C32	Larynx, epiglottis	19	0	0	1	0	0
C33–34	Lung, trachea	1 511	22	18	20	5	14
C38	Heart, mediastinum and pleura	4	0	0	0	0	0
C40–41	**Bone**	**21**	**1**	**0**	**1**	**0**	**0**
C43	**Melanoma of the skin**	**1 062**	**17**	**13**	**12**	**2**	**1**
C44	**Skin, non-melanoma**	**1 101**	**15**	**15**	**5**	**3**	**3**
C45	**Mesothelioma**	**13**	**0**	**0**	**0**	**0**	**0**
C47	**Autonomic nervous system**	**3**	**0**	**0**	**0**	**0**	**0**
C48–49	**Soft tissues**	**49**	**1**	**0**	**1**	**1**	**0**
C50	**Breast**	**3 144**	**68**	**64**	**91**	**49**	**78**
C51–58	**Female genital organs**	**1 613**	**28**	**29**	**46**	**17**	**38**
C51–52, C57.7–9	Other female genital	117	1	1	1	1	1
C53	Cervix uteri	310	6	6	16	3	14
C54	Corpus uteri	707	15	13	18	6	14
C55	Uterus, other	9	0	0	0	0	0
C56, C57.0–4, C48.2	Ovary etc.	468	6	9	12	6	9
C58	Placenta	2	0	0	0	0	0
C64–68	**Urinary organs**	**689**	**11**	**8**	**13**	**4**	**8**
C64	Kidney (excl. renal pelvis)	266	3	3	6	2	5
C65–68	Urinary tract	423	8	5	7	2	4
C69	**Eye**	**35**	**1**	**1**	**0**	**0**	**1**
C70–72	**Central nervous system**	**474**	**9**	**8**	**18**	**10**	**10**
C73	**Thyroid gland**	**251**	**7**	**6**	**20**	**11**	**19**
C37, C74–75	**Other endocrine glands**	**76**	**1**	**1**	**4**	**4**	**3**
C39, C76, C80	**Other or unspecified**	**178**	**2**	**1**	**2**	**1**	**2**
C81–96	**Lymphoid/haematopoietic tissue**	**1 231**	**21**	**22**	**32**	**18**	**18**
C81	Hodgkin lymphoma	53	1	2	2	4	2
C82–86, C96	Non-Hodgkin lymphoma	410	9	6	11	4	9
C88	Immunoproliferative disease	31	0	0	0	0	0
C90	Multiple myeloma	197	2	3	4	1	1
C91–95	Leukaemia	541	9	10	15	10	7

Table 5.27: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and origin, 2016–2020, **males**

ICD-10	Site	Norwegian born	Nordic countries	W Europe, North America and Oceania	Other European Countries	Middle East and Africa	Asia
C00–96	**All sites**	**730.5**	**699.0**	**665.3**	**494.0**	**465.7**	**395.8**
C00–14	**Mouth, pharynx**	**16.1**	**16.9**	**15.5**	**9.4**	**14.4**	**10.8**
C00	Lip	2.2	0.4	3.1	2.4	0.7	0.0
C02–06	Oral cavity	4.7	7.4	4.6	1.4	1.8	4.5
C07–08	Salivary glands	1.4	1.3	0.8	0.3	5.5	1.3
C09–10, C01, C14	Oropharynx	6.7	6.2	6.5	4.1	0.6	3.9
C11	Nasopharynx	0.2	0.8	0.6	1.2	3.8	0.4
C12–13	Hypopharynx	0.9	0.8	0.0	0.0	2.1	0.6
C15–26	**Digestive organs**	**148.3**	**136.7**	**121.7**	**106.4**	**115.5**	**88.2**
C15	Oesophagus	9.1	16.1	8.4	4.7	4.6	0.3
C16	Stomach	10.6	4.8	15.9	22.0	16.9	9.1
C17	Small intestine	4.8	5.4	4.0	3.6	2.4	0.6
C18	Colon	58.8	42.4	37.4	36.0	38.3	25.1
C19–20	Rectum, rectosigmoid	31.9	35.7	21.7	17.2	13.9	12.7
C21	Anus	1.4	0.3	1.5	0.2	0.7	0.6
C22	Liver	7.9	8.8	8.2	8.2	20.6	19.4
C23–24	Gallbladder, bile ducts	3.0	4.1	4.1	2.2	0.2	2.6
C25	Pancreas	18.3	17.1	19.0	11.9	16.6	15.2
C26	Other digestive organs	2.4	2.1	1.4	0.3	1.2	2.5
C30–34, C38	**Respiratory organs**	**68.9**	**82.0**	**70.3**	**79.8**	**53.3**	**42.4**
C30–31	Nose, sinuses	1.0	2.1	0.7	1.1	0.4	0.4
C32	Larynx, epiglottis	3.2	2.7	2.4	6.1	3.2	2.0
C33–34	Lung, trachea	64.1	76.9	67.0	72.5	49.4	40.0
C38	Heart, mediastinum and pleura	0.5	0.3	0.2	0.0	0.3	0.0
C40–41	**Bone**	**1.2**	**1.3**	**1.4**	**1.5**	**1.1**	**1.5**
C43	**Melanoma of the skin**	**47.2**	**37.0**	**32.1**	**13.9**	**0.6**	**2.7**
C44	**Skin, non-melanoma**	**57.7**	**57.4**	**59.4**	**14.4**	**16.6**	**12.7**
C45	**Mesothelioma**	**2.6**	**3.6**	**4.6**	**0.2**	**0.2**	**0.5**
C47	**Autonomic nervous system**	**0.2**	**0.0**	**0.0**	**0.1**	**0.0**	**0.2**
C48–49	**Soft tissues**	**2.6**	**6.0**	**0.9**	**1.1**	**3.4**	**3.0**
C50	**Breast**	**1.1**	**0.4**	**3.3**	**1.2**	**1.1**	**0.0**
C60–63	**Male genital organs**	**208.7**	**197.6**	**181.6**	**110.5**	**105.4**	**100.3**
C61	Prostate	193.0	186.6	167.6	103.4	103.2	97.3
C62	Testis	12.9	8.7	10.7	3.9	2.2	1.5
C60, C63	Other male genital	2.7	2.3	3.2	3.2	0.0	1.5
C64–68	**Urinary organs**	**73.8**	**75.5**	**71.0**	**77.3**	**67.1**	**45.5**
C64	Kidney (excl. renal pelvis)	22.9	19.5	19.8	22.1	16.0	14.5
C65–68	Urinary tract	50.9	56.0	51.2	55.1	51.0	31.1
C69	**Eye**	**1.6**	**0.7**	**1.8**	**0.3**	**0.0**	**1.3**
C70–72	**Central nervous system**	**17.1**	**18.3**	**14.8**	**17.0**	**12.6**	**10.0**
C73	**Thyroid gland**	**4.9**	**3.9**	**4.5**	**3.4**	**7.9**	**4.1**
C37, C74–75	**Other endocrine glands**	**3.4**	**1.4**	**2.2**	**2.6**	**5.4**	**8.9**
C39, C76, C80	**Other or unspecified**	**6.4**	**5.1**	**6.7**	**9.9**	**3.7**	**7.6**
C81–96	**Lymphoid/haematopoietic tissue**	**68.8**	**55.3**	**73.4**	**45.2**	**57.4**	**56.4**
C81	Hodgkin lymphoma	3.4	2.0	3.1	1.4	3.8	3.2
C82–86, C96	Non-Hodgkin lymphoma	22.0	20.0	22.7	14.2	19.3	20.5
C88	Immunoproliferative disease	2.2	2.1	0.7	3.2	0.0	0.5
C90	Multiple myeloma	11.5	5.8	10.5	4.9	8.3	7.1
C91–95	Leukaemia	29.7	25.4	36.3	21.5	25.9	25.1

Table 5.28: Age-standardised (Norwegian standard) incidence rates per 100 000 person-years by primary site and origin, 2016–2020, **females**

ICD-10	Site	Norwegian born	Nordic countries	W Europe, North America and Oceania	Other European Countries	Middle East and Africa	Asia
C00–96	**All sites**	**567.2**	**510.2**	**479.5**	**434.3**	**362.8**	**341.5**
C00–14	**Mouth, pharynx**	**8.2**	**7.1**	**8.4**	**4.6**	**3.2**	**6.2**
C00	Lip	1.4	1.8	1.4	0.1	0.2	0.3
C02–06	Oral cavity	3.4	3.2	4.5	0.7	0.4	2.7
C07–08	Salivary glands	1.0	0.0	1.0	0.8	0.4	1.2
C09–10, C01, C14	Oropharynx	2.1	1.8	1.2	2.5	1.5	1.4
C11	Nasopharynx	0.2	0.3	0.3	0.3	0.6	0.3
C12–13	Hypopharynx	0.1	0.0	0.0	0.1	0.0	0.2
C15–26	**Digestive organs**	**110.2**	**90.2**	**84.4**	**80.5**	**68.7**	**72.7**
C15	Oesophagus	2.7	1.2	4.8	1.1	6.3	2.8
C16	Stomach	5.4	4.6	5.2	7.9	3.8	8.1
C17	Small intestine	3.2	2.7	1.8	1.6	2.5	0.7
C18	Colon	54.5	47.8	39.9	32.8	22.8	22.0
C19–20	Rectum, rectosigmoid	19.1	15.6	12.3	10.1	10.6	11.3
C21	Anus	2.5	3.2	2.6	0.4	1.4	0.2
C22	Liver	4.0	1.5	2.8	4.3	3.1	15.3
C23–24	Gallbladder, bile ducts	2.7	1.5	1.9	3.6	4.2	2.6
C25	Pancreas	14.0	10.9	10.6	16.0	11.3	7.8
C26	Other digestive organs	2.1	1.3	2.5	2.8	2.7	1.9
C30–34, C38	**Respiratory organs**	**56.6**	**46.0**	**43.1**	**43.4**	**23.1**	**31.4**
C30–31	Nose, sinuses	0.6	0.7	0.7	0.7	1.6	0.0
C32	Larynx, epiglottis	0.7	0.4	0.8	0.5	0.3	0.0
C33–34	Lung, trachea	55.2	44.9	41.6	42.1	21.3	31.2
C38	Heart, mediastinum and pleura	0.1	0.0	0.0	0.1	0.0	0.1
C40–41	**Bone**	**0.9**	**1.8**	**0.7**	**0.6**	**0.1**	**0.6**
C43	**Melanoma of the skin**	**43.4**	**34.9**	**24.9**	**14.8**	**3.4**	**1.2**
C44	**Skin, non-melanoma**	**37.8**	**30.8**	**34.4**	**13.8**	**13.4**	**6.1**
C45	**Mesothelioma**	**0.5**	**0.7**	**0.6**	**1.0**	**0.0**	**0.3**
C47	**Autonomic nervous system**	**0.1**	**0.0**	**0.0**	**0.0**	**0.3**	**0.0**
C48–49	**Soft tissues**	**2.0**	**2.9**	**0.7**	**1.7**	**3.3**	**0.1**
C50	**Breast**	**129.6**	**136.4**	**125.0**	**104.9**	**96.6**	**95.2**
C51–58	**Female genital organs**	**64.5**	**55.7**	**57.8**	**56.2**	**42.7**	**43.9**
C51–52, C57.7–9	Other female genital	4.4	2.9	1.8	2.5	1.7	3.2
C53	Cervix uteri	14.7	11.2	9.8	11.9	5.3	11.7
C54	Corpus uteri	26.9	29.1	27.0	26.0	20.2	16.0
C55	Uterus, other	0.3	0.4	0.0	0.0	2.8	0.0
C56, C57.0–4, C48.2	Ovary etc.	18.1	12.1	19.0	15.8	12.8	12.9
C58	Placenta	0.1	0.0	0.3	0.0	0.0	0.1
C64–68	**Urinary organs**	**25.5**	**23.9**	**17.5**	**20.1**	**15.2**	**13.5**
C64	Kidney (excl. renal pelvis)	10.2	6.8	5.8	9.7	4.5	7.7
C65–68	Urinary tract	15.3	17.2	11.7	10.3	10.7	5.8
C69	**Eye**	**1.4**	**1.4**	**1.1**	**0.3**	**1.0**	**0.5**
C70–72	**Central nervous system**	**19.6**	**16.7**	**17.1**	**17.7**	**17.9**	**11.6**
C73	**Thyroid gland**	**11.1**	**13.3**	**10.5**	**16.3**	**13.6**	**18.3**
C37, C74–75	**Other endocrine glands**	**3.3**	**2.5**	**1.9**	**3.8**	**8.7**	**3.0**
C39, C76, C80	**Other or unspecified**	**6.1**	**3.7**	**2.3**	**5.5**	**5.7**	**3.6**
C81–96	**Lymphoid/haematopoietic tissue**	**46.5**	**42.2**	**49.0**	**49.1**	**46.0**	**33.2**
C81	Hodgkin lymphoma	2.3	1.8	2.8	1.5	4.8	1.8
C82–86, C96	Non-Hodgkin lymphoma	15.4	17.6	12.8	16.4	14.3	16.4
C88	Immunoproliferative disease	1.1	0.9	0.0	0.7	0.7	0.5
C90	Multiple myeloma	7.2	3.0	7.4	7.8	2.6	1.5
C91–95	Leukaemia	20.4	18.9	26.0	22.7	23.6	13.1

Chapter 6 Prevalence

As of December 31st 2020, a total of 305 503 individuals were alive and previously diagnosed with cancer in Norway. The cancer prevalence in Table 6.1 provides the numbers of cancer survivors by time after a given 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 prevalence was seen for prostate cancer (56 686), breast cancer (52 750), melanoma of the skin (30 034) and colon cancer (24 768).

Differences in prognosis and median age at diagnosis (rather than incidence) explain much of the site-specific variability in prevalence. In terms of new incident cases, there are 42% more cases of lung cancer compared to melanoma of the skin in Norway in 2020, but the number of lung cancer survivors ten years after diagnosis is only 11% of surviving melanoma patients. This reflects the vast difference in prognosis for the two patient groups.

Table 6.2 shows the number of patients with distant metastases alive at specific time points. Only patients with metastasis confirmed histologically are included. The number is increasing over the years, probably caused by improvements in the diagnostic quality. This also means that patients with only small distant metastases may contribute to a better prognosis in a group with otherwise quite severe disease. We see that patients with metastatic disease now live longer, have more often diagnostic work-up and surgery for metastatic lesions, and are also given more chemotherapy than before. This patient group represents an increasing demand of personnel and costs in the health care system.

Table 6.1: Prevalence of cancers 31 December 2010 and 31 December 2020, both sexes

		Total no. of persons alive		Years after diagnosis			
ICD-10	**Site**	**31.12.2010**	**31.12.2020**	**<1**	**1–4**	**5–9**	**10+**
C00–96	**All sites**	**209 128**	**305 503**	**24 984**	**81 793**	**74 297**	**124 429**
C00–14	**Mouth, pharynx**	**3 880**	**5 938**	**620**	**1 846**	**1 468**	**2 004**
C00	Lip	1 091	1 179	97	311	293	478
C02–06	Oral cavity	1 255	1 839	200	572	433	634
C07–08	Salivary glands	505	728	56	201	158	313
C09–10, C01, C14	Oropharynx	859	1 958	232	693	532	501
C11	Nasopharynx	109	164	14	48	42	60
C12–13	Hypopharynx	84	116	32	42	20	22
C15–26	**Digestive organs**	**31 540**	**45 263**	**5 384**	**14 361**	**11 218**	**14 300**
C15	Oesophagus	382	899	256	326	208	109
C16	Stomach	1 942	2 107	329	594	456	728
C17	Small intestine	805	1 507	214	555	371	367
C18	Colon	17 374	24 768	2 659	7 995	6 287	7 827
C19–20	Rectum, rectosigmoid	9 732	13 280	1 260	3 921	3 363	4 736
C21	Anus	607	942	98	307	213	324
C22	Liver	288	765	194	288	157	126
C23–24	Gallbladder, bile ducts	376	527	90	194	114	129
C25	Pancreas	674	1 457	451	571	272	163
C26	Other digestive organs	126	173	50	48	30	45
C30–34, C38	**Respiratory organs**	**6 781**	**11 430**	**2 307**	**4 620**	**2 422**	**2 081**
C30–31	Nose, sinuses	294	375	41	100	97	137
C32	Larynx, epiglottis	1 120	1 114	79	312	274	449
C33–34	Lung, trachea	5 335	9 936	2 195	4 228	2 051	1 462
C38	Heart, mediastinum and pleura	65	78	9	21	8	40
C40–41	**Bone**	**686**	**888**	**41**	**161**	**150**	**536**
C43	**Melanoma of the skin**	**18 488**	**30 034**	**2 274**	**7 948**	**6 744**	**13 068**
C44	**Skin, non-melanoma**	**12 137**	**19 685**	**2 766**	**7 417**	**4 418**	**5 084**
C45	**Mesothelioma**	**121**	**133**	**51**	**61**	**14**	**7**
C47	**Autonomic nervous system**	**243**	**247**	**8**	**22**	**24**	**193**
C48–49	**Soft tissues**	**1 230**	**1 570**	**106**	**311**	**325**	**828**
C50	**Breast**	**36 843**	**52 750**	**3 337**	**12 850**	**12 358**	**24 205**
C51–58	**Female genital organs**	**20 854**	**24 894**	**1 502**	**5 355**	**4 883**	**13 154**
C51–52, C57.7–9	Other female genital	843	1 062	98	300	233	431
C53	Cervix uteri	6 817	7 630	311	1 258	1 227	4 834
C54	Corpus uteri	8 990	11 359	718	2 601	2 553	5 487
C55	Uterus, other	42	45	0	8	9	28
C56, C57.0–4, C48.2	Ovary etc.	4 351	5 021	403	1 261	925	2 432
C58	Placenta	139	152	1	9	15	127
C60–63	**Male genital organs**	**38 449**	**65 375**	**5 143**	**18 982**	**19 444**	**21 806**
C61	Prostate	32 028	56 686	4 837	17 728	17 901	16 220
C62	Testis	6 115	8 347	283	1 173	1 482	5 409
C60, C63	Other male genital	423	630	52	201	136	241
C64–68	**Urinary organs**	**16 054**	**24 132**	**2 442**	**7 645**	**6 334**	**7 711**
C64	Kidney (excl. renal pelvis)	4 817	8 402	793	2 702	2 340	2 567
C65–68	Urinary tract	11 332	15 950	1 683	5 037	4 059	5 171
C69	**Eye**	**955**	**1 206**	**75**	**275**	**245**	**611**
C70–72	**Central nervous system**	**11 116**	**14 584**	**786**	**2 512**	**3 189**	**8 097**
C73	**Thyroid gland**	**4 454**	**6 898**	**471**	**1 566**	**1 332**	**3 529**
C37, C74–75	**Other endocrine glands**	**3 146**	**4 316**	**149**	**682**	**1 028**	**2 457**
C39, C76, C80	**Other or unspecified**	**555**	**686**	**128**	**178**	**139**	**241**
C81–96	**Lymphoid/haematopoietic tissue**	**17 638**	**29 176**	**2 760**	**8 834**	**7 066**	**10 516**
C81	Hodgkin lymphoma	2 259	3 104	139	537	593	1 835
C82–86, C96	Non-Hodgkin lymphoma	6 854	11 047	955	3 083	2 798	4 211
C88	Immunoproliferative disease	459	789	93	270	237	189
C90	Multiple myeloma	1 621	2 825	462	1 288	633	442
C91–95	Leukaemia	6 524	11 618	1 151	3 734	2 849	3 884

Table 6.2: Prevalence of patients diagnosed with distant metastases during lifetime, by health region, both sexes

	Alive by					
Health region	**31.12.1995**	**31.12.2000**	**31.12.2005**	**31.12.2010**	**31.12.2015**	**31.12.2020**
South-Eastern	4 610	5 583	6 753	8 314	9 707	11 350
Western	1 542	2 004	2 398	2 871	3 523	4 063
Central	1 159	1 342	1 711	2 039	2 364	2 690
Northern	750	936	1 143	1 368	1 585	1 922
Total	**8 061**	**9 865**	**12 005**	**14 592**	**17 179**	**20 025**

Chapter 7 Mortality

The mortality data is obtained from the Cause of Death Registry.

