



Cancer in Norway 2010

2010

Cancer in Norway

Cancer incidence, mortality,
survival and prevalence in Norway

Special issue:
Clustering of cancer



Cancer in Norway 2010

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

Cancer in Norway 2010

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Foreword

This year the Cancer Registry of Norway celebrates its 60th anniversary for recording national data on cancer occurrence. That makes the Registry one of the oldest in the world. One of the activities that more or less define a cancer registry and that remains essential to this date, is the annual report of cancer incidence rates. This Cancer in Norway report contains the most up-to date numbers we have available, that is cancer counts and rates from 2010, as well as trends over time.

As we review the numbers, we look for changes from previous years. Some of the fluctuations are random, while some can signify an important change that we must make the authorities and population aware of. Deciding what is random and what is significant is not obvious when we just compare the numbers for one year with those of the previous year or years. However, given that we have reports on cancer for the past 60 years in Norway, what are some of the important changes in the main cancers over these past decades?

Most cancers have increased. This is to be expected as more people live longer, and cancer becomes more common as a population ages. However, even age-adjusted and age-specific incidence rates have increased. The reasons for this are for some cancers obvious, as they are closely related to changes in lifestyle. Several of the common cancers are predominantly lifestyle-caused cancers, this includes skin cancer, breast cancer, and lung cancer. Without smoking, lung cancer would have been a rare disease. But with the smoking habits of the previous 50 years, our lung cancer rates have, as in the rest of the world, soared. Thankfully, rates fall as the lower or non-smoking generations become older, but this takes time. If we were to select one exposure that we could magically erase, smoking would be our first choice, having the largest impact on incidence and mortality rates of cancer.

Colorectal cancer is another cancer that has increased over time, and we have seen a larger increase in Norway than in many other Western countries. This year we started a pilot project on colorectal cancer screening in part of the country. With time, and once this program becomes national, it should eventually help reduce the incidence rates of this disease. Will colorectal cancer screening be as efficient as cervical cancer screening in reducing incidence? Perhaps not. However, we expect it eventually to affect both incidence and mortality. Colorectal cancer screening may ultimately have as large an effect on mortality from colorectal cancer as mammography-screening has had on mortality from breast cancer. However, it will take time for this effect to appear. As with all screening programs, we may first see an initial burst in colorectal cancer incidence rates.

Breast cancer has in most countries increased during the past 60 years. The increase in the first decades was probably largely due to changing reproductive patterns. After Norwegian women started having children at later ages, and fewer children, breast cancer rates went up. Other lifestyle factors that have changed over time include body weight, alcohol habits, and postmenopausal hormone therapy use. At the time we started screening women for breast cancer with mammography, prescriptions for hormone therapy soared. Consequently, breast cancer rates jumped from the mid 1990s. The past few years we have seen somewhat of a decline in the rates among women above 50. Whether this is predominantly due to mammography screening having overcome the first screening burst, or due to a concurrent decline in hormone therapy use, is less clear.

Prostate cancer is a disease that has increased substantially over time, but where lifestyle factors seem to play less of a role. The increase the past 20 years is probably due mainly to testing with prostate specific antigen (PSA). There is no screening program for prostate cancer in Norway, but since most of the PSA testing is done on presumably healthy men and not because of clinical symptoms, it can be viewed as opportunistic screening. Fluctuations in rates, or even a decline as we see this year, may reflect fluctuations in PSA screening. This screening seems however, never to be negatively featured in the media or to be subject to public concern. This is surprising, as treatment for prostate cancer can be brutal, potentially resulting in incontinence and impotence, side effects that may be quite mutilating, even more than having part of a breast removed. So why does PSA testing not receive the large scandalous headlines or intense negative scrutiny? One might speculate whether this is because it is done privately, and not as part of a governmental screening program? Or is it because it is the only screening that is not done in women? There are not even good data to determine how often PSA tests should be ordered. If we want to understand the changes seen in the prostate cancer rates, we should clearly monitor the frequency and distribution of PSA testing in Norway.

This year's Special Issue deals with the issue of clustering of cancer, another important aspect of a cancer registry's activities. Each form of cancer is a rare disease, and when rare events appear to cluster in a community or at a workplace, this often causes concern in the population. It is therefore important to be able to decipher whether an apparent cluster is likely a real cluster signifying a carcinogenic exposure, or whether it is a random aggregation, or not even a cluster, but rather a misreporting and misconception. The complexities of this important issue are discussed by Dr. Grimsrud and his colleagues in the last part of this report.

As we understand more about cancer, we also better grasp the complexity of the disease. Consequently, our demand for more information about each cancer case increases. The Cancer Registry of Norway receives the continuous assistance from a wide network of pathologists and clinicians who wish to improve diagnosis and patient care. There is a strong desire, some would argue an urge, for our registrars to code more information about each cancer, both about the initial tumor and about subsequent treatment and relapses. Such expanded reporting in clinical registries will become simpler once all reporting to the Cancer Registry can be made fully electronic and not paper-based. We are not quite there yet, partly because the electronic systems used in hospitals and pathology laboratories must be modernized for this to take place. However, there is much interest and enthusiasm for better systems, and the work is in progress.

Until then, there is an immense amount of manual and electronic work behind the numbers that we present in this report. Our coders work hard to decipher and enter the information behind each pathology report and each clinical report, and to merge this information into one cancer case registration. Thanks to hours and hours of work from our dedicated staff we are proud to present the numbers to you in this year's report. Thanks to all reporters and our registrars and their leaders, to our information technology staff and to the editorial staff for making this year's report.

Oslo, September 2012

Giske Ursin, MD, PhD
Director & Professor

Cancer in Norway 2010

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Summary

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

New Cases

A total of 28 271 new cancer cases were reported in 2010: 53 per cent were among men and 47 per cent among women. The five most common cancer types, in descending order, are for men: prostate, lung, colon, bladder, skin (non-melanoma), and for women: breast, lung, colon, malignant melanoma of the skin and uterus cancer.

Some variation in incidence rates may occur from one year to the next. In addition, the numbers for the preceding year (in this case 2009) will always be slightly higher than in last year's report due to delayed notification of cancer cases. When interpreting the cancer statistics, one should therefore look at the cancer development over the past several years.

The incidence rate has increased by 7 per cent in men and 3 per cent in women from the past five-year period (2001-2005) until the current one (2006-2010).

In men the largest incidence increase was in cancer of the prostate (21 per cent) and malignant melanoma (15 per cent). On the positive side, the rate for rectal cancer show a small reduction of 4 per cent. The rates for colon, lung and bladder cancer are only slightly changed in the period 2006-2010, compared to 2001-2005.

In women the strongest increase occurred in incidence of lung cancer (16 per cent) and malignant melanoma (15 per cent). For breast cancer, incidence rates increased until 2005, and have declined from 2006 onwards. The rate reduction from 2001-2005 to 2006-2010 was 5 per cent. Norwegian women have one of the world's highest incidence rates of the colon and rectal cancer. However, we are finally seeing a leveling off in the incidence rates of these cancers.

Among children (0-14 years of age) cancer in the central nervous system and leukemia are the most common. They represent 54 and 59 per cent of all cancer cases in boys and girls, respectively. In males aged 15-49 years testicular cancer is most common, but prostate cancer is most common in middle aged and older men.

Cancer in the central nervous system is the most common cancer type in young women 15-24 years old. In the age group 25-69 years breast cancer is most common, and among the oldest women (70+) colon cancer is more common than breast cancer.

Survival

This year's statistics confirm a trend we have seen earlier: Survival continues to increase. At the end of 2010 about 207 000 Norwegians were alive after having had at least one cancer diagnosis at one point in time. This is an increase of more than 60 000 individuals since 2000.

There is an improved survival in all the major cancers: breast, prostate, lung, and colorectal cancer.

This increase is partially due to improved treatment over time, but is probably predominantly due to screening. Increased attention to cancer in the population as well as among health care providers may also play a role.

Relative Survival

Relative survival is the probability of a cancer patient's survival if other causes of death are excluded.

From the period 2001-2005 to 2006-2010 the relative survival increased from:

- 86 to 89 per cent for breast cancer in women
- 80 to 89 per cent for prostate cancer
- 13 to 16 per cent for lung cancer in women
- 9 to 12 per cent for lung cancer in men
- 64 to 66 per cent for rectum cancer in women
- 58 to 64 per cent for rectum cancer in men
- 57 to 63 per cent for colon cancer in women
- 55 to 61 per cent for colon cancer in men

The probability of developing cancer before the age of 75 is 35 per cent in men and 28 per cent in women.

ICD-10 codes where specific morphologies are excluded or included

ICD-10	Site	Comments
C00- 96	All sites	Includes the following D-diagnoses; D32-D33, D35.2-35.4, D42-D43, D44.3-D44.5, D46 and D47
C33	Mediastinum, pleura	Excludes mesotheliomas of pleura
C44	Skin, non-melanoma	Excludes basal cell carcinoma
C56	Ovary	Excludes borderline tumours
C64	Kidney except renal pelvis	Excludes non-invasive papillary tumours
C65	Renal pelvis	Includes non-invasive papillary tumours
C66	Ureter	Includes non-invasive papillary tumours
C67	Bladder	Includes non-invasive papillary tumours
C68	Other and unspecified urinary organs	Includes non-invasive papillary tumours
C70	Meninges	Includes benign tumours (ICD10; D32-33, D42-43)
C71	Brain	Includes benign tumours (ICD10; D32-33, D35.2-35.4, D42-43, D44.3-44.5)
C72	Spinal cord, cranial nerves and other parts of central nervous system	Includes benign tumours (ICD10; D32-33, D42-43)
C75	Other endocrine glands and related structures	Includes benign tumours (ICD10; D44.3-44.5)
C92	Myeloid leukaemia	Includes myelodysplastic syndrome (ICD10; D46)
C95	Leukaemia of unspecified cell type	Includes polycythemia vera (ICD10; D45) and other, and unspecified tumours in lymphatic or hemopoetic tissue (ICD10; D47)

Definitions*

Incidence

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

Incidence rate

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

Crude rate

Rates estimated for the entire population ignoring possible stratifications, such as by age group.

Age-specific rate

A rate calculated on stratifying by age, often based on a five-year interval.

Age-standardised incidence rate

Age-standardised (or age-adjusted) incidence rates are summary rates which would have been observed, given the schedule of age-specific rates, in a population with the age composition of a given standard population. The world standard population (Doll, 1966) is used in this report.

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 life time cancer prevalence which can be defined as the number of living individuals having ever been diagnosed with cancer.

Relative survival

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

Conditional relative survival

The probability of surviving an additional number of years given that the person has already survived X years. As the duration from diagnosis lengthens, the statistic becomes more informative to survivors than the conventional relative survival estimate. A 5-year conditional relative survival that reaches close to 100% X number of years after diagnosis indicates that from thereon in, there is little or no excess mortality among the patient group.

* Based on "A Dictionary of Epidemiology, 4th Ed." (Last, 2001).

Data sources and Methods

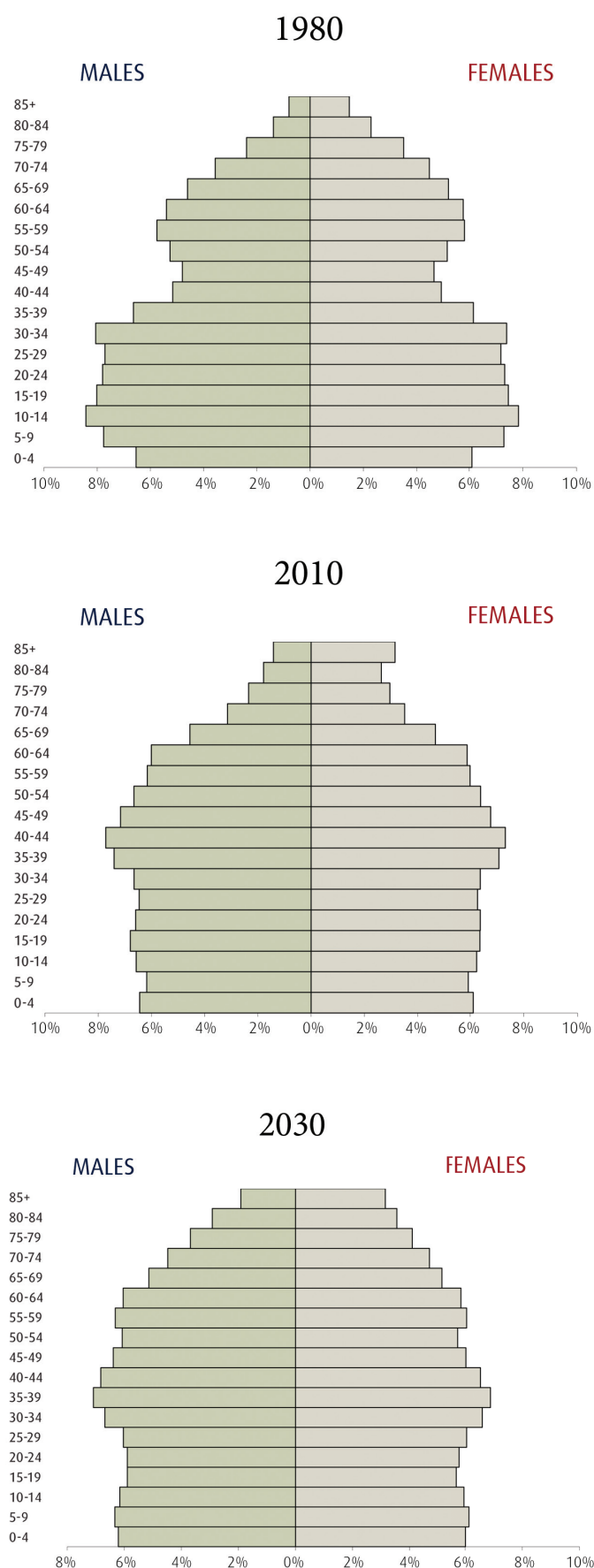
The population of Norway

The Norwegian population is mainly Caucasian. The immigrant population¹ (from over 200 countries) comprised 13.1% of the total population of nearly 5 million per January 2011 (Table 1) (Statistics Norway, 2012). Figure 1 illustrates the changing age structure over time, comparing population distributions from 1980 and 2010 with projections for 2030 (Statistics Norway, 2011). The population of Norway has increased since recording began, and this growth is expected to continue the next few decades. The total number of inhabitants in Norway has increased by 19% from 1980 to 2010, largely as a result of rising life expectancy and, more recently due to increases in net immigration. By 2030, the size of the population is expected to increase a further 24% to about 6 million² (Statistics Norway, 2012). The elderly will represent an increasingly large proportion of the population of Norway in the next quarter century. It is projected that by 2030 over one million inhabitants or one-fifth of the population will be aged 65 or over.

Table 1. Norwegian population 01.01.2011, 5-year age group and sex

Age group	Males	Females
00-04	158 452	150 374
05-09	151 952	145 827
10-14	161 656	153 448
15-19	167 124	156 500
20-24	162 253	156 763
25-29	158 849	154 261
30-34	163 689	156 786
35-39	182 137	173 902
40-44	189 756	179 727
45-49	176 233	166 258
50-54	163 780	157 085
55-59	151 389	147 453
60-64	147 642	144 766
65-69	111 996	114 771
70-74	77 335	86 441
75-79	57 777	72 770
80-84	43 952	64 879
85+	34 877	77 445
TOTAL	2 460 849	2 459 456

Figure 1. Age structure of the Norwegian population, 1980, 2010 and 2030



Forecast, Statistics Norway 2012.
Considered the scenario of medium national growth

¹ Includes persons born in Norway with both parents from abroad

² Considered the scenario of medium national growth

Data sources and registration routines

The Cancer Registry of Norway (CRN) has, since 1952, systematically collected notifications on cancer occurrence for the Norwegian population. This total number of registrations has from 1953 been considered to be very close to complete (Larsen & al, 2009). The reporting of neoplasms has been compulsory since the implementation of a directive from the Ministry of Health and Social Affairs in 1951. The Cancer Registry Regulations came into force in 2002 (Regulations for the collection and processing of data in the Cancer Registry of Norway). The main objectives of the Cancer Registry can be summarised as follows:

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

Data items registered in the Cancer Registry of Norway

The following shall be reported by law to the Cancer Registry:

- All definite malignant neoplasms. All precancerous disorders.
- All histologically benign tumours of the central nervous system and meninges.
- All histologically benign transitional cell papillomas of the urinary tract.

Registries

The incidence registry

The incidence registry contains the basic data items collected from clinicians and pathologists, as well as data from administrative patient discharge records and mortality sources. As of September 2012, the incidence registry contained information from 1953 on 1 515 686 cancer cases and premalignant conditions in 1 216 426 persons.

A total of 3 755 749 notifications have been registered since 1969³. The incidence registry is updated continuously with information on both new cases, as well as cases diagnosed in previous years.

The present report is based on data from the incidence registry.

Clinical registries

The Statutory Regulations for the Cancer Registry of Norway include the registration of treatment and follow-up of Norwegian cancer patients. Clinical registries – comprehensive registration schemes dedicated to specific cancers – have been established to include detailed information on diagnostic measures, therapy, and follow-up. By fostering strong collaborative links with the clinical community, the aims are to provide an empirical base for scientific studies concerning prognostic factors and treatment outcomes as well as evaluation of quality of cancer care.

The ongoing and expanding activities of these clinical registries are a major focus for the Registry, and several clinical registries are now established. Each clinical register is underpinned by a Reference Group, a panel of multi-disciplinary experts drawn from the clinical and research milieu in Norway, whose remit is to advise on the operations of the registry, and its strategic direction. These newly-established clinical registries will be integrated into the Registry's coding and registration activities. The overview on the next page indicates the status of these clinical registries as of September 2012.

³ Earlier notifications have not been registered individually

Status of the clinical registries, September 2012

Clinical registry for	Clinical reference group established	Established with extended data*	Clinical parameters for electronic report specified	Electronic report form developed
Colorectal cancer	Yes	Yes	Yes	Yes
Malignant melanoma	Yes	Yes	Yes	Yes***
Breast cancer	Yes	Yes	Yes	Yes
Prostate cancer	Yes	Yes	Yes	Yes***
Lymphoma	Yes	Yes	Yes	Yes
Lung cancer	Yes	Yes**	Yes	No
Childhood cancer	Yes	Yes	Yes	Yes***
Ovarian cancer	Yes	Yes****	Yes	Yes
Leukaemia	Yes	No	Yes	No
Central nervous system	Yes	No	Yes	No
Oesophagus and stomach cancer	Yes	No	Yes	No
Testis cancer	Yes	No	Yes	No

* Either by having a separate clinical report form and/or by having a database with extended information beyond the incidence registry

** Established for surgically treated patients, planned to be extended to all lung cancer patients.

*** Testing in progress, launched for production before 31.12.2012

**** Planned to be extended to all gynecological cancer patients.

Notifications and sources of information

The sources of information and the notification process are illustrated in Figure 2. Hospitals, laboratories, general practitioners and Statistics Norway provide the key information that enables the Registry to collect, code and store data on cancer patients in Norway. Information from clinical notifications, pathological notifications and death certificates are the main reporting sources, and are processed and registered in the clinical registries and the incidence registry. Information from the Patient Administrative Data System in the hospitals and the Norwegian Patient Register has proven an important additional source for identifying patients.

Clinical and pathological notifications

The Cancer Registry Regulations, as issued by the Ministry of Health and Social Affairs, require all hospitals, laboratories and general practitioners in Norway, within two months to report all new cases of cancer to the Registry. The cases should be reported irrespective whether the patient is treated, admitted, or seen only as an outpatient. There are two generic paper-based forms (clinical notifications) for reporting of solid or non-solid tumours. These

notifications may provide information on primary site, symptoms, stage of the disease, the basis for the diagnosis and primary treatment given to the patient. Cancers in the clinical registries are reported on separate forms with extended information (see clinical registries). Pathological notifications are received from hospitals and individual laboratories, and may provide either histological, cytological or autopsy information. The information is identified and linked by the personal identifier number system, established in Norway in 1964.

Death certificates

Records held in the Registry are supplemented with relevant information on vital status from the National Population Registry, and are regularly matched with the Cause of Death Registry run by Statistics Norway. The Registry receives and registers the death certificates in one or several batches every year. The automated procedure that matches registered patients to death certificates is important for maintaining quality control, facilitating a high level of completeness and ensuring validity of the Registry data items.

Death certificates also represent a complementary source of information on new cancer cases; those inconsistently specified or unmatched to registry files are subject to further scrutiny. Cancer cases first

identified from death certificates are traced back to the certifying hospital or physician. The Registry needs to ascertain from the registrar completing the certificate whether the patient had been examined and diagnosed when alive or post mortem. A reminder is sent to the physician or institution responsible for the treatment of the patient before death, as indicated on the death certificate. In many cases, a nursing home is the point of contact, and they refer the Registry to the treating physician or hospital where the cancer was diagnosed.

The Norwegian Patient Register

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

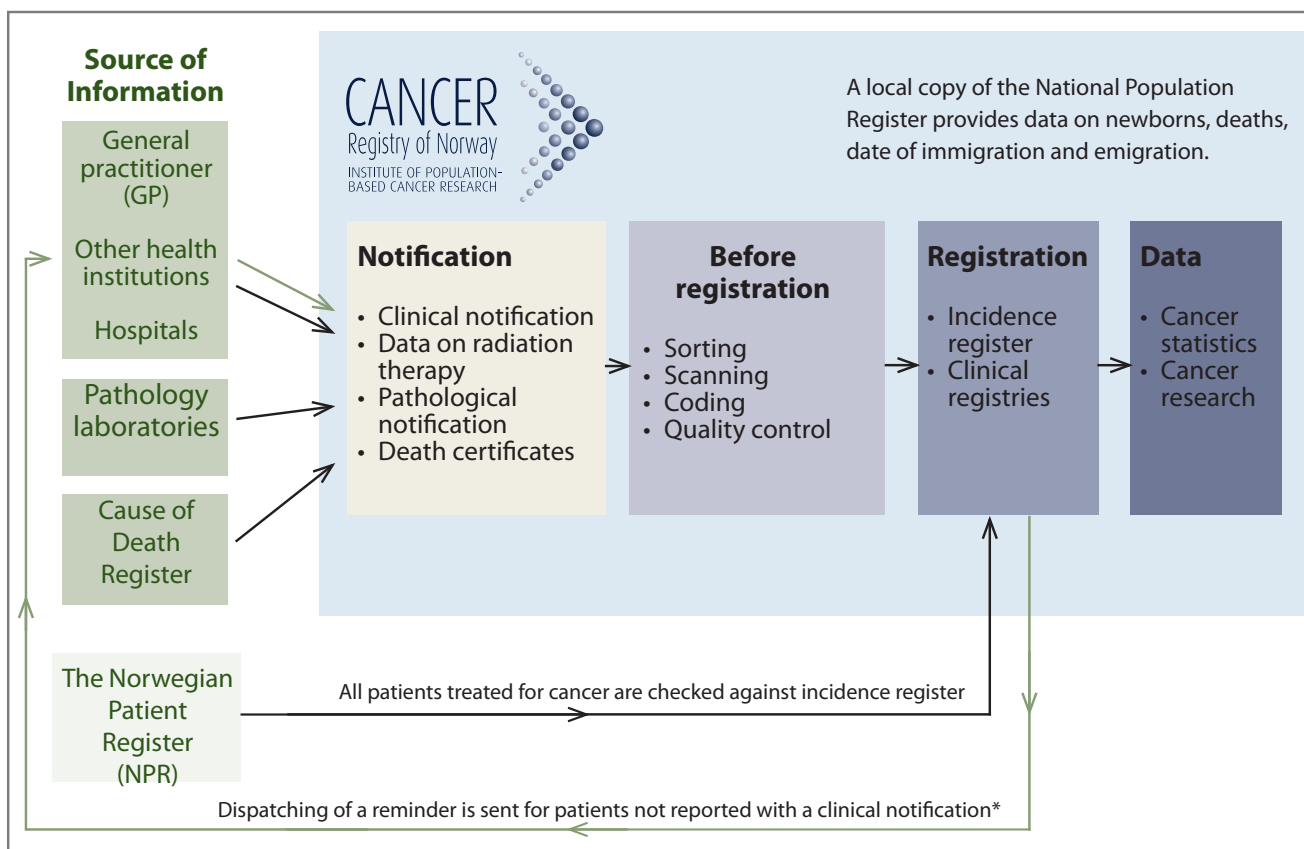
Dispatching of reminders

It is mandatory to report clinical information on new cases of cancer within two months of the diagnosis. Thus, except for some few cases (e.g. the cancer case was diagnosed at autopsy), at least one clinical notification should be registered for each cancer case. The Registry receives information on cancer cases from several sources (clinical notifications, pathological notifications, autopsies, death certificates and NPR). In those cases where the clinical notification is missing for the cancer case notified from one of these other sources, a reminder is sent to the hospital/ward/physician responsible for the diagnosis and treatment. About 40 000 reminders are sent annually, including, in some instances, repeat requests for information. The processes of cancer registration and the dispatching of reminders are illustrated in Figure 2.

Incidence and mortality data

The incidence data presented in the first part of this report are based on an extraction from the incidence registry on 11 September 2012. The tables and figures in general represent either the latest year of complete incidence (2010) or the latest five-year period (2006-10), the latter grouping used when the stratified numbers are too small to warrant presentation for a single year.

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



* Dispatching of reminders for clinical notifications are sent for unregistered cases (notified from the NPR) or cases that are only registered with a pathological notification/death certificate/data on radiation therapy in the registry.

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

Registered codes (ICD-7, ICD-O-2 and ICD-O-3) are translated to ICD-10 using a combination of topography and morphology. Population data, stratified by year, sex and age, are provided by Statistics Norway. The main cancer forms are tabulated according to their ICD-10 three digit categories. The “all sites” figure comprises all malignant neoplasms (ICD-10 C00-96) plus several benign or precancerous conditions.

A commentary on the inclusion and exclusion criteria applied to several sites with respect to morphology is shown on page 9. Corresponding mortality data coded in ICD-10 were obtained from Statistics Norway and are presented in the same ICD-10 categories as incidence.

Follow-up data

To estimate long-term survival patterns and trends, vital statistics of patients diagnosed with cancer during 1961-2010 were obtained from the National Population Register and Statistics Norway through 31 December 2010.

The 23 most common cancer sites were selected for analysis, and grouped according to their respective ICD-10 categories. About 3.7% of the cases were excluded as they were either registered as DCO cases (Death Certificate Only), diagnosed at autopsy, emigrated before diagnosis, or zero survival time (survival time = 0). It has been shown that exclusion of patients with a prior cancer diagnosis, which often is associated with an inferior prognosis, may give rise to artificially elevated estimates of survival (Brenner & Hakulinen, 2007). Therefore patients with previous cancer diagnoses were included in each site-specific analysis.

On the other hand, to provide an estimate of “all sites” survival (ICD-10 codes defined as above), analysis was restricted to first primary tumours. 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 rather negligible; the effect of their inclusion has been shown to reduce 5-year survival in Norway (for diagnoses 1995-2009) by less than a percentage point (Rosso & al, 2009).

Results should be interpreted with caution. Survival of the most frequent cancers in men and women, prostate and breast cancer, have been artificially inflated due to the impact of PSA testing and mammographic screening, respectively.

Statistical methods used in this report

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

Incidence and mortality

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

Age-specific rates

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

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

$$r_i = d_i / Y_i \times 100\,000$$

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

Age-standardised rates

To facilitate comparisons however, a summary rate is required that absorbs the schedule of age-specific rates in each comparison group. The summary measure that appears in this report is the age-standardised rate (ASR), a statistic that is independent of the effects of age, thus allowing comparisons of cancer risk between different groups. The calculation of the ASR is an example of direct standardisation, whereby the observed age-specific rates are applied to a standard population. The populations in each age class of the Standard Population are known as the weights to be used in the standardisation process. Many possible sets of weights, w_i , can be used. The world standard population, a commonly-used reference, is utilised in this report (Doll & al, 1966; Segi, 1960). Although the weights of the world standard fail to resemble those of the Norwegian population in 2010 (Figure 3), this observation is of relatively little importance, since it is the ratio of ASRs, an estimate of the age-adjusted relative risk between populations or within a population over time, that is the focus of interest. This characteristic has been shown to be rather insensitive to the choice of standard (Bray & al, 2002).

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

$$ASR = \frac{\sum_i r_i w_i}{\sum_i w_i} \times 100\,000$$

Cumulative Risk

The cumulative risk is the probability that an individual will develop the cancer under study during a certain age span, in the absence of other competing causes of death (Day, 1992). The age span over which the risk is accumulated must be specified, and in this report, the range 0–74 years is used and provides an approximation of the risk of developing cancer. If before the age of 75 the cumulative risk is less than 10%, as is the case for most cancer forms, it is reasonably approximated by the cumulative rate.

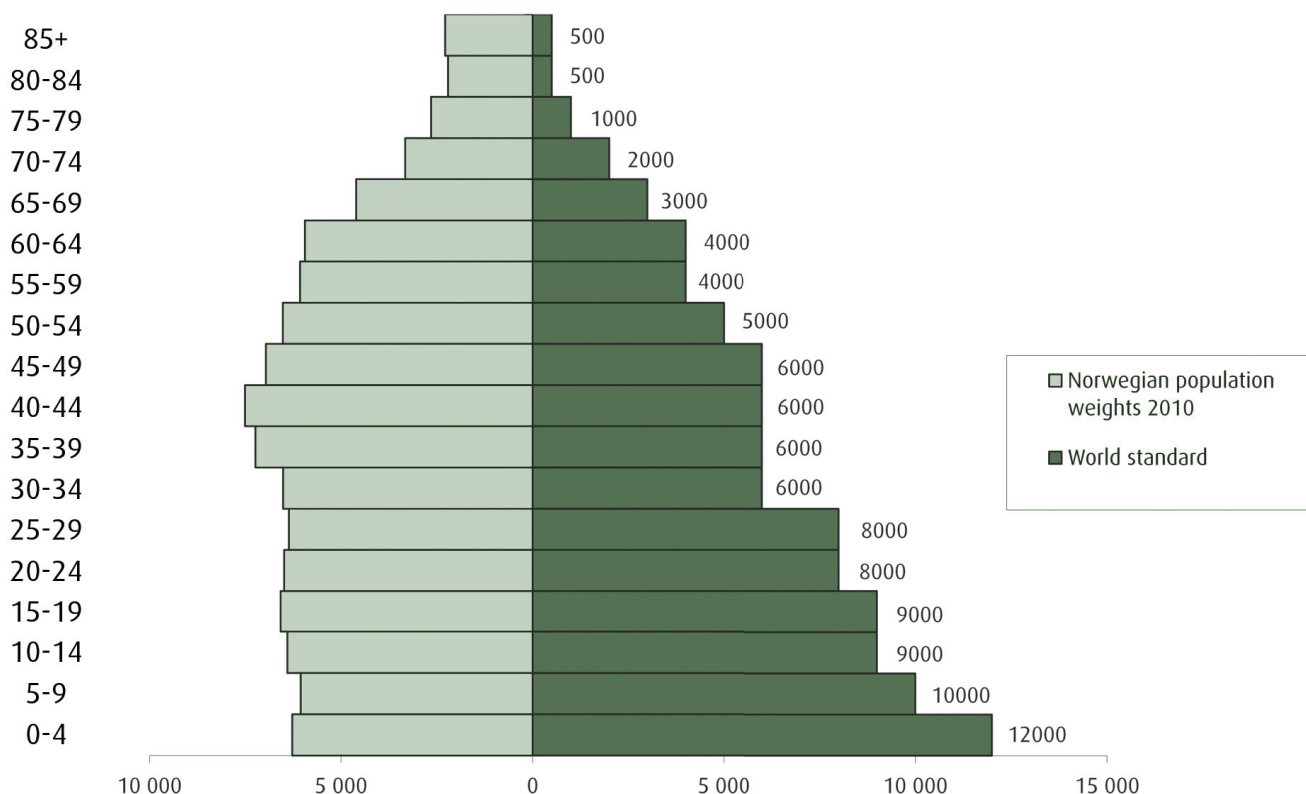
The cumulative rate is the summation of the age-specific rates over each year of age from birth to a defined upper age limit. As age-specific incidence rates are computed according to five-year age groups, the cumulative rate is five times the sum of the age-specific rates calculated over the five-year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

$$5 \sum r_i$$

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

$$\text{cumulative risk} = 1 - \exp(-\text{cumulative rate})$$

Figure 3. Comparison of population weights



Prevalence

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

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

Lifetime cancer prevalence can be defined as the number of living individuals having ever been diagnosed with cancer. Such a measure can easily be derived from the Registry's data, given the very long-term registration of cases and complete follow up over many years. We provide additional estimates that may be useful for quantifying resource requirements; therefore we have incorporated into this report the numbers of persons who were alive on 31 December 2010, and who were previously diagnosed with cancer within one year, one to four years, five to nine years, and 10 or more years.