There were 10 981 deaths from cancer in Norway in 2020, of which 5916 were men, and 5065 women (Table 7.1). Cancer of the lung accounts for 20% of the cancer mortality, followed by cancer in the colon (11%), prostate (9%), pancreas (7%) and female breast (5%). Together these cancer sites account for 51% of the cancer mortality.

Among men, lung cancer caused 1162 deaths in 2020. Prostate cancer (954 deaths), colon cancer (534 deaths) and pancreatic cancer (393 deaths) represent the second, third and fourth most frequent causes of cancer death among men, respectively.

Lung cancer mortality also ranks highest among women (1006 deaths), followed by colon (625 deaths), breast (591 deaths) and pancreatic cancer (378 deaths). Figure 7.1 shows the distribution of age-standardised mortality rates for selected cancer sites. There is at least a 10-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 only is a moderately common cancer.

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

Figure 7.1: Age-standardised (Norwegian standard) mortality rates per 100 000 person-years for selected cancers, 2020

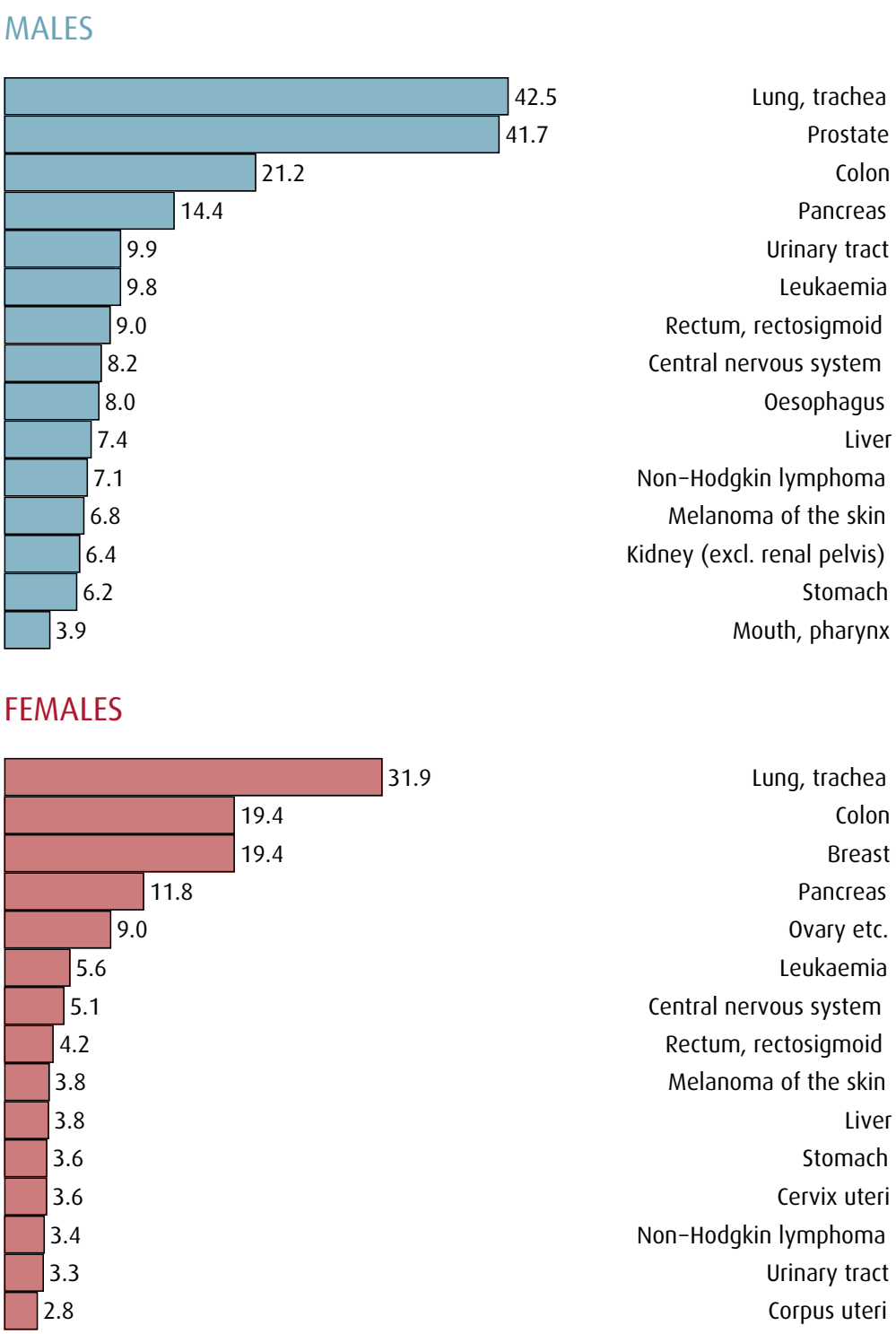

Table 7.1: Number of cancer deaths by primary site and sex, 2020

ICD-10	Site	Males	Females	Total
C00–96	**All sites**	**5 916**	**5 065**	**10 981**
C00–14	**Mouth, pharynx**	**105**	**48**	**153**
C00	Lip	4	1	5
C02–06	Oral cavity	34	30	64
C07–08	Salivary glands	16	4	20
C09–10, C01, C14	Oropharynx	33	9	42
C11	Nasopharynx	1	1	2
C12–13	Hypopharynx	17	3	20
C15–26	**Digestive organs**	**1 896**	**1 576**	**3 472**
C15	Oesophagus	217	78	295
C16	Stomach	163	114	277
C17	Small intestine	47	24	71
C18	Colon	534	625	1 159
C19–20	Rectum, rectosigmoid	235	130	365
C21	Anus	6	15	21
C22	Liver	203	120	323
C23–24	Gallbladder, bile ducts	43	46	89
C25	Pancreas	393	378	771
C26	Other digestive organs	55	46	101
C30–34, C38	**Respiratory organs**	**1 211**	**1 026**	**2 237**
C30–31	Nose, sinuses	13	8	21
C32	Larynx, epiglottis	33	8	41
C33–34	Lung, trachea	1 162	1 006	2 168
C38	Heart, mediastinum and pleura	3	4	7
C40–41	**Bone**	**13**	**11**	**24**
C43	**Melanoma of the skin**	**174**	**121**	**295**
C44	**Skin, non-melanoma**	**31**	**27**	**58**
C45	**Mesothelioma**	**56**	**12**	**68**
C47	**Autonomic nervous system**	**2**	**2**	**4**
C48–49	**Soft tissues**	**49**	**44**	**93**
C50	**Breast**	**10**	**591**	**601**
C51–58	**Female genital organs**		**589**	**589**
C51–52, C57.7–9	Other female genital		59	59
C53	Cervix uteri		106	106
C54	Corpus uteri		91	91
C55	Uterus, other		58	58
C56, C57.0–4, C48.2	Ovary etc.		275	275
C58	Placenta		0	0
C60–63	**Male genital organs**	**961**		**961**
C61	Prostate	954		954
C62	Testis	5		5
C60, C63	Other male genital	2		2
C64–68	**Urinary organs**	**407**	**188**	**595**
C64	Kidney (excl. renal pelvis)	166	80	246
C65–68	Urinary tract	241	108	349
C69	**Eye**	**4**	**1**	**5**
C70–72	**Central nervous system**	**223**	**154**	**377**
C73	**Thyroid gland**	**14**	**19**	**33**
C37, C74–75	**Other endocrine glands**	**8**	**8**	**16**
C39, C76, C80	**Other or unspecified**	**162**	**229**	**391**
C81–96	**Lymphoid/haematopoietic tissue**	**589**	**419**	**1 008**
C81	Hodgkin lymphoma	12	10	22
C82–86, C96	Non-Hodgkin lymphoma	182	111	293
C88	Immunoproliferative disease	9	7	16
C90	Multiple myeloma	136	108	244
C91–95	Leukaemia	250	183	433

Chapter 8 Survival

Long-term estimates of survival are becoming increasingly relevant as life expectancy amongst cancer patients increases and cancer care continues to advance[23]. Table 8.3 gives the 1-year, 5-year, 10-year and 15-year relative survival estimates (with 95% confidence intervals) for the follow-up period 2016–2020 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[20].

Figures 8.1–A to 8.1–X depict these two aspects of cancer survival in Norway for all cancers combined and for 23 specific cancer sites. 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 curve tends to level off a certain number of years after diagnosis, indicating that from this point forward, the cancer patient group has similar mortality as the comparable group without cancer, or in other words, statistically, these patients appear to be "cured"[24]. This concept of "statistical cure" involves attributes of survival observed among patients as a group, and should be distinguished from clinical cure, which is determined on the basis of 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, which better quantify the prognosis of cancer patients at time points beyond the initial diagnosis (Figure 8.1–A to 8.1–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 8.1–A. The combined cancer group is an aggregate of many different cancer types with different diagnostic and treatment possibilities, and survival estimates will particularly be 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 8.1–B to 8.1–X) are fairly self-explanatory and highlight the wide variations in patient survival according to these three variables. The 85 percentage-point difference in five-year survival among patients with testicular cancer (Figure 8.1–Q) compared to patients with pancreatic cancer (Figure 8.1–I) strikingly illustrates the wide differences in prognosis according to cancer type. Moreover, long-term survival following diagnosis of melanoma of the skin and cancers of the oral cavity, central nervous system, colon and thyroid gland clearly varies between men and women. This may be due to biological or anatomical differences or be related to sex-specific differences in stage at presentation[1], 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 for example colon cancer (Figure 8.1–E) relative to cervical cancer (Figure 8.1–M) or non-Hodgkin lymphoma (Figure 8.1–W). For certain cancers, including breast and corpus uteri cancer, long-term survival among patients diagnosed before the age of 50 are slightly lower than for patients diagnosed at the ages 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

[1] For cancers of the central nervous system, this is particularly noticeable. Among men, 58.1% of these tumors are malignant. The corresponding proportion among women is 34.1%.

be considered cured does however vary; five-year conditional survival from breast cancer reaches 90% 1 year after diagnosis (Figure 8.1–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.

Tables 8.1 and 8.2 provide the five-year relative survival estimates over the last four decades by cancer site and stage for males and females, respectively. While the stage-specific count of cases by five-year period of diagnosis in Tables 5.21 and 5.22 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.

Table 8.1: Five-year relative survival by primary site, stage and period of diagnosis, 1981–2020, **males**

			Relative survival (%)							
ICD-10	**Site**	**Stage**	**1981–85**	**1986–90**	**1991–95**	**1996–00**	**2001–05**	**2006–10**	**2011–15**	**2016–20***
C00–96	**All sites**	**Total**	**43.3**	**46.0**	**51.1**	**56.5**	**61.8**	**68.4**	**73.5**	**76.7**
C00–14	**Mouth, pharynx**	**Total**	**57.1**	**57.8**	**54.1**	**56.6**	**55.6**	**62.5**	**66.5**	**70.7**
		Localised	77.9	78.4	81.8	80.8	82.1	81.4	84.6	86.7
		Regional	24.6	28.0	25.1	34.0	37.4	47.3	58.9	63.9
		Distant	-	7.9	8.4	8.9	12.7	8.6	6.2	4.0
		Unknown	60.3	41.4	37.9	59.9	59.0	77.7	57.8	70.3
C15	**Oesophagus**	**Total**	**4.7**	**4.9**	**5.5**	**6.9**	**7.4**	**12.7**	**19.0**	**22.3**
		Localised	6.7	9.7	16.3	24.5	22.0	29.8	55.4	66.3
		Regional	5.4	4.6	3.8	7.9	9.8	12.2	21.9	31.5
		Distant	-	0.5	-	0.5	0.4	1.2	3.3	3.0
		Unknown	-	6.5	2.9	5.4	6.3	15.8	12.7	12.4
C16	**Stomach**	**Total**	**17.5**	**19.8**	**17.5**	**18.9**	**19.8**	**24.3**	**27.3**	**30.3**
		Localised	40.0	51.0	54.1	62.1	58.0	58.2	71.8	82.9
		Regional	18.9	20.6	17.1	19.9	21.6	23.3	31.5	35.4
		Distant	2.1	1.2	0.5	1.8	1.4	3.5	2.9	4.1
		Unknown	4.8	4.7	10.4	16.1	23.5	29.0	19.4	21.7
C18	**Colon**	**Total**	**48.6**	**47.9**	**51.0**	**56.1**	**57.2**	**60.5**	**63.9**	**69.4**
		Localised	77.3	78.0	83.5	96.1	89.5	91.7	94.3	97.9
		Regional	55.3	57.9	61.5	68.6	71.6	77.6	82.4	84.9
		Distant	5.2	4.1	4.1	6.2	7.2	11.7	14.1	16.3
		Unknown	32.1	24.1	30.9	52.5	54.9	52.6	22.8	40.0
C19–20	**Rectum, rectosigmoid**	**Total**	**43.8**	**46.8**	**51.3**	**57.2**	**60.1**	**66.2**	**69.6**	**71.4**
		Localised	66.1	71.5	81.2	84.3	88.8	91.1	96.7	98.2
		Regional	39.1	45.5	49.4	65.2	69.6	79.4	81.7	81.5
		Distant	2.3	3.1	3.6	9.9	10.2	15.9	18.7	22.4
		Unknown	30.3	30.5	27.6	47.7	57.1	51.8	40.5	51.0
C22	**Liver**	**Total**	**2.1**	**2.3**	**6.3**	**5.8**	**6.7**	**12.2**	**19.5**	**23.2**
		Localised	4.2	3.9	12.4	14.8	11.3	21.0	40.9	51.5
		Regional	-	-	-	-	-	1.2	7.0	11.5
		Distant	-	-	2.5	-	2.5	2.9	2.1	3.3
		Unknown	1.9	1.9	3.4	1.7	6.5	15.6	13.5	13.4
C23–24	**Gallbladder, bile ducts**	**Total**	**10.5**	**12.2**	**8.5**	**14.6**	**16.2**	**15.3**	**19.1**	**24.8**
		Localised	18.9	20.5	19.9	31.7	48.1	31.2	47.3	63.4
		Regional	13.1	16.4	10.8	25.2	16.8	20.7	20.6	24.8
		Distant	3.2	2.3	1.6	1.5	3.3	1.9	4.1	3.1
		Unknown	-	-	2.0	13.2	10.2	4.5	-	21.4
C25	**Pancreas**	**Total**	**1.4**	**1.6**	**2.5**	**2.9**	**4.1**	**4.8**	**10.4**	**14.5**
		Localised	2.6	4.9	5.9	12.9	16.4	21.0	52.5	53.5
		Regional	3.2	3.8	7.3	6.8	5.2	7.1	16.6	25.0
		Distant	0.3	0.8	1.0	1.5	1.8	1.7	2.0	2.9
		Unknown	2.5	-	1.8	2.0	3.7	7.4	8.6	12.3
C33–34	**Lung, trachea**	**Total**	**7.0**	**7.3**	**7.9**	**8.2**	**9.3**	**12.2**	**18.3**	**24.7**
		Localised	16.5	16.5	19.8	30.6	38.1	43.6	54.3	63.9
		Regional	7.3	9.1	8.0	8.2	10.3	14.5	22.2	30.4
		Distant	0.6	0.7	0.5	0.5	1.2	1.8	2.2	4.1
		Unknown	2.6	4.0	7.1	6.6	9.8	12.9	12.7	17.9
C43	**Melanoma of the skin**	**Total**	**68.2**	**70.0**	**74.3**	**75.4**	**76.7**	**77.7**	**85.6**	**90.1**
		Localised	77.4	78.2	81.4	83.1	85.6	85.9	91.4	94.8
		Regional	28.7	28.3	36.0	35.4	47.5	39.3	60.8	74.0
		Distant	-	7.9	12.4	9.9	14.9	9.7	23.6	36.6
		Unknown	61.4	46.8	63.3	75.0	77.6	77.4	64.8	67.4
C61	**Prostate**	**Total**	**57.9**	**58.1**	**66.4**	**78.7**	**84.9**	**91.5**	**95.1**	**95.7**
		Localised	74.4	73.2	78.5	94.6	96.7	100.7	103.1	102.0
		Regional	39.5	54.9	62.1	72.5	77.8	93.0	95.1	95.8
		Distant	20.6	24.8	24.0	26.1	29.9	36.9	39.5	44.5
		Unknown	53.0	59.9	69.9	82.3	87.9	93.8	100.2	99.9

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Table 8.1: Five-year relative survival by primary site, stage and period of diagnosis, 1981–2020, **males** (Continued)

			Relative survival (%)							
ICD-10	**Site**	**Stage**	**1981–85**	**1986–90**	**1991–95**	**1996–00**	**2001–05**	**2006–10**	**2011–15**	**2016–20***
		Total	**92.2**	**93.5**	**95.8**	**96.8**	**96.8**	**97.8**	**98.4**	**99.0**
		Localised	97.8	98.3	99.4	99.0	99.4	99.7	99.4	100.2
C62	**Testis**	Regional	95.8	94.4	95.5	98.2	95.3	95.9	97.5	97.5
		Distant	66.8	73.7	72.2	79.1	85.1	87.8	87.9	89.1
		Unknown	-	-	-	101.6	98.0	98.6	-	-
		Total	**41.7**	**42.6**	**50.2**	**49.1**	**59.2**	**64.9**	**75.2**	**79.6**
		Localised	73.1	68.7	76.4	74.5	85.4	85.7	91.2	93.5
C64	**Kidney (excl. renal pelvis)**	Regional	47.6	48.3	54.5	52.6	53.3	57.9	62.0	67.8
		Distant	6.0	6.0	5.1	7.5	7.0	10.6	15.3	21.1
		Unknown	44.5	36.1	28.3	53.1	65.7	72.6	46.2	59.3
		Total	**63.4**	**67.0**	**70.2**	**69.6**	**72.1**	**74.3**	**77.2**	**79.3**
		Localised	71.4	73.7	76.7	79.7	85.0	84.6	84.0	86.2
C65–68	**Urinary tract**	Regional	23.4	27.4	24.7	26.7	24.9	32.5	28.9	32.9
		Distant	2.6	7.8	6.8	4.4	6.3	5.0	4.8	6.7
		Unknown	61.3	66.7	67.2	69.2	70.6	75.1	46.8	62.5
		Total	**33.7**	**37.0**	**43.4**	**50.7**	**58.8**	**61.1**	**62.2**	**57.9**
C70–72	**Central nervous system**	Non-malignant	70.4	72.9	78.4	88.9	93.1	92.4	95.1	96.5
		Malignant	16.2	21.9	20.9	20.6	21.2	25.3	27.9	27.8
		Total	**85.1**	**77.7**	**76.9**	**81.2**	**86.9**	**86.8**	**88.4**	**88.8**
		Localised	102.5	91.6	95.9	101.1	99.5	102.7	99.8	99.7
C73	**Thyroid gland**	Regional	84.5	84.8	85.0	82.7	90.4	90.3	88.9	88.2
		Distant	45.4	29.9	22.9	47.0	-	-	32.8	35.2
		Unknown	-	-	-	-	-	-	70.2	78.1
C81	**Hodgkin lymphoma**	**Total**	**62.6**	**72.4**	**76.2**	**80.3**	**82.2**	**78.7**	**83.6**	**90.2**
C82–86, C96	**Non-Hodgkin lymphoma**	**Total**	**40.9**	**44.6**	**44.5**	**47.4**	**57.7**	**64.2**	**72.7**	**77.6**
C91–95	**Leukaemia**	**Total**	**25.1**	**33.3**	**41.2**	**45.9**	**54.6**	**59.5**	**64.7**	**69.9**

* For 2016–20 the 5-year relative survival estimates are based on the period approach (observation window 2016–20).

- Not estimated due to too few patients (see Chapter 4).

Table 8.2: Five-year relative survival by primary site, stage and period of diagnosis, 1981–2020, **females**

			Relative survival (%)							
ICD-10	**Site**	**Stage**	**1981–85**	**1986–90**	**1991–95**	**1996–00**	**2001–05**	**2006–10**	**2011–15**	**2016–20***
C00–96	**All sites**	**Total**	**53.1**	**55.6**	**58.6**	**62.4**	**65.5**	**68.7**	**72.9**	**75.9**
C00–14	**Mouth, pharynx**	**Total**	**58.4**	**60.5**	**64.5**	**59.1**	**66.8**	**70.4**	**75.3**	**75.6**
		Localised	75.0	75.1	84.8	83.6	85.6	85.3	90.1	89.8
		Regional	37.9	43.0	40.0	35.1	49.9	53.4	59.7	60.3
		Distant	-	-	-	7.4	-	-	-	-
		Unknown	-	56.8	54.6	57.7	77.6	86.4	81.0	84.2
C15	**Oesophagus**	**Total**	**12.7**	**8.1**	**12.2**	**9.0**	**9.9**	**16.9**	**27.0**	**30.8**
		Localised	15.9	16.5	23.6	26.5	25.0	42.6	42.5	56.7
		Regional	17.2	7.5	9.9	4.6	8.5	21.3	37.1	41.6
		Distant	-	-	-	-	2.2	-	8.0	11.6
		Unknown	-	-	12.9	8.3	9.0	10.8	18.5	25.0
C16	**Stomach**	**Total**	**21.1**	**23.2**	**22.1**	**26.0**	**23.7**	**25.9**	**29.2**	**30.8**
		Localised	52.0	52.7	61.0	75.5	64.3	66.1	73.6	78.9
		Regional	17.6	25.6	24.7	33.3	21.7	23.6	30.1	33.1
		Distant	1.0	0.6	1.5	3.1	4.2	3.3	4.0	6.4
		Unknown	16.0	8.0	13.4	18.7	28.9	34.7	32.2	28.3
C18	**Colon**	**Total**	**48.8**	**51.7**	**54.0**	**59.0**	**60.3**	**64.9**	**68.7**	**71.3**
		Localised	78.6	80.7	85.7	90.3	94.1	95.3	97.1	98.2
		Regional	56.3	61.3	62.4	71.6	73.2	80.1	83.6	85.9
		Distant	3.9	4.6	4.8	8.9	9.9	13.5	18.8	20.7
		Unknown	17.4	37.1	41.1	53.5	61.8	55.0	25.0	41.3
C19–20	**Rectum, rectosigmoid**	**Total**	**48.4**	**52.4**	**57.6**	**60.8**	**66.4**	**67.8**	**69.3**	**72.4**
		Localised	72.9	78.9	81.2	95.7	93.4	94.7	96.9	96.1
		Regional	41.5	51.8	58.3	63.5	73.0	77.7	79.2	83.3
		Distant	3.9	3.1	6.0	7.1	10.9	18.8	20.4	21.8
		Unknown	38.0	26.1	49.1	53.8	70.4	56.8	42.6	52.0
C22	**Liver**	**Total**	**6.2**	**7.1**	**10.7**	**8.9**	**13.6**	**17.3**	**25.1**	**24.1**
		Localised	10.2	11.8	19.4	18.7	22.9	35.7	45.8	46.1
		Regional	-	-	-	-	3.1	10.0	17.4	31.0
		Distant	1.7	2.6	2.3	-	3.1	3.9	10.1	6.2
		Unknown	-	4.4	11.7	5.9	14.3	12.1	15.3	16.6
C23–24	**Gallbladder, bile ducts**	**Total**	**10.8**	**11.1**	**9.9**	**13.0**	**10.7**	**16.7**	**20.7**	**26.2**
		Localised	26.9	19.5	27.3	40.1	28.0	41.6	40.0	57.0
		Regional	10.3	16.0	10.4	16.8	23.4	22.5	33.0	34.7
		Distant	-	-	-	2.5	0.9	2.0	3.1	2.8
		Unknown	-	10.1	6.4	9.7	3.9	17.4	-	30.6
C25	**Pancreas**	**Total**	**1.9**	**2.5**	**3.6**	**3.3**	**3.4**	**6.8**	**11.4**	**14.7**
		Localised	3.7	7.1	13.2	15.4	19.8	28.4	51.5	55.7
		Regional	5.1	4.5	5.5	3.8	4.7	7.0	15.6	19.8
		Distant	0.8	0.4	1.2	1.1	1.3	2.5	2.5	2.6
		Unknown	1.2	3.4	1.4	4.7	2.9	10.4	4.8	15.6
C33–34	**Lung, trachea**	**Total**	**6.6**	**8.3**	**11.0**	**11.5**	**12.8**	**17.1**	**24.2**	**31.0**
		Localised	18.1	21.7	29.6	42.4	48.1	54.7	63.7	72.8
		Regional	4.3	8.4	13.4	10.2	13.3	17.9	27.3	35.8
		Distant	0.3	1.1	1.2	1.1	1.6	2.8	3.6	5.8
		Unknown	7.6	6.2	6.0	12.0	16.4	17.5	20.1	24.9
C43	**Melanoma of the skin**	**Total**	**79.3**	**86.3**	**86.7**	**88.3**	**86.9**	**87.7**	**92.6**	**94.9**
		Localised	85.5	90.9	91.4	95.3	93.4	93.1	96.1	98.1
		Regional	41.6	43.9	46.2	53.2	61.1	56.3	65.8	75.9
		Distant	6.2	14.7	17.8	16.2	19.2	32.0	33.7	55.1
		Unknown	77.6	69.6	79.0	88.1	86.4	85.9	77.3	72.1

Continued on next page

Table 8.2: Five-year relative survival by primary site, stage and period of diagnosis, 1981–2020, **females** (Continued)

			Relative survival (%)							
ICD-10	**Site**	**Stage**	**1981–85**	**1986–90**	**1991–95**	**1996–00**	**2001–05**	**2006–10**	**2011–15**	**2016–20***
C50	**Breast**	**Total**	**73.7**	**75.6**	**77.5**	**85.0**	**87.0**	**88.6**	**91.5**	**92.1**
		I	86.6	93.3	95.5	98.2	99.1	99.7	100.9	100.5
		II	65.0	74.3	74.3	85.2	88.1	91.3	95.3	96.1
		III	48.7	47.1	50.8	63.4	67.5	75.5	79.1	79.4
		IV	14.8	20.2	23.6	20.6	21.7	24.0	31.2	33.9
		Unknown	86.2	85.7	82.1	88.7	82.0	70.8	74.4	79.3
C53	**Cervix uteri**	**Total**	**71.3**	**68.9**	**73.4**	**74.6**	**77.6**	**77.6**	**80.3**	**82.0**
		I	85.9	86.4	88.5	91.9	93.8	93.5	94.4	94.7
		II	58.3	56.0	64.1	61.0	76.2	77.6	82.4	79.9
		III	32.0	21.2	33.9	40.1	46.9	48.1	49.8	54.1
		IV	5.3	-	30.6	5.5	25.3	17.1	20.7	19.0
		Unknown	75.8	72.3	76.1	75.3	78.0	73.2	80.5	85.1
C54	**Corpus uteri**	**Total**	**69.6**	**71.5**	**75.7**	**78.4**	**81.6**	**83.4**	**84.8**	**85.6**
		Localised	82.1	82.1	88.4	91.3	91.6	95.2	96.0	96.7
		Regional	54.0	62.8	63.2	71.2	77.4	67.8	65.2	68.7
		Distant	23.9	22.6	32.9	32.2	36.5	40.8	38.4	41.6
		Unknown	35.8	47.5	52.9	75.0	86.5	82.1	66.3	64.4
C56, C57.0–4, C48.2	**Ovary etc.**	**Total**	**33.8**	**34.3**	**36.2**	**40.4**	**41.9**	**43.4**	**47.5**	**51.1**
		Localised	75.0	80.7	81.9	91.4	87.6	86.7	94.8	99.7
		Regional	41.8	47.2	45.6	64.9	66.7	64.8	63.7	61.3
		Distant	15.5	15.7	18.5	25.5	27.8	31.8	34.9	36.8
		Unknown	43.9	24.1	36.3	52.5	62.5	50.5	42.0	40.2
C64	**Kidney (excl. renal pelvis)**	**Total**	**45.9**	**52.0**	**56.5**	**54.5**	**64.1**	**73.1**	**78.2**	**80.7**
		Localised	70.4	79.4	79.4	82.0	87.0	90.0	92.5	93.5
		Regional	51.0	51.8	52.6	48.4	54.0	46.8	61.8	67.8
		Distant	6.5	9.7	4.7	11.9	13.9	18.0	14.6	20.9
		Unknown	-	15.1	34.3	56.2	63.5	80.0	40.0	43.8
C65–68	**Urinary tract**	**Total**	**55.4**	**61.3**	**61.1**	**63.0**	**62.2**	**66.6**	**71.2**	**75.4**
		Localised	68.4	70.4	72.0	80.7	80.1	79.4	80.0	83.9
		Regional	13.6	16.4	22.3	28.4	21.8	25.1	32.7	38.0
		Distant	5.8	5.7	5.5	3.0	6.9	7.7	4.7	12.3
		Unknown	37.7	66.2	51.9	61.4	60.0	69.2	57.3	38.1
C70–72	**Central nervous system**	**Total**	**48.9**	**55.7**	**60.0**	**67.7**	**75.9**	**78.1**	**77.7**	**75.3**
		Non-malignant	83.8	82.4	86.1	91.3	93.9	95.4	97.5	97.4
		Malignant	20.1	25.2	26.2	25.8	27.4	29.8	30.2	29.2
C73	**Thyroid gland**	**Total**	**85.8**	**88.0**	**90.4**	**86.3**	**90.3**	**92.2**	**92.6**	**95.1**
		Localised	93.8	95.3	98.1	101.2	102.0	103.3	100.7	100.1
		Regional	81.8	84.5	87.4	83.9	87.4	90.5	91.7	93.7
		Distant	-	44.3	50.8	60.6	54.3	-	-	-
		Unknown	-	-	-	83.8	82.9	86.5	72.6	87.3
C81	**Hodgkin lymphoma**	**Total**	**64.7**	**74.8**	**72.2**	**87.3**	**84.4**	**82.8**	**87.8**	**88.7**
C82–86, C96	**Non-Hodgkin lymphoma**	**Total**	**49.1**	**53.9**	**51.2**	**55.7**	**62.1**	**71.8**	**78.4**	**79.8**
C91–95	**Leukaemia**	**Total**	**28.9**	**32.3**	**48.2**	**54.2**	**59.6**	**67.1**	**72.4**	**76.2**

* For 2016–20 the 5-year relative survival estimates are based on the period approach (observation window 2016–20).

- Not estimated due to too few patients (see Chapter 4).

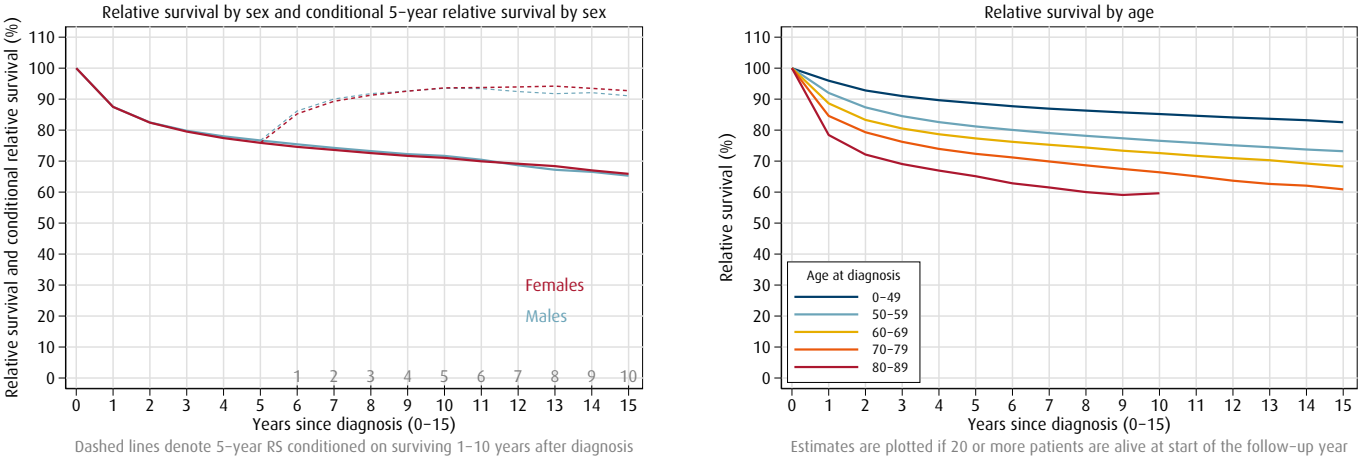
Table 8.3: 1-, 5-, 10-, and 15-year relative survival (%) with 95% confidence interval by primary site and sex. Period approach, 2016–2020

ICD-10	Site	Sex	1-year	5-year	10-year	15-year
C00–14	Mouth, pharynx	M	88.0 (86.4–89.7)	70.7 (68.0–73.4)	62.6 (58.4–67.1)	54.0 (42.2–69.1)
		F	90.2 (88.3–92.2)	75.6 (72.4–78.9)	65.5 (60.8–70.6)	55.0 (46.2–65.6)
C15	Oesophagus	M	50.7 (47.7–53.8)	22.3 (19.6–25.3)	18.0 (15.1–21.5)	14.7 (10.5–20.6)
		F	53.9 (48.8–59.4)	30.8 (25.9–36.6)	22.5 (17.0–29.9)	15.8 (8.7–28.7)
C16	Stomach	M	58.4 (55.7–61.3)	30.3 (27.6–33.3)	24.8 (20.8–29.5)	15.7 (10.4–23.8)
		F	55.7 (52.2–59.5)	30.8 (27.3–34.7)	28.8 (24.2–34.3)	30.4 (22.5–41.0)
C18	Colon	M	85.7 (84.7–86.6)	69.4 (67.8–71.0)	64.2 (61.1–67.4)	57.6 (48.7–68.3)
		F	85.0 (84.1–85.9)	71.3 (69.9–72.6)	69.9 (67.5–72.4)	67.7 (61.8–74.1)
C19–20	Rectum, rectosigmoid	M	89.2 (88.1–90.3)	71.4 (69.6–73.3)	66.3 (63.2–69.6)	61.2 (52.9–70.7)
		F	90.2 (89.0–91.5)	72.4 (70.3–74.6)	66.9 (63.5–70.4)	59.0 (52.4–66.6)
C22	Liver	M	47.1 (43.7–50.8)	23.2 (20.0–26.9)	15.4 (8.5–27.9)	11.4 (5.6–23.2)
		F	47.2 (42.7–52.1)	24.1 (20.1–29.0)	17.1 (13.1–22.4)	14.5 (9.1–23.0)
C23–24	Gallbladder, bile ducts	M	60.9 (55.7–66.7)	24.8 (20.2–30.6)	19.5 (13.4–28.6)	20.9 (13.7–32.0)
		F	58.3 (53.0–64.2)	26.2 (21.4–32.0)	22.7 (17.5–29.5)	14.7 (7.7–28.0)
C25	Pancreas	M	38.6 (36.5–40.9)	14.5 (12.8–16.4)	11.9 (9.7–14.6)	15.6 (11.4–21.4)
		F	39.8 (37.4–42.3)	14.7 (12.9–16.8)	11.6 (9.6–14.0)	8.6 (5.0–14.6)
C33–34	Lung, trachea	M	51.1 (50.0–52.3)	24.7 (23.6–25.9)	16.5 (15.3–17.9)	12.0 (10.4–13.9)
		F	58.0 (56.8–59.1)	31.0 (29.8–32.3)	21.0 (19.6–22.5)	14.0 (11.7–16.8)
C43	Melanoma of the skin	M	97.2 (96.7–97.8)	90.1 (88.7–91.4)	87.1 (84.2–90.0)	94.3 (88.9–100.0)
		F	98.3 (97.8–98.8)	94.9 (93.7–96.2)	93.3 (90.5–96.1)	88.2 (82.5–94.3)
C50	Breast	F	98.0 (97.8–98.3)	92.1 (91.5–92.8)	86.6 (85.4–87.7)	79.3 (76.5–82.3)
C53	Cervix uteri	F	93.8 (92.6–94.9)	82.0 (80.0–84.0)	77.6 (74.9–80.4)	74.2 (70.6–78.0)
C54	Corpus uteri	F	94.7 (93.8–95.5)	85.6 (84.1–87.2)	85.9 (83.3–88.7)	85.8 (80.0–92.1)
C56, C57.0–4, C48.2	Ovary etc.	F	84.7 (83.2–86.2)	51.1 (49.0–53.3)	38.0 (35.5–40.7)	34.7 (30.9–38.9)
C61	Prostate	M	99.5 (99.3–99.7)	95.7 (95.1–96.3)	91.6 (90.3–92.9)	81.5 (77.7–85.5)
C62	Testis	M	99.5 (99.1–99.9)	99.0 (98.3–99.8)	99.4 (98.4–100.4)	98.9 (97.5–100.2)
C64	Kidney (excl. renal pelvis)	M	90.9 (89.8–92.1)	79.6 (77.6–81.6)	69.7 (66.2–73.4)	57.7 (50.4–66.2)
		F	91.6 (90.1–93.2)	80.7 (78.1–83.4)	73.2 (69.1–77.5)	60.3 (51.6–70.5)
C65–68	Urinary tract	M	90.6 (89.8–91.5)	79.3 (77.7–80.9)	74.4 (71.3–77.6)	59.0 (48.4–71.8)
		F	87.0 (85.5–88.6)	75.4 (72.9–77.9)	68.3 (64.0–72.8)	54.2 (43.9–66.8)
C70–72	Central nervous system	M	76.7 (74.9–78.6)	57.9 (55.6–60.2)	55.6 (53.0–58.3)	52.6 (49.0–56.5)
		F	86.1 (84.8–87.6)	75.3 (73.4–77.2)	72.7 (70.3–75.2)	70.8 (67.3–74.5)
C73	Thyroid gland	M	94.2 (92.4–96.1)	88.8 (85.7–92.0)	83.5 (78.5–88.9)	82.3 (74.2–91.3)
		F	96.4 (95.3–97.5)	95.1 (93.5–96.8)	95.7 (92.6–99.0)	101.3 (95.4–107.5)
C81	Hodgkin lymphoma	M	95.7 (93.6–97.8)	90.2 (87.0–93.5)	86.5 (82.3–91.0)	83.2 (78.1–88.6)
		F	93.8 (90.9–96.9)	88.7 (84.5–93.0)	82.6 (77.1–88.6)	82.0 (75.0–89.5)
C82–86, C96	Non-Hodgkin lymphoma	M	87.6 (86.2–89.0)	77.6 (75.5–79.9)	66.7 (63.0–70.6)	60.9 (54.8–67.6)
		F	89.5 (88.2–90.9)	79.8 (77.7–82.0)	70.7 (67.6–74.0)	64.5 (56.7–73.5)
C91–95	Leukaemia	M	85.9 (84.6–87.1)	69.9 (67.9–72.0)	61.2 (58.2–64.4)	49.1 (42.9–56.2)
		F	87.4 (86.0–88.7)	76.2 (74.1–78.3)	64.8 (61.5–68.3)	55.3 (49.7–61.4)

- Not estimated due to too few patients (see Chapter 4).