Survival

The survival time of a cancer patient is defined as the time that has elapsed between a cancer diagnosis and subsequent death or end of follow-up. The most basic measure of survival is 5-year survival, which represents the percentage of patients still alive 5 years after the date of diagnosis.

Relative Survival

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

At each time t (year) since diagnosis, the relative survival from the cancer, $R(t)$, is defined as follows:

$$R(t) = So(t)/Se(t)$$

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

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

In this report, we have used a three-year period window (2008-2010) to estimate relative survival up to 15 years, thus patients diagnosed in 2007-2010 contribute with (part of) their survival experience the first year of follow up (part of the first year if they were diagnosed in 2007-2010), patients diagnosed in 2006-2009 contribute to the second year of follow up, patients diagnosed in 2005-2008 contribute to the third year of follow up etc. Thus, the period approach consists of the pieces of survival experience in 2008-2010 for all patients who have been diagnosed 15 years ago or less. The same approach is used to analyse time trends, using a three-year moving period window from 1965 to 2010. To increase stability in the estimates, stage-specific survival is presented using a five-year period window.

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

Conditional relative survival

The majority of cancer survivors wish to obtain information on their current prognosis, once they have survived a certain period of time after diagnosis. Conditional survival is a key indicator in this respect, estimating survival proportions given that patients have already survived a certain duration of time (Hankey & Steinhorn, 1982; Janssen-Heijnen & al, 2007). The point at which conditional 5-year relative survival reaches 100% is the point where there is no excess mortality among the cancer patients, and prognosis is equivalent to that experienced in the general population. As with the 15-year relative survival analyses, a three-year period window (2008-2010) is used in this report, and we present estimates of sex-specific 5-year relative survival conditional on being alive 1 to 10 years after diagnosis. Estimates were not plotted when there were too few cancer survivors ($n < 20$).

Data quality, completeness and timeliness

Data quality

Cancer in Norway 2006 included as a Special Issue an overview and comprehensive assessment of the data quality at the Cancer Registry of Norway. The report is available at www.kreftregisteret.no. Subsequently there have been several reports on data quality and completeness. Larsen & al. (Larsen & al, 2009) reported that the coding and classification systems, in general, follow international standards. Estimated overall completeness was 98.8% for the registration period 2001-2005, a lower completeness was observed for haematological malignancies and cancers of

the central nervous system. Practical aspects and techniques for addressing the data quality at a cancer registry, including the documentation of comparability, validity and timeliness has recently been reviewed (Bray & Parkin, 2009). Methods for the evaluation of registry completeness have also been assessed recently (Parkin & Bray, 2009).

Two indicators of accuracy are included in Table 2, namely the percentage histologically verified (HV%), and the percentage of death certificate only registrations (%DCO). See Larsen & al, 2009 for further details. The Registry has implemented the rules for registration and reporting of multiple neoplasms as defined jointly by the International Association of Cancer Registries (IACR) and the International Agency for Research on Cancer (IARC) (International Association of Cancer Registries, 2004).

Completeness and timeliness of incidence

Table 3 shows the number of cancer cases diagnosed in 2009 as enumerated on 10th June 2011 (for CiN 2009), and 11th September 2012 (the time of extraction for this report). The number of cancer cases diagnosed in 2009 reported and appearing in this issue (CiN 2010) are 524 (1.9%) more than those registered 15 months ago (in CiN 2009), with the differences varying by site. The largest apparent differences of 12.8% and -12.5% were for malignant immunoproliferative diseases (C88) and other uterus (C55), respectively. The main reason for this is that these cancers are rare, and even small changes in number, would have great impact on the percentage of change. Common cancers such as lung, and breast cancers, however, appear to have been almost complete when CiN 2009 was published.

Table 2. Percentage distribution of HV (histologically verified) and DCO (death certificate only) by primary site 2006-2010*

ICD10	Site	Cases	HV %	DCO %
C00-96	All sites	137143	88.8	1.7
C00-14	Mouth, pharynx	2444	97.5	0.3
C00	Lip	619	99.2	0.2
C01-02	Tongue	460	98.0	0.2
C03-06	Mouth, other	477	99.0	0.2
C07-08	Salivary glands	219	87.7	0.5
C09-14	Pharynx	669	97.8	0.4
C15-26	Digestive organs	28327	89.1	2.7
C15	Oesophagus	1059	95.8	1.4
C16	Stomach	2545	94.9	1.8
C17	Small intestine	630	95.9	1.0
C18	Colon	12228	95.2	1.6
C19-21	Rectum, rectosigmoid, anus	6309	97.5	0.6
C22	Liver	807	69.0	7.8
C23-24	Gallbladder, bile ducts	763	65.1	6.7
C25	Pancreas	3454	58.5	7.7
C26	Other digestive organs	532	66.4	13.5
C30-34, C38	Respiratory organs	14132	77.1	2.3
C30-31	Nose, sinuses	216	98.6	0.5
C32	Larynx, epiglottis	588	97.8	0.5
C33-34	Lung, trachea	13234	76.0	2.4
C38	Mediastinum, pleura (non-mesothelioma)	94	59.6	8.5
C40-41	Bone	248	96.4	0.8
C43	Melanoma of the skin	6693	99.4	0.1
C44	Skin, non-melanoma	7474	98.8	0.1
C45	Mesothelioma	387	87.6	0.0
C46	Kaposi's sarcoma	49	98.0	2.0
C47	Autonomic nervous system	66	98.5	0.0
C48-49	Soft tissues	740	95.7	0.5
C50	Breast	13918	98.1	0.3
C51-58	Female genital organs	7974	95.1	1.2
C53	Cervix uteri	1512	98.5	0.3
C54	Corpus uteri	3510	98.8	0.3
C55	Uterus, other	44	54.5	20.5
C56	Ovary	2232	87.9	2.5
C51-52, C57	Other female genital	666	94.9	2.1
C58	Placenta	10	50.0	0.0
C60-63	Male genital organs	23027	96.2	1.2
C61	Prostate	21329	96.0	1.3
C62	Testis	1467	99.4	0.1
C60, C63	Other male genital	231	98.3	0.0
C64-68	Urinary organs	10276	93.7	1.4
C64	Kidney excl. renal pelvis	3289	87.9	2.9
C65	Renal pelvis	411	92.7	0.7
C66-68	Bladder, ureter, urethra	6576	96.7	0.6
C69	Eye	297	50.8	0.7
C70-72	Central nervous system	5215	60.4	1.5
C73	Thyroid gland	1228	95.2	0.4
C37, C74-75	Other endocrine glands	1177	56.2	1.4
C39, C76, C80	Other or unspecified	1963	52.4	12.5
C81-96	Lymphoid and haematopoietic tissue	11508	74.8	2.4
C81	Hodgkin lymphoma	604	99.3	0.2
C82-85, C96	Non-Hodgkin lymphoma	4338	96.7	0.4
C88	Malignant immunoproliferative diseases	243	73.3	2.1
C90	Multiple myeloma	1807	56.6	5.3
C91-95	Leukaemia	4516	57.9	3.4

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 3. Registered cancer cases in Norway, 2009 as obtained from the incidence registry extracted 10th June 2011 and 11th September 2012*

ICD10	Site	Cases diagnosed 2009 as of			
		10.06.2011	11.09.2012	Difference	%
C00-96*	All sites	27520	28044	524	1.9
C00-14	Mouth, pharynx	509	517	8	1.6
C00	Lip	122	123	1	0.8
C01-02	Tongue	107	110	3	2.8
C03-06	Mouth, other	109	112	3	2.8
C07-08	Salivary glands	36	37	1	2.8
C09-14	Pharynx	135	135	0	0.0
C15-26	Digestive organs	5583	5761	178	3.2
C15	Oesophagus	199	201	2	1.0
C16	Stomach	475	479	4	0.8
C17	Small intestine	152	157	5	3.3
C18	Colon	2405	2482	77	3.2
C19-21	Rectum, rectosigmoid, anus	1219	1302	83	6.8
C22	Liver	164	161	-3	-1.8
C23-24	Gallbladder, bile ducts	147	152	5	3.4
C25	Pancreas	691	703	12	1.7
C26	Other digestive organs	131	124	-7	-5.3
C30-34, C38	Respiratory organs	2809	2824	15	0.5
C30-31	Nose, sinuses	33	34	1	3.0
C32	Larynx, epiglottis	108	109	1	0.9
C33-34	Lung, trachea	2648	2662	14	0.5
C38	Mediastinum, pleura (non-mesothelioma)	20	19	-1	-5.0
C40-41	Bone	62	64	2	3.2
C43	Melanoma of the skin	1413	1436	23	1.6
C44	Skin, non-melanoma	1588	1618	30	1.9
C45	Mesothelioma	81	81	0	0.0
C46	Kaposi's sarcoma	9	10	1	11.1
C47	Autonomic nervous system	12	12	0	0.0
C48-49	Soft tissues	166	170	4	2.4
C50	Breast	2760	2771	11	0.4
C51-58	Female genital organs	1558	1571	13	0.8
C53	Cervix uteri	296	301	5	1.7
C54	Corpus uteri	696	706	10	1.4
C55	Uterus, other	16	14	-2	-12.5
C56	Ovary	419	417	-2	-0.5
C51-52, C57	Other female genital	130	132	2	1.5
C58	Placenta	1	1	0	0.0
C60-63	Male genital organs	4664	4741	77	1.7
C61	Prostate	4299	4371	72	1.7
C62	Testis	320	323	3	0.9
C60, C63	Other male genital	45	47	2	4.4
C64-68	Urinary organs	2080	2108	28	1.3
C64	Kidney excl. renal pelvis	663	662	-1	-0.2
C65	Renal pelvis	82	86	4	4.9
C66-68	Bladder, ureter, urethra	1335	1360	25	1.9
C69	Eye	64	64	0	0.0
C70-72	Central nervous system	961	1032	71	7.4
C73	Thyroid gland	253	257	4	1.6
C37, C74-75	Other endocrine glands	237	257	20	8.4
C39, C76, C80	Other or unspecified	416	380	-36	-8.7
C81-96	Lymphoid and haematopoietic tissue	2295	2370	75	3.3
C81	Hodgkin lymphoma	122	124	2	1.6
C82-85, C96	Non-Hodgkin lymphoma	887	889	2	0.2
C88	Malignant immunoproliferative diseases	39	44	5	12.8
C90	Multiple myeloma	361	374	13	3.6
C91-95	Leukaemia	886	939	53	6.0

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Cancer incidence, mortality, survival and prevalence in Norway 2010

Incidence

In 2010, 28 271 new cases of cancer were recorded in Norway, of which 15 110 occurred among men and 13 161 among women (Table 4). Cancers of the prostate, female breast, lung and colon are the most common cancers and comprise almost half of the total cancer burden.

In men, prostate cancer continues to be the most frequent cancer (4 210), followed by colorectal (2 044) and lung cancer (1 559).

Breast cancer remains the most frequent neoplasm in women, with 2 839 new cases in 2010, followed by colorectal and lung cancer, with 1 828 and 1 267 incident cases, respectively.

The vast majority of cancers in Norway- over 90% in men and 85% in women are diagnosed in persons over the age of 50 (Figure 4). About half are diagnosed at ages 70 or older, while 40% of all new cases occur between the ages 50 and 69, in men and

women alike. A larger proportion of cancers are diagnosed in women than men at the ages of 25 to 49, while similar proportions, constituting slightly over 1% of the cancer burden, occur in children and young adults.

The relative impact of cancer at different ages varies considerably by cancer site. Figure 5 identifies the cancer types that are the main contributors to the disease burden at different ages. Cancers of the central nervous system are most frequent in children and young female adults, while testicular cancer is by far the most common cancer diagnosed in young men. Prostate cancer is the most frequent cancer in men aged over 50, while breast cancer is the most common cancer diagnosis in women from the ages 25 through to 69.

Figure 4. Percentage distribution of cancer incidence by age, 2006-2010

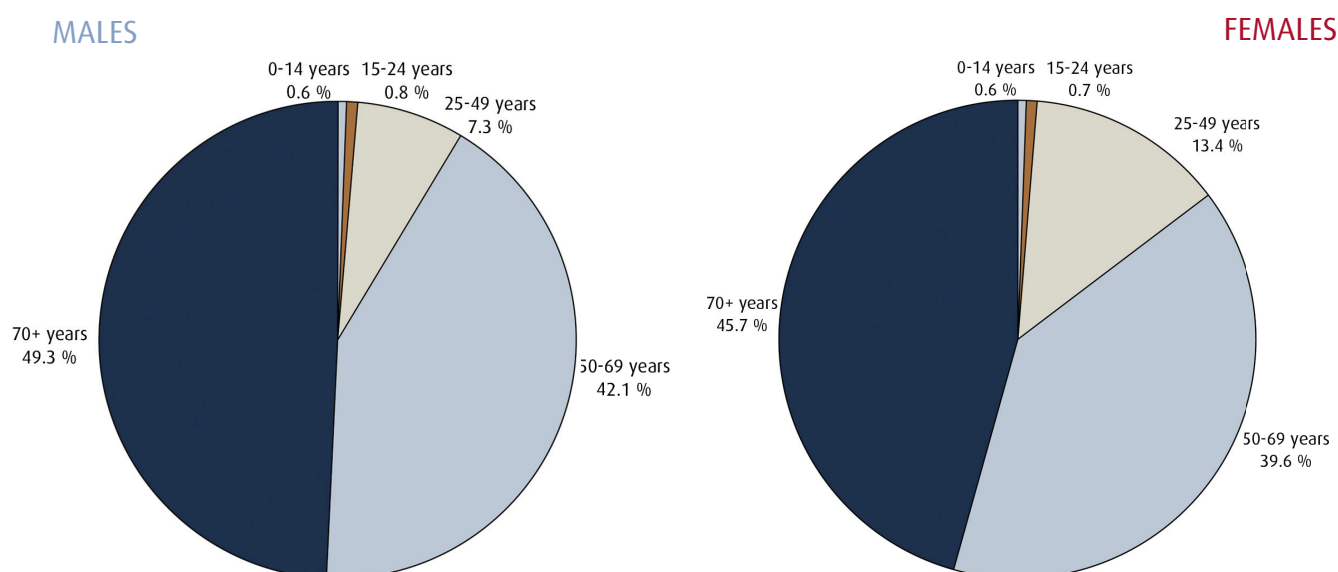
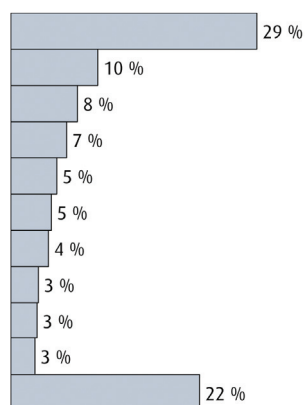


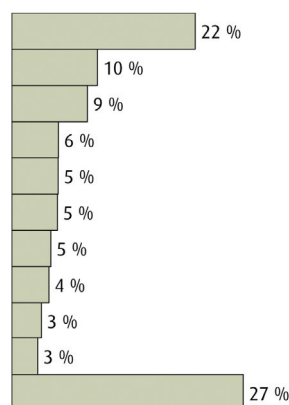
Table 4. Number of new cases by primary site* and sex - 2010

ICD10	Site	Males	Females	Total
C00-96	All sites	15110	13161	28271
C00-14	Mouth, pharynx	304	206	510
C00	Lip	74	52	126
C01-02	Tongue	59	32	91
C03-06	Mouth, other	50	45	95
C07-08	Salivary glands	27	34	61
C09-14	Pharynx	94	43	137
C15-26	Digestive organs	3205	2709	5914
C15	Oesophagus	188	65	253
C16	Stomach	306	176	482
C17	Small intestine	72	57	129
C18	Colon	1284	1259	2543
C19-21	Rectum, rectosigmoid, anus	760	569	1329
C22	Liver	124	75	199
C23-24	Gallbladder, bile ducts	86	99	185
C25	Pancreas	315	335	650
C26	Other digestive organs	70	74	144
C30-34, C38	Respiratory organs	1687	1316	3003
C30-31	Nose, sinuses	20	20	40
C32	Larynx, epiglottis	100	20	120
C33-34	Lung, trachea	1559	1267	2826
C38	Mediastinum, pleura (non-mesothelioma)	8	9	17
C40-41	Bone	27	25	52
C43	Melanoma of the skin	743	775	1518
C44	Skin, non-melanoma	830	706	1536
C45	Mesothelioma	77	14	91
C46	Kaposi's sarcoma	7	4	11
C47	Autonomic nervous system	5	5	10
C48-49	Soft tissues	53	87	140
C50	Breast	13	2839	2852
C51-58	Female genital organs		1689	1689
C53	Cervix uteri		322	322
C54	Corpus uteri		752	752
C55	Uterus, other		10	10
C56	Ovary		456	456
C51-52, C57	Other female genital		146	146
C58	Placenta		3	3
C60-63	Male genital organs	4531		4531
C61	Prostate	4210		4210
C62	Testis	271		271
C60, C63	Other male genital	50		50
C64-68	Urinary organs	1460	642	2102
C64	Kidney excl. renal pelvis	483	244	727
C65	Renal pelvis	54	35	89
C66-68	Bladder, ureter, urethra	923	363	1286
C69	Eye	24	19	43
C70-72	Central nervous system	454	537	991
C73	Thyroid gland	79	201	280
C37, C74-75	Other endocrine glands	98	93	191
C39, C76, C80	Other or unspecified	144	206	350
C81-96	Lymphoid and haematopoietic tissue	1369	1088	2457
C81	Hodgkin lymphoma	76	54	130
C82-85, C96	Non-Hodgkin lymphoma	547	417	964
C88	Malignant immunoproliferative diseases	25	20	45
C90	Multiple myeloma	197	180	377
C91-95	Leukaemia	524	417	941

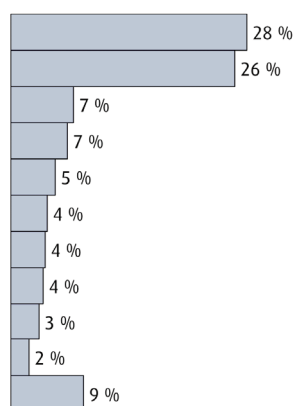
* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Figure 5. The most frequent incident cancers by age and sex, 2006-2010**MALES** all ages (73 326 cases)**FEMALE** all ages (63 817 cases)

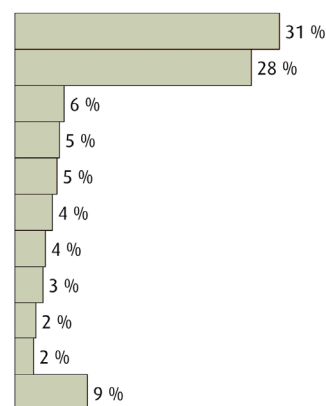
Prostate
Lung, trachea
Colon
Bladder, ureter, urethra
Skin, non-melanoma
Rectum, rectosigmoid, anus
Melanoma of the skin
Non-Hodgkin lymphoma
Central nervous system
Kidney except renal pelvis
Remaining sites



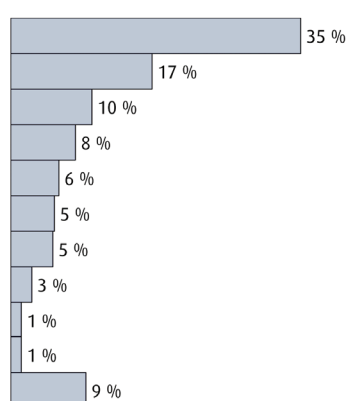
Breast
Colon
Lung, trachea
Corpus uteri
Skin, non-melanoma
Melanoma of the skin
Central nervous system
Rectum, rectosigmoid, anus
Ovary
Non-Hodgkin lymphoma
Remaining sites

MALES 0-14 years (419 cases)**FEMALE** 0-14 years (361 cases)

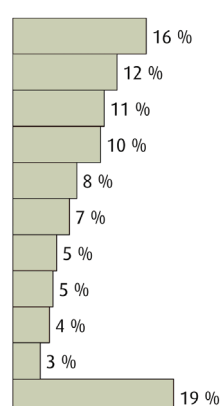
Central nervous system
Leukaemia
Other endocrine glands
Non-Hodgkin lymphoma
Hodgkin lymphoma
Kidney except renal pelvis
Bone
Testis
Autonomic nervous system
Eye
Remaining sites



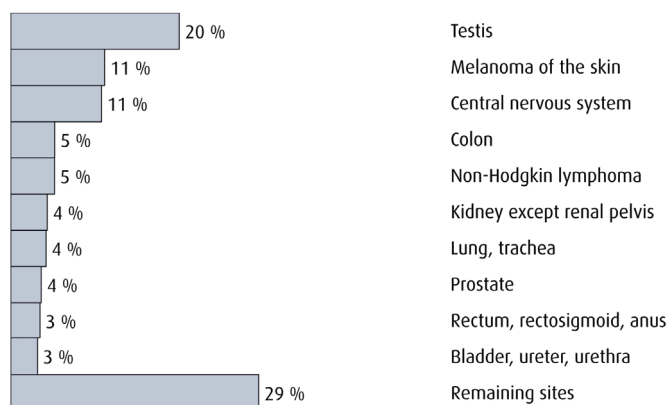
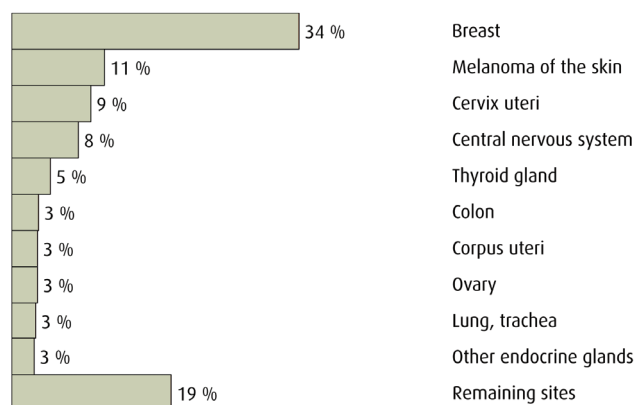
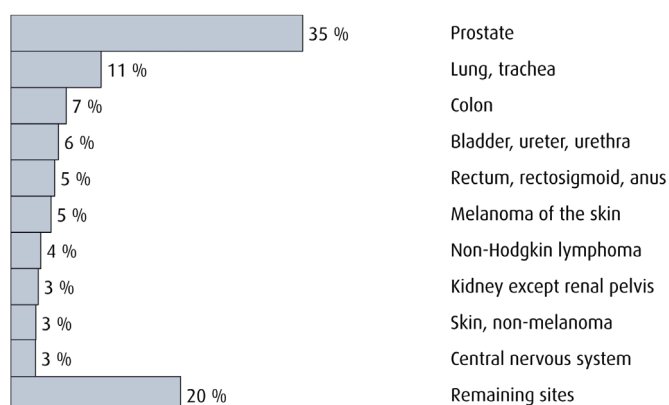
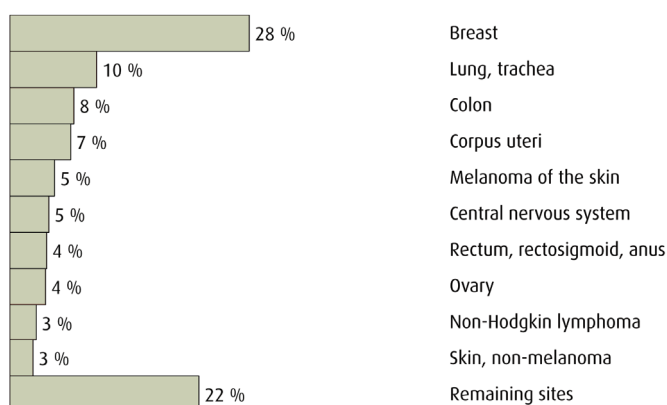
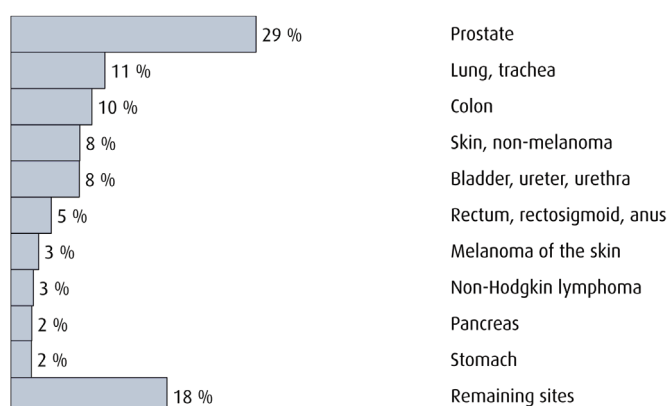
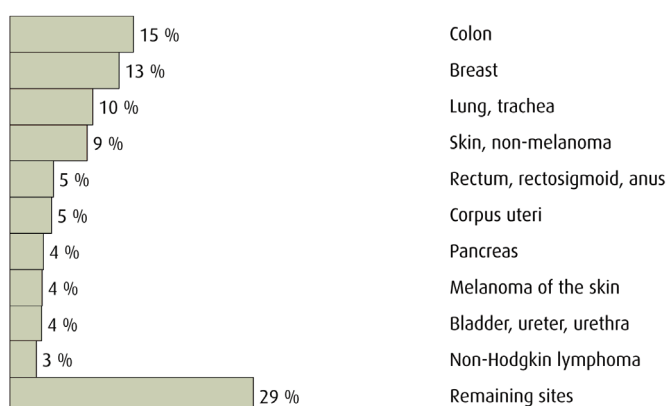
Central nervous system
Leukaemia
Other endocrine glands
Kidney except renal pelvis
Non-Hodgkin lymphoma
Ovary
Bone
Soft tissues
Eye
Autonomic nervous system
Remaining sites

MALES 15-24 years (551 cases)**FEMALE** 15-24 years (463 cases)

Testis
Central nervous system
Hodgkin lymphoma
Leukaemia
Other endocrine glands
Non-Hodgkin lymphoma
Bone
Melanoma of the skin
Colon
Kidney except renal pelvis
Remaining sites



Central nervous system
Hodgkin lymphoma
Other endocrine glands
Melanoma of the skin
Leukaemia
Thyroid gland
Non-Hodgkin lymphoma
Cervix uteri
Ovary
Bone
Remaining sites

Figure 5. The most frequent incident cancers by age and sex, 2006-2010**MALES 25-49 years (5 337 cases)****FEMALE 25-49 years (8 550 cases)****MALES 50-69 years (30 886 cases)****FEMALE 50-69 years (25 298 cases)****MALES 70+ years (36 133 cases)****FEMALE 70+ years (29 145 cases)**

The age-standardised rates and male:female (M:F) ratios for selected cancer types in 1978-1982 and 2006-2010 are compared in Table 5. Men tend to have higher rates of incidence for most cancer types in both time periods, with the exceptions of melanoma of the skin and thyroid cancer. The highest M:F ratios are observed for several head and neck cancers, although a number of the most frequent cancer forms - including cancers of the lung, bladder, stomach and rectum - are consistently more common among men.

The declines in the M:F ratios for several neoplasms over the last 25 years may largely be the result of decreasing incidence trends in men and increasing incidence trends in women for a number of cancer types. For lung cancer, the reduction of the M:F ratios over the last two to three decades points to a differential in sex-specific trends with the rapidly increasing trends in lung cancer rates among women contrasting with the recent declines in the last decade among men.

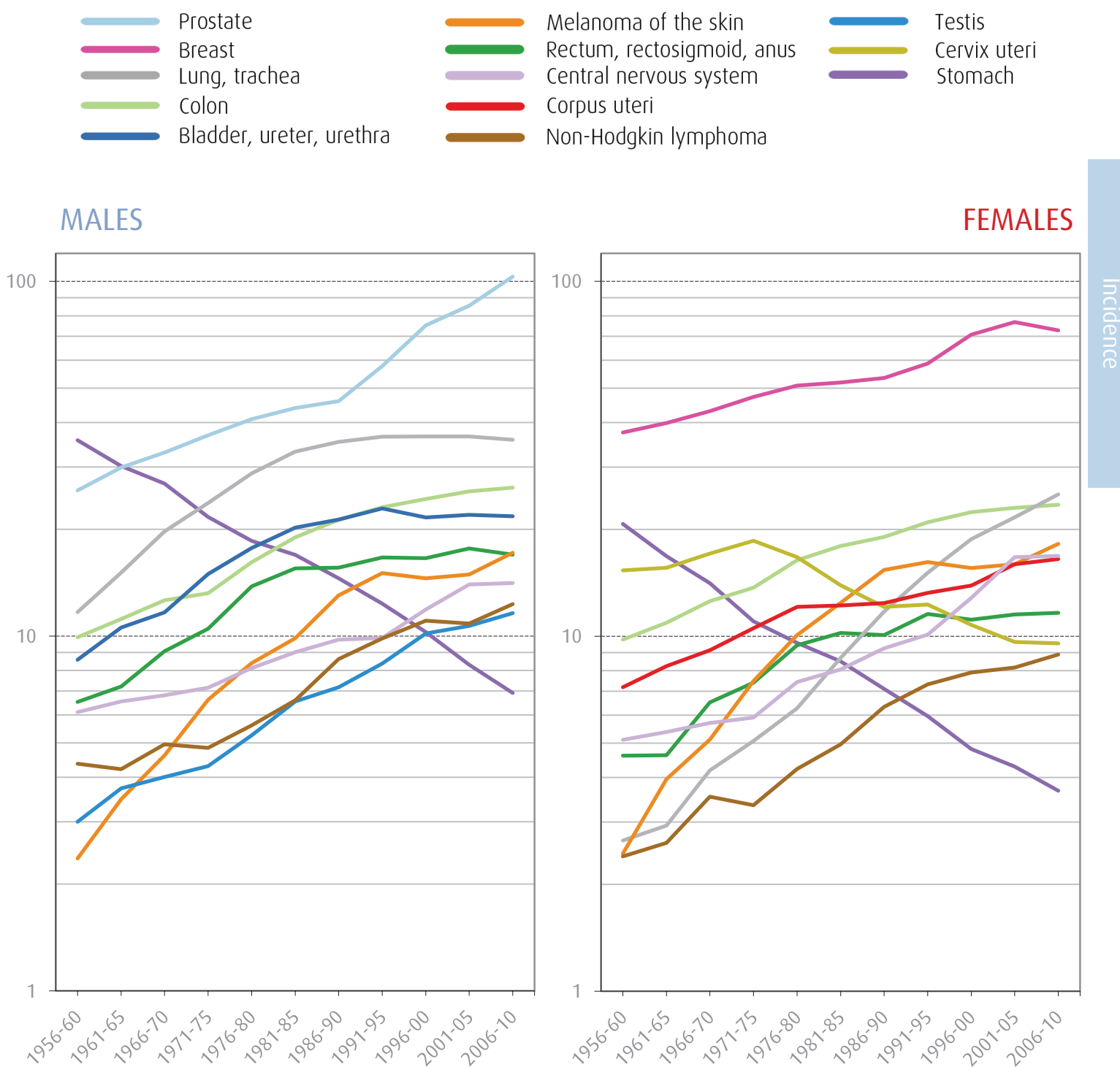
Table 5. Sex ratios (male:female) of age-adjusted rates (world) in 1978-82 and 2006-2010 by primary site*, sorted in descending order in last period

ICD10	Site	1978-1982			2006-2010		
		M	F	M:F ratio	M	F	M:F ratio
C32	Larynx, epiglottis	3.1	0.3	10.3	2.5	0.4	5.6
C15	Oesophagus	2.7	0.7	3.8	3.8	1.0	3.7
C66-68	Bladder, ureter, urethra	18.1	5.5	3.3	21.8	6.6	3.3
C09-14	Pharynx	1.6	0.5	3.2	2.7	1.0	2.6
C22	Liver	1.8	1.0	1.8	2.6	1.1	2.2
C01-02	Tongue	1.0	0.4	2.7	1.6	0.7	2.2
C65	Renal pelvis	1.0	0.4	2.2	1.2	0.6	2.1
C64	Kidney excl. renal pelvis	7.5	4.0	1.9	10.8	5.5	2.0
C16	Stomach	18.0	9.2	2.0	6.9	3.7	1.9
C00	Lip	3.4	0.4	7.9	1.7	1.0	1.8
C90	Multiple myeloma	4.7	3.0	1.5	4.7	3.2	1.5
C81	Hodgkin lymphoma	2.6	1.6	1.6	2.7	1.8	1.5
C19-21	Rectum, rectosigmoid, anus	14.7	10.1	1.5	17.0	11.6	1.5
C33-34	Lung, trachea	30.9	7.3	4.2	35.8	25.1	1.4
C91-95	Leukaemia	8.1	5.4	1.5	9.4	6.6	1.4
C82-85, C96	Non-Hodgkin lymphoma	6.2	4.5	1.4	12.5	9.1	1.4
C25	Pancreas	8.4	5.3	1.6	7.8	6.4	1.2
C18	Colon	17.1	17.4	1.0	26.2	23.5	1.1
C23-24	Gallbladder, bile ducts	1.1	1.6	0.7	1.6	1.6	1.0
C43	Melanoma of the skin	8.9	10.4	0.8	17.2	18.2	0.9
C73	Thyroid gland	1.6	5.1	0.3	2.0	5.4	0.4

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

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

1. Since 1990 up to 2007, there has been a continuing upsurge in the prostate cancer incidence, largely the result of an increased use of the Prostate Specific Antigen (PSA) test and subsequent biopsies to detect prostate cancer in Norway. The last three years (2007-2010), we have seen a reduction in the rates. However, due to the previously rapid increase, the incidence rate increased from the past five-year period (2001-2005) to the current one (2006-2010) with 21 percent.
2. For breast cancer, incidence rates increased until 2005, and have declined from 2006 onwards. The rate reduction from 2001-2005 to 2006-2010 was 5 per cent.
3. The increasing rates of melanoma for both sexes
4. The contrasting lung cancer trends in men and women, with a peak and recent flattening observed in men, but rapid increases in women, largely reflecting the respective phases of the smoking epidemic
5. The continuing increase in colon cancer now seems to be stabilising, and thus following the trends that have been observed for rectal cancer in both sexes, these trends possibly reflecting changing lifestyle
6. The continuing declines in stomach cancer in both sexes, reflecting the joint impact of refrigeration and control of H. Pylori infection
7. The rapid increases in a number of cancers for which the underlying determinants remain enigmatic, amongst them testicular cancer in men and non-Hodgkin lymphoma in both sexes

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

For men, the total incidence rate has also been increasing since the beginning of reporting in 1953, and since 1990 it has been strongly affected by the rates for prostate cancer with fluctuations related to changes in diagnostic practice (PSA-testing) (Table 8a). For women the incidence rates for all cancers combined have been increasing since 1953, but with a levelling of the last five-year period (Table 8b). While this long-term observation certainly reflects a genuine increase in risk of common cancers such

as breast cancer in women, and colorectal and lung cancer in both sexes, an increasing ability to diagnose a number of cancer types with time has also contributed.

Such trends are only partially compensated by decreasing incidence trends of stomach cancer and cervical cancer in women (Figure 6). More detailed trends of incidence, mortality and survival for 23 cancers are provided in a later section of this report.

Even if rates were to remain stable over the next 15 years, the number of new cases would certainly increase as a result of the joint demographic effects of population growth and ageing (see the special issue of CiN 2005 for predictions of cancer in Norway up to 2020, by Health Region.)

The cumulative risk is shown in Table 6 and in Figure 7, for the most common 15 cancers in men and women, respectively. The cumulative risk of 12.8 for prostate cancer ranks highest in males and indicates that, in the absence of competing causes of death, approximately one in eight men will develop this cancer before the age of 75. The corresponding risk of developing lung cancer is considerably lower in comparison, with about one in 25 men estimated to be diagnosed with the disease before the age of 75.

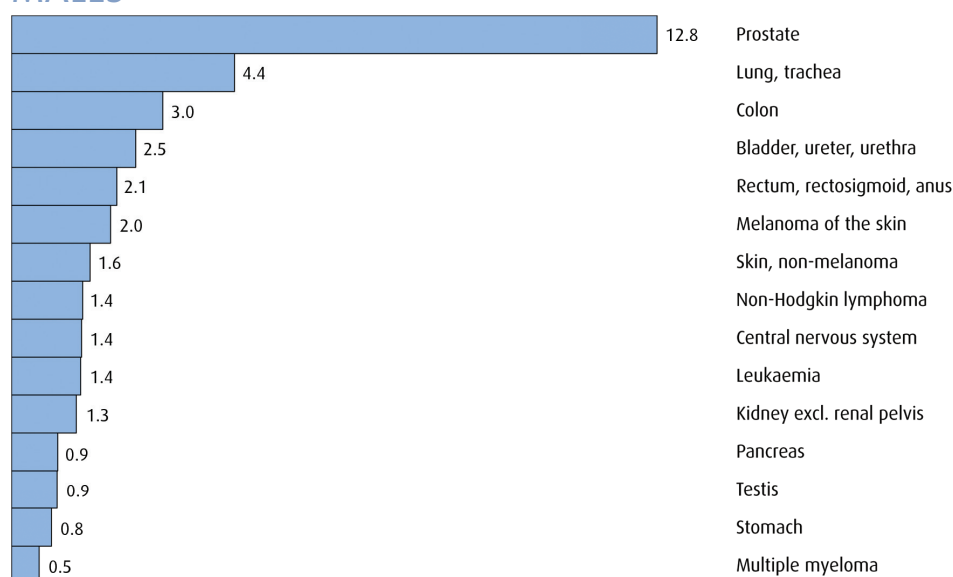
The cumulative risk of breast cancer ranks highest in women, with the figure of 7.9 indicating that about one in 12 Norwegian women develop this disease before the age of 75, in the absence of competing causes. As with men, lung and colon cancers rank second and third. Tables 7-16 provide further information on the distribution of cancer incidence in Norway. The number of incident cases and rates are tabulated according to year of diagnosis, age group, county of residence, and stage.

Further information

The descriptions in this report can be downloaded from the Cancer Registry of Norway website in various formats. The previous and current Special Issue is also available online at: www.kreftregisteret.no

Figure 7. Cumulative risk of developing cancer by the age of 75 for selected cancers by sex - 2006-2010 (%)

MALES



FEMALES

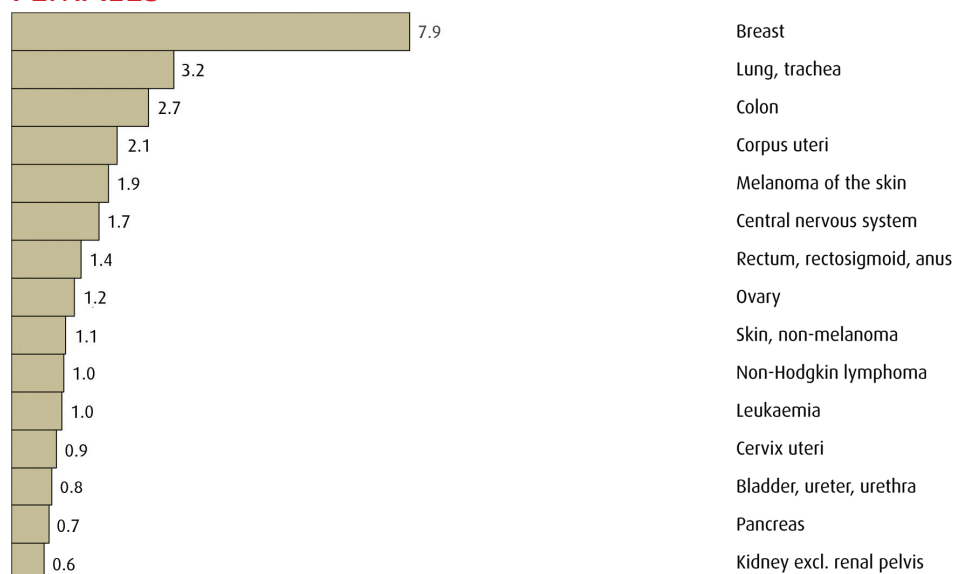


Table 6. Cumulative risk of developing cancer by the age of 75 by primary site* and sex - 2006-2010 (%)

ICD10	Site	Males	Females
C00-96	All sites	34.8	28.2
C00-14	Mouth, pharynx	0.9	0.5
C00	Lip	0.2	0.1
C01-02	Tongue	0.2	0.1
C03-06	Mouth, other	0.2	0.1
C07-08	Salivary glands	0.1	0.1
C09-14	Pharynx	0.3	0.1
C15-26	Digestive organs	7.8	5.8
C15	Oesophagus	0.5	0.1
C16	Stomach	0.8	0.4
C17	Small intestine	0.2	0.2
C18	Colon	3.0	2.7
C19-21	Rectum, rectosigmoid, anus	2.1	1.4
C22	Liver	0.3	0.1
C23-24	Gallbladder, bile ducts	0.2	0.2
C25	Pancreas	0.9	0.7
C26	Other digestive organs	0.1	0.1
C30-34, C38	Respiratory organs	4.8	3.3
C30-31	Nose, sinuses	0.1	0.0
C32	Larynx, epiglottis	0.3	0.1
C33-34	Lung, trachea	4.4	3.2
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0
C40-41	Bone	0.1	0.1
C43	Melanoma of the skin	2.0	1.9
C44	Skin, non-melanoma	1.6	1.1
C45	Mesothelioma	0.2	0.0
C46	Kaposi's sarcoma	0.0	0.0
C47	Autonomic nervous system	0.0	0.0
C48-49	Soft tissues	0.2	0.3
C50	Breast	0.1	7.9
C51-58	Female genital organs		4.5
C53	Cervix uteri		0.9
C54	Corpus uteri		2.1
C55	Uterus, other		0.0
C56	Ovary		1.2
C51-52, C57	Other female genital		0.3
C58	Placenta		0.0
C60-63	Male genital organs	13.7	
C61	Prostate	12.8	
C62	Testis	0.9	
C60, C63	Other male genital	0.1	
C64-68	Urinary organs	3.8	1.5
C64	Kidney excl. renal pelvis	1.3	0.6
C65	Renal pelvis	0.2	0.1
C66-68	Bladder, ureter, urethra	2.5	0.8
C69	Eye	0.1	0.1
C70-72	Central nervous system	1.4	1.7
C73	Thyroid gland	0.2	0.5
C37, C74-75	Other endocrine glands	0.4	0.4
C39, C76, C80	Other or unspecified	0.4	0.4
C81-96	Lymphoid and haematopoietic tissue	3.6	2.6
C81	Hodgkin lymphoma	0.2	0.1
C82-85, C96	Non-Hodgkin lymphoma	1.4	1.0
C88	Malignant immunoproliferative diseases	0.1	0.0
C90	Multiple myeloma	0.5	0.4
C91-95	Leukaemia	1.4	1.0

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 7a. Number of new cases by primary site* and year - 2001-2010**MALES**

ICD10	Site	Year									
		2001	02	03	04	05	06	07	08	09	2010
C00-96	All sites	11764	11841	12761	13434	13384	13709	14616	14794	15097	15110
C00-14	Mouth, pharynx	242	258	254	257	250	289	286	274	344	304
C00	Lip	52	61	42	37	49	80	71	57	84	74
C01-02	Tongue	51	50	52	53	44	46	57	62	75	59
C03-06	Mouth, other	36	47	56	52	40	53	40	43	65	50
C07-08	Salivary glands	21	23	17	17	26	15	18	18	22	27
C09-14	Pharynx	82	77	87	98	91	95	100	94	98	94
C15-26	Digestive organs	2677	2632	2689	2799	2772	2730	2868	2937	2933	3205
C15	Oesophagus	122	123	138	149	133	148	133	164	147	188
C16	Stomach	373	335	347	348	302	304	335	301	262	306
C17	Small intestine	67	46	58	44	50	65	67	63	82	72
C18	Colon	1000	972	992	1073	1075	1075	1111	1174	1125	1284
C19-21	Rectum, rectosigmoid, anus	633	682	676	693	690	660	656	694	742	760
C22	Liver	80	83	77	82	77	89	98	99	96	124
C23-24	Gallbladder, bile ducts	70	52	56	67	85	56	61	65	74	86
C25	Pancreas	293	306	307	304	327	302	367	340	348	315
C26	Other digestive organs	39	33	38	39	33	31	40	37	57	70
C30-34, C38	Respiratory organs	1502	1520	1567	1552	1556	1614	1629	1629	1646	1687
C30-31	Nose, sinuses	23	28	17	25	24	18	28	25	22	20
C32	Larynx, epiglottis	120	115	94	100	101	116	78	113	88	100
C33-34	Lung, trachea	1343	1365	1440	1416	1420	1467	1504	1482	1525	1559
C38	Mediastinum, pleura (non-mesothelioma)	16	12	16	11	11	13	19	9	11	8
C40-41	Bone	22	28	21	28	25	24	21	23	36	27
C43	Melanoma of the skin	486	475	480	491	588	561	576	677	704	743
C44	Skin, non-melanoma	598	666	656	693	667	763	751	775	863	830
C45	Mesothelioma	61	51	66	74	72	50	62	59	69	77
C46	Kaposi's sarcoma	6	6	5	9	9	9	3	5	6	7
C47	Autonomic nervous system	4	5	7	3	7	6	7	9	7	5
C48-49	Soft tissues	50	57	50	51	47	63	62	51	68	53
C50	Breast	13	14	20	14	18	14	19	21	15	13
C60-63	Male genital organs	3212	3050	3723	4164	4011	4193	4790	4772	4741	4531
C61	Prostate	2909	2770	3413	3849	3701	3889	4441	4418	4371	4210
C62	Testis	272	239	257	269	260	263	306	304	323	271
C60, C63	Other male genital	31	41	53	46	50	41	43	50	47	50
C64-68	Urinary organs	1183	1244	1256	1417	1308	1339	1456	1457	1471	1460
C64	Kidney excl. renal pelvis	322	328	334	395	363	362	399	419	424	483
C65	Renal pelvis	36	37	32	51	28	47	54	58	50	54
C66-68	Bladder, ureter, urethra	825	879	890	971	917	930	1003	980	997	923
C69	Eye	23	31	42	31	27	37	29	37	27	24
C70-72	Central nervous system	382	381	424	393	463	427	502	448	443	454
C73	Thyroid gland	53	53	53	50	68	80	67	60	75	79
C37, C74-75	Other endocrine glands	63	88	96	73	96	94	130	129	135	98
C39, C76, C80	Other or unspecified	238	231	246	206	217	204	174	175	176	144
C81-96	Lymphoid and haematopoietic tissue	949	1051	1106	1129	1183	1212	1184	1256	1338	1369
C81	Hodgkin lymphoma	53	53	84	73	64	67	67	77	79	76
C82-85, C96	Non-Hodgkin lymphoma	354	341	376	410	422	465	419	468	484	547
C88	Malignant immunoproliferative diseases	28	31	35	28	31	31	33	33	24	25
C90	Multiple myeloma	181	165	167	180	222	186	187	207	219	197
C91-95	Leukaemia	333	461	444	438	444	463	478	471	532	524

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 7b. Number of new cases by primary site* and year - 2001-2010**FEMALES**

ICD10	Site	Year									
		2001	02	03	04	05	06	07	08	09	2010
C00-96	All sites	11026	11539	11616	12043	12222	12469	12536	12704	12947	13161
C00-14	Mouth, pharynx	140	132	130	133	182	205	169	194	173	206
C00	Lip	32	25	25	26	41	55	55	52	39	52
C01-02	Tongue	27	27	25	26	32	38	23	33	35	32
C03-06	Mouth, other	34	35	28	40	43	54	37	43	47	45
C07-08	Salivary glands	24	17	20	11	26	22	23	25	15	34
C09-14	Pharynx	23	28	32	30	40	36	31	41	37	43
C15-26	Digestive organs	2470	2547	2548	2570	2624	2676	2692	2749	2828	2709
C15	Oesophagus	52	48	57	54	60	45	56	59	54	65
C16	Stomach	209	257	223	218	235	217	215	212	217	176
C17	Small intestine	47	63	46	49	41	44	54	51	75	57
C18	Colon	1139	1135	1234	1187	1197	1284	1270	1289	1357	1259
C19-21	Rectum, rectosigmoid, anus	513	520	505	574	566	557	549	562	560	569
C22	Liver	47	46	41	42	58	43	54	64	65	75
C23-24	Gallbladder, bile ducts	62	80	83	65	82	78	83	83	78	99
C25	Pancreas	346	351	317	333	325	369	356	367	355	335
C26	Other digestive organs	55	47	42	48	60	39	55	62	67	74
C30-34, C38	Respiratory organs	845	862	936	977	991	1079	1157	1197	1178	1316
C30-31	Nose, sinuses	17	16	12	27	17	22	33	16	12	20
C32	Larynx, epiglottis	22	18	18	13	17	12	17	23	21	20
C33-34	Lung, trachea	797	824	904	925	950	1040	1100	1153	1137	1267
C38	Mediastinum, pleura (non-mesothelioma)	9	4	2	12	7	5	7	5	8	9
C40-41	Bone	21	21	19	15	17	19	22	23	28	25
C43	Melanoma of the skin	533	556	552	561	575	660	638	627	732	775
C44	Skin, non-melanoma	485	522	566	576	677	658	680	693	755	706
C45	Mesothelioma	5	8	11	10	9	20	14	10	12	14
C46	Kaposi's sarcoma	0	3	2	3	2	5	3	3	4	4
C47	Autonomic nervous system	5	4	3	7	4	8	6	8	5	5
C48-49	Soft tissues	69	64	69	88	85	83	91	80	102	87
C50	Breast	2638	2716	2745	2805	2821	2728	2750	2763	2756	2839
C51-58	Female genital organs	1500	1538	1498	1573	1578	1569	1550	1595	1571	1689
C53	Cervix uteri	302	312	295	270	306	312	282	295	301	322
C54	Corpus uteri	594	588	630	685	680	660	672	720	706	752
C55	Uterus, other	6	10	13	8	6	9	4	7	14	10
C56	Ovary	451	522	428	467	433	457	449	453	417	456
C51-52, C57	Other female genital	144	103	128	139	147	127	141	120	132	146
C58	Placenta	3	3	4	4	6	4	2	0	1	3
C64-68	Urinary organs	518	585	565	579	602	594	601	619	637	642
C64	Kidney excl. renal pelvis	188	214	202	211	242	213	253	254	238	244
C65	Renal pelvis	26	30	37	27	18	26	23	28	36	35
C66-68	Bladder, ureter, urethra	304	341	326	341	342	355	325	337	363	363
C69	Eye	28	34	34	37	24	30	29	28	37	19
C70-72	Central nervous system	480	527	529	595	596	622	623	570	589	537
C73	Thyroid gland	130	144	133	173	165	149	162	173	182	201
C37, C74-75	Other endocrine glands	70	83	98	97	101	116	115	145	122	93
C39, C76, C80	Other or unspecified	286	308	298	283	271	244	236	200	204	206
C81-96	Lymphoid and haematopoietic tissue	803	885	880	961	898	1004	998	1027	1032	1088
C81	Hodgkin lymphoma	33	42	53	46	49	48	49	42	45	54
C82-85, C96	Non-Hodgkin lymphoma	334	343	334	369	331	385	378	370	405	417
C88	Malignant immunoproliferative diseases	17	20	15	21	20	25	17	15	20	20
C90	Multiple myeloma	175	161	151	154	157	143	167	166	155	180
C91-95	Leukaemia	244	319	327	371	341	403	387	434	407	417

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 8a. Age-adjusted (world) incidence rates per 100 000 person-years by primary site* and year - 2001-2010**MALES**

ICD10	Site	Year									
		2001	02	03	04	05	06	07	08	09	2010
C00-96	All sites	323.6	322.5	343.3	354.1	347.4	351.1	369.7	366.9	367.8	355.7
C00-14	Mouth, pharynx	7.2	7.8	7.7	7.6	7.0	7.8	7.8	7.3	8.8	7.5
C00	Lip	1.4	1.7	1.1	1.0	1.2	1.9	1.7	1.3	1.9	1.6
C01-02	Tongue	1.6	1.6	1.7	1.6	1.3	1.2	1.6	1.7	2.1	1.6
C03-06	Mouth, other	1.1	1.4	1.7	1.5	1.1	1.5	1.1	1.2	1.6	1.2
C07-08	Salivary glands	0.6	0.7	0.5	0.5	0.7	0.4	0.5	0.5	0.6	0.6
C09-14	Pharynx	2.5	2.4	2.7	2.9	2.7	2.8	2.9	2.6	2.6	2.6
C15-26	Digestive organs	69.8	68.5	68.8	70.3	68.4	66.1	68.7	69.3	67.5	72.0
C15	Oesophagus	3.2	3.5	3.8	4.0	3.5	3.9	3.3	4.1	3.6	4.4
C16	Stomach	9.1	8.6	8.6	8.2	7.1	7.1	7.8	7.0	5.8	6.9
C17	Small intestine	2.0	1.3	1.7	1.2	1.3	1.8	1.7	1.6	2.2	1.8
C18	Colon	25.5	24.8	24.7	26.5	26.4	25.2	25.8	27.0	25.2	27.8
C19-21	Rectum, rectosigmoid, anus	17.3	18.0	17.8	17.9	17.3	16.2	16.5	16.6	17.8	17.7
C22	Liver	2.0	2.3	2.2	1.9	2.1	2.4	2.5	2.6	2.3	2.9
C23-24	Gallbladder, bile ducts	1.9	1.3	1.4	1.7	2.1	1.3	1.5	1.5	1.6	2.0
C25	Pancreas	7.8	7.9	7.9	8.0	7.9	7.6	8.7	8.0	7.7	7.1
C26	Other digestive organs	0.9	0.8	0.9	1.1	0.7	0.7	0.8	0.8	1.4	1.5
C30-34, C38	Respiratory organs	40.7	41.2	41.7	39.9	39.1	40.8	39.5	39.0	38.6	37.9
C30-31	Nose, sinuses	0.6	0.9	0.5	0.7	0.7	0.4	0.8	0.7	0.6	0.5
C32	Larynx, epiglottis	3.1	3.3	2.8	2.8	2.7	3.2	2.0	2.8	2.1	2.3
C33-34	Lung, trachea	36.4	36.8	38.0	36.2	35.4	36.9	36.3	35.3	35.6	34.9
C38	Mediastinum, pleura (non-mesothelioma)	0.5	0.3	0.4	0.3	0.3	0.3	0.4	0.2	0.3	0.2
C40-41	Bone	0.9	1.2	0.8	1.1	0.9	1.1	0.7	1.0	1.3	1.0
C43	Melanoma of the skin	14.8	14.3	14.4	14.6	16.6	15.4	15.7	17.7	18.1	19.0
C44	Skin, non-melanoma	14.3	15.6	14.8	15.0	14.4	16.2	15.3	15.6	17.1	16.3
C45	Mesothelioma	1.6	1.4	1.7	1.9	1.7	1.2	1.5	1.4	1.5	1.6
C46	Kaposi's sarcoma	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0.2
C47	Autonomic nervous system	0.2	0.3	0.4	0.1	0.4	0.2	0.3	0.5	0.5	0.3
C48-49	Soft tissues	1.6	1.8	1.5	1.6	1.4	2.0	1.8	1.6	1.8	1.3
C50	Breast	0.4	0.3	0.5	0.3	0.5	0.3	0.5	0.5	0.4	0.3
C60-63	Male genital organs	88.5	82.3	99.0	110.7	105.7	108.4	124.0	120.1	118.7	108.7
C61	Prostate	76.4	71.2	87.1	98.7	93.4	96.6	110.4	106.9	104.9	97.1
C62	Testis	11.1	10.0	10.4	11.0	10.9	10.8	12.5	11.9	12.6	10.3
C60, C63	Other male genital	0.9	1.2	1.5	1.0	1.4	1.0	1.1	1.2	1.1	1.3
C64-68	Urinary organs	31.0	32.4	32.5	35.2	32.3	32.4	35.0	34.9	34.0	32.9
C64	Kidney excl. renal pelvis	9.4	9.5	9.4	10.9	9.7	9.8	10.4	11.0	11.0	12.0
C65	Renal pelvis	0.9	0.9	0.7	1.3	0.8	1.1	1.3	1.4	1.1	1.2
C66-68	Bladder, ureter, urethra	20.7	22.0	22.3	23.0	21.8	21.5	23.3	22.4	22.0	19.7
C69	Eye	0.7	1.0	1.2	1.1	0.8	1.1	0.8	1.1	0.8	0.6
C70-72	Central nervous system	13.2	13.6	15.1	12.9	15.2	13.6	16.3	14.0	13.4	13.2
C73	Thyroid gland	1.8	1.7	1.7	1.5	2.1	2.4	1.8	1.7	2.1	2.2
C37, C74-75	Other endocrine glands	2.3	2.9	3.3	2.5	2.8	3.2	4.1	3.9	4.4	3.0
C39, C76, C80	Other or unspecified	5.5	5.6	5.6	4.6	4.8	4.7	3.8	3.8	3.6	3.0
C81-96	Lymphoid and haematopoietic tissue	28.9	30.5	32.4	32.9	32.9	34.0	31.9	33.4	35.0	34.6
C81	Hodgkin lymphoma	2.1	2.2	3.4	3.0	2.7	2.5	2.4	2.9	2.9	2.8
C82-85, C96	Non-Hodgkin lymphoma	10.6	9.8	11.0	11.9	11.5	12.6	11.4	12.2	12.5	13.6
C88	Malignant immunoproliferative diseases	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.7	0.6	0.5
C90	Multiple myeloma	5.0	4.3	4.3	4.5	5.4	4.7	4.5	4.9	5.1	4.3
C91-95	Leukaemia	10.4	13.3	12.8	12.7	12.5	13.4	12.9	12.7	13.9	13.4

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 8b. Age-adjusted (world) incidence rates per 100 000 person-years by primary site* and year - 2001-2010**FEMALES**