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

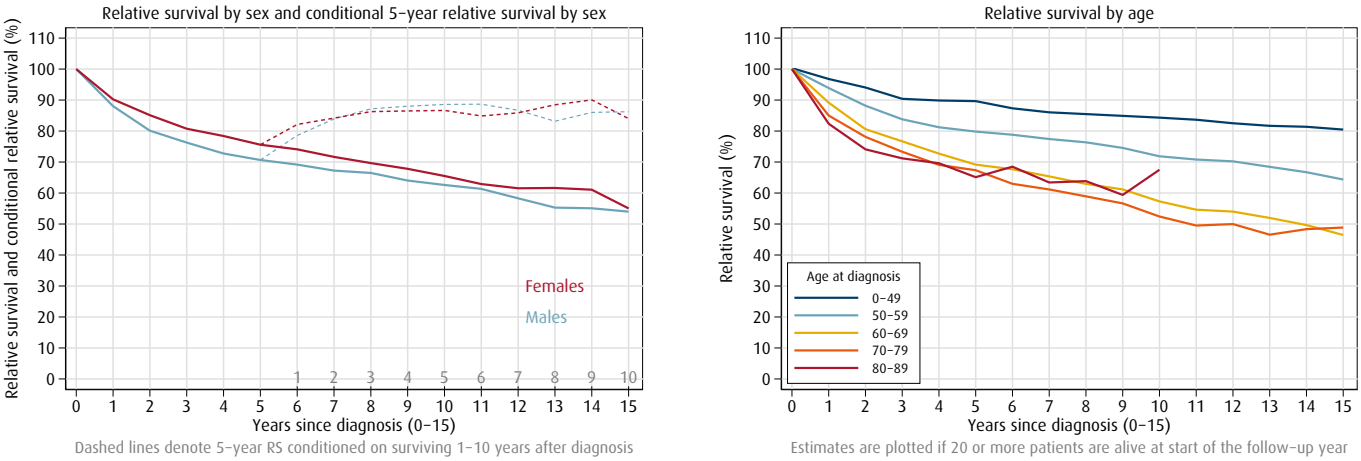
Figure 8.1–A: All sites (ICD-10 C00–96)



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

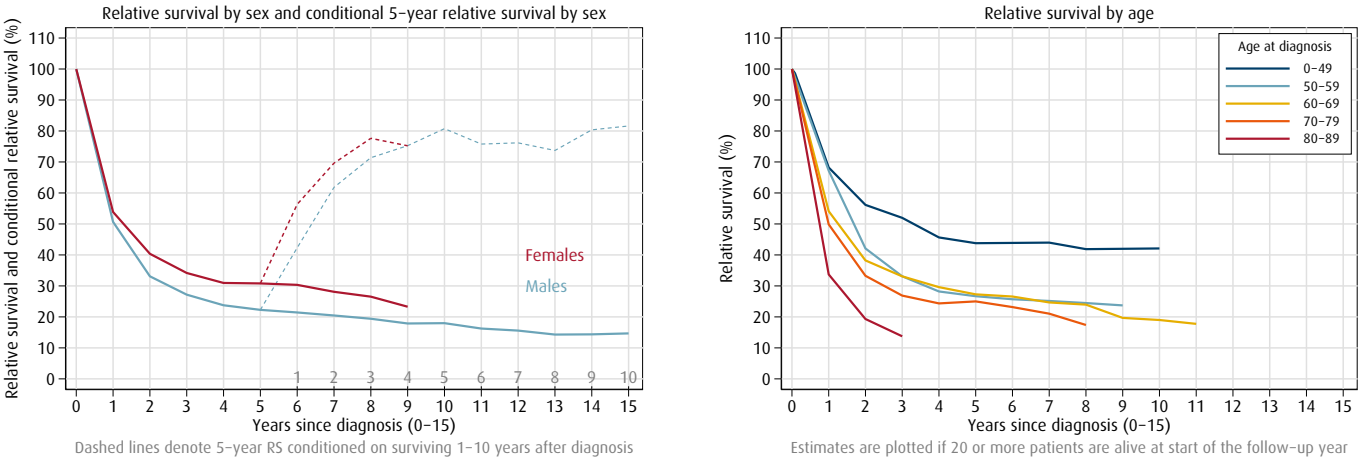
Figure 8.1–B: Mouth, pharynx (ICD-10 C00–14)



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 8.1–C: Oesophagus (ICD-10 C15)

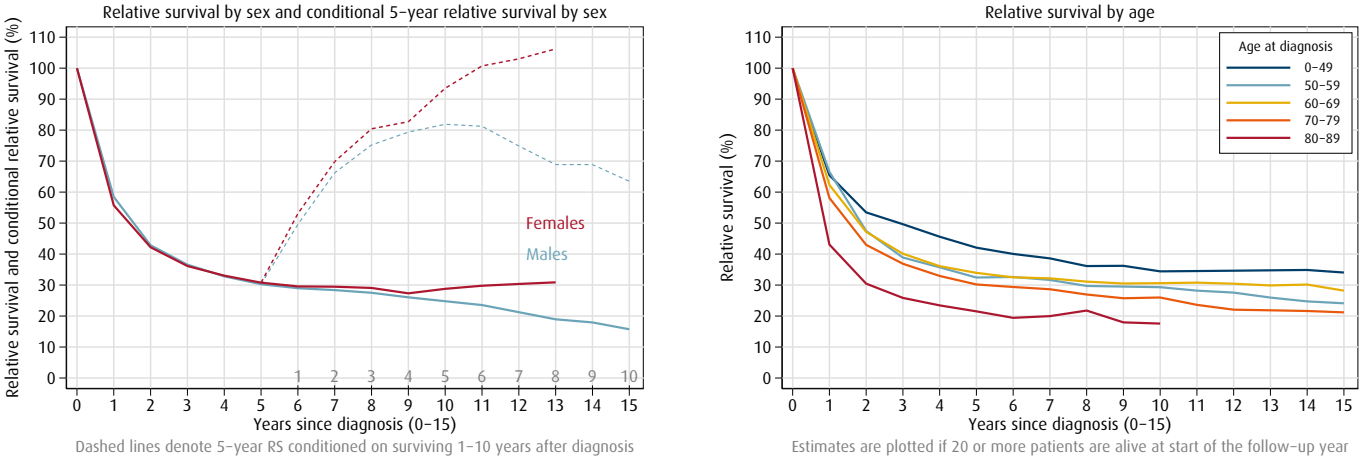


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

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

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

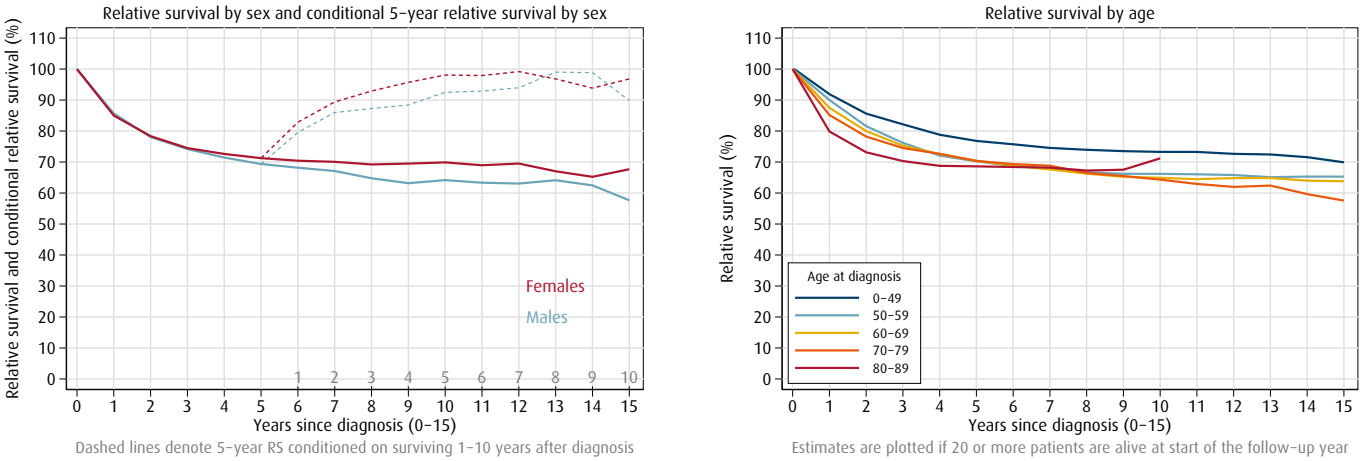
Figure 8.1–D: Stomach (ICD-10 C16)



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

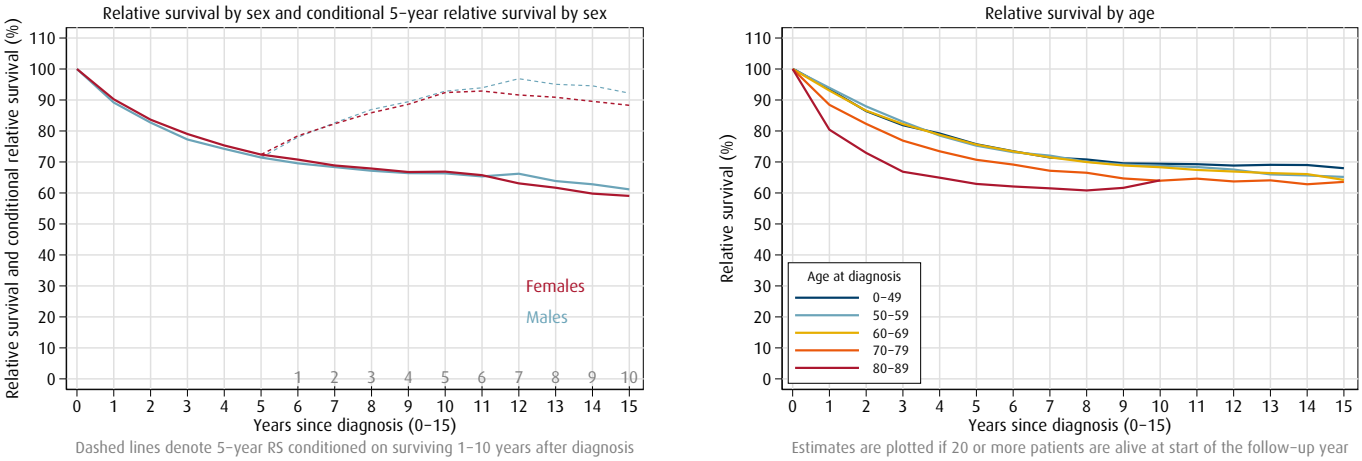
Figure 8.1–E: Colon (ICD-10 C18)



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

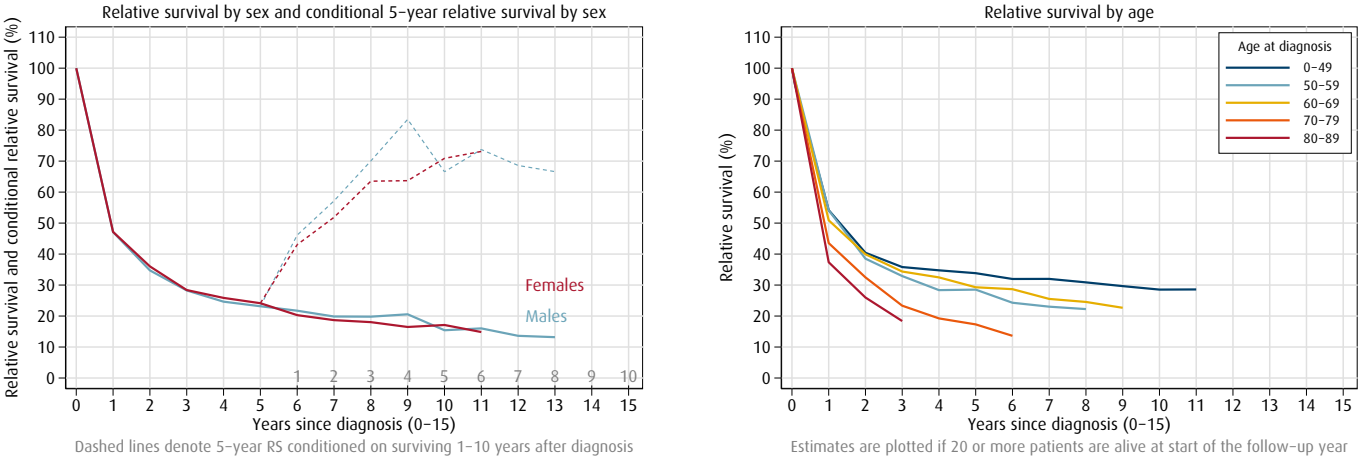


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

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

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

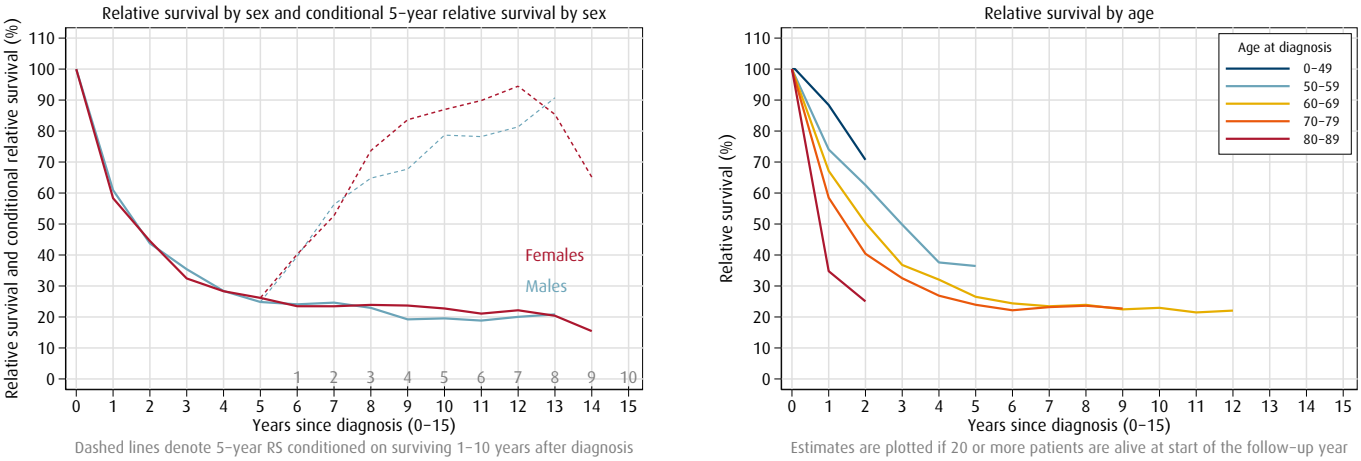
Figure 8.1–G: Liver (ICD-10 C22)



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

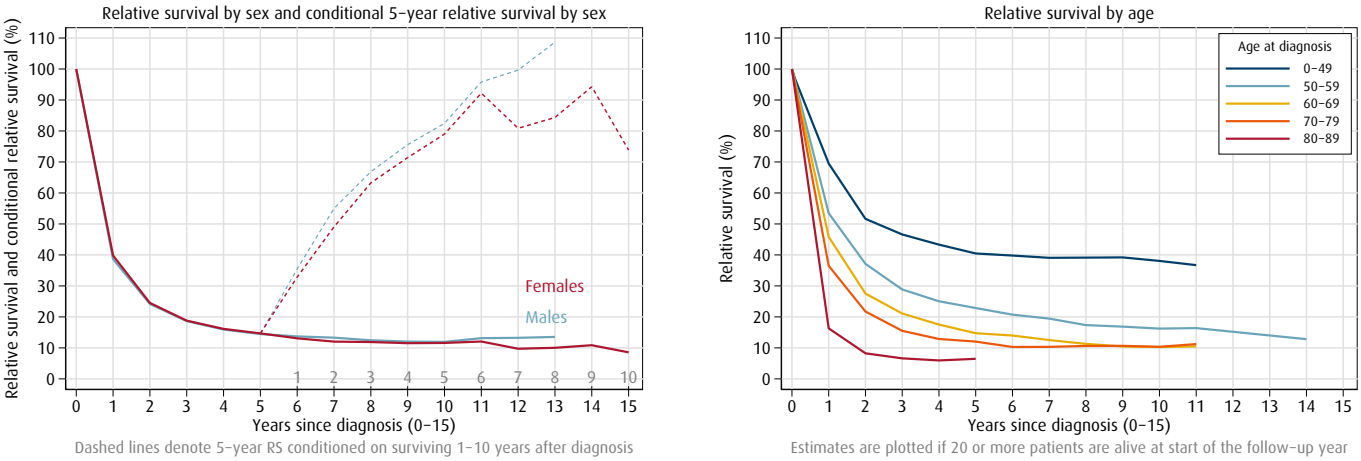
Figure 8.1–H: Gallbladder, bile ducts (ICD-10 C23–24)



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 8.1–I: Pancreas (ICD-10 C25)

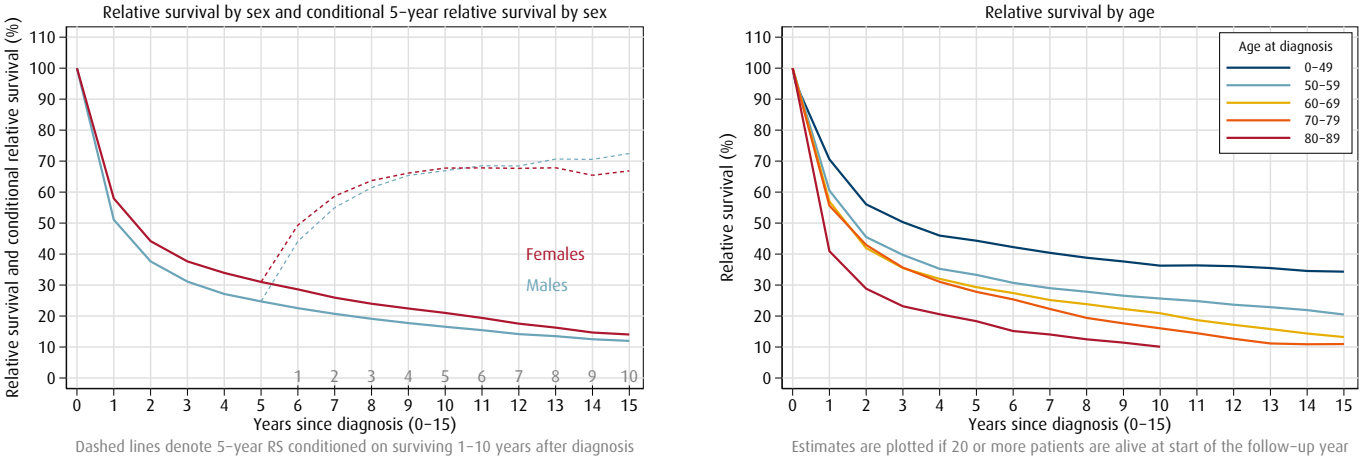


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

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

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

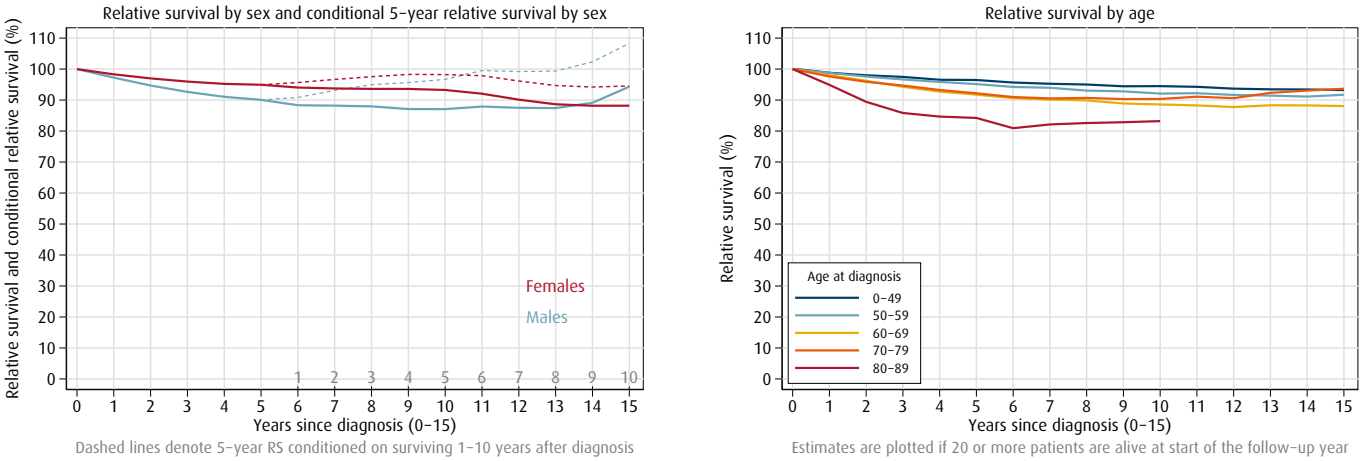
Figure 8.1–J: Lung, trachea (ICD-10 C33–34)