ICD10	Site	Year									
		2001	02	03	04	05	06	07	08	09	2010
C00-96	All sites	277.1	286.7	284.0	292.2	291.6	296.7	292.9	292.0	294.3	295.8
C00-14	Mouth, pharynx	3.1	3.3	3.2	3.2	4.1	4.9	3.7	4.2	3.8	4.7
C00	Lip	0.7	0.6	0.5	0.6	0.7	1.2	1.0	1.0	0.7	1.0
C01-02	Tongue	0.5	0.7	0.6	0.7	0.7	0.9	0.5	0.8	0.8	0.7
C03-06	Mouth, other	0.6	0.9	0.7	0.9	0.9	1.2	0.7	0.8	0.9	1.0
C07-08	Salivary glands	0.7	0.5	0.6	0.2	0.7	0.5	0.6	0.6	0.4	0.8
C09-14	Pharynx	0.6	0.8	0.9	0.8	1.1	1.1	0.8	1.1	1.0	1.2
C15-26	Digestive organs	50.1	50.7	49.8	51.6	50.5	52.0	51.0	50.7	52.5	49.6
C15	Oesophagus	1.1	0.9	1.1	1.1	1.1	0.9	1.0	1.2	1.0	1.1
C16	Stomach	3.9	4.7	4.0	4.5	4.4	4.1	4.0	3.5	3.8	3.0
C17	Small intestine	1.1	1.6	1.0	1.2	1.0	1.0	1.2	1.2	1.6	1.2
C18	Colon	22.8	22.5	23.8	23.4	22.6	24.1	23.6	23.3	23.9	22.4
C19-21	Rectum, rectosigmoid, anus	11.3	11.5	10.9	12.1	11.8	11.9	11.8	11.4	11.7	11.3
C22	Liver	1.0	1.0	0.9	1.0	1.3	0.8	1.0	1.2	1.3	1.3
C23-24	Gallbladder, bile ducts	1.4	1.4	1.4	1.2	1.5	1.5	1.6	1.5	1.5	1.9
C25	Pancreas	6.5	6.4	6.2	6.3	5.7	6.9	6.0	6.5	6.6	6.0
C26	Other digestive organs	0.8	0.7	0.6	0.9	1.0	0.6	0.8	0.9	1.2	1.3
C30-34, C38	Respiratory organs	21.7	21.5	23.1	23.4	23.4	24.9	26.1	26.3	25.3	28.1
C30-31	Nose, sinuses	0.4	0.5	0.3	0.5	0.4	0.5	0.8	0.3	0.3	0.4
C32	Larynx, epiglottis	0.6	0.5	0.5	0.3	0.5	0.3	0.4	0.6	0.5	0.5
C33-34	Lung, trachea	20.5	20.5	22.4	22.4	22.4	24.0	24.8	25.4	24.3	27.0
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.2	0.2
C40-41	Bone	0.8	1.0	0.8	0.6	0.6	0.7	0.8	0.7	1.0	1.0
C43	Melanoma of the skin	15.7	16.3	15.9	15.9	16.1	18.7	16.9	16.6	19.3	19.6
C44	Skin, non-melanoma	8.6	8.5	9.1	9.5	10.3	10.3	10.3	10.9	11.2	10.7
C45	Mesothelioma	0.1	0.2	0.2	0.1	0.2	0.4	0.3	0.2	0.3	0.3
C46	Kaposi's sarcoma	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
C47	Autonomic nervous system	0.2	0.3	0.1	0.3	0.2	0.3	0.3	0.4	0.2	0.2
C48-49	Soft tissues	2.1	1.6	1.9	2.5	2.6	2.2	2.5	2.1	2.6	2.2
C50	Breast	75.7	77.3	77.2	77.4	76.7	73.8	73.0	72.9	71.0	73.0
C51-58	Female genital organs	40.8	41.7	39.9	41.1	41.0	39.7	39.6	39.9	39.0	41.0
C53	Cervix uteri	9.8	10.3	9.5	8.7	9.9	9.8	9.0	9.2	9.7	10.1
C54	Corpus uteri	15.0	15.1	16.1	17.0	16.6	15.6	16.5	17.4	16.2	16.9
C55	Uterus, other	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.2
C56	Ovary	12.6	13.8	11.1	12.3	11.0	11.2	11.1	10.9	10.1	10.7
C51-52, C57	Other female genital	3.1	2.2	2.8	2.7	3.2	2.8	2.9	2.3	2.7	2.9
C58	Placenta	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.1
C64-68	Urinary organs	11.2	12.3	11.7	11.3	12.7	12.4	12.5	12.8	13.0	12.7
C64	Kidney excl. renal pelvis	4.2	4.8	4.8	4.8	5.6	5.0	5.8	5.6	5.6	5.4
C65	Renal pelvis	0.6	0.6	0.8	0.4	0.3	0.5	0.4	0.5	0.8	0.6
C66-68	Bladder, ureter, urethra	6.4	6.9	6.0	6.0	6.8	6.8	6.3	6.6	6.7	6.7
C69	Eye	0.7	1.0	0.8	1.0	0.8	0.9	0.8	0.8	1.1	0.6
C70-72	Central nervous system	14.7	17.2	16.1	17.6	18.1	17.6	18.3	16.5	16.6	15.2
C73	Thyroid gland	4.3	4.6	4.3	5.4	5.1	4.8	5.0	5.3	5.8	6.3
C37, C74-75	Other endocrine glands	2.8	2.8	3.7	3.2	3.8	4.1	4.0	4.8	4.6	3.0
C39, C76, C80	Other or unspecified	4.5	5.1	4.5	4.7	4.4	4.0	3.6	3.3	3.1	3.2
C81-96	Lymphoid and haematopoietic tissue	19.9	21.3	21.6	23.3	20.9	24.9	24.1	23.5	23.8	24.5
C81	Hodgkin lymphoma	1.4	1.5	2.1	1.7	2.0	2.1	1.9	1.4	1.8	1.9
C82-85, C96	Non-Hodgkin lymphoma	8.3	8.2	7.9	9.1	7.8	9.2	9.1	8.5	9.2	9.3
C88	Malignant immunoproliferative diseases	0.4	0.4	0.3	0.4	0.3	0.6	0.3	0.3	0.4	0.4
C90	Multiple myeloma	3.5	3.3	2.8	3.1	3.3	2.7	3.3	3.3	3.2	3.3
C91-95	Leukaemia	6.4	7.9	8.6	9.0	7.6	10.4	9.4	9.9	9.2	9.6

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 9a. Average annual number of new cases by primary site* and five-year age group - 2006-2010

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	39	17	28	43	68	99
C00-14	Mouth, pharynx	0	0	0	1	1	1
C00	Lip	0	0	0	0	0	0
C01-02	Tongue	0	0	0	0	0	0
C03-06	Mouth, other	0	0	0	0	0	0
C07-08	Salivary glands	0	0	0	0	0	1
C09-14	Pharynx	0	0	0	0	0	0
C15-26	Digestive organs	1	0	1	1	1	4
C15	Oesophagus	0	0	0	0	0	0
C16	Stomach	0	0	0	0	0	0
C17	Small intestine	0	0	0	0	0	1
C18	Colon	0	0	1	1	1	2
C19-21	Rectum, rectosigmoid, anus	0	0	0	0	0	1
C22	Liver	1	0	0	0	0	1
C23-24	Gallbladder, bile ducts	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	0
C26	Other digestive organs	0	0	0	0	0	0
C30-34, C38	Respiratory organs	0	0	0	1	0	1
C30-31	Nose, sinuses	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0
C33-34	Lung, trachea	0	0	0	0	0	1
C38	Mediastinum, pleura (non-mesothelioma)	0	0	0	0	0	0
C40-41	Bone	0	1	2	3	3	1
C43	Melanoma of the skin	0	0	0	1	2	5
C44	Skin, non-melanoma	1	0	0	0	1	1
C45	Mesothelioma	0	0	0	0	0	0
C46	Kaposi's sarcoma	0	0	0	0	0	0
C47	Autonomic nervous system	2	0	0	0	1	0
C48-49	Soft tissues	1	0	0	1	0	1
C50	Breast	0	0	0	0	0	0
C60-63	Male genital organs	1	0	2	7	31	52
C61	Prostate	0	0	0	0	0	0
C62	Testis	1	0	2	7	31	52
C60, C63	Other male genital	0	0	0	0	0	0
C64-68	Urinary organs	3	1	0	1	2	2
C64	Kidney excl. renal pelvis	2	1	0	0	1	1
C65	Renal pelvis	0	0	0	0	0	0
C66-68	Bladder, ureter, urethra	0	0	0	0	1	1
C69	Eye	2	0	0	0	0	0
C70-72	Central nervous system	9	6	8	10	9	11
C73	Thyroid gland	0	0	0	0	1	1
C37, C74-75	Other endocrine glands	3	1	2	3	4	4
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81-96	Lymphoid and haematopoietic tissue	16	7	10	14	12	13
C81	Hodgkin lymphoma	0	1	3	4	7	6
C82-85, C96	Non-Hodgkin lymphoma	3	1	2	4	2	3
C88	Malignant immunoproliferative diseases	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0
C91-95	Leukaemia	13	5	5	6	3	4

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
145	189	255	379	698	1257	2072	2151	2094	2098	1743	1291	
2	3	9	14	31	41	49	43	34	32	22	16	
0	0	2	2	4	7	7	11	11	13	8	8	
0	1	2	4	6	7	12	10	8	4	4	1	
0	1	1	1	4	6	10	9	7	6	4	2	
1	1	1	1	1	1	2	2	2	2	2	2	
0	1	3	6	15	19	18	12	7	8	3	2	
13	24	44	75	142	242	365	413	439	459	403	307	
0	1	3	5	8	16	25	25	24	21	15	12	
1	3	4	8	16	20	35	38	44	48	45	38	
1	1	2	2	4	8	10	11	11	10	6	2	
6	8	16	24	48	79	126	151	180	197	179	136	
3	6	10	16	37	74	101	108	106	103	82	54	
1	1	3	7	8	7	13	11	14	12	13	9	
0	0	1	2	3	6	10	8	10	11	8	9	
0	3	3	9	16	29	41	55	44	51	47	37	
1	0	1	1	2	3	3	8	7	7	6	8	
2	6	12	29	77	146	254	254	268	273	207	110	
0	0	1	1	1	2	4	4	3	3	2	1	
0	0	1	2	8	14	15	19	12	12	10	5	
2	5	10	26	68	128	233	230	252	256	192	102	
0	0	0	0	0	1	2	2	1	2	2	1	
1	1	2	2	1	1	2	1	1	3	2	0	
13	25	37	39	54	72	89	79	75	67	57	39	
4	4	6	9	15	33	54	81	106	137	164	182	
0	0	0	1	2	3	10	10	10	12	8	6	
1	0	1	0	0	0	0	1	0	1	0	1	
0	0	0	1	0	0	1	0	0	0	0	0	
1	2	3	4	4	6	6	6	7	7	4	4	
0	0	0	2	0	2	3	2	2	2	1	1	
52	49	44	59	162	395	786	845	712	618	466	323	
0	0	6	32	144	381	773	833	705	612	460	318	
51	48	37	24	14	8	6	5	2	1	1	1	
0	1	1	3	3	5	7	7	5	6	5	4	
5	11	24	41	71	120	182	194	205	244	197	135	
2	7	14	22	35	44	63	57	54	49	43	21	
0	0	0	2	2	4	7	7	9	10	7	4	
2	4	10	16	34	72	113	129	142	185	147	110	
0	0	1	2	3	2	6	4	3	4	2	2	
20	24	26	35	35	48	55	43	36	31	27	24	
5	5	7	5	8	8	8	4	5	8	4	3	
4	7	5	9	9	10	19	8	12	10	6	3	
0	1	2	5	8	10	15	19	24	27	30	34	
24	28	32	48	77	118	168	147	153	163	142	101	
9	6	6	4	5	5	4	4	3	3	2	1	
7	12	13	20	34	51	72	61	55	59	45	32	
0	0	0	0	1	2	5	5	3	4	5	4	
0	2	4	6	14	17	24	27	28	34	28	17	
7	9	9	18	23	43	63	50	64	63	62	48	

Table 9b. Average annual number of new cases by primary site* and five-year age group - 2006-2010

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	33	20	20	36	57	102
C00-14	Mouth, pharynx	0	0	0	0	1	2
C00	Lip	0	0	0	0	0	0
C01-02	Tongue	0	0	0	0	0	0
C03-06	Mouth, other	0	0	0	0	0	1
C07-08	Salivary glands	0	0	0	0	1	1
C09-14	Pharynx	0	0	0	0	0	0
C15-26	Digestive organs	0	1	1	2	3	5
C15	Oesophagus	0	0	0	0	0	0
C16	Stomach	0	0	0	0	0	0
C17	Small intestine	0	0	0	0	0	0
C18	Colon	0	0	0	1	2	3
C19-21	Rectum, rectosigmoid, anus	0	0	0	0	1	1
C22	Liver	0	0	0	1	0	0
C23-24	Gallbladder, bile ducts	0	0	0	0	0	0
C25	Pancreas	0	0	0	0	0	0
C26	Other digestive organs	0	0	0	0	0	0
C30-34, C38	Respiratory organs	0	1	0	0	1	1
C30-31	Nose, sinuses	0	0	0	0	0	0
C32	Larynx, epiglottis	0	0	0	0	0	0
C33-34	Lung, trachea	0	0	0	0	1	1
C38	Mediastinum, pleura (non-mesothelioma)	0	0	0	0	0	0
C40-41	Bone	0	1	1	2	1	1
C43	Melanoma of the skin	0	0	0	2	7	17
C44	Skin, non-melanoma	1	0	0	1	2	1
C45	Mesothelioma	0	0	0	0	0	0
C46	Kaposi's sarcoma	0	0	0	0	0	0
C47	Autonomic nervous system	1	0	0	1	0	0
C48-49	Soft tissues	0	1	1	1	1	2
C50	Breast	0	0	0	0	2	8
C51-58	Female genital organs	1	0	2	2	7	21
C53	Cervix uteri	0	0	0	0	4	18
C54	Corpus uteri	0	0	0	0	0	1
C55	Uterus, other	0	0	0	0	0	0
C56	Ovary	1	0	2	2	2	2
C51-52, C57	Other female genital	0	0	0	0	0	1
C58	Placenta	0	0	0	0	0	0
C64-68	Urinary organs	2	1	0	0	1	1
C64	Kidney excl. renal pelvis	2	1	0	0	0	1
C65	Renal pelvis	0	0	0	0	0	0
C66-68	Bladder, ureter, urethra	0	0	0	0	0	0
C69	Eye	2	0	0	0	0	1
C70-72	Central nervous system	9	6	7	7	8	11
C73	Thyroid gland	0	0	0	2	5	9
C37, C74-75	Other endocrine glands	2	1	1	4	6	8
C39, C76, C80	Other or unspecified	0	0	0	0	0	0
C81-96	Lymphoid and haematopoietic tissue	13	6	6	13	12	11
C81	Hodgkin lymphoma	0	0	0	6	6	6
C82-85, C96	Non-Hodgkin lymphoma	1	1	1	2	3	4
C88	Malignant immunoproliferative diseases	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0
C91-95	Leukaemia	12	5	4	5	4	2

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

FEMALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
174	296	457	682	955	1164	1530	1410	1326	1432	1446	1625	
3	2	4	9	17	16	21	25	22	20	21	26	
0	0	1	2	3	3	5	6	6	7	7	11	
1	0	1	1	3	2	5	4	3	4	4	4	
0	0	1	1	3	3	4	6	7	5	7	7	
1	1	1	2	1	1	3	3	3	3	2	2	
1	1	1	3	6	7	4	6	3	2	2	2	
10	19	34	66	117	177	274	304	339	409	464	506	
0	0	1	1	2	5	6	6	6	11	6	12	
1	2	2	6	10	12	16	20	22	31	38	47	
1	0	1	2	5	6	7	7	8	8	7	5	
4	8	16	24	47	74	116	146	171	194	237	250	
2	6	9	21	34	45	73	68	67	80	75	78	
0	0	0	3	2	3	5	4	7	11	11	11	
0	1	1	2	3	7	9	10	10	13	16	12	
1	2	4	6	12	24	38	38	43	52	61	75	
0	0	1	1	2	2	4	5	6	9	12	17	
2	6	10	31	67	119	183	169	185	185	136	88	
0	0	0	1	1	2	2	3	2	2	3	3	
0	0	0	0	3	3	2	2	3	3	1	1	
2	6	10	30	62	114	178	165	179	179	130	83	
0	0	0	0	1	1	0	0	2	1	1	1	
1	1	1	1	1	3	3	1	2	1	1	1	
24	43	51	51	61	67	74	66	55	55	51	61	
2	3	8	9	20	28	40	51	73	98	122	240	
0	0	1	0	0	1	1	2	2	2	3	1	
0	0	0	0	0	0	1	0	0	0	1	2	
0	0	1	1	0	1	0	0	0	0	0	0	
1	4	3	4	5	8	12	12	9	11	8	6	
35	78	171	287	353	357	402	319	180	173	192	208	
38	60	71	87	143	174	210	187	162	155	137	137	
31	44	35	31	32	21	23	12	13	15	12	11	
2	7	16	26	60	89	109	106	91	78	64	54	
0	0	0	0	0	0	1	0	1	1	1	4	
3	7	16	24	41	52	63	56	42	48	42	42	
1	2	3	6	10	11	13	12	16	12	18	27	
1	0	0	0	0	0	0	0	0	0	0	0	
2	4	11	19	28	41	80	72	85	93	87	92	
1	3	7	12	14	19	35	26	33	34	26	27	
0	0	0	0	1	2	4	4	4	6	4	3	
1	1	4	7	13	20	41	42	48	52	56	62	
0	1	1	1	1	4	4	2	3	3	2	2	
19	28	30	45	54	60	65	54	55	45	43	40	
14	18	19	18	15	17	16	9	11	9	6	6	
7	8	10	11	10	9	11	8	8	6	5	2	
1	1	2	4	6	10	17	18	20	31	40	67	
14	18	28	37	55	74	115	112	117	136	125	138	
6	4	2	1	3	2	1	2	3	2	2	1	
3	7	12	16	27	32	51	47	45	52	45	42	
0	0	1	0	1	1	3	2	2	5	1	2	
0	1	3	6	8	12	19	17	19	31	24	23	
5	7	10	13	16	26	40	44	48	47	53	69	

Table 10a. Age-specific incidence rates per 100 000 person-years by primary site* and five-year age group - 2006-2010

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	25.4	11.1	17.3	26.1	44.6	65.0
C00-14	Mouth, pharynx	0.0	0.0	0.1	0.4	0.5	0.7
C00	Lip	0.0	0.0	0.0	0.0	0.0	0.0
C01-02	Tongue	0.0	0.0	0.0	0.0	0.1	0.3
C03-06	Mouth, other	0.0	0.0	0.0	0.0	0.0	0.0
C07-08	Salivary glands	0.0	0.0	0.1	0.1	0.1	0.4
C09-14	Pharynx	0.0	0.0	0.0	0.2	0.3	0.0
C15-26	Digestive organs	0.8	0.1	0.5	0.9	0.8	2.9
C15	Oesophagus	0.0	0.0	0.0	0.0	0.0	0.0
C16	Stomach	0.0	0.0	0.0	0.2	0.1	0.0
C17	Small intestine	0.0	0.0	0.0	0.0	0.0	0.5
C18	Colon	0.0	0.0	0.4	0.4	0.5	1.2
C19-21	Rectum, rectosigmoid, anus	0.0	0.0	0.0	0.0	0.1	0.7
C22	Liver	0.8	0.1	0.0	0.1	0.0	0.4
C23-24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.0	0.0
C25	Pancreas	0.0	0.0	0.0	0.1	0.0	0.1
C26	Other digestive organs	0.0	0.0	0.1	0.0	0.0	0.0
C30-34, C38	Respiratory organs	0.0	0.1	0.1	0.5	0.3	0.6
C30-31	Nose, sinuses	0.0	0.1	0.0	0.2	0.1	0.0
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0
C33-34	Lung, trachea	0.0	0.0	0.0	0.2	0.1	0.6
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.1	0.0	0.0	0.0
C40-41	Bone	0.0	0.8	1.4	1.8	1.7	0.9
C43	Melanoma of the skin	0.0	0.0	0.2	0.5	1.3	3.6
C44	Skin, non-melanoma	0.4	0.0	0.2	0.2	0.4	0.5
C45	Mesothelioma	0.0	0.0	0.0	0.0	0.0	0.0
C46	Kaposi's sarcoma	0.0	0.0	0.0	0.0	0.0	0.3
C47	Autonomic nervous system	1.6	0.1	0.1	0.1	0.4	0.1
C48-49	Soft tissues	0.9	0.0	0.2	0.5	0.3	0.9
C50	Breast	0.0	0.0	0.0	0.0	0.0	0.0
C60-63	Male genital organs	0.4	0.3	1.4	4.5	20.9	34.3
C61	Prostate	0.0	0.0	0.0	0.1	0.0	0.0
C62	Testis	0.4	0.3	1.4	4.4	20.9	34.3
C60, C63	Other male genital	0.0	0.0	0.0	0.0	0.0	0.0
C64-68	Urinary organs	1.8	0.5	0.2	0.4	1.2	1.3
C64	Kidney excl. renal pelvis	1.6	0.5	0.2	0.2	0.7	0.5
C65	Renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66-68	Bladder, ureter, urethra	0.3	0.0	0.0	0.1	0.5	0.8
C69	Eye	1.2	0.0	0.0	0.0	0.1	0.0
C70-72	Central nervous system	6.2	3.9	4.9	5.9	6.1	6.9
C73	Thyroid gland	0.0	0.0	0.0	0.0	0.7	0.9
C37, C74-75	Other endocrine glands	2.0	0.7	1.4	1.7	2.3	2.3
C39, C76, C80	Other or unspecified	0.0	0.0	0.0	0.0	0.0	0.0
C81-96	Lymphoid and haematopoietic tissue	10.2	4.6	6.4	8.7	7.7	8.6
C81	Hodgkin lymphoma	0.1	0.7	2.0	2.4	4.4	3.8
C82-85, C96	Non-Hodgkin lymphoma	1.7	0.5	1.4	2.6	1.0	1.7
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.0	0.0	0.3
C91-95	Leukaemia	8.4	3.4	3.1	3.7	2.2	2.9

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
88.9	102.8	138.8	223.9	436.0	839.3	1455.7	2184.2	2907.2	3545.1	3955.8	3930.2	
1.0	1.7	5.0	8.6	19.2	27.1	34.6	44.1	47.7	54.9	49.4	48.6	
0.0	0.1	0.9	0.9	2.5	4.4	5.0	11.3	15.8	22.0	19.0	25.6	
0.1	0.4	1.1	2.6	3.7	4.7	8.2	10.1	10.4	6.4	9.5	4.4	
0.1	0.3	0.5	0.8	2.6	4.1	7.1	8.7	9.2	9.9	8.6	5.3	
0.5	0.5	0.6	0.5	0.8	0.9	1.4	1.6	3.0	3.4	5.5	6.7	
0.2	0.3	1.8	3.7	9.6	13.0	12.9	12.4	9.3	13.2	6.8	6.7	
7.9	13.0	23.8	44.2	88.8	161.7	256.6	417.0	609.2	775.5	915.4	935.4	
0.2	0.3	1.6	3.0	5.3	10.7	17.8	25.1	33.8	34.8	34.5	37.6	
0.5	1.9	2.4	4.8	9.9	13.5	25.0	38.2	61.5	80.3	103.0	116.1	
0.7	0.7	1.3	1.4	2.4	5.1	7.2	10.9	14.6	17.2	14.1	7.4	
3.7	4.1	8.6	14.3	30.3	53.0	88.2	152.5	250.2	332.3	407.1	413.0	
2.0	3.3	5.5	9.7	23.0	49.7	71.3	108.6	146.9	173.6	186.4	166.4	
0.4	0.8	1.7	3.9	4.9	4.4	9.2	10.8	19.3	20.6	30.4	28.0	
0.0	0.2	0.7	1.2	2.0	3.9	6.9	7.8	13.3	19.0	18.2	28.5	
0.1	1.5	1.6	5.6	9.8	19.4	28.7	55.6	60.5	86.1	107.2	112.7	
0.4	0.2	0.3	0.4	1.4	2.1	2.3	7.5	9.0	11.6	14.5	25.7	
1.5	3.0	6.7	17.3	48.2	97.5	179.0	258.5	373.0	460.9	469.3	332.8	
0.0	0.2	0.6	0.4	0.5	1.3	2.9	3.9	3.9	4.4	5.0	4.4	
0.0	0.1	0.5	1.4	4.9	9.5	10.7	19.2	17.0	19.9	23.6	14.5	
1.5	2.7	5.6	15.3	42.8	85.8	163.9	233.6	350.7	433.3	436.6	309.5	
0.0	0.0	0.0	0.2	0.0	0.9	1.4	1.8	1.4	3.3	4.1	4.3	
0.6	0.7	0.9	1.0	0.5	0.9	1.1	0.6	1.9	4.4	3.6	1.2	
7.7	13.5	20.0	22.7	33.5	47.9	62.3	78.9	103.2	112.6	130.3	119.3	
2.2	2.0	3.3	5.1	9.2	21.9	38.1	81.8	147.6	230.9	372.5	553.3	
0.0	0.0	0.0	0.5	1.1	2.3	7.2	10.2	14.2	21.0	18.6	18.7	
0.4	0.2	0.4	0.1	0.0	0.1	0.1	0.6	0.6	1.0	0.9	3.7	
0.2	0.1	0.2	0.4	0.1	0.1	0.4	0.0	0.0	0.0	0.0	1.3	
0.6	1.1	1.6	2.5	2.6	4.1	4.4	6.0	9.2	12.5	10.0	10.8	
0.0	0.0	0.2	1.1	0.2	1.1	2.0	2.5	3.0	4.1	2.7	3.7	
31.6	26.6	24.0	34.8	101.1	264.0	552.1	859.7	989.9	1043.5	1057.0	984.0	
0.0	0.1	3.1	19.1	90.0	254.8	542.9	847.5	980.4	1032.7	1042.9	971.2	
31.3	25.9	20.3	14.2	9.0	5.6	4.4	5.4	2.8	1.4	3.2	1.8	
0.2	0.5	0.6	1.5	2.1	3.6	4.8	6.9	6.7	9.4	10.9	10.9	
2.8	5.9	12.9	24.0	44.6	79.9	127.8	197.3	284.3	412.4	447.5	411.2	
1.3	3.6	7.5	13.2	22.0	29.5	44.1	58.0	74.6	83.1	97.6	63.4	
0.0	0.1	0.1	1.2	1.5	2.4	4.6	7.5	12.8	16.9	15.4	12.8	
1.5	2.2	5.3	9.6	21.1	48.0	79.1	131.8	196.9	312.3	334.5	335.1	
0.2	0.1	0.5	1.2	1.6	1.3	4.2	3.7	4.5	7.1	4.5	4.9	
12.1	12.9	14.1	20.4	21.6	32.2	38.6	43.2	49.5	53.1	60.4	73.1	
2.9	2.8	3.8	3.1	4.8	5.3	5.7	3.7	7.2	13.5	10.0	8.6	
2.6	3.7	2.7	5.5	5.6	6.7	13.0	7.7	16.9	16.5	13.6	7.9	
0.0	0.3	1.2	2.9	4.9	6.4	10.6	19.5	33.8	46.3	68.5	103.8	
14.6	15.2	17.6	28.7	48.2	78.5	117.9	149.1	211.6	274.9	321.5	307.8	
5.8	3.0	3.2	2.6	3.1	3.1	3.0	4.0	4.1	5.1	4.5	3.7	
4.4	6.3	7.3	12.0	21.5	34.3	50.3	61.6	76.4	100.1	103.1	97.3	
0.0	0.0	0.0	0.2	0.9	1.5	3.4	5.0	4.3	6.4	11.3	11.0	
0.1	1.0	2.1	3.3	8.5	11.2	17.0	27.6	38.2	57.4	62.7	51.1	
4.3	4.9	5.0	10.5	14.2	28.5	44.2	51.0	88.6	105.8	139.8	144.8	

Table 10b. Age-specific incidence rates per 100 000 person-years by primary site* and five-year age group - 2006-2010

ICD10	Site	0-4	5-9	10-14	15-19	20-24	25-29
C00-96	All sites	22.3	13.4	13.1	23.3	39.2	68.3
C00-14	Mouth, pharynx	0.0	0.1	0.1	0.0	0.7	1.5
C00	Lip	0.0	0.0	0.0	0.0	0.0	0.3
C01-02	Tongue	0.0	0.0	0.0	0.0	0.1	0.1
C03-06	Mouth, other	0.0	0.0	0.0	0.0	0.0	0.4
C07-08	Salivary glands	0.0	0.0	0.1	0.0	0.4	0.5
C09-14	Pharynx	0.0	0.1	0.0	0.0	0.1	0.1
C15-26	Digestive organs	0.3	0.4	0.5	1.0	1.8	3.2
C15	Oesophagus	0.0	0.0	0.0	0.0	0.0	0.0
C16	Stomach	0.0	0.0	0.0	0.0	0.1	0.3
C17	Small intestine	0.0	0.0	0.0	0.1	0.0	0.1
C18	Colon	0.0	0.1	0.1	0.5	1.1	1.9
C19-21	Rectum, rectosigmoid, anus	0.0	0.0	0.0	0.0	0.4	0.7
C22	Liver	0.3	0.3	0.3	0.4	0.0	0.0
C23-24	Gallbladder, bile ducts	0.0	0.0	0.0	0.0	0.1	0.1
C25	Pancreas	0.0	0.0	0.0	0.0	0.0	0.0
C26	Other digestive organs	0.0	0.0	0.1	0.0	0.0	0.1
C30-34, C38	Respiratory organs	0.0	0.4	0.1	0.1	0.4	0.9
C30-31	Nose, sinuses	0.0	0.3	0.0	0.0	0.0	0.1
C32	Larynx, epiglottis	0.0	0.0	0.0	0.0	0.0	0.0
C33-34	Lung, trachea	0.0	0.1	0.1	0.1	0.4	0.8
C38	Mediastinum, pleura (non-mesothelioma)	0.0	0.0	0.0	0.0	0.0	0.0
C40-41	Bone	0.1	0.8	0.8	1.3	0.6	0.7
C43	Melanoma of the skin	0.1	0.1	0.0	1.4	5.1	11.6
C44	Skin, non-melanoma	0.4	0.1	0.3	0.5	1.1	0.4
C45	Mesothelioma	0.0	0.0	0.0	0.0	0.0	0.0
C46	Kaposi's sarcoma	0.0	0.0	0.0	0.0	0.0	0.3
C47	Autonomic nervous system	0.8	0.3	0.0	0.4	0.1	0.0
C48-49	Soft tissues	0.3	0.7	0.7	0.6	0.6	1.1
C50	Breast	0.0	0.0	0.0	0.3	1.6	5.6
C51-58	Female genital organs	0.8	0.3	1.2	1.3	5.0	14.4
C53	Cervix uteri	0.0	0.0	0.0	0.0	3.0	11.9
C54	Corpus uteri	0.0	0.0	0.0	0.0	0.0	0.4
C55	Uterus, other	0.0	0.0	0.0	0.0	0.0	0.0
C56	Ovary	0.7	0.3	1.2	1.2	1.5	1.3
C51-52, C57	Other female genital	0.1	0.0	0.0	0.0	0.3	0.4
C58	Placenta	0.0	0.0	0.0	0.1	0.1	0.3
C64-68	Urinary organs	1.7	0.7	0.3	0.1	0.6	0.8
C64	Kidney excl. renal pelvis	1.7	0.7	0.3	0.0	0.3	0.5
C65	Renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66-68	Bladder, ureter, urethra	0.0	0.0	0.0	0.1	0.3	0.3
C69	Eye	1.2	0.0	0.0	0.1	0.0	0.8
C70-72	Central nervous system	6.4	4.4	4.4	4.3	5.6	7.7
C73	Thyroid gland	0.0	0.0	0.3	1.0	3.1	6.2
C37, C74-75	Other endocrine glands	1.2	0.8	0.8	2.3	4.4	5.5
C39, C76, C80	Other or unspecified	0.0	0.0	0.0	0.0	0.1	0.3
C81-96	Lymphoid and haematopoietic tissue	8.9	4.2	3.7	8.3	8.4	7.5
C81	Hodgkin lymphoma	0.0	0.1	0.3	3.8	3.9	3.8
C82-85, C96	Non-Hodgkin lymphoma	0.7	0.8	0.9	1.4	1.8	2.4
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple myeloma	0.0	0.0	0.0	0.0	0.0	0.0
C91-95	Leukaemia	8.3	3.3	2.5	3.1	2.8	1.3

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

FEMALES

Age												
30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
109.9	168.3	262.4	424.0	616.7	802.9	1093.5	1370.7	1611.5	1898.6	2149.9	2156.9	
1.6	1.2	2.4	5.5	10.7	10.8	15.2	23.8	27.3	26.7	31.9	34.5	
0.3	0.2	0.4	1.1	1.9	1.8	3.3	5.7	7.3	8.7	10.2	15.1	
0.4	0.1	0.7	0.9	2.1	1.5	3.5	3.6	3.9	5.1	5.7	4.8	
0.1	0.2	0.3	0.4	1.7	2.2	3.2	6.2	9.0	6.6	10.4	9.0	
0.5	0.3	0.3	1.4	0.9	0.5	2.1	2.5	3.1	4.2	3.3	2.9	
0.4	0.3	0.6	1.7	4.1	4.7	3.1	5.8	3.9	2.1	2.4	2.7	
6.2	11.0	19.7	40.9	75.5	122.2	196.2	296.2	412.4	542.2	690.2	671.9	
0.0	0.0	0.5	0.6	1.4	3.2	4.3	5.7	7.8	14.3	9.5	15.3	
0.9	0.9	1.3	3.9	6.2	8.0	11.6	19.7	26.5	40.8	57.1	62.4	
0.4	0.2	0.5	1.1	3.0	4.0	4.9	6.8	9.4	10.4	10.7	6.8	
2.4	4.4	9.0	14.9	30.4	50.9	83.5	142.5	207.6	257.8	351.8	331.1	
1.5	3.3	5.2	13.0	21.9	31.3	52.1	66.6	80.9	106.1	111.3	103.4	
0.1	0.2	0.1	1.6	1.4	1.8	3.7	3.8	9.0	14.9	17.0	14.5	
0.1	0.7	0.7	1.0	2.1	5.0	6.1	9.8	11.7	17.0	24.1	15.7	
0.6	1.1	2.3	4.0	7.9	16.4	27.2	36.7	52.2	69.4	91.0	99.8	
0.1	0.1	0.3	0.7	1.3	1.7	2.8	4.5	7.2	11.5	17.6	22.8	
1.5	3.5	6.0	19.3	43.4	82.3	130.7	164.0	224.5	246.3	202.6	116.5	
0.2	0.1	0.2	0.4	0.9	1.4	1.6	2.6	2.0	3.1	4.8	4.0	
0.3	0.2	0.1	0.1	1.7	1.9	1.7	1.5	3.6	3.5	1.8	1.6	
1.0	3.2	5.6	18.6	40.3	78.4	127.2	160.0	217.0	238.3	194.3	110.1	
0.0	0.0	0.0	0.2	0.5	0.6	0.3	0.0	1.9	1.3	1.8	0.8	
0.8	0.5	0.6	0.7	0.5	1.8	1.9	1.4	2.2	1.9	0.9	1.8	
15.4	24.2	29.5	31.9	39.3	46.2	52.7	63.0	66.4	72.7	76.6	81.0	
1.1	1.8	4.6	5.8	13.0	19.2	28.5	49.6	88.2	129.9	181.6	318.5	
0.0	0.1	0.5	0.1	0.3	0.7	0.7	2.0	2.9	2.6	4.1	1.6	
0.0	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.0	0.0	1.2	2.1	
0.1	0.0	0.3	0.5	0.3	0.4	0.3	0.0	0.2	0.0	0.6	0.5	
0.8	2.2	1.8	2.6	3.2	5.4	8.6	11.3	10.5	14.1	12.5	8.5	
22.3	44.5	98.3	178.5	228.4	246.2	287.6	310.2	218.0	229.4	285.7	276.0	
23.8	33.9	40.7	54.2	92.7	120.0	149.7	181.7	196.9	204.6	203.9	181.6	
19.7	25.0	20.2	19.4	20.5	14.5	16.7	12.0	15.4	19.2	18.1	14.1	
1.1	4.0	9.3	16.1	38.5	61.5	77.4	102.9	110.7	103.7	95.0	71.1	
0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.2	0.7	1.9	1.5	4.8	
1.6	3.9	9.2	15.1	26.7	36.1	45.4	54.6	51.3	63.7	61.9	55.7	
0.8	1.0	2.0	3.5	6.5	7.6	9.4	12.0	18.8	16.1	27.4	36.0	
0.5	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1.0	2.5	6.3	11.8	18.0	28.1	57.3	70.2	103.0	123.0	128.9	122.0	
0.4	1.6	3.9	7.2	8.8	13.1	24.9	25.7	39.8	45.6	38.6	35.3	
0.1	0.2	0.1	0.2	0.5	1.2	3.0	3.7	4.6	8.5	6.3	4.5	
0.5	0.7	2.3	4.3	8.7	13.8	29.4	40.8	58.6	69.0	84.0	82.1	
0.2	0.7	0.6	0.8	0.8	3.0	3.0	2.3	3.2	3.5	3.0	2.9	
12.3	16.1	17.2	28.2	34.9	41.7	47.0	52.4	66.7	59.7	63.5	53.7	
8.9	10.4	10.6	11.1	9.5	11.6	11.7	8.4	13.1	12.5	9.5	7.7	
4.7	4.8	6.0	6.6	6.7	5.9	7.9	8.0	9.5	7.9	7.4	2.7	
0.5	0.5	1.3	2.6	4.0	6.6	12.3	17.8	24.9	40.4	59.2	89.7	
8.7	10.5	15.9	22.8	35.5	50.9	81.8	108.5	141.7	181.1	186.8	183.6	
3.7	2.2	1.3	0.8	1.8	1.7	1.0	2.1	3.4	2.6	3.3	1.6	
2.2	4.1	6.8	9.9	17.4	22.1	36.7	45.6	54.7	68.4	66.4	56.0	
0.0	0.0	0.3	0.3	0.8	1.0	2.0	1.9	2.2	7.2	2.1	3.2	
0.0	0.3	1.8	3.6	5.0	8.0	13.4	16.1	23.6	40.8	35.6	30.9	
2.9	3.9	5.7	8.4	10.5	18.2	28.7	42.9	57.8	62.0	79.3	91.8	

Table 11a. Average annual number of new cases by primary site* and five-year period 1956-2010

ICD10	Site	1956-60	1961-65	1966-70
C00-96	All sites	3971	4613	5405
C00-14	Mouth, pharynx	189	188	203
C00	Lip	101	93	103
C01-02	Tongue	18	21	21
C03-06	Mouth, other	22	22	32
C07-08	Salivary glands	12	13	14
C09-14	Pharynx	35	39	32
C15-26	Digestive organs	1642	1725	1865
C15	Oesophagus	74	80	77
C16	Stomach	851	794	769
C17	Small intestine	10	11	18
C18	Colon	236	291	357
C19-21	Rectum, rectosigmoid, anus	155	189	257
C22	Liver	19	23	36
C23-24	Gallbladder, bile ducts	17	22	27
C25	Pancreas	143	176	218
C26	Other digestive organs	137	140	106
C30-34, C38	Respiratory organs	327	451	633
C30-31	Nose, sinuses	20	22	21
C32	Larynx, epiglottis	32	46	67
C33-34	Lung, trachea	263	373	532
C38	Mediastinum, pleura (non-mesothelioma)	12	11	13
C40-41	Bone	13	16	18
C43	Melanoma of the skin	51	76	103
C44	Skin, non-melanoma	84	73	90
C45	Mesothelioma	0	3	3
C46	Kaposi's sarcoma	2	4	4
C47	Autonomic nervous system	20	14	16
C48-49	Soft tissues	21	24	34
C50	Breast	7	8	9
C60-63	Male genital organs	728	932	1109
C61	Prostate	654	841	1012
C62	Testis	55	68	75
C60, C63	Other male genital	18	24	22
C64-68	Urinary organs	304	411	501
C64	Kidney excl. renal pelvis	95	124	155
C65	Renal pelvis	9	12	18
C66-68	Bladder, ureter, urethra	200	275	329
C69	Eye	20	18	23
C70-72	Central nervous system	120	136	146
C73	Thyroid gland	20	23	35
C37, C74-75	Other endocrine glands	5	11	16
C39, C76, C80	Other or unspecified	54	85	125
C81-96	Lymphoid and haematopoietic tissue	362	416	473
C81	Hodgkin lymphoma	44	52	59
C82-85, C96	Non-Hodgkin lymphoma	97	107	138
C88	Malignant immunoproliferative diseases	0	0	2
C90	Multiple myeloma	72	83	90
C91-95	Leukaemia	150	175	185

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Period							
1971-75	1976-80	1981-85	1986-90	1991-95	1996-2000	2001-05	2006-10
6305	7440	8503	9227	10316	11291	12637	14665
245	240	248	255	256	268	252	299
121	117	99	95	75	66	48	73
25	29	36	35	41	47	50	60
29	34	46	47	55	52	46	50
14	14	14	15	21	22	21	20
56	45	53	63	63	81	87	96
1952	2153	2362	2373	2469	2519	2714	2935
84	87	87	99	107	118	133	156
662	603	589	529	460	400	341	302
16	19	31	25	32	40	53	70
402	521	649	741	844	918	1022	1154
317	438	520	537	583	598	675	702
55	50	66	59	61	68	80	101
28	39	43	49	54	57	66	68
250	264	299	292	281	274	307	334
140	132	79	42	47	44	36	47
788	1009	1197	1298	1372	1434	1539	1641
22	24	22	24	21	23	23	23
70	90	105	107	103	107	106	99
679	876	1056	1160	1229	1288	1397	1507
17	20	15	7	19	17	13	12
22	20	24	21	22	21	25	26
157	206	254	352	435	454	504	652
171	223	270	357	471	558	656	796
8	19	25	39	34	49	65	63
6	6	8	12	14	6	7	6
11	9	8	8	7	7	5	7
43	52	45	43	46	48	51	59
9	10	13	13	13	15	16	16
1336	1612	1869	2051	2576	3152	3632	4605
1227	1478	1695	1860	2344	2879	3328	4266
85	107	143	165	199	240	259	293
24	27	31	26	33	34	44	46
646	798	964	1042	1140	1143	1282	1437
174	199	246	255	271	285	348	417
27	31	34	32	39	37	37	53
445	568	684	754	830	821	896	967
18	26	25	24	26	30	31	31
161	189	220	247	261	330	409	455
35	43	45	50	45	47	55	72
26	27	44	42	52	63	83	117
146	182	222	270	292	289	228	175
525	616	659	731	787	858	1084	1272
63	67	56	50	50	57	65	73
136	165	210	273	310	355	381	477
6	7	10	8	16	20	31	29
117	150	152	162	160	162	183	199
202	227	232	238	251	264	424	494

Table 11b. Average annual number of new cases by primary site* and five-year period 1956-2010

ICD10	Site	1956-60	1961-65	1966-70
C00-96	All sites	4142	4581	5315
C00-14	Mouth, pharynx	60	67	74
C00	Lip	8	9	10
C01-02	Tongue	10	13	17
C03-06	Mouth, other	11	13	17
C07-08	Salivary glands	8	14	14
C09-14	Pharynx	23	19	17
C15-26	Digestive organs	1384	1436	1579
C15	Oesophagus	23	29	30
C16	Stomach	595	538	501
C17	Small intestine	10	11	13
C18	Colon	273	337	427
C19-21	Rectum, rectosigmoid, anus	127	138	214
C22	Liver	11	14	19
C23-24	Gallbladder, bile ducts	47	52	61
C25	Pancreas	97	119	156
C26	Other digestive organs	202	198	158
C30-34, C38	Respiratory organs	89	108	156
C30-31	Nose, sinuses	13	13	12
C32	Larynx, epiglottis	2	4	6
C33-34	Lung, trachea	70	84	131
C38	Mediastinum, pleura (non-mesothelioma)	4	7	6
C40-41	Bone	9	11	12
C43	Melanoma of the skin	55	88	120
C44	Skin, non-melanoma	53	47	49
C45	Mesothelioma	0	1	1
C46	Kaposi's sarcoma	0	1	2
C47	Autonomic nervous system	17	11	14
C48-49	Soft tissues	17	26	27
C50	Breast	921	1045	1201
C51-58	Female genital organs	865	952	1101
C53	Cervix uteri	341	358	396
C54	Corpus uteri	175	216	260
C55	Uterus, other	23	21	14
C56	Ovary	259	286	358
C51-52, C57	Other female genital	66	69	69
C58	Placenta	3	2	4
C64-68	Urinary organs	197	219	262
C64	Kidney excl. renal pelvis	75	89	110
C65	Renal pelvis	6	5	12
C66-68	Bladder, ureter, urethra	115	125	140
C69	Eye	15	18	17
C70-72	Central nervous system	105	120	131
C73	Thyroid gland	53	58	85
C37, C74-75	Other endocrine glands	7	7	10
C39, C76, C80	Other or unspecified	47	70	97
C81-96	Lymphoid and haematopoietic tissue	248	298	377
C81	Hodgkin lymphoma	31	37	45
C82-85, C96	Non-Hodgkin lymphoma	63	76	117
C88	Malignant immunoproliferative diseases	0	0	0
C90	Multiple myeloma	37	58	77
C91-95	Leukaemia	116	126	137

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

FEMALES

Period							
1971-75	1976-80	1981-85	1986-90	1991-95	1996-2000	2001-05	2006-10
6035	7039	7788	8487	9392	10425	11689	12763
78	88	100	111	122	132	143	189
10	16	20	27	29	26	30	51
16	18	22	24	22	27	27	32
17	21	24	28	36	34	36	45
12	13	14	13	17	20	20	24
22	21	20	19	19	25	31	38
1691	1986	2146	2208	2341	2455	2552	2731
30	31	35	37	42	47	54	56
423	411	391	353	306	255	228	207
19	19	28	28	31	40	49	56
495	657	772	874	986	1098	1178	1292
266	359	419	441	498	506	536	559
30	34	44	41	45	44	47	60
49	69	83	78	72	83	74	84
183	218	266	287	303	318	334	356
195	188	109	70	58	64	50	59
195	242	332	455	589	746	922	1185
14	13	12	16	17	16	18	21
7	10	12	11	18	20	18	19
165	213	303	423	548	702	880	1139
8	6	5	4	6	7	7	7
13	13	13	15	17	20	19	23
178	259	338	431	485	502	555	686
107	146	207	275	384	467	565	698
2	3	4	6	9	8	9	14
4	3	5	6	6	5	2	4
10	7	5	9	7	7	5	6
35	42	45	46	46	56	75	89
1380	1565	1698	1830	2028	2437	2745	2767
1221	1296	1288	1308	1389	1425	1537	1595
437	410	365	336	354	318	297	302
310	370	383	408	454	506	635	702
9	7	6	6	8	9	9	9
340	377	416	445	458	466	460	446
122	130	114	108	111	123	132	133
3	2	4	5	5	4	4	2
316	373	413	462	488	515	570	619
117	137	149	180	188	191	211	240
16	17	17	21	21	24	28	30
183	219	246	261	279	299	331	349
18	23	21	23	30	28	31	29
140	186	214	255	293	397	545	588
107	129	142	136	139	122	149	173
15	28	48	37	48	58	90	118
103	162	221	270	311	311	289	218
422	490	551	604	661	734	885	1030
41	45	37	36	31	43	45	48
111	145	194	237	280	312	342	391
4	3	6	7	14	10	19	19
106	125	129	138	137	143	160	162
160	173	185	186	199	226	320	410

Table 12a. Age-adjusted (world) incidence rates per 100 000 person-years by primary site* and five-year period 1956-2010

ICD10	Site	1956-60	1961-65	1966-70
C00-96	All sites	171.1	181.8	197.4
C00-14	Mouth, pharynx	8.0	7.4	7.4
C00	Lip	4.2	3.7	3.7
C01-02	Tongue	0.8	0.9	0.8
C03-06	Mouth, other	0.9	0.8	1.2
C07-08	Salivary glands	0.5	0.5	0.6
C09-14	Pharynx	1.5	1.6	1.2
C15-26	Digestive organs	69.1	65.9	65.5
C15	Oesophagus	3.1	3.1	2.6
C16	Stomach	35.6	30.2	26.9
C17	Small intestine	0.5	0.4	0.7
C18	Colon	9.9	11.2	12.6
C19-21	Rectum, rectosigmoid, anus	6.5	7.2	9.1
C22	Liver	0.8	0.9	1.3
C23-24	Gallbladder, bile ducts	0.7	0.9	0.9
C25	Pancreas	6.2	6.8	7.6
C26	Other digestive organs	5.7	5.3	3.7
C30-34, C38	Respiratory organs	14.5	18.2	23.6
C30-31	Nose, sinuses	0.8	0.8	0.8
C32	Larynx, epiglottis	1.4	1.8	2.6
C33-34	Lung, trachea	11.7	15.1	19.7
C38	Mediastinum, pleura (non-mesothelioma)	0.6	0.4	0.5
C40-41	Bone	0.8	0.8	0.8
C43	Melanoma of the skin	2.4	3.5	4.6
C44	Skin, non-melanoma	3.5	2.7	3.1
C45	Mesothelioma	0.0	0.1	0.1
C46	Kaposi's sarcoma	0.1	0.1	0.1
C47	Autonomic nervous system	1.0	0.7	0.7
C48-49	Soft tissues	1.0	1.0	1.4
C50	Breast	0.3	0.3	0.3
C60-63	Male genital organs	29.5	34.5	37.7
C61	Prostate	25.7	29.9	32.9
C62	Testis	3.0	3.7	4.0
C60, C63	Other male genital	0.7	0.9	0.8
C64-68	Urinary organs	13.2	16.1	18.1
C64	Kidney excl. renal pelvis	4.3	5.1	5.8
C65	Renal pelvis	0.4	0.5	0.6
C66-68	Bladder, ureter, urethra	8.6	10.6	11.7
C69	Eye	0.9	0.8	1.0
C70-72	Central nervous system	6.1	6.5	6.8
C73	Thyroid gland	0.9	1.0	1.4
C37, C74-75	Other endocrine glands	0.3	0.5	0.8
C39, C76, C80	Other or unspecified	2.4	3.4	4.5
C81-96	Lymphoid and haematopoietic tissue	17.2	18.1	19.2
C81	Hodgkin lymphoma	2.3	2.6	2.7
C82-85, C96	Non-Hodgkin lymphoma	4.5	4.5	5.6
C88	Malignant immunoproliferative diseases	0.0	0.0	0.1
C90	Multiple myeloma	3.1	3.2	3.2
C91-95	Leukaemia	7.3	7.8	7.7

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Period							
1971-75	1976-80	1981-85	1986-90	1991-95	1996-2000	2001-05	2006-10
215.8	239.8	260.6	273.4	296.2	318.8	338.2	362.2
8.5	8.0	8.1	8.3	8.2	8.4	7.4	7.9
4.2	3.8	3.0	2.8	2.2	1.8	1.3	1.7
0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.6
1.0	1.2	1.5	1.6	1.8	1.7	1.4	1.3
0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.5
2.0	1.5	1.8	2.2	2.2	2.7	2.6	2.7
64.3	66.8	69.2	67.6	68.5	67.6	69.2	68.7
2.7	2.7	2.7	3.0	3.2	3.4	3.6	3.8
21.7	18.6	16.9	14.6	12.4	10.3	8.3	6.9
0.5	0.7	1.0	0.8	1.0	1.1	1.5	1.8
13.2	16.2	19.0	21.3	23.1	24.4	25.6	26.2
10.5	13.8	15.5	15.6	16.7	16.6	17.7	17.0
1.9	1.7	2.1	1.8	1.8	1.9	2.1	2.6
0.9	1.1	1.3	1.3	1.5	1.5	1.7	1.6
8.2	8.2	8.7	8.2	7.7	7.3	7.9	7.8
4.6	3.9	2.1	1.1	1.2	1.1	0.9	1.1
27.6	33.3	37.9	39.7	41.0	41.0	40.5	39.2
0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.6
2.5	3.1	3.5	3.4	3.3	3.2	2.9	2.5
23.7	28.8	33.2	35.3	36.5	36.6	36.6	35.8
0.7	0.7	0.5	0.2	0.6	0.5	0.3	0.3
1.0	0.9	1.1	0.9	0.9	0.9	1.0	1.0
6.6	8.4	9.9	13.0	15.1	14.6	14.9	17.2
5.4	6.6	7.5	9.6	11.8	13.8	14.8	16.1
0.3	0.6	0.8	1.2	1.0	1.4	1.6	1.4
0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2
0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.4
1.7	2.0	1.7	1.5	1.6	1.6	1.6	1.7
0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
42.0	47.1	51.5	53.9	67.0	86.2	97.3	116.0
36.9	40.9	44.0	46.0	57.7	75.1	85.4	103.2
4.3	5.3	6.5	7.2	8.4	10.2	10.7	11.6
0.8	0.9	1.0	0.8	0.9	0.9	1.2	1.2
22.2	25.6	29.5	30.3	32.2	31.1	32.7	33.8
6.3	6.8	8.3	8.0	8.2	8.5	9.8	10.8
0.9	1.0	1.0	0.9	1.1	1.1	0.9	1.2
15.0	17.7	20.2	21.3	22.9	21.6	22.0	21.8
0.7	1.0	1.0	0.9	1.0	1.0	1.0	0.9
7.2	8.1	9.0	9.8	9.9	11.9	14.0	14.1
1.4	1.6	1.6	1.8	1.6	1.6	1.8	2.0
1.2	1.3	1.9	1.8	2.0	2.4	2.8	3.7
4.9	5.8	6.5	7.5	7.9	7.3	5.2	3.8
19.7	21.8	22.4	24.3	25.2	27.1	31.5	33.8
2.7	2.7	2.3	2.0	2.1	2.4	2.7	2.7
5.0	5.8	7.2	9.1	10.1	11.1	11.0	12.5
0.2	0.2	0.3	0.2	0.5	0.5	0.8	0.7
3.8	4.7	4.5	4.7	4.4	4.3	4.7	4.7
7.9	8.4	8.1	8.2	8.2	8.7	12.3	13.2

Table 12b. Age-adjusted (world) incidence rates per 100 000 person-years by primary site* and five-year period 1956-2010

ICD10	Site	1956-60	1961-65	1966-70
C00-96	All sites	163.7	168.3	181.3
C00-14	Mouth, pharynx	2.3	2.3	2.3
C00	Lip	0.3	0.3	0.3
C01-02	Tongue	0.4	0.4	0.4
C03-06	Mouth, other	0.4	0.4	0.5
C07-08	Salivary glands	0.3	0.5	0.5
C09-14	Pharynx	0.9	0.7	0.6
C15-26	Digestive organs	48.8	45.8	45.4
C15	Oesophagus	0.8	0.9	0.8
C16	Stomach	20.7	16.8	14.1
C17	Small intestine	0.4	0.4	0.4
C18	Colon	9.8	10.9	12.6
C19-21	Rectum, rectosigmoid, anus	4.6	4.6	6.5
C22	Liver	0.4	0.6	0.6
C23-24	Gallbladder, bile ducts	1.6	1.7	1.7
C25	Pancreas	3.5	3.9	4.5
C26	Other digestive organs	6.9	6.1	4.3
C30-34, C38	Respiratory organs	3.4	3.8	5.0
C30-31	Nose, sinuses	0.5	0.4	0.4
C32	Larynx, epiglottis	0.1	0.2	0.2
C33-34	Lung, trachea	2.7	2.9	4.2
C38	Mediastinum, pleura (non-mesothelioma)	0.2	0.3	0.2
C40-41	Bone	0.5	0.5	0.6
C43	Melanoma of the skin	2.4	4.0	5.1
C44	Skin, non-melanoma	1.9	1.5	1.4
C45	Mesothelioma	0.0	0.0	0.0
C46	Kaposi's sarcoma	0.0	0.0	0.1
C47	Autonomic nervous system	0.8	0.5	0.7
C48-49	Soft tissues	0.7	1.1	1.1
C50	Breast	37.5	39.9	43.1
C51-58	Female genital organs	37.1	38.2	42.3
C53	Cervix uteri	15.3	15.6	17.1
C54	Corpus uteri	7.2	8.2	9.1
C55	Uterus, other	0.8	0.7	0.4
C56	Ovary	11.1	11.2	13.3
C51-52, C57	Other female genital	2.5	2.3	2.1
C58	Placenta	0.2	0.2	0.2
C64-68	Urinary organs	7.5	7.4	7.9
C64	Kidney excl. renal pelvis	3.0	3.2	3.6
C65	Renal pelvis	0.2	0.2	0.4
C66-68	Bladder, ureter, urethra	4.2	4.0	4.0
C69	Eye	0.7	0.8	0.7
C70-72	Central nervous system	5.1	5.4	5.7
C73	Thyroid gland	2.2	2.4	3.3
C37, C74-75	Other endocrine glands	0.3	0.3	0.5
C39, C76, C80	Other or unspecified	1.8	2.5	3.0
C81-96	Lymphoid and haematopoietic tissue	10.7	11.9	13.3
C81	Hodgkin lymphoma	1.5	1.7	1.9
C82-85, C96	Non-Hodgkin lymphoma	2.6	2.8	4.1
C88	Malignant immunoproliferative diseases	0.0	0.0	0.0
C90	Multiple myeloma	1.4	2.0	2.2
C91-95	Leukaemia	5.2	5.3	5.0

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

FEMALES

Period							
1971-75	1976-80	1981-85	1986-90	1991-95	1996-2000	2001-05	2006-10
195.4	213.2	221.6	229.9	248.1	267.2	286.3	294.3
2.3	2.3	2.7	2.8	3.2	3.4	3.4	4.3
0.3	0.4	0.5	0.6	0.7	0.6	0.6	1.0
0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.7
0.5	0.5	0.6	0.7	0.9	0.9	0.8	0.9
0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6
0.7	0.5	0.6	0.6	0.5	0.7	0.8	1.0
45.2	48.4	48.6	47.3	49.5	49.6	50.5	51.2
0.7	0.7	0.7	0.8	0.8	1.0	1.1	1.0
11.0	9.6	8.5	7.1	6.0	4.8	4.3	3.7
0.6	0.5	0.7	0.7	0.8	1.0	1.2	1.2
13.7	16.4	18.0	19.1	21.0	22.4	23.0	23.5
7.4	9.4	10.2	10.1	11.6	11.1	11.5	11.6
0.9	0.9	1.1	1.0	1.0	1.0	1.0	1.1
1.2	1.6	1.8	1.6	1.5	1.6	1.4	1.6
4.8	5.2	5.7	5.9	6.0	5.9	6.2	6.4
4.8	4.1	1.9	1.1	0.9	0.9	0.8	0.9
6.0	7.1	9.4	12.6	16.2	19.9	22.6	26.1
0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.5
0.2	0.3	0.3	0.3	0.5	0.5	0.4	0.4
5.1	6.3	8.7	11.7	15.1	18.8	21.6	25.1
0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.1
0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8
7.5	10.1	12.4	15.4	16.2	15.6	16.0	18.2
2.7	3.4	4.3	5.2	7.1	8.0	9.2	10.7
0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.3
1.3	1.5	1.5	1.4	1.5	1.6	2.1	2.3
47.2	50.9	51.9	53.5	58.7	70.8	76.9	72.7
45.2	45.8	42.9	41.0	42.1	40.8	40.9	39.8
18.6	16.7	13.9	12.1	12.3	10.8	9.6	9.6
10.5	12.1	12.2	12.4	13.2	13.9	16.0	16.5
0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1
12.3	13.2	13.6	13.6	13.7	13.1	12.2	10.8
3.4	3.4	2.9	2.6	2.5	2.7	2.8	2.7
0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1
8.9	9.8	10.0	10.8	10.9	11.3	11.8	12.7
3.6	4.0	4.0	4.6	4.6	4.7	4.8	5.5
0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.6
4.9	5.4	5.6	5.7	6.0	6.1	6.4	6.6
0.7	0.7	0.9	0.8	1.0	0.8	0.9	0.8
5.9	7.4	8.1	9.3	10.1	12.8	16.7	16.9
4.2	5.0	5.1	4.8	4.8	4.1	4.8	5.4
0.7	1.2	2.1	1.6	1.9	2.2	3.3	4.1
2.8	4.1	4.8	5.6	6.2	5.7	4.7	3.5
13.6	14.7	15.7	16.6	17.4	19.3	21.4	24.2
1.6	1.8	1.4	1.4	1.3	1.8	1.7	1.8
3.5	4.4	5.4	6.6	7.4	8.0	8.2	9.1
0.1	0.1	0.2	0.1	0.3	0.2	0.4	0.4
3.0	3.1	3.0	3.0	2.8	2.9	3.2	3.2
5.4	5.4	5.8	5.4	5.6	6.4	7.9	9.7

Table 13a. Average annual number of new cases by primary site* and county - 2006-2010

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	14665	907	1471	1355	669	627	859
C00-14	Mouth, pharynx	299	20	30	31	16	9	14
C00	Lip	73	5	8	4	5	2	4
C01-02	Tongue	60	3	7	8	3	2	2
C03-06	Mouth, other	50	4	4	6	2	2	2
C07-08	Salivary glands	20	2	3	1	1	1	0
C09-14	Pharynx	96	6	9	12	5	2	6
C15-26	Digestive organs	2935	175	296	267	135	130	163
C15	Oesophagus	156	9	17	17	8	7	10
C16	Stomach	302	15	27	31	11	14	15
C17	Small intestine	70	4	6	5	3	3	3
C18	Colon	1154	71	110	95	52	52	64
C19-21	Rectum, rectosigmoid, anus	702	47	72	59	34	29	43
C22	Liver	101	5	12	15	6	4	4
C23-24	Gallbladder, bile ducts	68	3	7	7	3	5	3
C25	Pancreas	334	19	38	33	16	13	17
C26	Other digestive organs	47	3	7	5	3	2	3
C30-34, C38	Respiratory organs	1641	105	146	139	79	69	88
C30-31	Nose, sinuses	23	1	3	2	1	1	1
C32	Larynx, epiglottis	99	7	7	10	6	5	4
C33-34	Lung, trachea	1507	96	135	127	72	63	82
C38	Mediastinum, pleura (non-mesothelioma)	12	1	1	1	0	0	0
C40-41	Bone	26	1	2	4	0	1	1
C43	Melanoma of the skin	652	47	82	62	26	24	46
C44	Skin, non-melanoma	796	55	77	70	37	26	69
C45	Mesothelioma	63	3	7	4	1	2	4
C46	Kaposi's sarcoma	6	0	1	2	0	0	0
C47	Autonomic nervous system	7	0	0	0	0	0	1
C48-49	Soft tissues	59	3	8	5	4	2	2
C50	Breast	16	1	2	2	0	0	1
C60-63	Male genital organs	4605	273	441	400	201	217	277
C61	Prostate	4266	254	407	357	190	205	261
C62	Testis	293	16	29	39	9	11	14
C60, C63	Other male genital	46	3	4	4	2	1	2
C64-68	Urinary organs	1437	102	150	134	66	56	75
C64	Kidney excl. renal pelvis	417	31	50	38	18	17	25
C65	Renal pelvis	53	4	6	5	2	2	1
C66-68	Bladder, ureter, urethra	967	67	94	91	46	36	49
C69	Eye	31	3	4	3	1	1	1
C70-72	Central nervous system	455	27	43	44	19	17	22
C73	Thyroid gland	72	3	7	11	3	2	5
C37, C74-75	Other endocrine glands	117	6	12	12	6	3	6
C39, C76, C80	Other or unspecified	175	12	17	20	9	8	9
C81-96	Lymphoid and haematopoietic tissue	1272	70	149	145	67	59	75
C81	Hodgkin lymphoma	73	6	7	10	4	3	4
C82-85, C96	Non-Hodgkin lymphoma	477	24	53	57	28	27	21
C88	Malignant immunoproliferative diseases	29	2	4	3	1	2	1
C90	Multiple myeloma	199	10	24	21	8	8	13
C91-95	Leukaemia	494	29	60	53	26	19	36