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

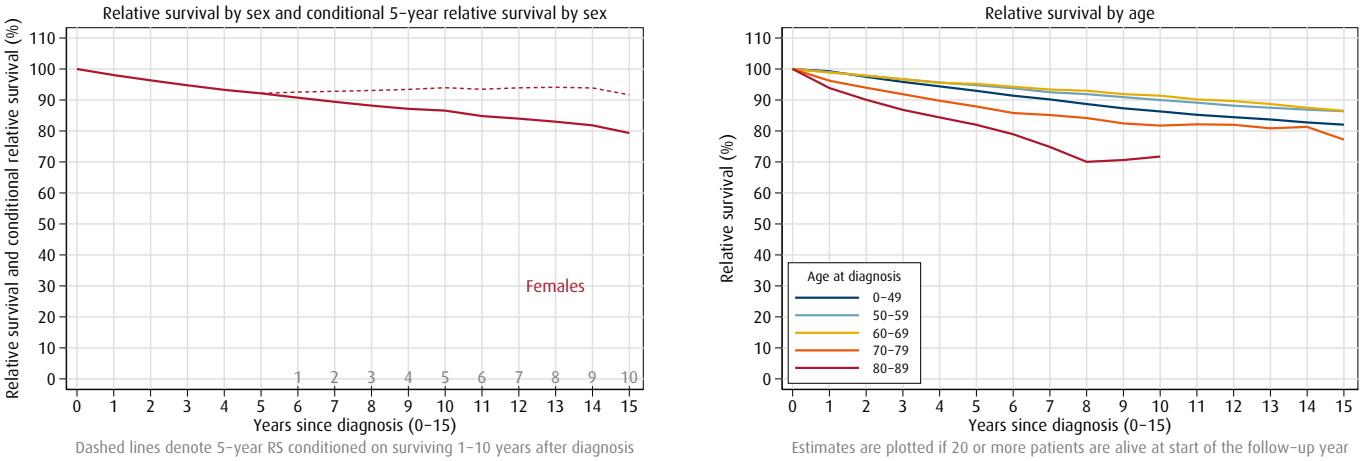
Figure 8.1–K: Melanoma of the skin (ICD-10 C43)



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 8.1–L: Breast (ICD-10 C50)

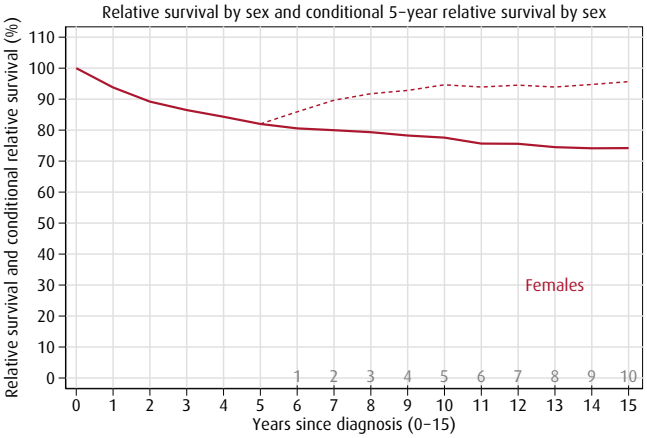


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

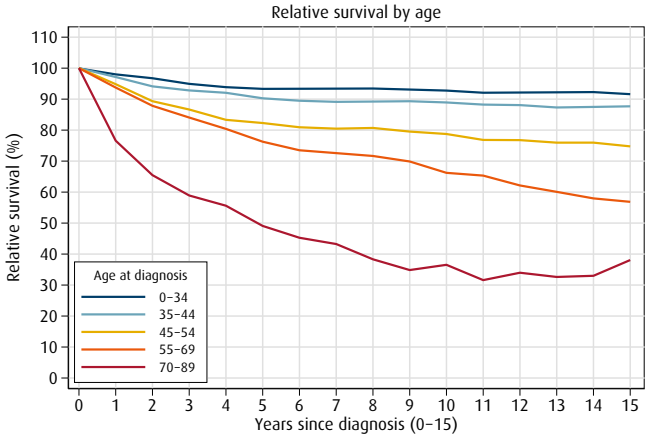
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

Figure 8.1–M: Cervix uteri (ICD-10 C53)

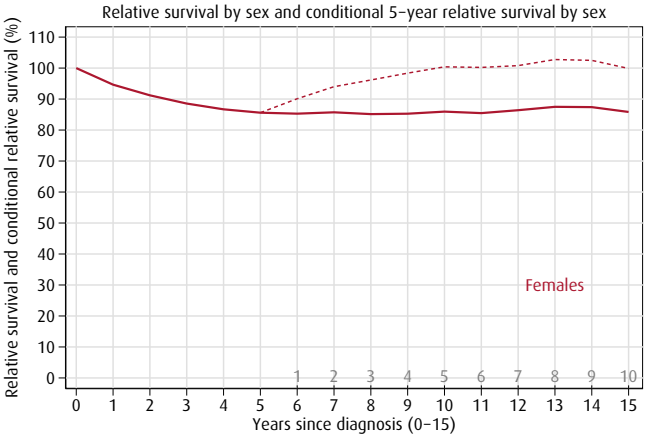


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

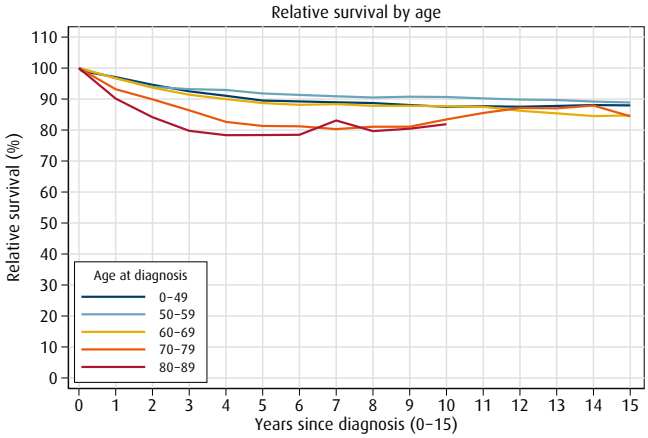


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–N: Corpus uteri (ICD-10 C54)

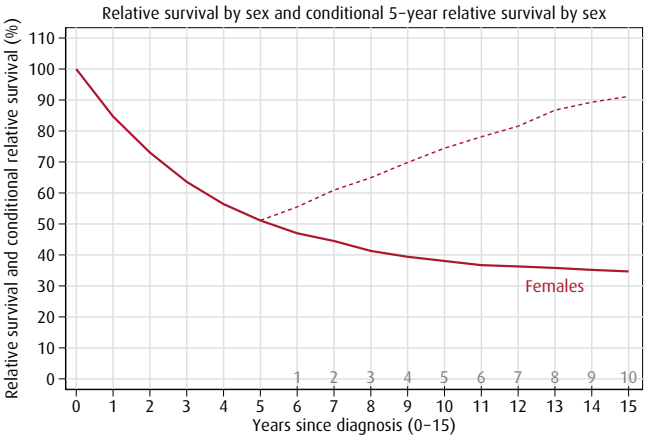


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

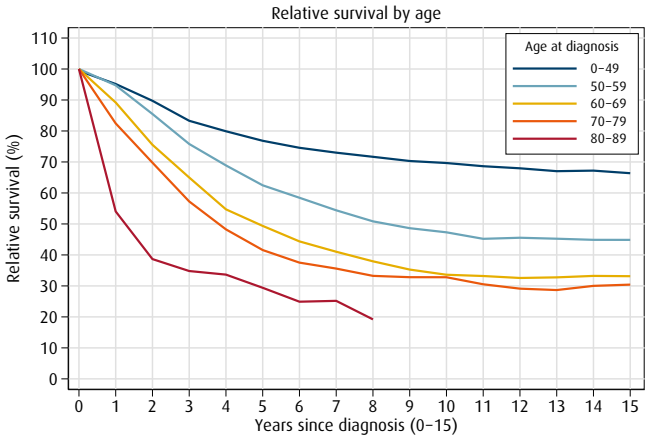


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–O: Ovary etc. (ICD-10 C56, C57.0–4, C48.2)



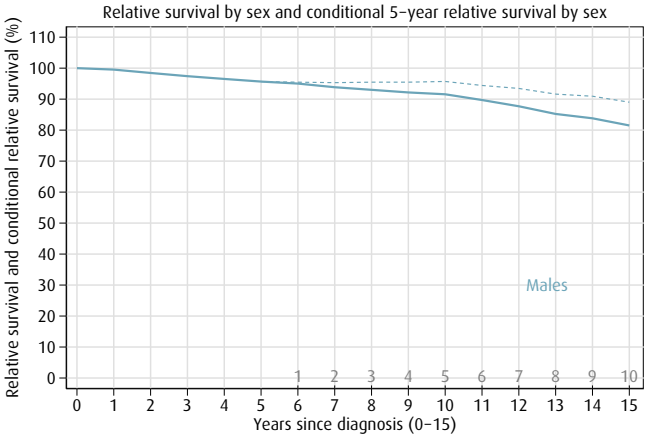
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



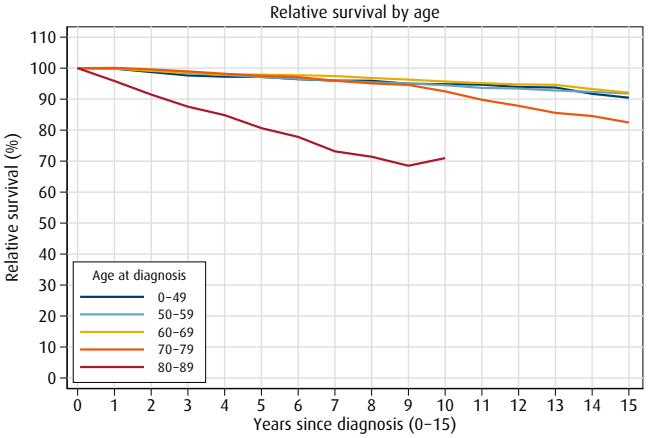
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

Figure 8.1–P: Prostate (ICD-10 C61)

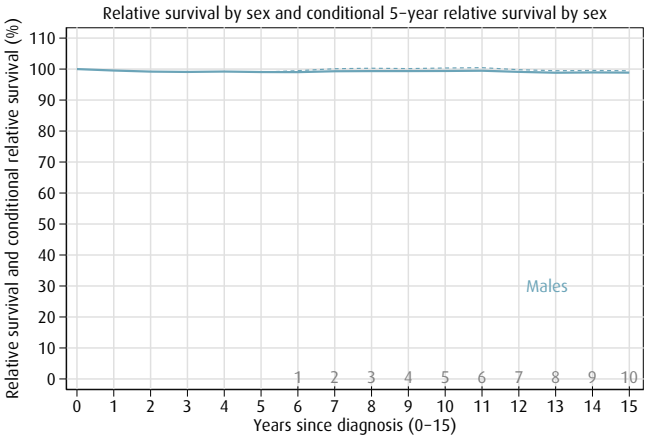


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

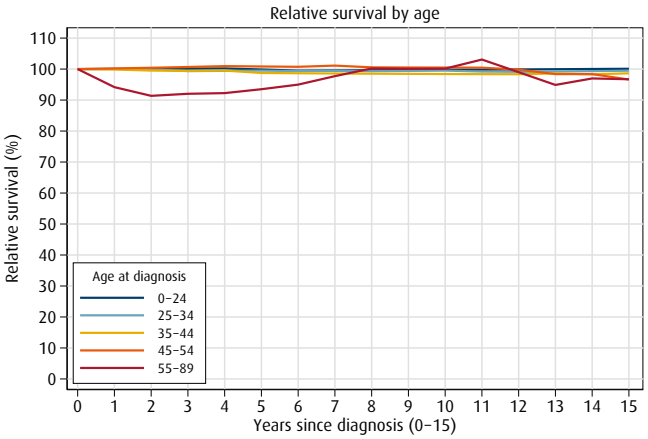


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–Q: Testis (ICD-10 C62)

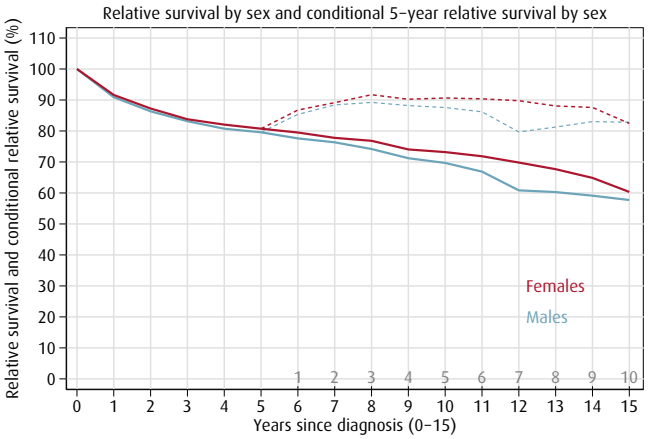


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

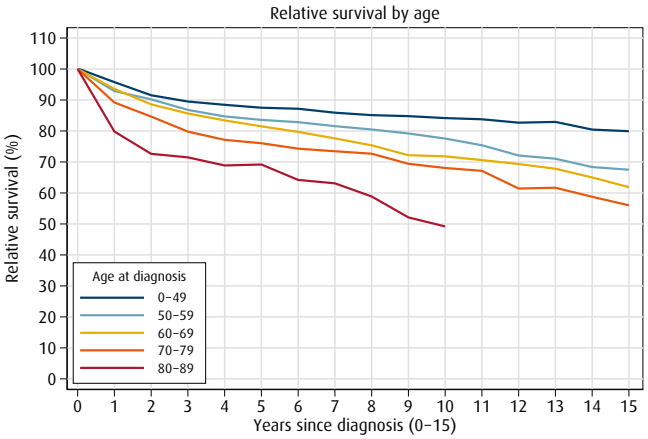


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–R: Kidney (excl. renal pelvis) (ICD-10 C64)



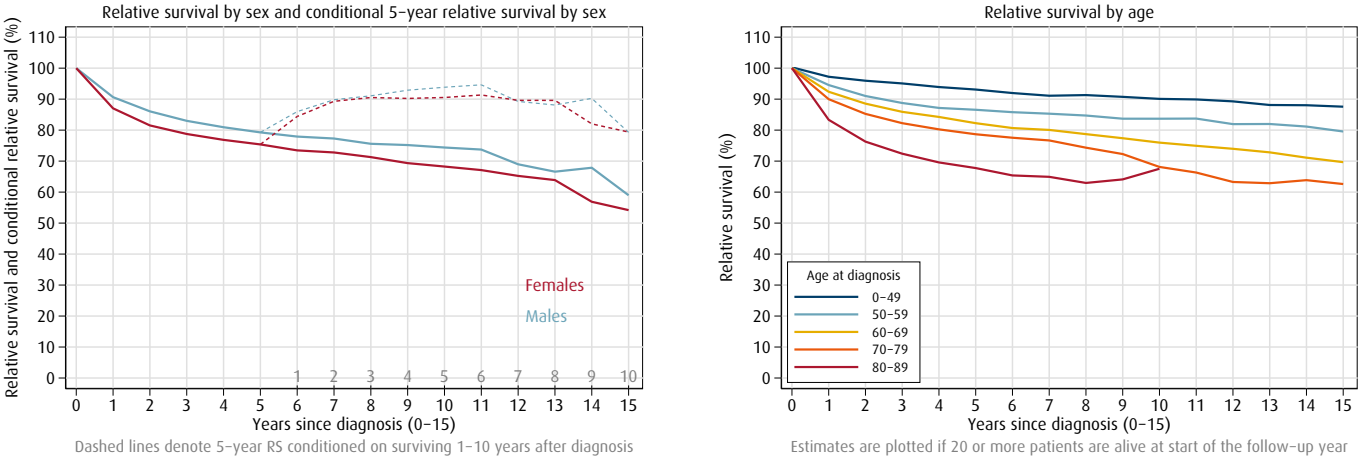
Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis



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

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

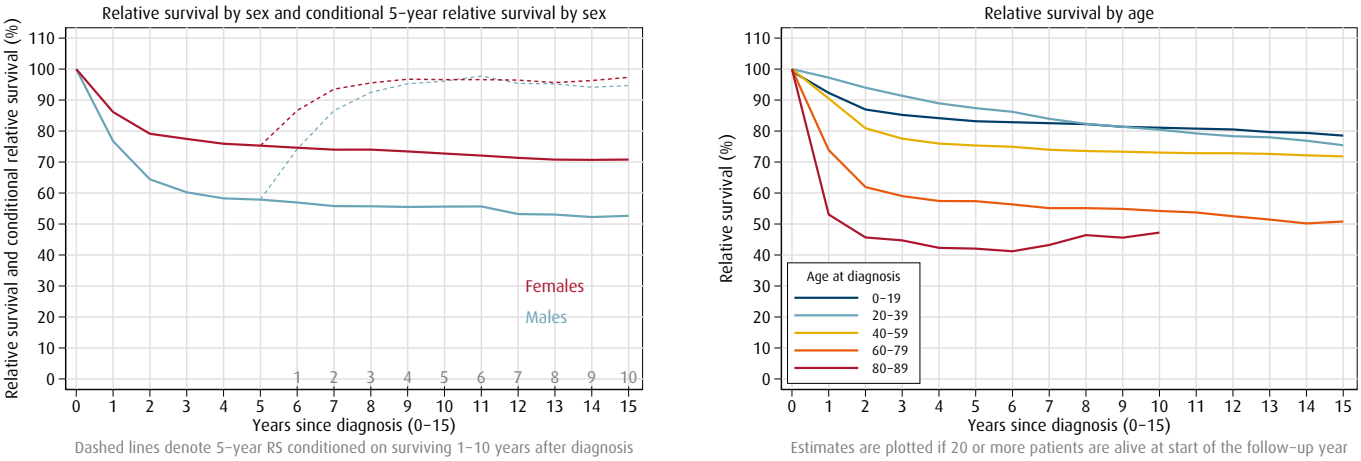
Figure 8.1–S: Urinary tract (ICD-10 C65–68)



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

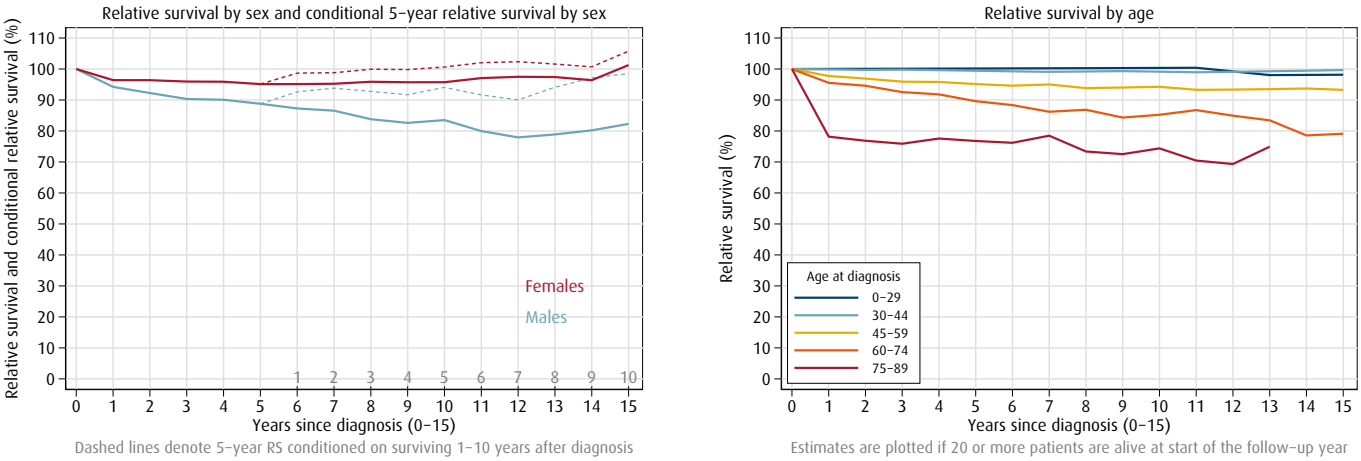
Figure 8.1–T: Central nervous system (ICD-10 C70–72)



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 8.1–U: Thyroid gland (ICD-10 C73)