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Finmark	Troms	Nordland	Nord-Trøndelag	Sør-Trøndelag	More og Romsdal	Sogn og Fjordane	Hordaland	Rogaland	Vest-Agder	Aust-Agder	Telemark	Vestfold
193	452	800	400	789	873	398	1405	1193	506	381	584	803
3	9	20	7	18	17	7	26	25	10	8	15	16
1	1	5	1	4	3	1	7	8	4	2	4	5
1	1	5	1	3	5	1	5	3	2	2	2	4
0	2	3	1	2	3	2	5	5	1	1	2	2
0	0	1	0	1	1	0	2	2	1	0	2	2
1	4	7	3	8	5	2	8	6	3	2	5	4
39	103	161	85	163	180	80	313	230	93	62	109	152
2	5	10	4	8	8	4	14	10	6	4	6	6
8	12	17	9	17	23	10	33	21	9	5	11	14
1	2	4	3	8	4	0	7	6	2	2	3	5
11	36	67	37	59	71	32	130	98	38	22	43	66
10	27	36	15	35	44	21	78	56	23	17	22	35
1	3	5	3	7	4	2	9	6	4	2	5	4
1	2	3	2	5	3	2	7	5	2	2	3	3
5	13	16	10	22	20	6	33	26	8	7	15	17
1	2	2	2	3	3	1	2	3	1	1	1	2
34	58	89	43	93	99	44	156	130	69	49	60	90
1	1	2	0	1	1	0	3	2	1	0	0	1
1	3	6	2	5	6	1	9	8	5	3	6	5
32	53	81	40	86	91	42	142	119	62	45	54	84
0	1	1	0	1	1	0	2	1	0	0	1	1
1	1	1	1	1	2	1	2	3	1	1	2	1
4	14	20	14	36	26	12	63	69	22	12	27	45
4	15	29	19	40	30	14	72	72	42	29	44	52
1	1	3	1	4	2	2	8	6	2	2	4	7
0	0	0	0	1	0	0	1	0	0	0	0	0
0	0	0	0	1	0	0	1	1	0	0	0	0
1	2	3	2	2	3	2	6	6	1	2	2	3
0	0	1	0	1	1	0	1	1	1	0	0	2
55	138	285	121	231	305	151	416	390	153	127	183	240
49	127	266	112	210	285	145	381	359	141	120	173	224
5	10	16	8	18	16	5	30	27	11	7	8	13
1	1	3	1	2	3	1	6	4	2	1	2	3
22	47	86	40	79	89	35	136	107	40	36	55	82
7	11	21	12	24	26	8	42	32	12	7	15	20
1	2	2	2	5	3	2	5	3	2	2	2	5
14	33	64	27	50	60	25	89	72	26	27	38	57
1	0	1	0	1	2	1	3	3	1	1	1	3
7	17	25	14	34	24	11	47	38	15	13	17	21
1	2	3	1	7	6	2	6	4	3	1	3	3
2	3	6	4	6	8	3	15	9	4	3	4	6
3	5	9	6	8	9	5	15	12	5	5	7	10
16	37	57	40	64	69	29	116	87	42	30	50	69
1	3	3	2	5	3	1	8	6	2	2	2	3
7	15	22	15	23	27	11	42	33	17	12	17	24
0	1	1	2	2	1	0	3	1	1	0	1	2
4	6	9	6	10	12	5	17	15	5	6	9	12
5	12	22	15	24	26	11	46	32	17	10	21	29

Table 13b. Average annual number of new cases by primary site* and county - 2006-2010

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	12763	794	1336	1408	581	521	752
C00-14	Mouth, pharynx	189	13	18	23	9	10	11
C00	Lip	51	3	5	4	2	3	3
C01-02	Tongue	32	2	3	4	1	2	2
C03-06	Mouth, other	45	3	4	5	3	2	3
C07-08	Salivary glands	24	2	2	3	1	1	1
C09-14	Pharynx	38	3	4	5	1	2	2
C15-26	Digestive organs	2731	179	259	276	119	108	147
C15	Oesophagus	56	2	6	8	3	2	3
C16	Stomach	207	10	14	20	8	8	11
C17	Small intestine	56	4	6	6	3	1	3
C18	Colon	1292	89	120	133	57	49	73
C19-21	Rectum, rectosigmoid, anus	559	37	61	56	22	25	28
C22	Liver	60	4	6	6	4	2	3
C23-24	Gallbladder, bile ducts	84	5	6	7	5	4	3
C25	Pancreas	356	24	32	35	14	15	19
C26	Other digestive organs	59	4	7	6	3	3	3
C30-34, C38	Respiratory organs	1185	74	127	138	59	43	71
C30-31	Nose, sinuses	21	1	2	2	1	1	2
C32	Larynx, epiglottis	19	0	2	4	1	1	1
C33-34	Lung, trachea	1139	72	122	131	56	42	68
C38	Mediastinum, pleura (non-mesothelioma)	7	0	1	1	0	0	0
C40-41	Bone	23	2	1	3	1	1	1
C43	Melanoma of the skin	686	48	74	74	29	26	45
C44	Skin, non-melanoma	698	48	58	68	28	21	68
C45	Mesothelioma	14	1	2	1	0	1	1
C46	Kaposi's sarcoma	4	0	0	0	0	0	0
C47	Autonomic nervous system	6	0	0	0	0	0	1
C48-49	Soft tissues	89	5	9	8	4	4	4
C50	Breast	2767	162	315	329	119	110	156
C51-58	Female genital organs	1595	93	169	175	86	86	92
C53	Cervix uteri	302	15	35	34	16	15	16
C54	Corpus uteri	702	39	80	75	39	37	39
C55	Uterus, other	9	0	0	0	1	0	1
C56	Ovary	446	30	45	53	24	26	29
C51-52, C57	Other female genital	133	7	9	12	7	8	7
C58	Placenta	2	0	0	0	0	0	0
C64-68	Urinary organs	619	48	59	72	27	24	32
C64	Kidney excl. renal pelvis	240	22	21	24	9	8	13
C65	Renal pelvis	30	2	3	3	2	0	2
C66-68	Bladder, ureter, urethra	349	24	35	44	15	15	17
C69	Eye	29	2	3	4	2	2	1
C70-72	Central nervous system	588	30	60	58	25	24	30
C73	Thyroid gland	173	7	22	19	11	5	10
C37, C74-75	Other endocrine glands	118	8	14	16	4	3	5
C39, C76, C80	Other or unspecified	218	13	21	28	12	10	13
C81-96	Lymphoid and haematopoietic tissue	1030	62	124	116	47	43	63
C81	Hodgkin lymphoma	48	2	6	5	3	1	3
C82-85, C96	Non-Hodgkin lymphoma	391	21	44	44	20	17	23
C88	Malignant immunoproliferative diseases	19	2	3	3	1	1	1
C90	Multiple myeloma	162	9	19	19	8	8	9
C91-95	Leukaemia	410	28	52	45	16	16	28

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

FEMALES

Finnmark	Troms	Nordland	Nord-Trøndelag	Sør-Trøndelag	More og Romsdal	Sogn og Fjordane	Hordaland	Rogaland	Vest-Agder	Aust-Agder	Telemark	Vestfold
161	362	634	359	732	669	279	1201	992	465	300	506	712
2	7	11	4	12	9	4	14	12	7	5	8	10
0	1	2	1	2	2	2	4	6	3	2	2	3
1	1	2	1	3	2	1	2	2	1	1	1	2
0	2	4	1	3	2	1	3	1	1	1	2	3
0	1	1	1	2	2	1	2	1	1	0	1	1
1	2	2	0	3	1	0	4	2	1	1	2	2
37	83	146	78	169	177	76	286	209	85	61	89	146
1	3	3	1	4	2	2	4	3	2	2	2	3
6	7	13	5	14	16	7	25	16	5	4	9	10
0	0	4	2	6	3	1	5	4	2	1	1	2
11	39	67	39	73	88	35	139	102	41	28	42	67
8	16	28	14	34	31	17	61	43	17	14	14	35
1	3	4	1	4	4	2	5	5	2	1	1	2
1	3	3	4	6	6	4	7	5	3	2	4	4
9	11	21	10	24	23	8	35	27	11	8	13	19
0	2	4	3	3	4	1	4	4	2	2	2	3
20	36	65	35	66	57	22	94	81	52	31	47	67
1	1	1	0	0	1	0	2	0	0	0	1	2
0	1	1	0	1	0	0	1	1	1	0	1	1
19	34	63	34	63	56	21	90	80	51	30	45	64
1	0	0	0	1	0	0	1	0	0	0	0	0
0	0	0	1	1	1	0	3	2	1	1	1	2
7	13	16	18	41	29	10	69	71	25	20	29	42
3	9	25	19	36	20	11	61	72	42	27	43	39
0	0	0	1	1	1	0	1	1	0	0	0	1
0	0	1	0	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	2	0	0	0	0	0
2	4	7	4	6	5	2	7	6	2	2	4	4
34	79	136	78	148	153	58	248	218	100	55	104	167
20	49	80	40	87	73	31	140	131	60	33	69	79
4	11	21	9	15	11	6	31	25	10	5	11	13
8	20	31	15	40	29	13	61	60	29	15	34	37
0	1	0	1	0	0	0	1	1	0	0	0	0
7	13	21	11	23	23	9	35	34	17	10	17	20
1	4	7	4	8	9	4	12	11	4	2	7	9
0	0	0	0	0	0	0	0	0	0	0	0	0
7	22	41	15	42	32	12	54	43	21	18	22	29
4	9	16	9	18	11	6	21	15	10	6	10	9
0	1	2	0	2	2	0	2	2	1	1	1	3
3	13	23	6	22	19	6	30	25	10	11	11	17
0	1	1	0	1	2	1	3	3	0	0	1	1
8	16	30	25	39	27	16	66	43	20	12	24	34
2	5	10	4	10	11	3	18	8	7	2	10	9
1	2	7	3	7	8	3	17	6	3	2	3	7
3	8	12	8	12	7	5	18	15	6	5	9	13
13	27	46	26	53	55	23	101	70	31	25	44	62
1	1	1	1	5	3	1	5	3	2	1	1	2
5	9	21	9	19	22	7	36	29	14	11	16	24
1	0	1	1	1	2	1	2	0	0	0	1	1
1	6	8	4	6	9	4	17	10	4	3	7	10
5	11	14	11	23	19	10	42	27	12	9	18	25

Table 14a. Age-adjusted (world) incidence rates per 100 000 person-years by county and primary site* - 2006-2010

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	362.2	374.1	350.2	346.4	350.6	343.8	380.6
C00-14	Mouth, pharynx	7.9	8.6	7.4	8.4	8.9	5.7	6.5
C00	Lip	1.7	2.0	1.8	1.0	2.4	1.1	1.6
C01-02	Tongue	1.6	1.2	1.7	2.2	1.9	1.5	1.1
C03-06	Mouth, other	1.3	1.9	1.0	1.4	1.3	0.7	0.7
C07-08	Salivary glands	0.5	0.8	0.7	0.4	0.2	0.7	0.2
C09-14	Pharynx	2.7	2.7	2.2	3.3	3.1	1.7	2.9
C15-26	Digestive organs	68.7	68.7	66.7	65.7	65.1	67.9	68.9
C15	Oesophagus	3.8	3.6	4.1	4.4	3.9	3.9	4.6
C16	Stomach	6.9	5.5	6.0	7.6	5.3	7.0	6.3
C17	Small intestine	1.8	1.8	1.3	1.4	1.6	1.8	1.4
C18	Colon	26.2	27.3	24.4	22.7	23.4	26.4	26.8
C19-21	Rectum, rectosigmoid, anus	17.0	18.6	16.6	14.5	16.8	16.3	18.2
C22	Liver	2.6	2.3	2.9	3.8	3.1	1.7	2.1
C23-24	Gallbladder, bile ducts	1.6	1.1	1.6	1.8	1.5	2.7	1.2
C25	Pancreas	7.8	7.3	8.4	8.3	8.3	7.0	7.3
C26	Other digestive organs	1.1	1.1	1.4	1.3	1.2	1.2	1.1
C30-34, C38	Respiratory organs	39.2	42.0	32.7	35.4	40.4	35.6	37.6
C30-31	Nose, sinuses	0.6	0.4	0.8	0.5	0.3	0.6	0.5
C32	Larynx, epiglottis	2.5	2.9	1.6	2.5	3.3	2.3	1.7
C33-34	Lung, trachea	35.8	38.4	30.0	32.1	36.8	32.5	35.3
C38	Mediastinum, pleura (non-mesothelioma)	0.3	0.4	0.3	0.3	0.0	0.1	0.1
C40-41	Bone	1.0	0.8	0.7	1.4	0.4	0.7	0.8
C43	Melanoma of the skin	17.2	21.0	20.3	15.8	14.7	15.1	21.3
C44	Skin, non-melanoma	16.1	18.5	14.9	14.4	14.5	10.8	25.6
C45	Mesothelioma	1.4	1.3	1.4	0.8	0.6	0.9	1.6
C46	Kaposi's sarcoma	0.2	0.0	0.1	0.5	0.0	0.0	0.1
C47	Autonomic nervous system	0.4	0.4	0.1	0.2	0.6	0.2	0.7
C48-49	Soft tissues	1.7	1.3	2.0	1.4	2.6	1.5	1.7
C50	Breast	0.4	0.6	0.6	0.6	0.1	0.1	0.4
C60-63	Male genital organs	116.0	112.1	108.5	105.2	105.6	120.2	125.9
C61	Prostate	103.2	98.9	96.4	93.4	93.1	106.4	114.5
C62	Testis	11.6	11.8	11.1	10.7	11.2	13.1	10.4
C60, C63	Other male genital	1.2	1.3	1.0	1.1	1.3	0.7	1.0
C64-68	Urinary organs	33.8	41.5	34.4	33.8	31.5	28.4	32.1
C64	Kidney excl. renal pelvis	10.8	13.9	12.3	10.2	10.2	9.8	11.5
C65	Renal pelvis	1.2	1.6	1.5	1.3	0.6	1.1	0.7
C66-68	Bladder, ureter, urethra	21.8	25.9	20.6	22.3	20.7	17.5	20.0
C69	Eye	0.9	1.4	1.0	1.1	0.5	0.8	0.3
C70-72	Central nervous system	14.1	14.9	13.0	12.7	13.6	11.7	12.6
C73	Thyroid gland	2.0	1.2	1.9	2.8	2.1	1.2	2.5
C37, C74-75	Other endocrine glands	3.7	3.1	3.6	3.6	5.4	2.8	3.1
C39, C76, C80	Other or unspecified	3.8	4.3	3.6	4.8	3.9	3.6	3.5
C81-96	Lymphoid and haematopoietic tissue	33.8	32.5	37.2	38.1	40.2	36.6	35.4
C81	Hodgkin lymphoma	2.7	3.4	2.6	3.0	4.2	3.0	3.0
C82-85, C96	Non-Hodgkin lymphoma	12.5	11.4	12.8	15.1	16.2	16.2	9.7
C88	Malignant immunoproliferative diseases	0.7	0.8	1.0	0.7	0.6	0.8	0.7
C90	Multiple myeloma	4.7	3.9	5.4	5.5	4.1	4.1	5.5
C91-95	Leukaemia	13.2	13.0	15.4	13.8	14.9	12.4	16.5

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

MALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	Møre og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finmark
391.0	364.5	406.2	371.5	382.2	365.4	394.1	381.4	337.8	327.1	362.2	343.2	308.2
8.1	9.8	8.9	7.9	8.0	7.0	7.9	8.3	8.2	6.2	9.4	6.8	5.5
2.2	1.9	1.8	2.7	2.3	1.7	1.6	1.3	1.8	0.9	2.0	0.8	0.9
2.0	1.7	2.8	1.3	1.0	1.3	1.1	2.3	1.4	1.2	2.4	1.2	2.2
1.1	1.5	1.3	0.7	1.8	1.6	2.6	1.5	0.9	1.1	1.2	1.3	0.4
0.8	1.1	0.2	0.9	0.5	0.4	0.3	0.3	0.4	0.3	0.4	0.5	0.5
2.0	3.5	2.7	2.3	2.3	2.1	2.3	2.9	3.8	2.7	3.4	2.9	1.4
70.1	66.0	62.9	64.5	70.5	77.7	74.7	72.4	64.8	64.5	67.5	75.1	59.0
3.2	4.2	4.2	4.1	3.2	3.6	4.7	3.6	3.4	2.9	4.5	4.2	3.0
6.3	6.3	5.1	5.9	6.2	8.1	9.5	9.5	6.4	6.7	6.6	8.7	13.3
2.4	2.0	1.9	1.5	2.0	1.8	0.4	1.9	3.2	2.7	2.1	1.4	0.9
29.7	24.7	21.4	25.4	29.0	31.3	28.6	27.7	22.5	27.8	27.2	25.8	15.8
16.2	13.5	18.0	16.1	18.0	20.1	19.8	18.6	14.6	12.1	16.1	20.1	14.5
2.1	3.3	2.2	3.5	1.9	2.6	2.1	1.5	2.7	2.6	2.2	2.6	0.9
1.4	1.7	2.0	1.4	1.4	1.7	2.4	1.1	2.3	1.2	1.3	1.4	1.0
8.1	9.5	7.2	5.8	7.9	7.9	6.1	7.6	8.6	7.1	6.7	9.3	7.7
0.9	0.7	0.8	0.8	0.9	0.5	1.0	1.0	1.0	1.5	0.9	1.6	2.1
43.2	37.4	50.2	51.2	41.3	39.8	42.0	41.7	36.9	33.5	37.6	41.1	49.9
0.6	0.3	0.4	0.8	0.6	0.8	0.6	0.5	0.7	0.1	0.8	0.5	1.1
2.3	3.5	3.4	3.8	2.7	2.5	1.1	3.1	2.1	1.8	2.7	2.6	2.2
40.0	33.3	46.2	46.5	37.8	36.1	40.1	37.9	33.7	31.4	33.8	37.5	46.2
0.4	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.1	0.4	0.5	0.4
0.9	2.0	0.8	1.1	1.3	0.7	1.3	1.2	0.6	0.8	1.2	1.0	2.1
24.4	19.4	13.0	16.6	22.9	17.6	12.8	12.1	16.8	12.4	10.0	11.6	8.2
21.3	22.1	26.2	25.3	19.9	15.3	10.2	9.8	14.6	12.1	11.3	10.2	6.4
3.0	2.1	1.8	1.3	1.7	2.1	1.9	0.8	1.5	1.0	1.1	1.1	1.3
0.2	0.2	0.2	0.3	0.0	0.1	0.1	0.0	0.3	0.0	0.1	0.1	0.0
0.5	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.9	1.2	0.1	0.0	1.1
1.4	1.4	2.5	1.2	2.4	1.7	2.0	1.4	1.1	2.3	1.5	2.0	1.3
0.8	0.1	0.4	0.7	0.3	0.4	0.0	0.5	0.4	0.2	0.4	0.2	0.7
118.8	114.1	138.3	116.0	127.1	110.8	148.8	137.2	102.0	100.0	132.4	105.5	88.1
106.0	103.3	126.1	102.4	114.3	97.9	138.9	121.6	89.3	87.4	116.6	92.5	73.0
11.4	9.6	11.7	12.1	11.5	11.4	9.1	14.2	11.7	12.1	14.5	11.9	13.8
1.3	1.2	0.5	1.4	1.4	1.5	0.9	1.4	0.9	0.4	1.3	1.1	1.3
37.0	33.1	37.3	27.7	32.5	33.5	32.5	36.8	31.9	31.1	37.4	32.3	34.0
9.9	10.4	7.6	9.2	10.4	11.4	9.4	12.4	11.1	10.5	10.2	8.2	11.3
2.0	1.0	1.7	1.2	1.0	1.2	1.1	1.2	1.7	1.2	0.6	1.6	1.0
25.1	21.7	28.0	17.3	21.1	20.9	21.9	23.3	19.1	19.4	26.6	22.6	21.7
1.4	0.7	1.6	1.3	1.0	0.8	1.5	0.7	0.4	0.2	0.7	0.7	0.8
13.4	12.9	18.7	14.3	14.5	14.9	14.3	14.8	17.5	15.1	14.4	16.1	12.7
1.7	1.7	0.9	3.0	1.5	1.7	2.4	3.4	3.6	0.9	1.3	1.4	1.7
3.7	3.7	3.7	3.6	3.5	4.8	3.8	4.8	3.3	4.6	3.7	2.5	4.7
4.0	3.7	4.6	3.5	3.7	3.3	4.6	3.2	3.0	4.0	3.3	3.1	4.1
37.3	33.9	34.3	31.8	29.3	32.5	33.4	32.0	29.8	37.0	28.9	32.3	26.6
2.1	1.8	3.0	2.7	2.6	2.7	2.0	2.3	2.7	3.0	1.8	3.2	1.1
12.4	12.4	13.4	12.9	10.8	11.8	12.0	12.5	10.3	12.4	10.8	13.1	11.5
0.8	0.5	0.0	0.6	0.2	0.8	0.4	0.4	0.7	1.9	0.4	0.6	0.2
5.9	5.8	5.7	3.2	4.6	4.0	5.0	4.5	4.2	4.5	3.9	4.6	5.6
16.2	13.4	12.3	12.4	11.1	13.1	14.0	12.3	11.8	15.3	11.9	10.7	8.2

Table 14b. Age-adjusted (world) incidence rates per 100 000 person-years by county and primary site* - 2006-2010

ICD10	Site	Norway	Østfold	Akershus	Oslo	Hedmark	Oppland	Buskerud
C00-96	All sites	294.3	303.1	298.3	297.7	295.5	278.4	311.7
C00-14	Mouth, pharynx	4.3	4.7	4.1	5.2	4.1	4.9	4.0
C00	Lip	1.0	0.7	1.1	0.8	0.7	1.3	1.0
C01-02	Tongue	0.7	0.7	0.8	1.2	0.7	0.9	0.9
C03-06	Mouth, other	0.9	1.1	0.8	1.2	1.3	1.0	0.8
C07-08	Salivary glands	0.6	0.9	0.5	0.6	0.5	0.7	0.2
C09-14	Pharynx	1.0	1.3	1.0	1.5	0.9	1.0	1.1
C15-26	Digestive organs	51.2	55.5	49.7	48.3	46.2	47.0	49.6
C15	Oesophagus	1.0	0.8	1.2	1.4	1.0	0.9	1.0
C16	Stomach	3.7	2.7	2.6	3.6	2.8	3.3	3.9
C17	Small intestine	1.2	1.2	1.3	1.3	1.4	0.5	1.5
C18	Colon	23.5	26.9	22.5	22.4	21.9	21.4	23.9
C19-21	Rectum, rectosigmoid, anus	11.6	12.7	12.6	10.8	9.5	11.5	10.6
C22	Liver	1.1	1.2	0.9	1.2	1.7	0.9	0.9
C23-24	Gallbladder, bile ducts	1.6	1.8	1.2	1.2	1.7	1.9	0.9
C25	Pancreas	6.4	7.4	6.1	5.4	5.2	5.9	6.0
C26	Other digestive organs	0.9	0.8	1.2	1.0	0.9	0.7	0.9
C30-34, C38	Respiratory organs	26.1	26.9	26.7	27.7	28.3	22.1	27.4
C30-31	Nose, sinuses	0.5	0.5	0.6	0.4	0.6	0.3	0.6
C32	Larynx, epiglottis	0.4	0.1	0.4	1.1	0.6	0.3	0.6
C33-34	Lung, trachea	25.1	26.3	25.5	26.0	26.9	21.5	26.1
C38	Mediastinum, pleura (non-mesothelioma)	0.1	0.1	0.2	0.2	0.1	0.1	0.0
C40-41	Bone	0.8	0.8	0.5	1.1	0.7	0.6	0.7
C43	Melanoma of the skin	18.2	22.1	17.7	17.0	16.7	16.9	22.2
C44	Skin, non-melanoma	10.7	12.2	8.6	8.7	8.8	6.5	21.5
C45	Mesothelioma	0.3	0.4	0.4	0.2	0.1	0.3	0.6
C46	Kaposi's sarcoma	0.1	0.0	0.1	0.1	0.0	0.0	0.0
C47	Autonomic nervous system	0.3	0.2	0.1	0.2	0.0	0.0	0.4
C48-49	Soft tissues	2.3	2.8	2.3	1.8	2.2	2.0	2.1
C50	Breast	72.7	71.2	77.2	80.3	68.9	68.4	72.7
C51-58	Female genital organs	39.8	39.3	40.1	40.1	46.7	46.8	42.0
C53	Cervix uteri	9.6	8.5	9.9	9.1	11.5	11.3	10.4
C54	Corpus uteri	16.5	16.0	17.7	17.3	18.6	18.0	16.5
C55	Uterus, other	0.1	0.1	0.0	0.1	0.2	0.1	0.2
C56	Ovary	10.8	12.0	10.7	11.4	12.7	13.4	12.5
C51-52, C57	Other female genital	2.7	2.4	1.9	2.2	3.7	3.9	2.5
C58	Placenta	0.1	0.3	0.0	0.1	0.0	0.0	0.0
C64-68	Urinary organs	12.7	16.0	11.4	13.5	11.4	10.9	11.7
C64	Kidney excl. renal pelvis	5.5	7.7	4.5	5.2	4.2	4.1	5.5
C65	Renal pelvis	0.6	0.4	0.6	0.7	1.0	0.2	0.6
C66-68	Bladder, ureter, urethra	6.6	7.8	6.3	7.6	6.2	6.5	5.6
C69	Eye	0.8	0.9	0.7	1.2	1.2	0.8	0.7
C70-72	Central nervous system	16.9	15.0	15.6	14.4	17.8	18.9	17.2
C73	Thyroid gland	5.4	3.2	6.5	5.0	8.2	4.0	5.7
C37, C74-75	Other endocrine glands	4.1	5.1	4.4	4.5	3.5	2.6	2.9
C39, C76, C80	Other or unspecified	3.5	3.4	3.2	3.9	4.4	3.4	3.3
C81-96	Lymphoid and haematopoietic tissue	24.2	23.5	29.1	24.6	26.1	22.3	27.2
C81	Hodgkin lymphoma	1.8	1.4	2.3	1.7	3.0	1.2	1.9
C82-85, C96	Non-Hodgkin lymphoma	9.1	7.5	10.3	9.1	10.2	8.1	10.3
C88	Malignant immunoproliferative diseases	0.4	0.5	0.6	0.5	0.3	0.4	0.4
C90	Multiple myeloma	3.2	2.8	3.7	3.7	3.0	4.0	3.3
C91-95	Leukaemia	9.7	11.2	12.2	9.7	9.6	8.6	11.4

FEMALES

Vestfold	Telemark	Aust-Agder	Vest-Agder	Rogaland	Hordaland	Sogn og Fjordane	More og Romsdal	Sør-Trøndelag	Nord-Trøndelag	Nordland	Troms	Finnmark
321.3	301.3	298.4	310.1	294.8	291.0	272.7	284.4	292.7	286.6	284.1	266.1	268.6
4.3	4.3	5.2	5.0	3.6	3.3	3.7	3.3	4.9	3.1	4.7	5.3	3.4
0.8	0.7	2.0	1.9	1.7	0.8	1.8	0.6	0.6	0.5	1.0	0.9	0.1
0.9	0.4	0.4	0.4	0.6	0.4	0.6	0.6	0.9	0.5	1.1	0.8	0.9
1.1	1.3	0.9	1.1	0.4	0.6	0.5	0.8	0.8	0.8	1.3	1.3	0.3
0.6	0.2	0.6	0.7	0.4	0.4	0.9	0.7	1.3	0.9	0.4	0.7	0.7
1.0	1.8	1.2	0.9	0.6	1.0	0.0	0.6	1.3	0.4	0.9	1.6	1.3
53.5	41.4	51.0	46.9	52.3	55.6	58.0	58.7	54.8	50.0	50.8	46.7	50.6
1.2	0.9	1.5	1.0	0.9	0.7	1.6	0.5	1.4	0.5	0.7	2.0	0.8
3.5	4.5	2.4	3.5	3.7	4.1	4.9	4.9	4.3	2.5	4.1	4.0	7.5
1.0	0.7	1.6	1.4	0.9	1.3	1.1	1.4	2.2	1.7	1.7	0.2	0.5
23.1	19.3	22.6	21.6	24.4	26.5	24.1	28.6	22.6	23.4	22.7	22.4	15.8
13.7	7.2	11.9	10.0	11.9	13.4	16.2	11.5	12.2	10.4	11.3	9.3	11.8
1.2	0.7	1.1	0.8	1.2	1.0	1.9	1.1	1.5	1.1	1.4	1.3	0.7
1.4	1.9	1.8	2.0	1.6	1.3	2.6	2.1	1.9	2.6	1.3	1.7	1.8
7.3	5.4	6.7	5.6	6.8	6.8	5.1	7.6	7.8	6.3	6.5	5.1	11.2
1.1	0.8	1.4	1.0	0.8	0.5	0.6	1.1	1.1	1.5	1.2	0.7	0.5
28.1	26.6	31.8	34.2	24.3	22.4	21.8	22.9	24.8	26.0	27.2	24.4	31.0
0.7	0.6	0.1	0.4	0.1	0.5	0.2	0.5	0.0	0.2	0.6	0.7	0.3
0.6	0.5	0.0	0.2	0.3	0.3	0.4	0.2	0.5	0.3	0.2	0.6	0.2
26.7	25.3	31.7	33.6	23.8	21.4	21.1	22.1	23.9	25.3	26.4	23.2	29.4
0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.4	0.2	0.0	0.0	1.0
1.0	0.8	1.8	1.1	1.1	1.2	0.1	0.9	0.6	1.0	0.3	0.0	0.8
20.8	20.5	19.3	20.4	22.4	19.0	12.2	14.8	19.6	20.6	9.6	12.5	15.1
11.4	16.9	19.1	17.5	13.6	9.6	6.1	5.8	10.4	10.8	7.9	5.6	4.1
0.5	0.4	0.2	0.0	0.3	0.1	0.4	0.4	0.1	0.7	0.1	0.0	0.4
0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.3	0.0	0.1
0.0	0.2	1.0	0.8	0.1	0.7	0.8	0.5	0.4	0.0	0.2	0.0	0.0
2.7	2.7	1.6	1.9	2.0	2.1	2.0	2.2	2.6	2.8	3.1	3.0	3.8
86.1	68.9	63.2	75.1	74.4	69.7	68.0	74.7	66.8	69.2	70.2	65.3	61.0
37.8	45.3	35.3	44.2	42.1	37.6	33.7	33.0	37.1	35.7	40.7	40.8	36.9
8.0	9.2	7.5	9.3	9.6	9.9	8.4	7.3	7.7	10.5	14.3	11.8	9.9
16.8	21.3	15.2	20.0	18.3	15.5	13.1	12.1	16.0	12.3	14.2	15.5	15.3
0.2	0.1	0.2	0.1	0.2	0.2	0.0	0.0	0.1	0.3	0.0	0.3	0.1
9.3	10.8	10.1	12.2	11.0	9.1	8.6	9.9	10.3	9.9	9.7	10.1	10.5
3.3	3.8	2.3	2.6	2.9	2.8	3.5	3.6	2.9	2.7	2.4	2.7	1.1
0.3	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.6	0.0
11.3	11.0	16.8	12.3	11.9	11.5	9.9	12.4	15.5	11.2	15.6	15.1	12.3
4.4	5.3	6.6	6.4	5.0	5.1	4.3	5.0	7.0	6.7	6.9	6.2	7.1
1.1	0.2	1.3	0.5	0.5	0.5	0.4	0.5	0.7	0.3	0.6	0.7	0.4
5.9	5.5	8.9	5.4	6.5	5.8	5.2	7.0	7.8	4.2	8.2	8.3	4.8
0.4	0.8	0.3	0.3	1.0	1.0	1.7	1.1	0.8	0.3	0.6	0.5	0.4
19.5	20.3	15.6	15.5	15.9	18.5	20.2	15.0	19.1	23.1	17.1	14.4	17.0
5.5	8.5	3.3	7.2	2.9	6.3	4.3	6.5	4.9	5.4	5.6	4.9	3.8
5.4	2.9	2.9	2.5	2.2	5.7	5.7	5.8	4.1	3.7	5.2	2.4	2.8
4.0	3.3	3.8	2.5	3.3	3.0	3.2	2.1	3.2	4.8	4.0	4.7	3.3
28.7	26.5	26.2	22.6	21.2	23.6	20.9	24.2	22.7	18.0	20.6	20.3	21.7
1.8	1.3	2.0	2.7	1.5	1.8	1.9	2.1	2.8	0.9	1.3	1.4	2.4
10.9	9.0	10.5	8.3	8.9	8.8	7.2	9.4	8.3	7.0	9.2	7.0	9.1
0.3	0.7	0.1	0.4	0.0	0.3	0.6	0.8	0.3	0.4	0.2	0.0	1.0
4.1	3.2	3.0	1.9	2.6	3.2	2.5	3.3	2.1	2.9	2.7	3.4	2.1
11.6	12.3	10.6	9.2	8.0	9.6	8.7	8.7	9.4	6.8	7.1	8.5	7.0

Table 15a. Average annual number of new cases for selected primary sites*, stage and period of diagnosis 1956-2010**MALES**

ICD10	Site	Stage	Period											% 2006-10
			1956-60	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10	
C00-14	Mouth, pharynx	Total	189	188	203	245	240	248	255	256	268	252	299	100.0
		Localized	131	131	132	161	155	151	161	145	108	82	121	40.5
		Regional	45	45	44	65	70	87	81	90	100	113	137	45.6
		Distant	3	6	9	10	9	5	8	12	12	12	13	4.3
		Unknown	10	5	18	9	6	4	5	8	48	45	29	9.6
C15	Oesophagus	Total	74	80	77	84	87	87	99	107	118	133	156	100.0
		Localized	46	47	43	39	42	42	41	46	29	26	49	31.7
		Regional	10	11	10	18	18	20	24	25	26	33	42	26.8
		Distant	12	18	18	22	22	22	30	28	33	44	41	26.4
		Unknown	5	4	6	5	5	3	3	8	31	30	24	15.1
C16	Stomach	Total	851	794	769	662	603	589	529	460	400	341	302	100.0
		Localized	241	221	200	165	176	183	185	153	79	61	77	25.5
		Regional	182	175	152	149	146	163	144	133	116	105	82	27.1
		Distant	348	346	333	302	244	211	181	149	136	122	96	31.8
		Unknown	80	52	85	46	37	31	18	26	68	53	47	15.6
C18	Colon	Total	236	291	357	402	521	649	741	844	918	1022	1154	100.0
		Localized	91	118	141	140	155	200	228	260	176	185	206	17.8
		Regional	66	70	81	116	194	264	284	328	444	505	611	52.9
		Distant	66	90	117	131	152	163	203	222	239	262	276	23.9
		Unknown	13	13	19	15	20	22	26	35	60	70	61	5.3
C19-21	Rectum, rectosigmoid, anus	Total	155	189	257	317	438	520	537	583	598	675	702	100.0
		Localized	74	94	118	150	198	243	227	252	194	177	178	25.4
		Regional	39	48	70	87	145	171	204	209	232	285	344	48.9
		Distant	29	41	56	71	86	94	96	106	114	137	127	18.1
		Unknown	13	8	13	9	9	12	10	16	58	75	53	7.5
C22	Liver	Total	19	23	36	55	50	66	59	61	68	80	101	100.0
		Localized	9	11	19	26	24	35	33	36	25	27	39	38.9
		Regional	1	1	1	4	4	5	4	3	5	6	10	10.1
		Distant	7	9	14	21	18	18	13	11	15	19	25	24.7
		Unknown	2	1	3	4	4	8	9	10	24	27	27	26.3
C23-24	Gallbladder, bile ducts	Total	17	22	27	28	39	43	49	54	57	66	68	100.0
		Localized	8	9	8	9	11	14	20	16	9	12	13	19.0
		Regional	3	3	5	5	9	10	10	10	11	22	24	34.5
		Distant	6	10	11	12	17	15	13	16	17	18	19	27.5
		Unknown	1	1	2	1	2	4	6	12	20	14	13	19.0
C25	Pancreas	Total	143	176	218	250	264	299	292	281	274	307	334	100.0
		Localized	41	54	55	51	41	58	65	53	21	24	31	9.2
		Regional	15	19	28	34	34	42	29	31	35	67	72	21.5
		Distant	74	94	119	144	159	159	158	134	132	161	184	55.1
		Unknown	12	9	15	22	29	41	41	64	86	56	47	14.2
C33-34	Lung, trachea	Total	263	373	532	679	876	1056	1160	1229	1288	1397	1507	100.0
		Localized	76	130	172	218	289	352	384	393	243	188	248	16.5
		Regional	54	80	103	129	155	198	241	240	320	389	430	28.5
		Distant	112	141	226	285	372	433	458	473	544	666	683	45.3
		Unknown	21	22	31	48	60	73	77	123	181	154	146	9.7
C43	Melanoma of the skin	Total	51	76	103	157	206	254	352	435	454	504	652	100.0
		Localized	31	49	64	121	170	209	301	377	305	289	368	56.4
		Regional	10	10	13	16	16	19	16	16	14	23	33	5.0
		Distant	7	16	15	15	16	16	22	25	26	34	25	3.9
		Unknown	3	1	10	5	4	10	13	17	110	158	227	34.7
C61	Prostate	Total	654	841	1012	1227	1478	1695	1860	2344	2879	3328	4266	100.0
		Localized	388	547	647	811	995	1137	1250	1623	1097	1386	2246	52.6
		Regional	29	31	36	67	69	64	57	98	112	188	621	14.6
		Distant	174	205	229	262	315	416	484	400	407	409	355	8.3
		Unknown	63	57	100	87	99	78	70	224	1263	1345	1044	24.5
C62	Testis	Total	55	68	75	85	107	143	165	199	240	259	293	100.0
		Localized	38	43	49	45	61	77	109	135	137	145	197	67.1
		Regional	2	4	5	16	22	40	30	36	35	47	39	13.2
		Distant	14	19	18	23	22	23	23	23	32	28	31	10.6
		Unknown	2	2	2	1	1	3	2	5	35	40	27	9.1
C64	Kidney except renal pelvis	Total	95	124	155	174	199	246	255	271	285	348	417	100.0
		Localized	49	66	77	71	80	108	116	139	110	156	219	52.4
		Regional	8	16	20	37	48	47	48	37	43	42	38	9.2
		Distant	34	38	53	62	66	81	80	70	75	80	85	20.4
		Unknown	4	4	5	3	4	10	11	25	57	70	76	18.1
C66-68	Bladder, ureter, urethra	Total	200	275	329	445	568	684	754	830	821	896	967	100.0
		Localized	156	234	264	354	474	586	661	739	485	490	637	65.9
		Regional	15	22	33	52	52	56	51	42	43	65	73	7.5
		Distant	19	13	17	26	31	27	30	25	34	34	37	3.9
		Unknown	10	6	15	13	10	15	12	23	260	307	220	22.7
C70-72	Central nervous system	Total	120	136	146	161	189	220	247	261	330	409	455	100.0
		Non-malignant	30	38	41	44	57	71	74	104	139	201	229	50.4
		Malignant	90	97	104	117	132	149	173	156	191	207	225	49.6
C73	Thyroid gland	Total	20	23	35	35	43	45	50	45	47	55	72	100.0
		Localized	6	5	12	15	21	20	27	21	19	19	24	33.5
		Regional	10	11	13	15	16	16	14	14	16	23	34	47.4
		Distant	4	7	9	5	6	8	8	8	7	7	8	11.6
		Unknown	0	0	1	1	0	1	1	2	5	7	5	7.5

Table 15b. Average annual number of new cases for selected primary sites*, stage and period of diagnosis 1956-2010**FEMALES**

ICD10	Site	Stage	Period												% 2006-10
			1956-60	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10		
C00-14	Mouth, pharynx	Total	60	67	74	78	88	100	111	122	132	143	189	100.0	
		Localized	35	39	43	41	51	56	73	79	62	52	90	47.7	
		Regional	19	22	27	27	29	39	32	34	40	53	70	36.9	
		Distant	3	4	1	5	4	2	5	3	6	6	5	2.6	
		Unknown	3	3	2	5	5	2	2	5	24	32	24	12.8	
C15	Oesophagus	Total	23	29	30	30	31	35	37	42	47	54	56	100.0	
		Localized	15	19	18	15	18	18	19	25	12	12	19	34.8	
		Regional	3	3	3	6	5	9	8	7	8	13	12	20.8	
		Distant	3	4	6	5	7	6	9	7	10	13	11	19.4	
		Unknown	2	3	3	3	2	3	2	4	17	16	14	25.1	
C16	Stomach	Total	595	538	501	423	411	391	353	306	255	228	207	100.0	
		Localized	169	153	117	102	114	131	136	109	57	44	57	27.6	
		Regional	99	97	90	84	104	96	93	74	63	66	43	20.7	
		Distant	240	224	226	203	158	131	110	103	81	77	74	35.7	
		Unknown	87	64	67	35	35	33	14	20	53	42	33	16.0	
C18	Colon	Total	273	337	427	495	657	772	874	986	1098	1178	1292	100.0	
		Localized	106	141	165	172	190	234	263	301	215	218	229	17.7	
		Regional	70	78	107	150	252	316	355	397	539	585	702	54.4	
		Distant	74	100	131	153	187	187	217	230	250	287	277	21.4	
		Unknown	23	18	24	21	28	35	38	58	95	89	83	6.5	
C19-21	Rectum, rectosigmoid, anus	Total	127	138	214	266	359	419	441	498	506	536	559	100.0	
		Localized	59	67	96	127	163	195	200	236	168	154	159	28.4	
		Regional	33	34	57	78	115	136	149	164	188	216	262	46.9	
		Distant	28	29	49	55	71	74	78	79	92	94	94	16.9	
		Unknown	6	8	11	6	10	14	14	20	58	72	44	7.9	
C22	Liver	Total	11	14	19	30	34	44	41	45	44	47	60	100.0	
		Localized	5	6	8	15	16	18	23	21	12	12	21	34.6	
		Regional	0	0	1	1	1	4	1	3	4	6	8	13.0	
		Distant	4	7	9	12	14	16	10	8	10	8	13	21.6	
		Unknown	2	1	1	2	3	7	7	12	18	20	19	30.9	
C23-24	Gallbladder, bile ducts	Total	47	52	61	49	69	83	78	72	83	74	84	100.0	
		Localized	13	15	15	14	20	25	28	20	13	13	16	19.0	
		Regional	8	9	8	10	11	19	14	12	16	15	23	27.3	
		Distant	23	26	36	22	34	33	25	22	27	27	29	34.2	
		Unknown	2	2	2	3	4	7	11	17	28	19	16	19.5	
C25	Pancreas	Total	97	119	156	183	218	266	287	303	318	334	356	100.0	
		Localized	29	38	43	42	46	55	74	65	26	28	43	12.0	
		Regional	9	11	16	24	28	34	31	31	37	62	71	19.8	
		Distant	48	63	83	98	121	137	140	119	144	164	172	48.2	
		Unknown	11	7	14	20	23	40	42	88	112	80	71	20.0	
C33-34	Lung, trachea	Total	70	84	131	165	213	303	423	548	702	880	1139	100.0	
		Localized	18	25	42	50	63	86	132	162	116	126	225	19.8	
		Regional	8	11	19	27	31	49	80	107	158	227	291	25.6	
		Distant	35	42	62	77	101	142	184	216	307	434	517	45.4	
		Unknown	9	6	8	12	18	26	28	63	120	93	105	9.3	
C43	Melanoma of the skin	Total	55	88	120	178	259	338	431	485	502	555	686	100.0	
		Localized	42	73	85	154	233	301	399	442	348	342	415	60.5	
		Regional	7	6	8	9	8	16	12	11	11	14	22	3.2	
		Distant	6	6	13	10	13	12	12	15	21	21	16	2.3	
		Unknown	2	3	13	5	5	9	9	16	121	178	233	34.0	
C50	Breast	Total	921	1045	1201	1380	1565	1698	1830	2028	2437	2745	2767	100.0	
		Pagets stage 0	0	0	3	19	23	34	37	21	20	18	16	0.6	
		I	407	487	579	668	834	895	767	631	742	1062	1136	41.0	
		II	349	348	373	431	433	487	691	766	888	1113	1094	39.5	
		III	44	89	79	105	96	95	119	91	85	92	137	4.9	
		IV	93	95	119	111	114	108	122	134	123	133	104	3.7	
C53	Cervix uteri	Unknown	28	27	47	46	65	80	95	384	579	326	281	10.1	
		Total	341	358	396	437	410	365	336	354	318	297	302	100.0	
		I	144	149	199	233	233	209	184	224	186	171	179	59.3	
		II	114	125	130	116	89	75	73	58	66	55	58	19.0	
		III	52	54	41	62	56	54	46	39	35	33	24	7.9	
		IV	23	23	19	23	23	23	28	27	25	25	31	10.1	
C54	Corpus uteri	Unknown	7	7	7	3	10	4	5	5	6	12	11	3.6	
		Total	175	216	260	310	370	383	408	454	506	635	702	100.0	
		Localized	139	181	204	259	291	288	306	346	337	400	496	70.6	
		Regional	9	11	16	21	41	46	48	44	58	75	65	9.2	
		Distant	19	20	37	27	33	36	48	55	68	82	93	13.2	
		Unknown	7	3	4	4	4	13	6	9	42	78	49	7.0	
C56	Ovary	Total	259	286	358	340	377	416	445	458	466	460	446	100.0	
		Localized	83	95	111	141	107	113	121	127	92	86	85	19.1	
		Regional	24	14	19	22	30	37	23	15	13	13	14	3.0	
		Distant	142	166	220	173	235	252	287	293	310	309	303	68.0	
		Unknown	10	11	7	5	5	13	14	23	51	53	44	9.9	
C64	Kidney except renal pelvis	Total	75	89	110	117	137	149	180	188	191	211	240	100.0	
		Localized	42	52	59	59	65	67	88	104	76	93	133	55.2	
		Regional	8	9	13	23	27	32	28	21	22	23	20	8.2	
		Distant	21	27	34	30	42	44	50	44	51	42	40	16.7	
		Unknown	4	2	4	4	3	7	14	20	43	53	48	19.9	
C66-68	Bladder, ureter, urethra	Total	115	125	140	183	219	246	261	279	299	331	349	100.0	
		Localized	73	79	93	122	160	193	221	231	155	168	220	63.0	
		Regional	12	20	19	26	27	26	18	16	18	29	29	8.4	
		Distant	19	18	19	23	21	15	15	15	22	22	19	5.5	
		Unknown	12	8	9	11	11	12	7	16	105	111	80	23.1	
C70-72	Central nervous system	Total	105	120	131	140	186	214	255	293	397	545	588	100.0	
		Non-malignant	42	53	59	58	80	94	131	162	246	380	418	71.0	
		Malignant	63	67	71	82	106	119	124	131	151	166	171	29.0	
C73	Thyroid gland	Total	53	58	85	107	129	142	136	139	122	149	173	100.0	
		Localized	22	26	47	59	84	95	92	88	58	70	90	51.7	
		Regional	15	22	26	30	30	34	31	37	37	46	55	31.8	
		Distant	12	9	9	14	12	10	9	11	11	10	7	4.2	
		Unknown	3	1	3	3	2	4	4	4	16	22	21	12.2	

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 16a. Age-adjusted (world) incidence rates per 100 000 person-years for selected primary sites*, stage and period of diagnosis 1956-2010

ICD10	Site	Stage	Period										
			1956-60	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10
C00-14	Mouth, pharynx	Total	8.0	7.4	7.4	8.5	8.0	8.1	8.3	8.2	8.4	7.4	7.9
		Localized	5.5	5.2	4.9	5.7	5.1	4.9	5.1	4.6	3.3	2.4	3.1
		Regional	1.9	1.8	1.6	2.2	2.4	2.9	2.8	3.0	3.3	3.4	3.7
		Distant	0.1	0.3	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.4	0.3
		Unknown	0.4	0.2	0.6	0.3	0.2	0.1	0.1	0.3	1.4	1.3	0.7
C15	Oesophagus	Total	3.1	3.1	2.6	2.7	2.7	2.7	3.0	3.2	3.4	3.6	3.8
		Localized	1.9	1.8	1.4	1.2	1.3	1.2	1.1	1.3	0.8	0.7	1.2
		Regional	0.4	0.4	0.4	0.6	0.6	0.6	0.8	0.8	0.8	1.0	1.1
		Distant	0.5	0.7	0.6	0.7	0.7	0.7	1.0	0.9	1.0	1.2	1.0
		Unknown	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.8	0.7	0.6
C16	Stomach	Total	35.6	30.2	26.9	21.7	18.6	16.9	14.6	12.4	10.3	8.3	6.9
		Localized	9.8	8.1	6.8	5.3	5.3	5.1	4.9	3.8	2.0	1.4	1.7
		Regional	8.0	6.9	5.4	5.0	4.6	4.9	4.1	3.8	3.1	2.7	1.9
		Distant	14.8	13.4	11.8	10.0	7.6	6.2	5.1	4.1	3.6	3.1	2.3
		Unknown	3.1	1.8	2.9	1.4	1.1	0.8	0.5	0.6	1.5	1.1	1.0
C18	Colon	Total	9.9	11.2	12.6	13.2	16.2	19.0	21.3	23.1	24.4	25.6	26.2
		Localized	3.8	4.5	4.9	4.5	4.8	5.8	6.3	7.0	4.7	4.6	4.6
		Regional	2.8	2.7	2.9	3.9	6.2	7.8	8.4	9.0	11.8	12.5	13.8
		Distant	2.8	3.5	4.1	4.3	4.7	4.8	5.9	6.3	6.5	6.8	6.6
		Unknown	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.8	1.4	1.7	1.2
C19-21	Rectum, rectosigmoid, anus	Total	6.5	7.2	9.1	10.5	13.8	15.5	15.6	16.7	16.6	17.7	17.0
		Localized	3.1	3.5	4.1	4.9	6.2	7.2	6.4	7.1	5.3	4.6	4.3
		Regional	1.7	1.8	2.6	3.0	4.6	5.2	6.2	6.0	6.4	7.5	8.4
		Distant	1.2	1.6	2.0	2.3	2.7	2.9	2.8	3.1	3.3	3.8	3.1
		Unknown	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.4	1.5	1.8	1.2
C22	Liver	Total	0.8	0.9	1.3	1.9	1.7	2.1	1.8	1.8	1.9	2.1	2.6
		Localized	0.4	0.5	0.7	0.9	0.8	1.0	1.0	1.0	0.8	0.7	1.0
		Regional	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3
		Distant	0.3	0.4	0.5	0.7	0.6	0.6	0.4	0.3	0.4	0.5	0.6
		Unknown	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.6	0.7	0.6
C23-24	Gallbladder, bile ducts	Total	0.7	0.9	0.9	0.9	1.1	1.3	1.3	1.5	1.5	1.7	1.6
		Localized	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.2	0.3	0.3
		Regional	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.6	0.6
		Distant	0.2	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5
		Unknown	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.5	0.3	0.2
C25	Pancreas	Total	6.2	6.8	7.6	8.2	8.2	8.7	8.2	7.7	7.3	7.9	7.8
		Localized	1.7	2.0	1.9	1.6	1.2	1.6	1.7	1.4	0.5	0.6	0.7
		Regional	0.7	0.8	1.0	1.1	1.1	1.3	0.9	0.9	1.1	1.8	1.7
		Distant	3.3	3.6	4.2	4.8	5.1	4.8	4.6	3.9	3.7	4.3	4.4
		Unknown	0.5	0.3	0.5	0.7	0.9	1.1	1.0	1.5	2.0	1.2	0.9
C33-34	Lung, trachea	Total	11.7	15.1	19.7	23.7	28.8	33.2	35.3	36.5	36.6	36.6	35.8
		Localized	3.4	5.2	6.3	7.5	9.1	10.4	10.9	11.2	6.9	4.9	5.8
		Regional	2.4	3.3	4.0	4.7	5.5	6.6	7.7	7.4	9.2	10.1	10.3
		Distant	5.0	5.7	8.5	10.0	12.4	14.1	14.5	14.8	16.0	17.9	16.5
		Unknown	0.9	0.9	1.1	1.5	1.8	2.0	2.1	3.1	4.5	3.6	3.2
C43	Melanoma of the skin	Total	2.4	3.5	4.6	6.6	8.4	9.9	13.0	15.1	14.6	14.9	17.2
		Localized	1.4	2.2	2.9	5.1	7.0	8.2	11.2	13.1	9.9	8.7	9.7
		Regional	0.4	0.5	0.6	0.7	0.6	0.7	0.6	0.6	0.4	0.7	0.8
		Distant	0.3	0.7	0.6	0.6	0.6	0.6	0.8	0.9	0.8	1.0	0.6
		Unknown	0.1	0.1	0.5	0.2	0.2	0.4	0.5	0.6	3.4	4.6	6.0
C61	Prostate	Total	25.7	29.9	32.9	36.9	40.9	44.0	46.0	57.7	75.1	85.4	103.2
		Localized	15.2	19.3	21.0	24.2	27.5	29.3	30.4	39.6	29.9	37.6	56.5
		Regional	1.2	1.1	1.2	2.1	1.9	1.7	1.7	3.2	3.8	5.3	14.8
		Distant	6.9	7.4	7.5	8.0	8.8	10.9	12.2	9.8	9.7	9.2	7.3
		Unknown	2.4	2.1	3.2	2.6	2.7	2.0	1.6	5.1	31.8	33.3	24.6
C62	Testis	Total	3.0	3.7	4.0	4.3	5.3	6.5	7.2	8.4	10.2	10.7	11.6
		Localized	2.0	2.4	2.6	2.3	3.0	3.5	4.7	5.7	5.8	6.0	7.8
		Regional	0.1	0.2	0.3	0.8	1.1	1.9	1.3	1.5	1.5	1.9	1.5
		Distant	0.8	1.1	1.0	1.2	1.1	1.1	1.0	1.0	1.4	1.2	1.3
		Unknown	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.5	1.6	1.1
C64	Kidney except renal pelvis	Total	4.3	5.1	5.8	6.3	6.8	8.3	8.0	8.2	8.5	9.8	10.8
		Localized	2.2	2.7	2.9	2.6	2.8	3.7	3.7	4.4	3.4	4.5	5.8
		Regional	0.4	0.7	0.8	1.4	1.7	1.6	1.5	1.2	1.3	1.2	1.0
		Distant	1.5	1.5	2.0	2.2	2.2	2.6	2.5	2.1	2.2	2.2	2.1
		Unknown	0.2	0.2	0.2	0.1	0.1	0.3	0.3	0.6	1.6	1.9	1.9
C66-68	Bladder, ureter, urethra	Total	8.6	10.6	11.7	15.0	17.7	20.2	21.3	22.9	21.6	22.0	21.8
		Localized	6.7	9.0	9.4	12.0	14.9	17.4	18.7	20.5	13.1	12.2	14.3
		Regional	0.6	0.8	1.1	1.7	1.6	1.6	1.4	1.2	1.1	1.7	1.7
		Distant	0.8	0.5	0.6	0.9	0.9	0.8	0.9	0.7	0.9	0.8	0.9
		Unknown	0.4	0.2	0.5	0.4	0.3	0.4	0.3	0.6	6.5	7.3	4.8
C70-72	Central nervous system	Total	6.1	6.5	6.8	7.2	8.1	9.0	9.8	9.9	11.9	14.0	14.1
		Non-malignant	1.5	1.8	1.9	1.9	2.3	2.7	2.7	3.7	4.9	6.7	7.0
		Malignant	4.6	4.7	4.9	5.3	5.8	6.3	7.1	6.2	7.0	7.3	7.2
C73	Thyroid gland	Total	0.9	1.0	1.4	1.4	1.6	1.6	1.8	1.6	1.6	1.8	2.0
		Localized	0.3	0.2	0.5	0.6	0.8	0.7	1.0	0.8	0.7	0.6	0.7
		Regional	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.7	1.0
		Distant	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 16b. Age-adjusted (world) incidence rates per 100 000 person-years for selected primary sites*, stage and period of diagnosis 1956-2010**FEMALES**

			Period										
ICD10	Site	Stage	1956-60	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10
C00-14	Mouth, pharynx	Total	2.3	2.3	2.3	2.3	2.3	2.7	2.8	3.2	3.4	3.4	4.3
		Localized	1.3	1.4	1.4	1.2	1.4	1.6	1.8	2.1	1.6	1.3	2.0
		Regional	0.7	0.7	0.8	0.8	0.7	1.0	0.9	0.9	1.0	1.3	1.7
		Distant	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1
		Unknown	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.6	0.7	0.5
C15	Oesophagus	Total	0.8	0.9	0.8	0.7	0.7	0.7	0.8	0.8	1.0	1.1	1.0
		Localized	0.5	0.6	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.2	0.3
		Regional	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3
		Distant	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2
		Unknown	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.3	0.3	0.2
C16	Stomach	Total	20.7	16.8	14.1	11.0	9.6	8.5	7.1	6.0	4.8	4.3	3.7
		Localized	5.6	4.6	3.1	2.4	2.5	2.7	2.5	1.9	1.0	0.8	1.0
		Regional	3.8	3.3	2.8	2.3	2.6	2.2	2.1	1.5	1.3	1.3	0.7
		Distant	8.8	7.2	6.6	5.6	3.8	3.1	2.3	2.2	1.8	1.6	1.5
		Unknown	2.6	1.7	1.6	0.7	0.7	0.6	0.2	0.3	0.7	0.6	0.5
C18	Colon	Total	9.8	10.9	12.6	13.7	16.4	18.0	19.1	21.0	22.4	23.0	23.5
		Localized	3.8	4.5	4.8	4.8	4.6	5.3	5.7	6.3	4.5	4.1	4.0
		Regional	2.6	2.6	3.3	4.2	6.5	7.6	7.9	8.6	11.1	11.5	12.9
		Distant	2.7	3.3	3.9	4.2	4.7	4.5	5.0	5.3	5.4	5.9	5.6
		Unknown	0.7	0.5	0.6	0.5	0.5	0.6	0.6	0.8	1.4	1.4	1.0
C19-21	Rectum, rectosigmoid, anus	Total	4.6	4.6	6.5	7.4	9.4	10.2	10.1	11.6	11.1	11.5	11.6
		Localized	2.1	2.3	3.0	3.5	4.2	4.9	4.5	5.3	3.9	3.4	3.3
		Regional	1.3	1.2	1.7	2.3	3.1	3.4	3.6	4.2	4.2	4.8	5.5
		Distant	1.0	1.0	1.5	1.5	1.9	1.8	1.8	1.8	2.1	2.1	2.1
		Unknown	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.3	1.0	1.3	0.8
C22	Liver	Total	0.4	0.6	0.6	0.9	0.9	1.1	1.0	1.0	1.0	1.0	1.1
		Localized	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.3	0.3	0.4
		Regional	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2
		Distant	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.3	0.2	0.3
		Unknown	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.3
C23-24	Gallbladder, bile ducts	Total	1.6	1.7	1.7	1.2	1.6	1.8	1.6	1.5	1.6	1.4	1.6
		Localized	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.2	0.2	0.3
		Regional	0.3	0.3	0.2	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.5
		Distant	0.8	0.8	1.1	0.5	0.8	0.6	0.5	0.5	0.6	0.6	0.6
		Unknown	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.2
C25	Pancreas	Total	3.5	3.9	4.5	4.8	5.2	5.7	5.9	6.0	5.9	6.2	6.4
		Localized	1.0	1.2	1.2	1.0	1.0	1.0	1.4	1.2	0.5	0.4	0.7
		Regional	0.4	0.4	0.5	0.7	0.7	0.8	0.7	0.7	0.8	1.3	1.4
		Distant	1.8	2.1	2.4	2.6	2.9	3.1	3.1	2.8	3.0	3.4	3.4
		Unknown	0.4	0.2	0.4	0.5	0.5	0.7	0.7	1.3	1.6	1.2	0.9
C33-34	Lung, trachea	Total	2.7	2.9	4.2	5.1	6.3	8.7	11.7	15.1	18.8	21.6	25.1
		Localized	0.7	0.8	1.4	1.5	1.8	2.3	3.4	4.4	3.1	3.1	5.0
		Regional	0.3	0.4	0.6	0.9	1.0	1.6	2.4	3.1	4.4	5.6	6.6
		Distant	1.4	1.5	2.0	2.5	3.0	4.3	5.3	6.4	8.6	11.0	11.7
		Unknown	0.3	0.2	0.2	0.3	0.5	0.5	0.6	1.3	2.7	1.9	1.9
C43	Melanoma of the skin	Total	2.4	4.0	5.1	7.5	10.1	12.4	15.4	16.2	15.6	16.0	18.2
		Localized	1.8	3.3	3.8	6.6	9.3	11.2	14.5	14.9	11.2	10.0	11.1
		Regional	0.3	0.3	0.3	0.4	0.3	0.5	0.3	0.3	0.3	0.4	0.4
		Distant	0.2	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.4
		Unknown	0.1	0.1	0.5	0.2	0.2	0.3	0.2	0.5	3.6	5.0	6.3
C50	Breast**	Total	37.5	39.9	43.1	47.2	50.9	51.9	53.5	58.7	70.8	76.9	72.7
		Pagets stage 0	0.0	0.0	0.1	0.7	0.7	1.0	1.1	0.6	0.5	0.4	0.4
		I	16.5	18.5	20.7	22.7	26.7	26.6	22.6	18.9	23.1	32.1	31.8
		II	14.7	13.9	14.2	15.6	15.0	16.0	21.4	23.8	27.2	32.5	29.7
		III	1.6	3.2	2.6	3.2	2.7	2.3	3.3	2.3	2.2	2.3	3.4
		IV	3.6	3.4	4.0	3.5	3.5	3.2	3.3	3.9	3.2	3.2	2.4
C53	Cervix uteri	Unknown	1.1	0.9	1.6	1.6	2.3	2.8	1.8	9.3	14.5	6.3	5.1
		Total	15.3	15.6	17.1	18.6	16.7	13.9	12.1	12.3	10.8	9.6	9.6
		I	6.7	6.9	9.3	11.0	10.6	8.7	7.2	8.3	6.8	6.1	6.2
		II	5.1	5.4	5.3	4.5	3.3	2.7	2.5	1.9	2.1	1.6	1.7
		III	2.2	2.1	1.5	2.2	1.8	1.7	1.5	1.2	1.0	0.9	0.7
C54	Corpus uteri	IV	0.9	0.9	0.7	0.8	0.7	0.6	0.8	0.7	0.7	0.7	0.8
		Unknown	0.3	0.2	0.3	0.1	0.3	0.2	0.2	0.1	0.2	0.3	0.3
		Total	7.2	8.2	9.1	10.5	12.1	12.2	12.4	13.2	13.9	16.0	16.5
		Localized	5.8	7.0	7.3	9.0	9.8	9.6	9.5	10.3	9.6	10.5	11.9
		Regional	0.4	0.4	0.5	0.6	1.2	1.3	1.4	1.3	1.5	1.8	1.5
C56	Ovary	Distant	0.8	0.8	1.2	0.8	1.0	1.0	1.4	1.5	1.8	2.0	2.1
		Unknown	0.3	0.1	0.1	0.1	0.1	0.3	0.1	0.2	1.0	1.8	1.0
		Total	11.1	11.2	13.3	12.3	13.2	13.6	13.6	13.7	13.1	12.2	10.8
		Localized	3.8	3.9	4.3	5.4	4.0	4.0	4.0	4.2	3.0	2.7	2.4
		Regional	1.0	0.5	0.7	0.8	1.0	1.3	0.7	0.4	0.4	0.3	0.3
C64	Kidney except renal pelvis	Distant	5.9	6.3	8.1	5.9	8.0	8.0	8.6	8.6	8.5	8.0	7.3
		Unknown	0.4	0.4	0.2	0.2	0.2	0.3	0.3	0.4	1.2	1.2	0.8
		Total	3.0	3.2	3.6	3.6	4.0	4.0	4.6	4.6	4.7	4.8	5.5
		Localized	1.7	1.9	1.9	1.9	2.0	1.9	2.3	2.8	2.1	2.4	3.2
		Regional	0.3	0.3	0.4	0.7	0.8	0.9	0.8	0.5	0.6	0.5	0.5
C66-68	Bladder, ureter, urethra	Distant	0.8	1.0	1.1	0.9	1.2	1.1	1.3	1.0	1.2	0.9	0.8
		Unknown	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.9	1.0	1.0
		Total	4.2	4.0	4.0	4.9	5.4	5.6	5.7	6.0	6.1	6.4	6.6
		Localized	2.6	2.5	2.7	3.3	3.9	4.4	4.9	5.0	3.3	3.4	4.2
		Regional	0.4	0.7	0.6	0.7	0.6	0.6	0.4	0.4	0.4	0.6	0.6
C70-72	Central nervous system	Distant	0.8	0.6	0.5	0.6	0.5	0.3	0.3	0.3	0.5	0.4	0.4
		Unknown	0.4	0.2	0.2	0.3	0.2	0.2	0.1	0.2	1.9	2.0	1.4
		Total	5.1	5.4	5.7	5.9	7.4	8.1	9.3	10.1	12.8	16.7	16.9
		Non-malignant	2.0	2.2	2.4	2.3	3.1	3.3	4.4	5.2	7.5	11.3	11.6
		Malignant	3.1	3.1	3.3	3.6	4.4	4.8	4.9	4.9	5.3	5.5	5.2
C73	Thyroid gland	Total	2.2	2.4	3.3	4.2	5.0	5.1	4.8	4.8	4.1	4.8	5.4
		Localized	0.9	1.1	1.9	2.6	3.5	3.6	3.4	3.2	2.1	2.4	2.9
		Regional	0.7	1.0	1.0	1.1	1.1	1.2	1.1	1.3	1.3	1.5	1.7
		Distant	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2
		Unknown	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.6	0.6

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

**The stage classification on the basis of TNM was revised between the 2009 and 2010 CiN issue and results therefore differ especially for stage I. A more strict treatment of NX and MX has been introduced with the result of a higher proportion of unknown stage but higher validity of stages I-IV.