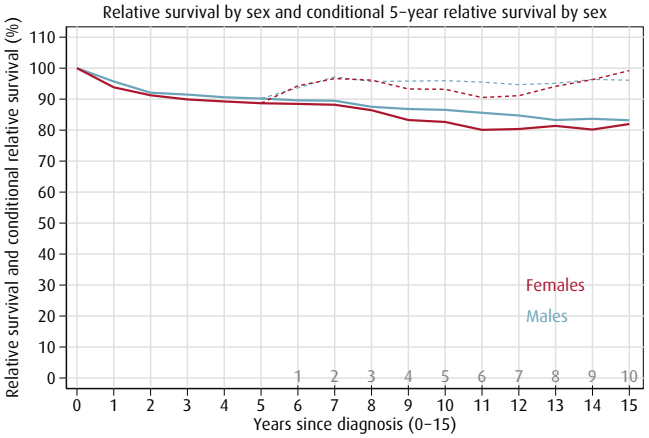


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

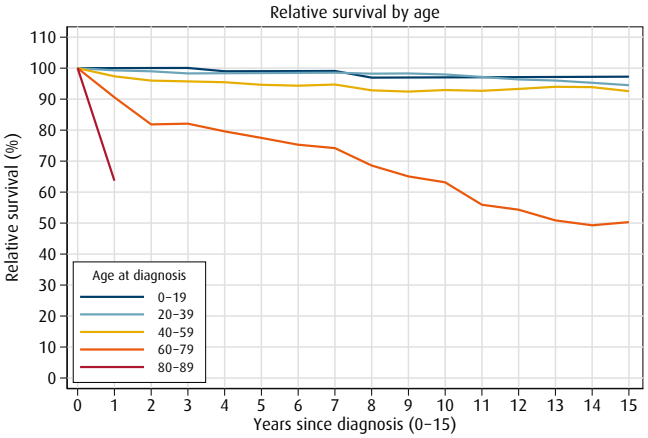
Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1: Relative survival (RS) up to 15 years after diagnosis by sex and age, 2016–2020

Figure 8.1–V: Hodgkin lymphoma (ICD-10 C81)

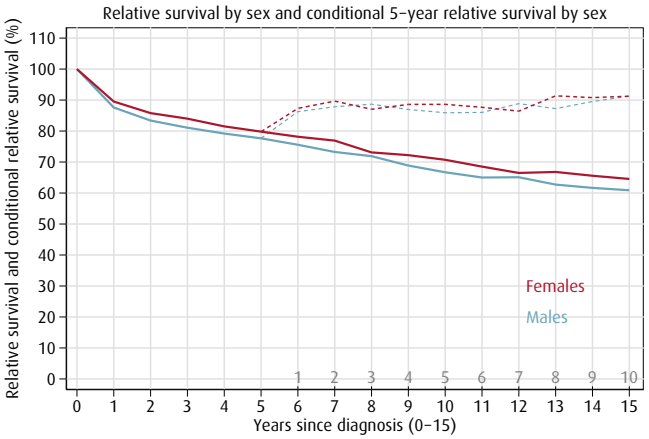


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

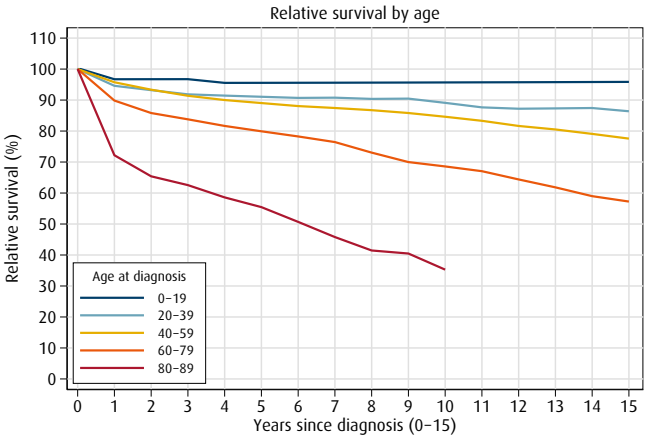


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–W: Non-Hodgkin lymphoma (ICD-10 C82–86, C96)

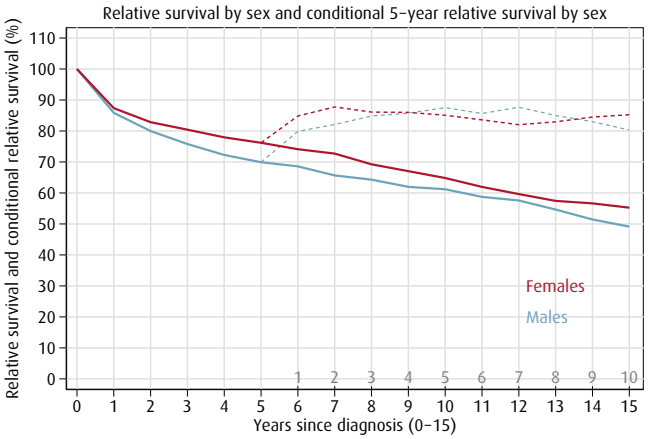


Dashed lines denote 5-year RS conditioned on surviving 1–10 years after diagnosis

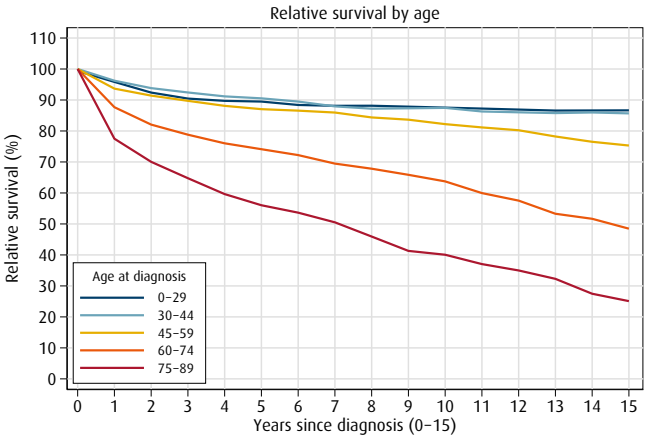


Estimates are plotted if 20 or more patients are alive at start of the follow-up year

Figure 8.1–X: Leukaemia (ICD-10 C91–95)



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

Chapter 9 Trends in incidence, mortality and survival, Norway 1965–2020

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[25–29]. Analysing incidence trends may provide some insight into changes in the distribution of risk factors, and into 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 has been comprehensively addressed[30,31]. The accuracy of death certificates has also been discussed[32–34]. 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 precision, 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. Figures 9.1–A to 9.1–X present time trends during 1965–2020 for age-standardised incidence and mortality rates and five-year relative survival estimates. 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 9.1–A show a persistent increase in cancer survival in Norway for both genders over the last five decades. The incidence rates have also increased, but for men the trend has levelled off and a decrease is seen for the last few years. The mortality rates were fairly stable until the late 1990s both for men and women. From 2000 onwards, it was a notable decline in the mortality rate in men, and a slight decline in women. The interpretation of these aggregated estimates is complex, in that they comprise many different cancer types, which vary in terms of their capacity to be diagnosed as well as treated.

Among men, 26% of all cancers diagnosed in 2020 were **prostate cancers**. General screening for prostate cancer using the PSA test is not recommended in Norway. However, the doubling in incidence and the improved relative survival from 1990 to mid 2000s (Figure 9.1–O) probably reflects the availability and upsurge in the use of the PSA test for early detection of disease. During the last few years, the incidence of prostate cancer has stabilised and a marked decrease is seen in the last four to five years. Mortality declined from around 1996, and both early diagnosis and improved and more active treatment may have had an impact.

Breast cancer comprised more than 20% of all female cancer cases. There has been a monotonous increase in the incidence rate up to 2005 with a steeper increase in the mid-1990s followed by a notable decline between 2005 and 2009 (Figure 9.1–M). The Norwegian Breast Cancer Screening Programme started as a four-year pilot project in four of the former nineteen Norwegian counties in 1996, and gradually expanded to become nationwide by 2005. The programme invites women aged 50–69 years to biennial mammography. The implementation of the screening programme explains much of the increasing incidence trend from the mid 1990s to 2005. The figures for recent years indicate a new increase in incidence. The age-specific rates show that the rise primarily is limited to the age group 60–79 (not shown). The increase may thus be related to more sensitive diagnostic methods both within and outside the screening programme, combined with women continuing to have mammography after the age of 70. Of note is the drop in breast cancer incidence from 2019 to 2020, which is possibly explained by the fact that all screening activity in the Mammography programme ceased for a few months from mid-March 2020, when large parts of society in general closed down to limit infection of Covid-19 in the population.

Breast cancer mortality was almost stable up to the mid 1990s when it began declining (Figure 9.1–M). These good news most likely reflect a combination of improved diagnostics, better treatment, and the implementation of the screening programme for breast cancer. Today, 92% of women with breast cancer survive their cancer for five years or more (5-year relative survival).

The trends in **lung cancer** incidence and mortality rates have followed each other closely. Since early 2000s, the distance between the rates has increased, reflecting improved survival for these patients. Although the survival for lung cancer is still poor compared to other cancers, it has increased by 10 percentage-points during the last ten years, and 25% of men and 31% of women with lung cancer now survive their cancer for at least five years. The varying incidence trends by sex reflect the different phases of the smoking epidemic in Norwegian men and women (Figure 9.1–J). Overall, lung cancer incidence and mortality rates among males began to level off in the mid 1990s and have declined the past eigth or nine years. For women, we have observed signs of a stabilisation in the rate during recent years. However, the rate reached an all-time high level in 2018. A slight decrease is seen from 2018 to 2019 and 2020. The same pattern was seen in the age-specific rates (not presented in this report) for women over 70 years. Time will show if 2018 was the peak year in incidence in women. Interestingly, the number of new lung cancer cases among women surpassed that of men in 2018 and 2019, while the rates still are lower due to a higher number of women attaining high age. During the last two decades, lung cancer has surpassed breast cancer as the most frequent cause of cancer death among women.

The incidence for **cancer in colon and rectum** incidence has increased for many decades, but the rectal cancer rate levelled off in the 1990s, and is now declining. For colon cancer, a levelling off has been seen in the incidence rate since around 2010, and among men we even see a slight decline (Figure 9.1–E and 9.1–F). Of particular note is the increasing survival and declining mortality from rectal cancer in both sexes, and the mortality is now nearly half of what it used to be. The most important determinants are probably the national introduction of total mesorectal excision in the early 1990s, increased specialisation, and use of preoperative radiation. However, our colon cancer incidence and mortality rates are among the highest in the world, 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 and reduced the use of potentially harmful methods of food preservation. The survival of stomach cancer has increased moderately over time (Figure 9.1–D).

In contrast, the incidence rate of **testicular cancer** increased gradually until 2007 (Figure 9.1–Q). An improvement in therapy started in the 1970s with the introduction of cisplatin 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 **melanoma of the skin** in both genders (Figure 9.1–K). The steep rise is suggested to result from sun exposure habits. However, we cannot exclude the possibility that increased awareness, both in the general population and among general practitioners, and sliding of the diagnostic criteria, may also have contributed to the increase. The moderate but steady increase in melanoma mortality until 2010 indicates that some of the increase in incidence is caused by a higher risk of the disease.

The classification of diseases changes over time, and sometimes this appears clearly in the insidence trends. In 2002, polycythaemia vera (D45), myelodysplastic syndromes (D46) and other neoplasms of uncertain or unknown behavior of lymphoid, hematopoietic and related tissue (D47) were included in the statistics for **leukaemia**, and this inclusion caused a notable increase in the incidence. In 2020, a review was made of all registered cases of malignant and benign cases, and we then identified benign cases (D45, D46 and D47) that were registered before 2002, but which were previously not counted in the statistics. This is the explanation for the sharp increase in incidence from 1992 to 1993 (Figure 9.1–X). Moreover, due to international guidelines of conversions between ICD-O-3 and ICD-10 and more strict adherence to these in this report there are some cases that have been reclassified from non-hodgkin lymphoma to chronic lymphatic leukaemia. The treatment of leukaemia has improved, and a steep prolonged increase in the survival is observed since the early 1970s.

Cancer of the **bladder and urinary tract** is the fourth most frequent cancer in men, but are less frequent in women. The incidence rate increased gradually until the early 1990s, but has since then been less pronounced. The mortality rate has decreased since early 2000, reflecting the increase in survival (Figure 9.1–S).

Finally, among more uncommon cancer sites, there has been a notable increase in the rates for **liver and thyroid cancer** in both genders (Figures 9.1–G and 9.1–U). 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 the Scandinavian increase, but similar trends have been observed internationally, possibly linked 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[35]. The increased rate of liver cancer was earlier suspected to be due to a rising proportion of immigrants from areas with higher risk of liver cancer. A study from 2018, revealed that this assumption was incorrect, and that there is an increase in liver cancer incidence also among Norwegian-born[36].

In summary, the overall trends in cancer survival probably reflect a combination of several factors, such as screening programmes and unrecommended screening, both associated with some degree of overdiagnosis (tumours that would have remained harmless throughout life), improved diagnostics, improved treatment, and improved general health (less comorbidity among cancer patients). 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: For Figure 9.1–F, the mortality rate for rectosigmoid (C19–20) includes anal cancer.

Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–A: All sites (ICD-10 C00–96)

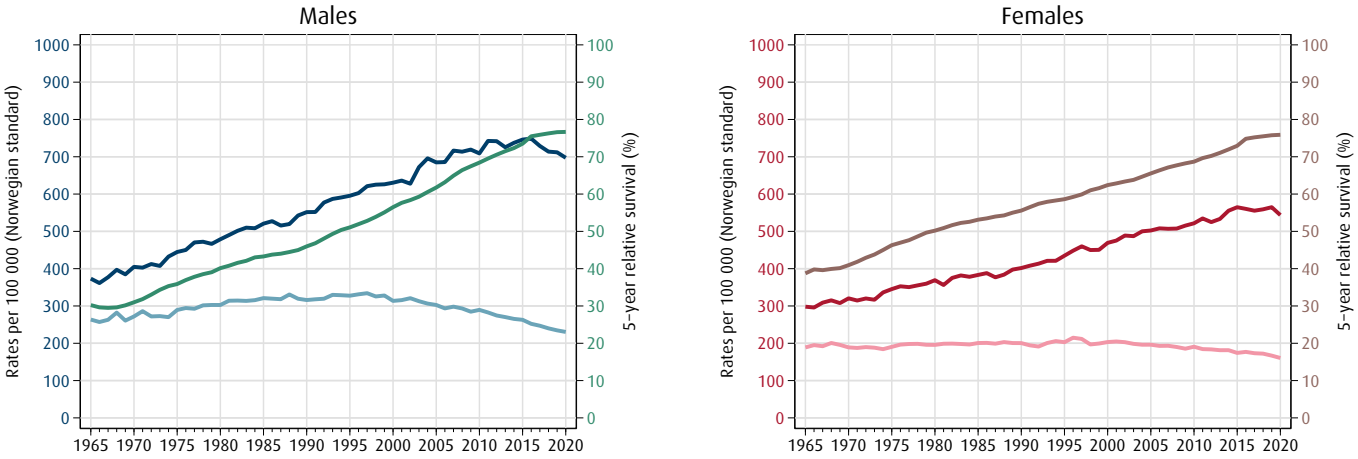


Figure 9.1–B: Mouth, pharynx (ICD-10 C00–14)

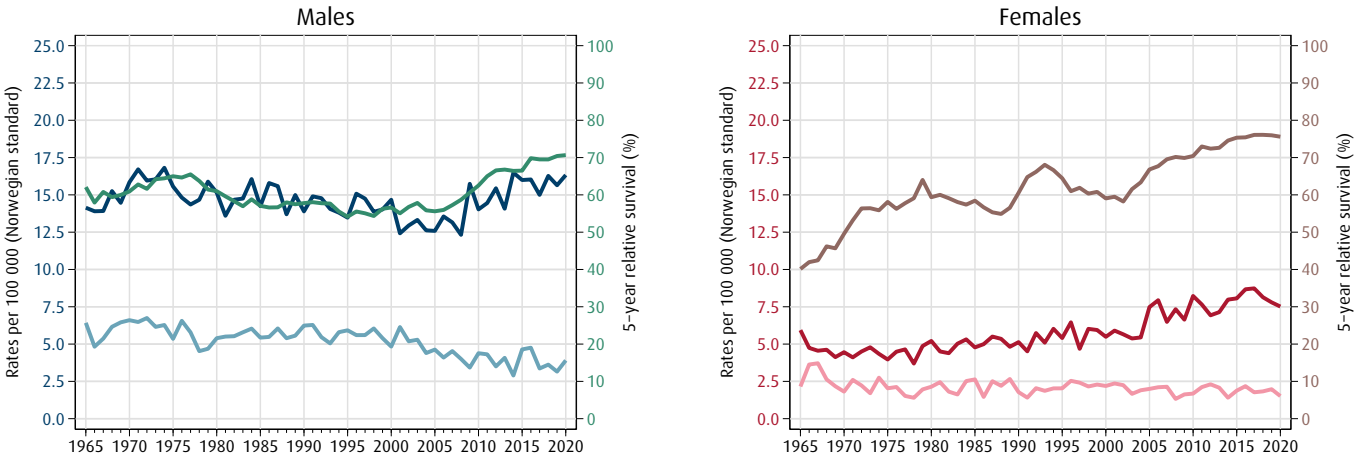


Figure 9.1–C: Oesophagus (ICD-10 C15)

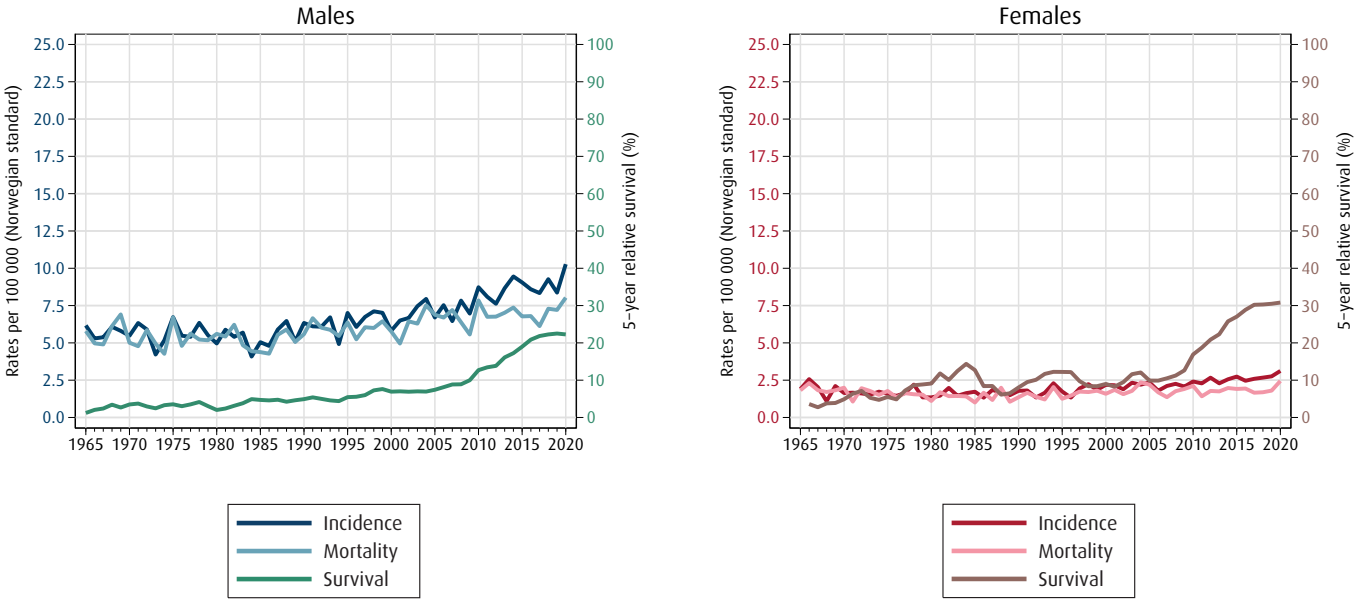


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–D: Stomach (ICD-10 C16)

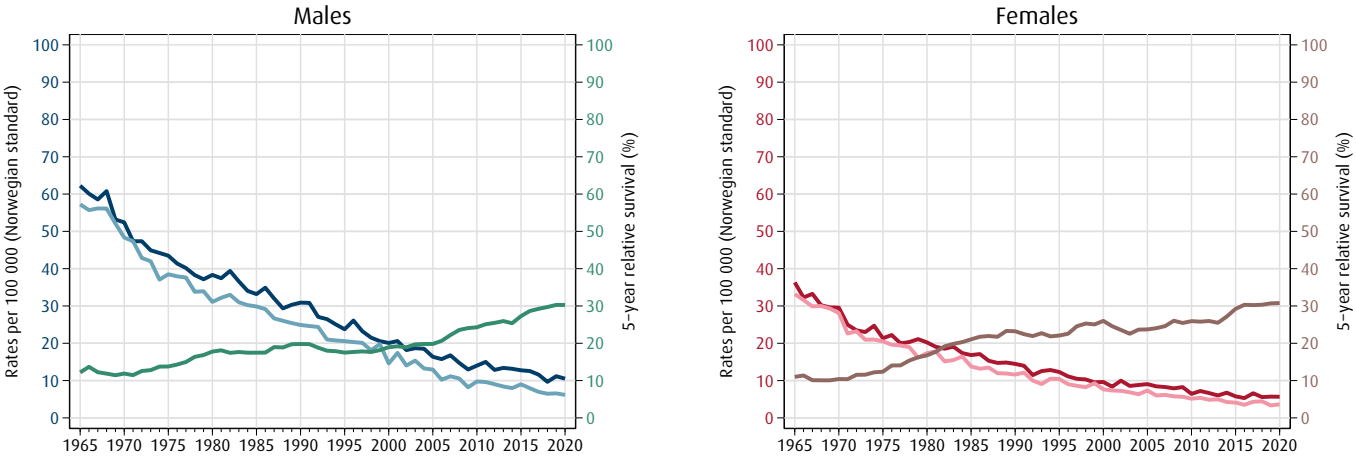


Figure 9.1–E: Colon (ICD-10 C18)

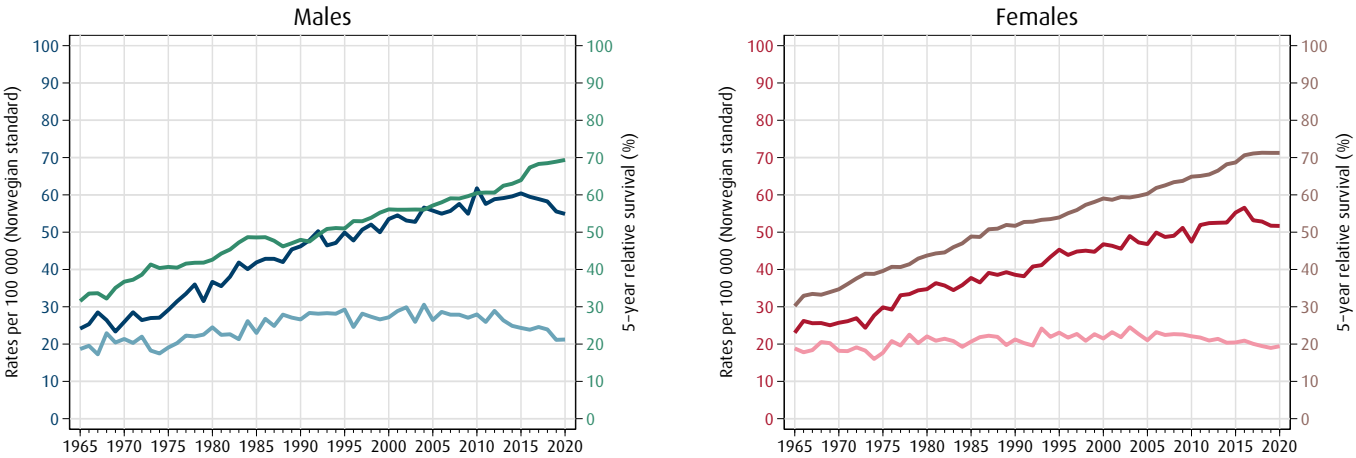


Figure 9.1–F: Rectum, rectosigmoid (ICD-10 C19–20)

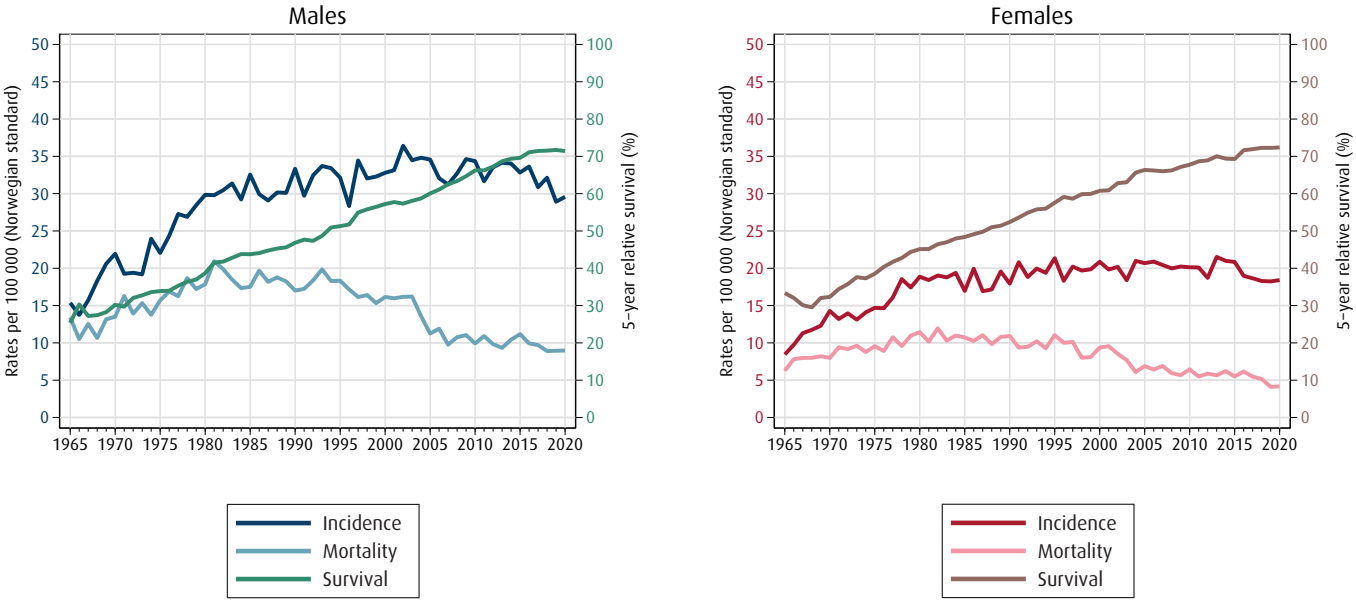


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–G: Liver (ICD-10 C22)

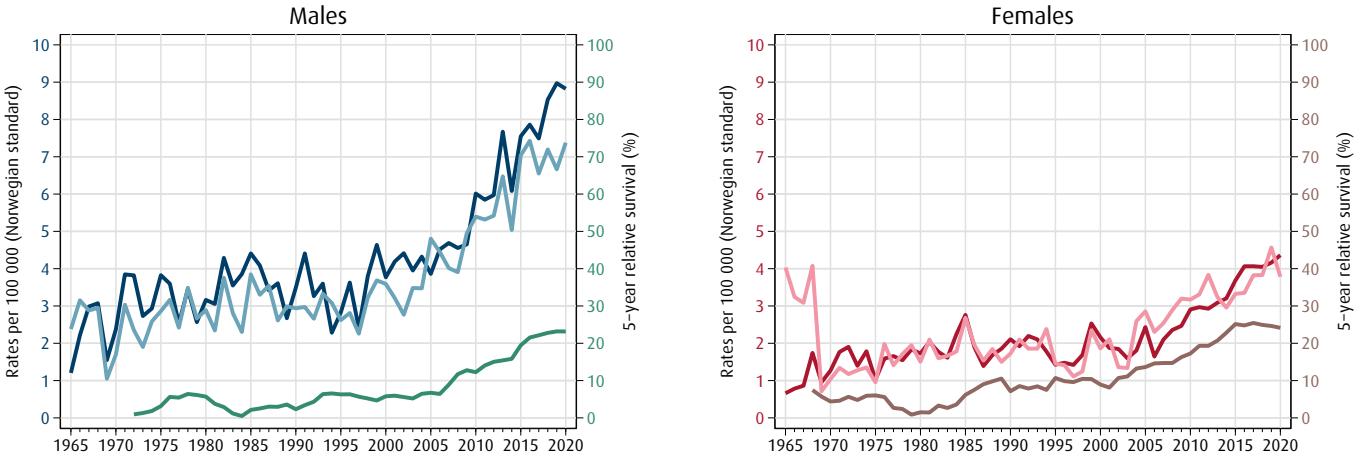


Figure 9.1–H: Gallbladder, bile ducts (ICD-10 C23–24)

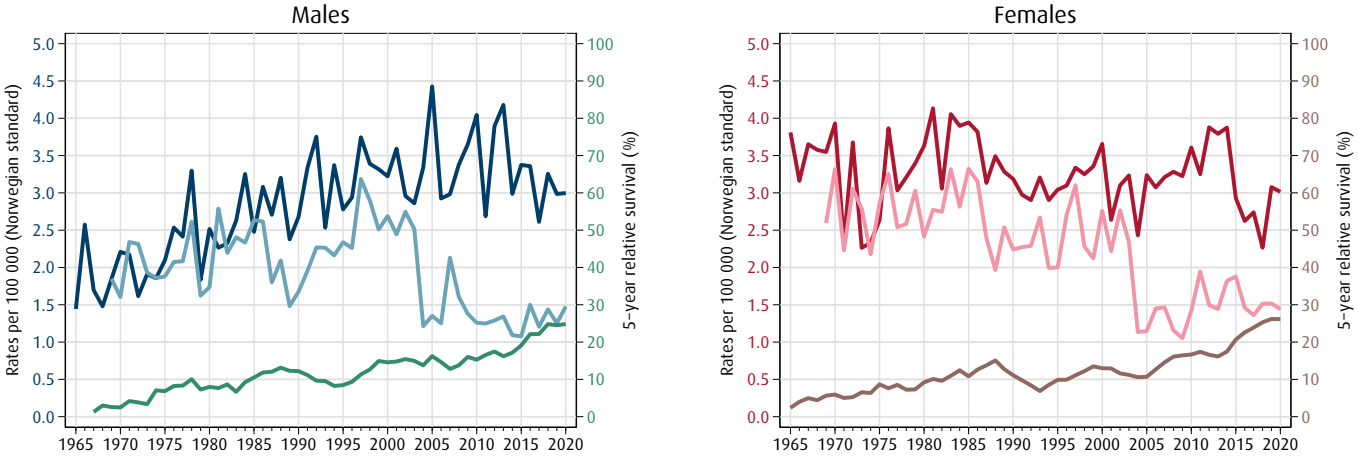


Figure 9.1–I: Pancreas (ICD-10 C25)

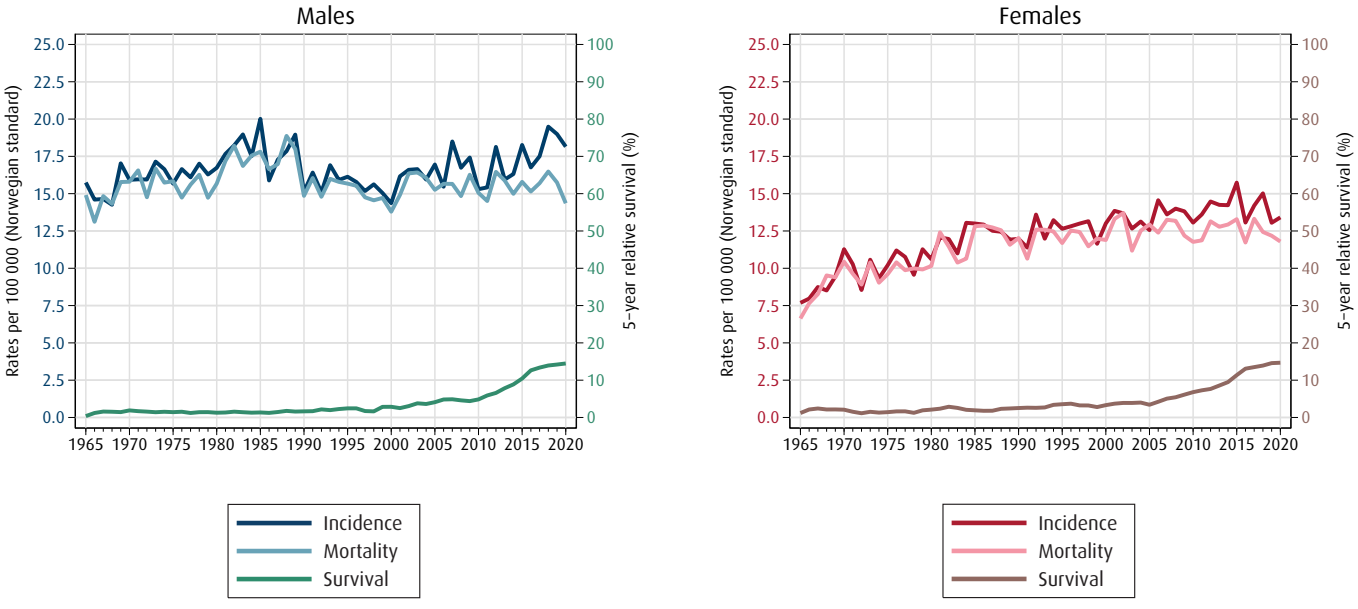


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–J: Lung, trachea (ICD-10 C33–34)

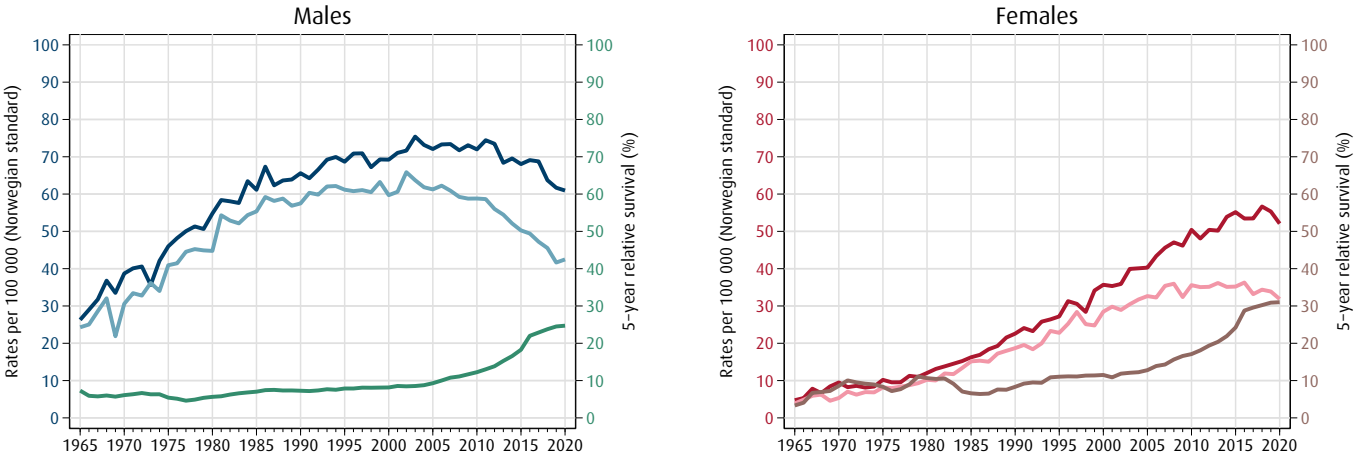


Figure 9.1–K: Melanoma of the skin (ICD-10 C43)

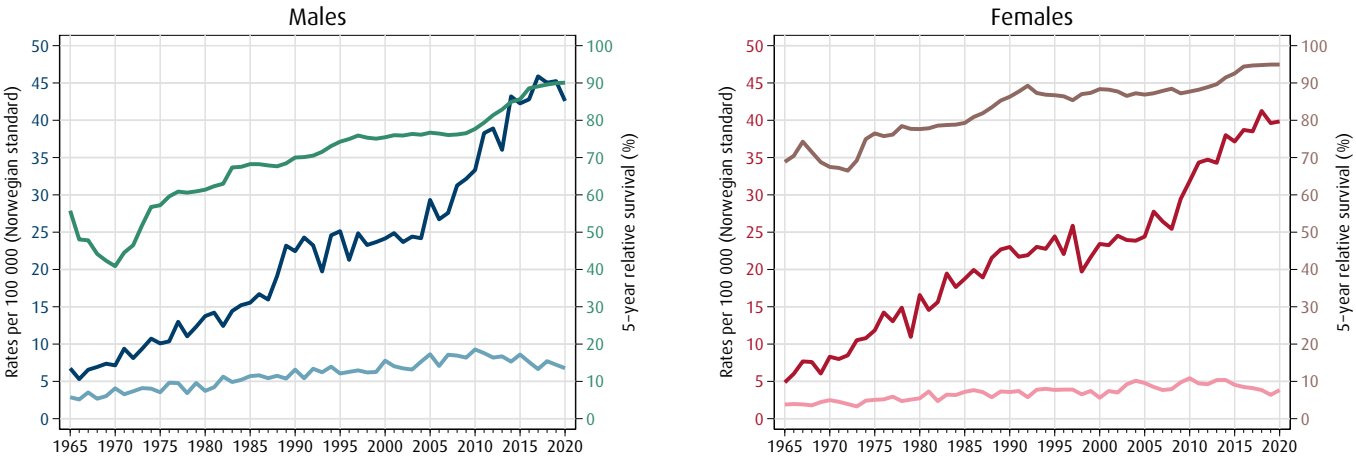


Figure 9.1–L: Kidney (excl. renal pelvis) (ICD-10 C64)

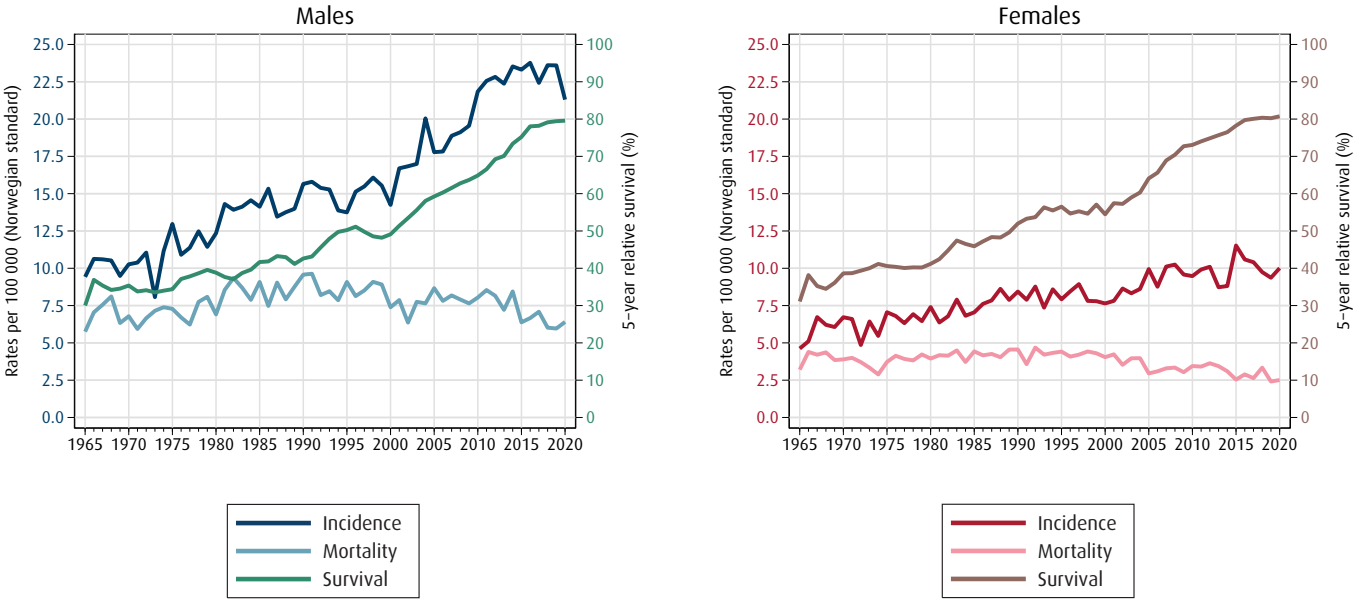


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–M: Breast (ICD-10 C50)

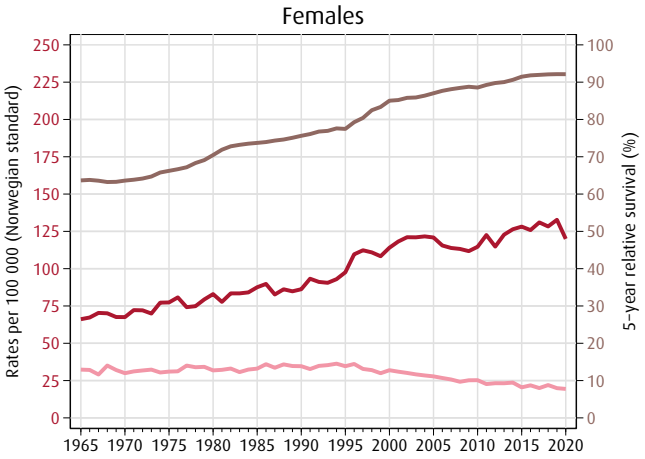


Figure 9.1–N: Cervix uteri (ICD-10 C53)

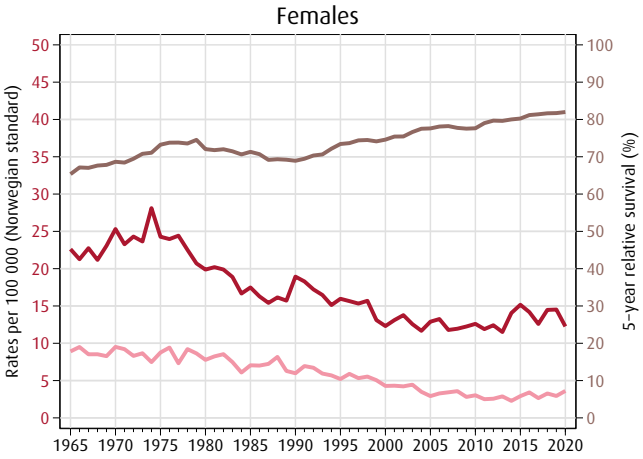


Figure 9.1–O: Prostate (ICD-10 C61)

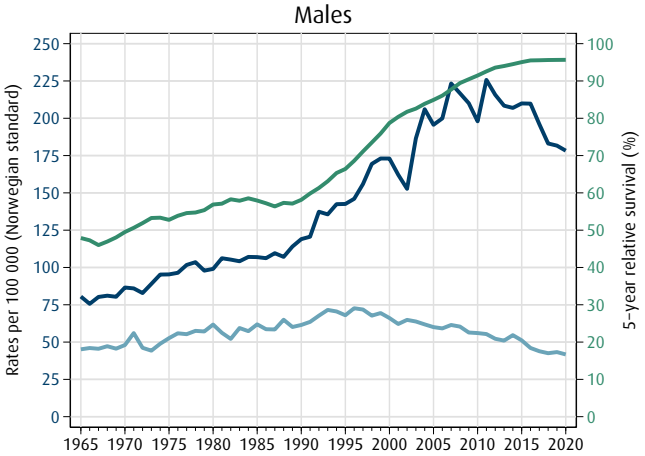


Figure 9.1–P: Corpus uteri (ICD-10 C54)

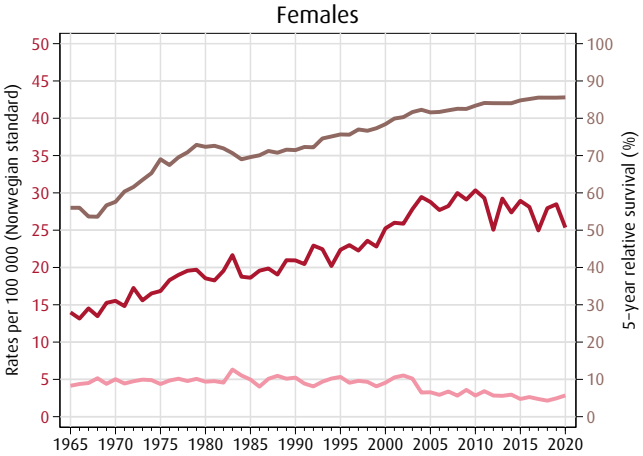


Figure 9.1–Q: Testis (ICD-10 C62)

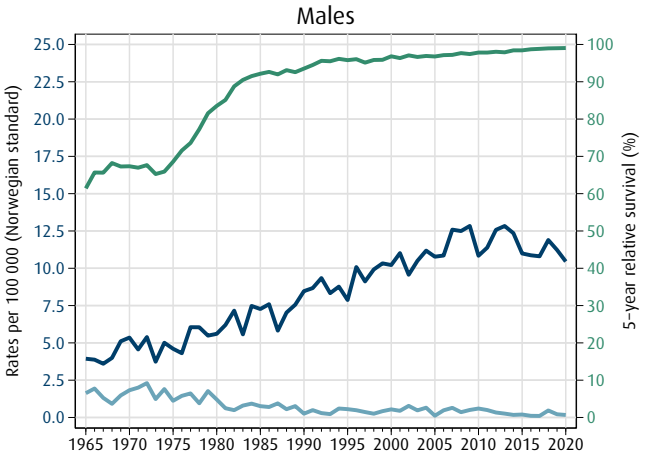
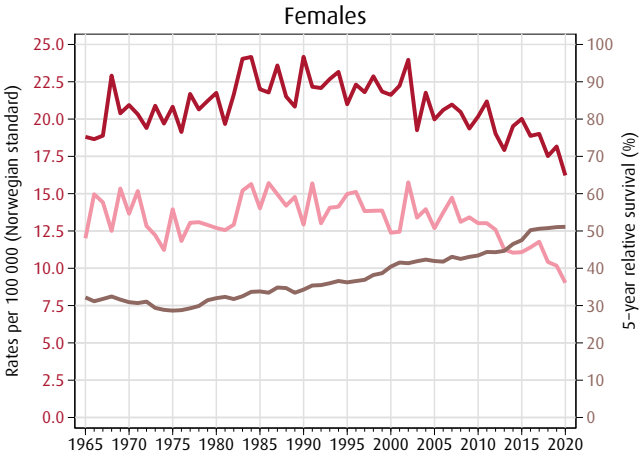
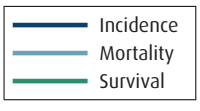


Figure 9.1–R: Ovary etc. (ICD-10 C56, C57.0–4, C48.2)





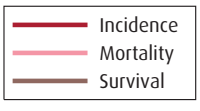


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–S: Urinary tract (ICD-10 C65–68)

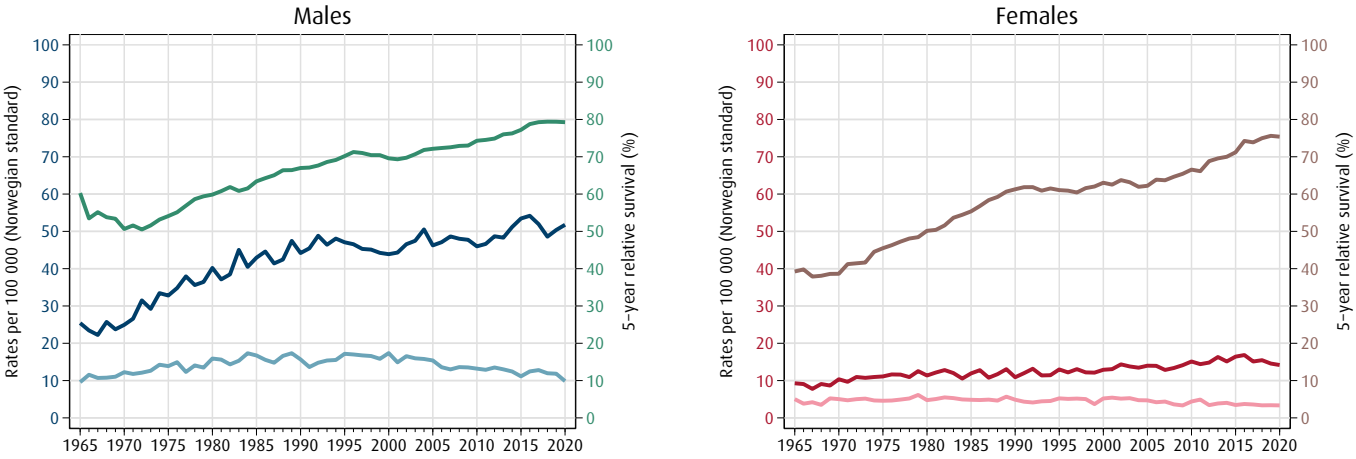


Figure 9.1–T: Central nervous system (ICD-10 C70–72)

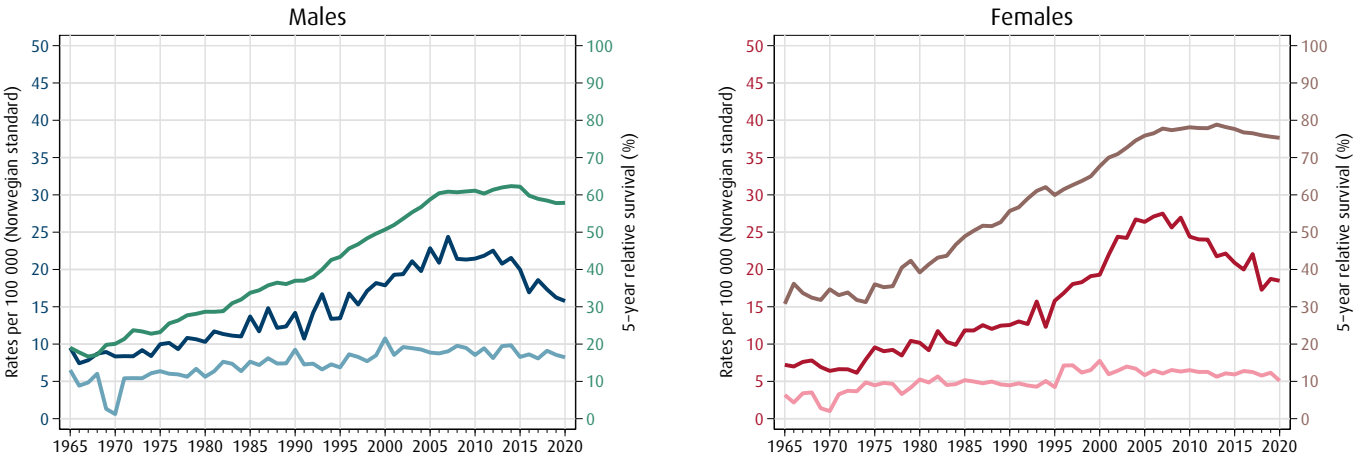


Figure 9.1–U: Thyroid gland (ICD-10 C73)

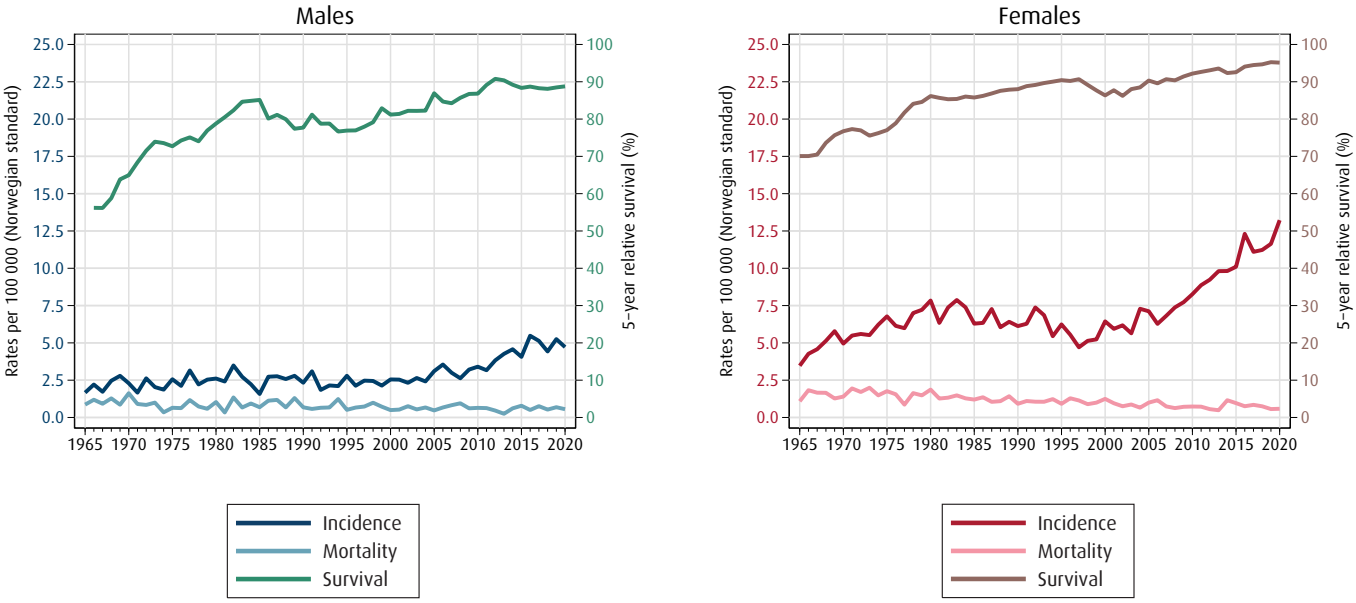


Figure 9.1: Trends in incidence and mortality rates and 5-year relative survival proportions

Figure 9.1–V: Hodgkin lymphoma (ICD-10 C81)

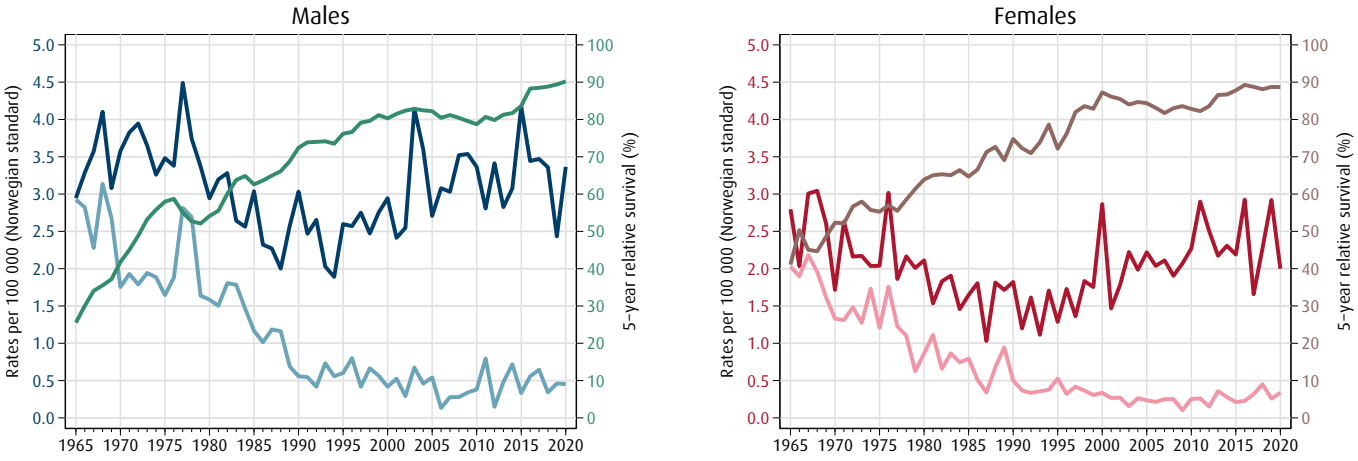


Figure 9.1–W: Non-Hodgkin lymphoma (ICD-10 C82–86, C96)

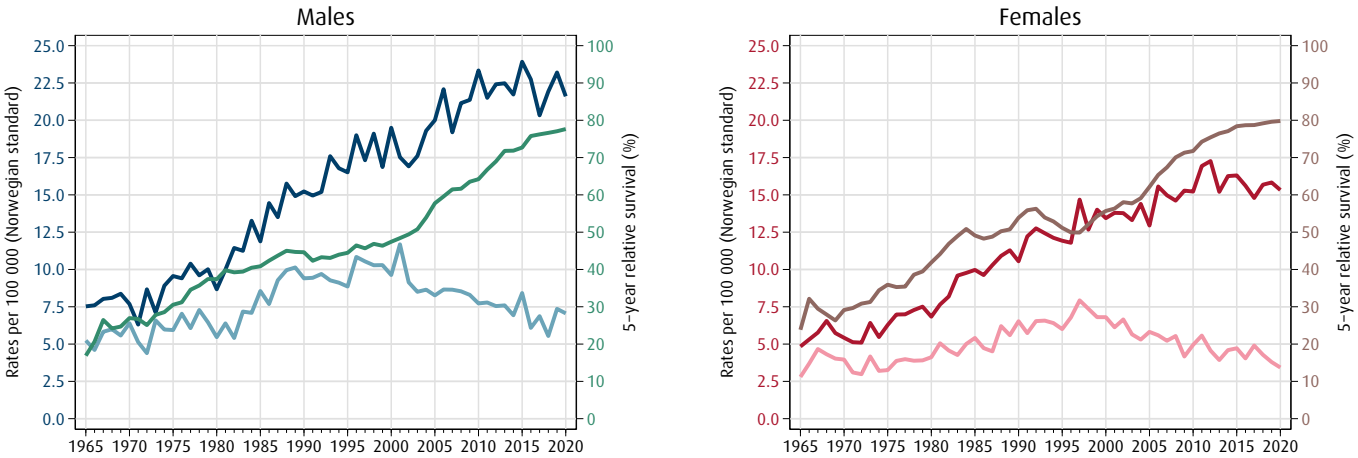
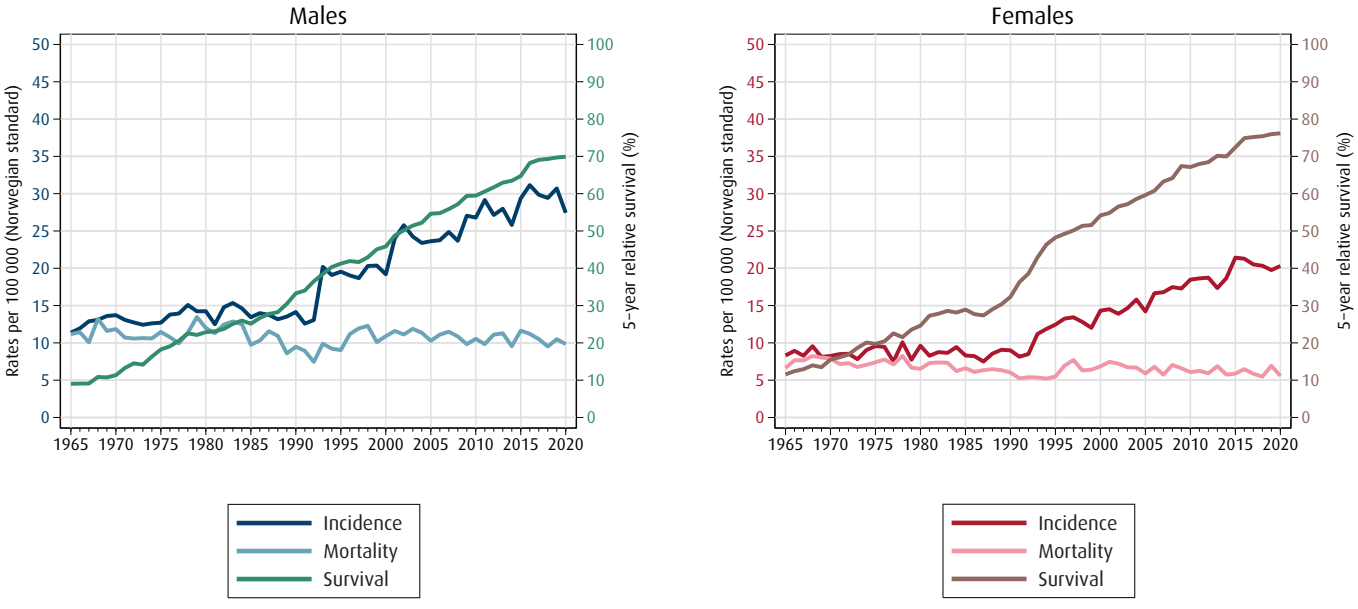


Figure 9.1–X: Leukaemia (ICD-10 C91–95)



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