Mortality

There were 11 036 deaths from cancer in Norway in 2010, of which 5 872 were among men and 5 164 among women (Table 17). Cancers of the lung, colorectal, prostate and female breast account for half of the total cancer mortality. As previously, lung cancer ranked first in men in terms of cancer mortality numbers, responsible for 1 242 deaths, followed by prostate cancer (1 043 deaths) and colorectal cancer (773 deaths).

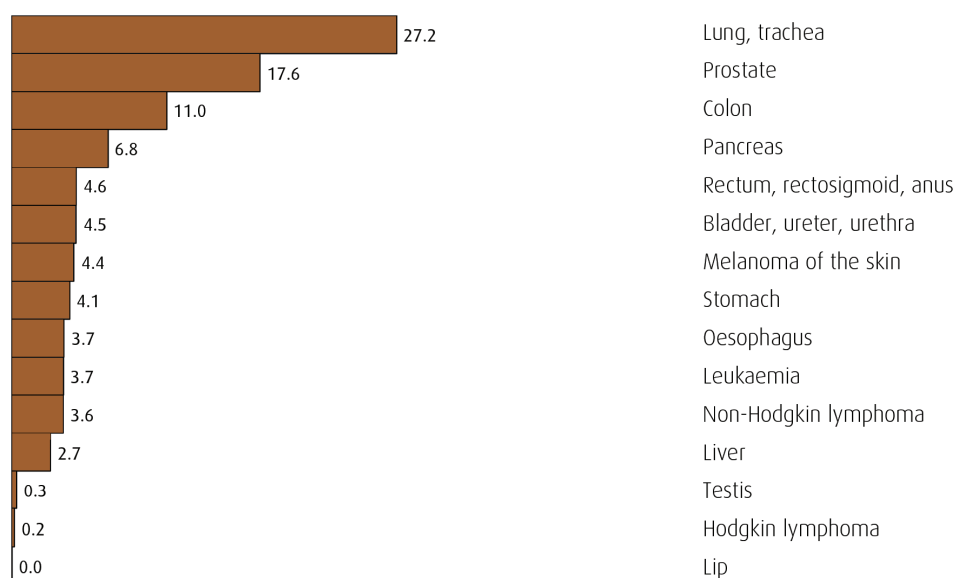
Lung cancer mortality (925 deaths) also ranks highest among women. Colorectal cancer (816 deaths) and breast cancer (673 deaths) rank as the second and third most frequent cause of cancer deaths among women.

Figure 8 shows the distribution of age-standardised mortality rates for selected cancer sites. There is at least a 100-fold variation in rates across these cancers, with lung cancer as the leading cause of cancer death in both sexes. Given the very poor prognosis for pancreatic cancer, it ranks among the top 5 causes of cancer death among both men and women.

The Trends section in this report examines the mortality time trends in relation to those of incidence and survival for 23 selected cancer sites.

Figure 8. Age-standardised (world) mortality rates per 100 000 person-years in Norway 2010 for selected cancers (Source: Statistics Norway)

Males



Females

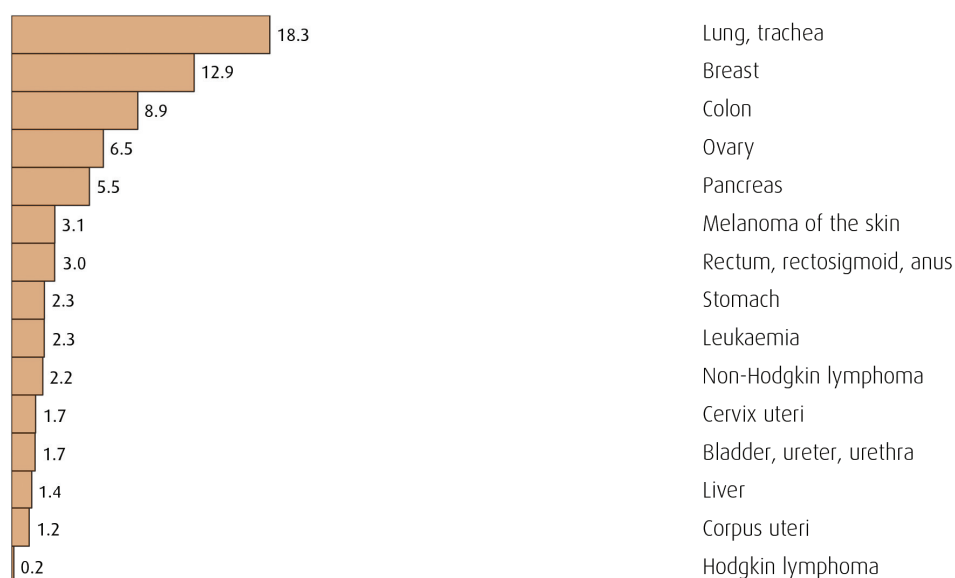


Table 17. Number of cancer deaths in Norway by primary site and sex - 2010

ICD10	Site	Males	Females	Total
C00-96	All sites	5872	5164	11036
C00-14	Mouth, pharynx	92	47	139
C00	Lip	2	1	3
C01-02	Tongue	17	8	25
C03-06	Mouth, other	25	18	43
C07-08	Salivary glands	9	5	14
C09-14	Pharynx	39	15	54
C15-26	Digestive organs	1646	1532	3178
C15	Oesophagus	165	57	222
C16	Stomach	199	146	345
C17	Small intestine	26	34	60
C18	Colon	559	629	1188
C19-21	Rectum, rectosigmoid, anus	214	187	401
C22	Liver	117	86	203
C23-24	Gallbladder, bile ducts	25	39	64
C25	Pancreas	313	317	630
C26	Other digestive organs	28	37	65
C30-34, C38	Respiratory organs	1275	946	2221
C30-31	Nose, sinuses	5	8	13
C32	Larynx, epiglottis	25	7	32
C33-34	Lung, trachea	1242	925	2167
C38	Mediastinum, pleura (non-mesothelioma)	3	6	9
C40-41	Bone	13	8	21
C43	Melanoma of the skin	198	140	338
C44	Skin, non-melanoma	31	19	50
C45	Mesothelioma	56	10	66
C46	Kaposi's sarcoma		1	1
C47	Autonomic nervous system	2	1	3
C48-49	Soft tissues	42	46	88
C50	Breast	2	673	675
C51-58	Female genital organs		575	575
C53	Cervix uteri		78	78
C54	Corpus uteri		78	78
C55	Uterus, other		42	42
C56	Ovary		323	323
C51-52, C57	Other female genital		54	54
C58	Placenta			
C60-63	Male genital organs	1065		1065
C61	Prostate	1043		1043
C62	Testis	13		13
C60, C63	Other male genital	9		9
C64-68	Urinary organs	424	221	645
C64	Kidney excl. renal pelvis	166	95	261
C65	Renal pelvis	12	1	13
C66-68	Bladder, ureter, urethra	246	125	371
C69	Eye	3		3
C70-72, D32-33	Central nervous system	184	155	339
C73	Thyroid gland	14	19	33
C37, C74-75	Other endocrine glands	6	5	11
C39, C76, C80	Other or unspecified	290	336	626
C81-96	Lymphoid and haematopoietic tissue	529	430	959
C81	Hodgkin lymphoma	8	7	15
C82-85, C96	Non-Hodgkin lymphoma	165	137	302
C88	Malignant immunoproliferative diseases	4	2	6
C90	Multiple myeloma	142	113	255
C91-95, D45-47	Leukaemia	210	171	381

Survival

Long-term estimates of survival are becoming increasingly relevant as life expectancy amongst cancer patients increases and cancer care continues to advance (Brenner & Hakulinen, 2002). Given that cancer patients survive longer, there is a need to communicate information not only on prognosis at the time of diagnosis, but for a period of time thereafter, among those who survive their cancer diagnosis (Janssen-Heijnen & al, 2007). Figures 9-A to 9-X overleaf aim to depict these two aspects of cancer survival in Norway for all cancers combined and for 23 specific cancer types. Relative survival estimates are presented by sex and age, 1 to 15 years after diagnosis, with age strata determined cancer-specifically according to relevant biological and/or clinical criteria. Table 18 provides the 5-year relative survival estimates over the last four decades by stage, as well as for cancer site and sex. Table 19 gives the 1-, 5-, 10- and 15-year relative survival estimates (with 95% confidence intervals) for the follow-up period 2008-10 by cancer site and sex.

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

Estimates of 5-year relative survival conditional on being alive 1 to 10 years after diagnosis are included in the sex-specific figures, and better quantify the prognosis of cancer patients beyond their initial diagnosis (Figure 9-A to 9-X, dashed lines). When

conditional 5-year relative survival reaches beyond 90-95%, we commonly say that there is little or no excess mortality among the cancer patients, with mortality equivalent to that experienced in the general population, analogous to the notion of 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 captured in Figure 9-A. The levelling-off of the 5-year relative survival occurs some 8 to 10 years after diagnosis, while the attainment of 5-year conditional relative survival estimates of 90-95% is reached in patients alive 3-5 years after diagnosis (dashed lines). Cure appears to be attained more rapidly in women than men. As was mentioned in the Trends section, the combined-cancer estimates are an aggregate of many different cancer forms with contrasting diagnostic and treatment capacities. Sex-specific survival estimates will be particularly influenced by PSA testing for prostate cancer and mammographic screening for breast cancer, respectively.

The cumulative 5-year relative survival described by cancer site, sex and age, and 5-year conditional relative survival by site and age (Figures 9-B to 9-X) are fairly self-explanatory and highlight the wide variations in patient survival according to these three variables. The 90 percentage point difference in 5-year survival among patients with testicular (Figure 9-Q) or pancreatic cancer (Figure 9-I) strikingly illustrates the wide differential in prognosis according to the type of cancer diagnosed. Long-term survival following diagnoses of melanoma and cancers of the oral cavity, central nervous system and thyroid clearly varies in men and women, and contributing factors may be biological or anatomical, or may relate to sex-specific differences in stage at presentation, subsite or histological type, and 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 the likes of colon cancer (Figure 9-E) relative to, for example, ovarian cancer (Figure 9-O) or leukaemia (Figure 9-X). For certain cancers including breast and prostate cancer, long-term survival among patients diagnosed aged under the age of 50 is actually lower than for patients diagnosed aged 50-59. This in part represents the diagnosis of more aggressive tumours in the younger age group, but also the impact of screening on the older group.

The figures also illustrate a very positive aspect of cancer survival; cancer patients who are alive for a certain time after diagnosis show good prospects of surviving their cancer and becoming cured. In fact, for about two-thirds of the cancer types diagnosed in Norway, the 5-year conditional relative survival reaches 90% 2-5 years after diagnosis. This means that in general terms, survivors of these cancers, will, within a few years of diagnosis have mortality rates similar to that of the general population, and would be considered (statistically) cured. The extent

to which survivors may be considered cured does however vary; 5-year conditional survival from breast cancer reaches 90% 2 years after diagnosis (Figure 9-L) and slowly increases to 94% 10 years from diagnosis. As is evident from the continual decline in long-term breast cancer survival by age however, the cancer represents a disease for which a proportion may be considered cured long-term, but for which there remains a group of survivors with a persistent excess mortality. There is also a spectrum of cancers associated with particularly poor survival on diagnosis, and for which cure is not indicated, including cancers of the oesophagus (Figure 9-C), liver (Figure 9-G) and pancreas (Figure 9-I).

Table 18a Five-year relative survival (period approach) by primary site*, stage and period of follow up, 1971-2010**MALES**

ICD10	Site	Stage	Relative survival (%)							
			1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10
C00-96	All sites	Total	33.2	37.6	41.2	43.3	48.8	53.4	59.3	67.1
C00-14	Mouth, pharynx	Total	63.8	64.4	58.1	56.0	56.3	57.3	56.9	60.3
		Localized	81.5	84.4	80.1	73.9	78.9	78.9	83.3	77.5
		Regional	27.6	27.1	24.8	27.0	28.2	36.1	41.5	49.3
		Distant	3.3	-	-	-	8.4	10.2	13.5	14.5
		Unknown	54.7	-	-	-	-	58.7	57.0	74.0
C15	Oesophagus	Total	2.5	4.0	2.6	4.8	4.3	7.7	8.5	10.1
		Localized	4.4	3.7	3.8	7.2	6.6	20.1	18.0	25.2
		Regional	0.5	3.3	4.5	5.5	5.2	7.1	10.0	12.5
		Distant	0.0	0.0	0.0	0.0	0.3	0.9	1.2	0.1
		Unknown	-	-	-	-	-	0.0	10.6	5.6
C16	Stomach	Total	12.5	14.0	16.6	16.2	18.2	16.6	18.0	23.9
		Localized	39.2	37.6	37.8	36.2	34.7	52.6	51.2	55.2
		Regional	13.7	15.4	20.6	19.6	22.5	16.2	22.3	22.5
		Distant	1.7	1.1	1.0	0.6	0.5	1.0	1.2	2.7
		Unknown	2.8	4.2	2.8	2.1	4.4	5.3	18.2	32.1
C18	Colon	Total	36.4	41.4	47.2	47.0	48.4	52.2	55.4	60.9
		Localized	68.3	70.4	76.3	78.2	78.1	86.4	87.6	85.7
		Regional	42.4	48.1	57.7	56.8	55.7	66.4	69.1	75.6
		Distant	4.3	6.3	3.9	4.6	4.7	4.6	7.6	9.5
		Unknown	8.1	17.4	17.9	9.6	13.7	24.4	53.5	60.3
C19-21	Rectum, rectosigmoid, anus	Total	32.8	39.2	43.6	45.5	48.0	55.4	58.2	64.1
		Localized	57.2	60.2	65.1	66.4	67.6	80.4	85.1	82.6
		Regional	21.1	31.0	39.8	43.8	45.3	59.9	66.0	73.9
		Distant	3.5	3.9	3.7	2.0	4.8	4.8	10.1	15.2
		Unknown	14.4	-	21.9	-	33.9	28.2	54.6	52.3
C22	Liver	Total	0.0	1.7	1.1	1.6	3.7	4.4	4.6	13.4
		Localized	0.0	4.7	1.1	3.2	5.8	12.0	13.2	24.4
		Regional	-	-	-	-	-	-	-	5.1
		Distant	0.0	0.6	1.0	0.0	0.0	0.8	0.0	2.7
		Unknown	-	-	-	-	-	0.7	1.8	11.2
C23-24	Gallbladder, bile ducts	Total	3.2	8.3	6.3	10.2	8.3	8.5	14.4	14.8
		Localized	8.9	18.2	10.4	17.5	18.1	20.6	36.9	30.3
		Regional	-	15.3	11.4	17.8	14.2	21.2	18.7	19.9
		Distant	0.4	1.2	0.4	0.9	1.4	1.4	2.6	1.2
		Unknown	-	-	-	-	0.0	0.0	6.5	-
C25	Pancreas	Total	1.2	1.1	0.7	1.3	1.7	1.5	3.1	5.1
		Localized	4.3	4.7	1.5	2.9	2.1	6.1	13.8	18.8
		Regional	3.4	2.1	2.4	4.2	9.0	4.0	5.3	10.7
		Distant	0.1	0.2	0.2	0.2	0.6	0.6	1.3	1.4
		Unknown	0.0	0.7	1.7	3.2	1.1	1.5	2.4	5.4
C33-34	Lung, trachea	Total	7.9	7.2	7.4	7.8	7.2	8.3	9.0	11.7
		Localized	19.2	16.3	18.1	17.8	15.5	27.3	38.8	41.4
		Regional	10.5	10.7	8.6	9.9	10.8	9.0	10.8	14.1
		Distant	0.6	0.7	0.6	0.5	0.6	0.7	0.8	1.5
		Unknown	1.9	2.9	3.8	1.6	4.9	6.2	8.7	13.2
C43	Melanoma of the skin	Total	57.2	67.5	69.9	73.0	78.7	78.4	77.5	77.2
		Localized	68.1	76.3	78.3	82.0	86.2	85.5	88.9	85.4
		Regional	31.9	28.8	35.9	26.2	40.4	27.8	45.2	43.1
		Distant	9.0	12.5	3.5	2.8	11.5	10.9	9.1	6.6
		Unknown	-	-	59.8	45.3	46.5	73.4	75.0	79.0
C61	Prostate	Total	51.1	52.8	56.9	56.7	61.4	70.3	80.4	88.5
		Localized	64.6	66.2	72.4	70.9	73.4	81.5	95.8	97.2
		Regional	38.2	39.8	36.8	47.4	64.8	74.9	77.8	87.1
		Distant	17.1	18.9	19.6	23.1	23.7	23.4	26.5	32.8
		Unknown	49.0	35.1	40.1	45.5	56.4	76.4	81.9	89.6
C62	Testis	Total	66.4	75.9	92.2	94.3	96.1	95.5	96.7	97.3
		Localized	86.2	90.7	97.1	99.7	99.0	99.1	98.8	99.7
		Regional	75.8	78.2	95.3	95.2	97.8	97.5	95.8	97.8
		Distant	20.8	32.4	74.2	72.7	77.9	78.2	86.0	84.5
		Unknown	-	-	-	-	-	90.0	97.9	96.0
C64	Kidney except renal pelvis	Total	34.0	37.9	36.3	41.3	47.0	46.6	58.1	65.0
		Localized	62.7	71.9	66.3	69.9	70.9	75.0	84.1	85.9
		Regional	41.2	40.6	46.1	47.4	53.9	50.9	56.3	55.3
		Distant	4.5	5.6	3.5	5.9	6.0	3.4	8.1	10.5
		Unknown	-	-	-	-	22.8	39.0	63.8	76.0
C66-68	Bladder, ureter, urethra	Total	56.8	64.0	67.1	68.2	71.9	71.8	72.3	74.5
		Localized	66.5	73.5	75.4	74.7	77.6	80.9	84.4	83.5
		Regional	13.2	23.3	26.9	25.3	27.8	22.1	28.0	28.7
		Distant	4.0	4.7	0.2	5.2	5.3	5.2	3.8	4.5
		Unknown	48.8	25.3	31.6	56.4	40.9	70.4	69.4	76.2
C70-72	Central nervous system	Non-malignant	52.0	55.1	69.3	71.5	81.0	91.4	93.2	94.0
		Malignant	14.7	22.0	22.4	27.3	28.5	27.5	26.0	31.0
C73	Thyroid gland	Total	75.0	75.5	81.7	74.0	80.1	78.3	88.2	81.0
		Localized	85.6	92.2	96.2	91.2	97.3	99.1	97.8	98.2
		Regional	78.7	77.4	90.1	84.1	83.9	82.8	91.5	85.4
		Distant	-	-	-	-	-	-	-	-
		Unknown	-	-	-	-	-	-	-	-
C81	Hodgkin lymphoma	Total	48.5	55.1	62.5	74.7	83.8	86.9	89.4	88.9
C82-85, C96	Non-Hodgkin lymphoma	Total	32.2	38.0	44.2	45.1	49.6	52.0	58.4	68.3
C91-95	Leukaemia	Total	14.9	22.4	25.2	30.0	41.6	44.3	54.2	59.6

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

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Table 18b Five-year relative survival (period approach) by primary site*, stage and period of follow up, 1971 -2010**FEMALES**

ICD10	Site	Stage	Relative survival (%)							
			1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-10
C00-96	All sites	Total	46.7	49.5	52.5	53.7	57.9	60.8	64.6	68.6
C00-14	Mouth, pharynx	Total	55.4	59.9	58.8	56.1	68.9	60.3	63.7	70.2
		Localized	72.2	71.6	80.0	68.7	81.9	81.9	82.8	84.4
		Regional	35.5	42.0	31.1	38.6	48.6	32.4	50.1	53.4
		Distant	-	-	-	-	-	-	-	-
C15	Oesophagus	Unknown	-	-	-	-	-	63.3	59.4	80.8
		Total	4.3	7.2	9.2	8.4	8.6	8.2	9.0	10.3
		Localized	5.7	10.8	10.7	11.8	12.6	16.2	21.1	20.0
		Regional	-	-	-	-	-	-	4.7	12.1
C16	Stomach	Distant	-	-	-	-	-	0.0	0.0	1.3
		Unknown	-	-	-	-	-	10.9	6.9	6.3
		Total	10.6	14.0	17.7	20.6	20.7	21.8	21.7	24.0
		Localized	31.1	36.0	44.3	39.6	39.0	56.8	57.4	57.2
C18	Colon	Regional	13.7	17.3	18.7	22.8	25.9	27.8	24.9	23.7
		Distant	1.8	2.1	0.5	1.0	0.8	1.2	3.5	3.1
		Unknown	5.0	3.8	3.9	7.1	13.3	7.3	15.7	30.6
		Total	39.3	40.4	47.5	49.0	53.1	56.6	57.2	62.7
C19-21	Rectum, rectosigmoid, anus	Localized	69.1	69.9	77.3	78.6	83.2	88.7	89.3	89.9
		Regional	41.9	49.3	57.2	58.4	60.1	67.7	70.2	74.0
		Distant	5.9	3.3	4.0	4.3	5.4	7.5	8.2	12.3
		Unknown	30.1	13.7	16.0	14.1	17.3	37.3	52.8	46.5
C22	Liver	Total	37.2	44.4	48.1	49.2	55.4	58.6	63.8	66.4
		Localized	60.3	70.8	70.5	69.9	75.5	82.2	90.3	89.6
		Regional	25.0	32.3	42.0	47.1	53.2	62.0	68.4	71.8
		Distant	3.6	5.5	5.7	5.2	4.5	6.6	10.0	13.3
C23-24	Gallbladder, bile ducts	Unknown	-	-	20.1	18.6	30.8	47.2	54.4	63.9
		Total	3.1	1.1	1.4	5.5	5.0	6.8	11.6	13.9
		Localized	7.6	2.8	3.8	9.8	7.4	17.9	24.3	20.6
		Regional	-	-	-	-	-	-	-	-
C25	Pancreas	Distant	0.3	0.0	0.0	1.1	-	-	-	0.7
		Unknown	-	-	-	-	-	3.3	7.9	16.4
		Total	4.9	7.1	8.3	8.5	7.5	9.4	9.8	14.2
		Localized	16.1	24.0	24.0	15.8	19.1	27.7	24.3	28.5
C33-34	Lung, trachea	Regional	-	12.3	6.1	21.2	10.3	17.0	27.2	22.1
		Distant	0.2	0.0	0.3	0.0	0.0	5.3	0.2	0.0
		Unknown	-	-	-	2.4	5.6	2.3	5.9	11.0
		Total	1.0	0.9	1.4	1.4	2.0	2.4	2.9	3.8
C43	Melanoma of the skin	Localized	4.1	4.0	2.0	3.1	6.0	11.8	11.9	17.9
		Regional	1.5	1.5	5.1	4.4	5.2	5.5	5.1	4.5
		Distant	0.2	0.2	0.6	0.4	0.3	0.4	0.8	1.0
		Unknown	0.0	0.0	0.0	0.9	0.7	2.9	2.9	6.0
C50	Breast**	Total	10.6	10.6	9.2	7.5	10.4	11.8	12.9	16.4
		Localized	27.2	30.0	25.6	19.1	24.7	40.1	50.3	50.5
		Regional	13.4	13.6	10.7	8.3	12.2	12.7	14.0	18.7
		Distant	1.1	0.7	0.9	0.4	1.2	1.4	1.8	2.1
C53	Cervix uteri	Unknown	8.4	8.3	7.4	7.7	5.7	7.0	16.2	20.1
		Total	77.9	83.9	84.2	86.8	90.2	88.5	88.1	89.5
		Localized	87.6	88.9	89.5	90.8	94.0	93.7	94.3	93.9
		Regional	36.3	-	45.2	47.3	45.7	47.8	57.6	53.3
C54	Corpus uteri	Distant	16.9	22.8	11.9	4.9	20.0	14.9	15.4	27.2
		Unknown	-	-	61.0	74.1	71.4	86.9	87.3	89.5
		Total	66.5	69.1	73.5	74.3	76.1	81.3	85.9	88.7
		Localized	79.7	76.0	73.7	75.7	80.6	92.6	98.8	96.1
C56	Ovary	I	84.8	84.5	86.6	88.9	91.8	95.6	97.9	98.8
		II	55.8	59.3	64.9	70.7	74.3	78.8	84.5	88.0
		III	43.5	49.1	49.9	51.8	48.6	59.3	65.4	71.6
		IV	12.8	13.7	15.2	13.5	21.6	18.0	16.9	21.1
C64	Kidney except renal pelvis	Unknown	77.5	78.5	85.2	65.2	67.5	85.0	84.5	71.4
		Total	70.0	70.8	69.0	67.1	69.6	71.4	75.8	77.5
		Localized	88.0	90.0	86.6	84.8	85.2	89.7	93.3	93.6
		II	64.2	64.0	61.1	58.9	61.1	54.7	67.4	70.4
C66-68	Bladder, ureter, urethra	III	31.8	28.5	34.4	31.0	30.0	39.0	39.0	52.4
		IV	9.3	10.2	5.2	13.0	23.8	11.5	15.0	19.9
		Unknown	-	-	-	-	-	-	55.7	66.6
		Total	75.4	77.2	76.5	75.7	77.9	81.0	83.0	84.4
C70-72	Central nervous system	Localized	82.9	85.2	87.0	86.7	86.4	90.8	93.9	93.3
		Regional	37.7	60.8	60.4	59.0	70.1	74.1	75.3	75.6
		Distant	24.0	20.3	22.9	23.7	32.6	38.5	35.5	42.5
		Unknown	-	-	41.4	-	-	50.9	81.3	85.6
C73	Thyroid gland	Total	38.8	38.8	38.0	36.8	40.0	42.2	45.7	43.8
		Localized	70.4	76.8	81.9	80.3	83.0	90.0	92.4	85.1
		Regional	38.0	39.9	48.2	46.1	53.3	53.3	63.8	72.9
		Distant	14.3	17.2	17.9	17.6	20.6	24.9	28.6	29.1
C81	Hodgkin lymphoma	Unknown	-	-	40.6	22.1	14.8	39.1	60.2	46.5
		Total	42.3	38.9	43.1	45.8	52.1	51.6	57.9	71.2
		Localized	65.6	69.1	70.1	74.8	77.3	80.7	85.3	87.3
		Regional	46.7	39.2	49.5	49.8	52.3	52.0	43.2	52.2
C82-85, C96	Non-Hodgkin lymphoma	Distant	4.5	4.5	3.3	7.1	6.1	2.4	9.7	11.1
		Unknown	-	-	-	13.6	18.5	43.4	58.3	74.6
		Total	48.5	49.7	55.7	60.8	62.7	60.5	64.9	67.3
		Localized	67.1	64.0	68.1	69.8	71.4	76.7	83.1	80.6
C91-95	Leukaemia	Regional	15.7	13.9	15.7	13.6	22.1	27.0	22.4	21.0
		Distant	3.7	3.8	2.9	5.4	5.1	4.3	1.8	7.7
		Unknown	29.4	-	15.8	-	25.4	51.7	60.4	65.2
		Total	64.8	71.8	83.5	83.3	83.3	92.1	94.1	95.5
C97	Thyroid gland	Non-malignant	15.8	18.8	21.9	29.2	33.9	28.1	32.6	33.4
		Malignant	73.6	84.4	87.2	86.7	90.9	88.3	91.1	94.9
		Localized	89.8	95.6	96.5	94.1	98.7	99.7	101.8	101.1
		Regional	73.7	83.0	81.5	83.9	86.8	86.8	85.5	93.1
C98	Hodgkin lymphoma	Distant	9.8	13.4	14.2	11.6	26.2	32.7	31.4	-
		Unknown	-	-	-	-	-	68.8	87.3	91.7
		Total	49.6	55.9	63.2	73.2	81.9	87.9	87.1	88.9
		Localized	37.1	43.1	47.1	51.5	55.8	54.9	60.4	71.4
C99	Leukaemia	Total	18.0	20.1	29.3	27.6	40.0	50.0	54.0	62.1

See footnote in Table 18a

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

**The stage classification on the basis of TNM was revised between the 2009 and 2010 CIN issue and results therefore differ especially for stage I. A more strict treatment of NX and MX has been introduced with the result of a higher proportion of unknown stage but higher validity of stages I-IV.

Table 18 describes the stage-specific relative survival, 5 years after diagnosis for selected cancers in consecutive 5-year periods of follow-up 1971 to 2010. While the stage-specific count of cases by period of diagnosis in Tables 15a and b are not equivalent to the size of patient groups used in the survival calculations, the underlying numbers do provide a reasonable indication of the absolute number of patients involved in the survival analyses at different time periods and their

relative distribution. In general, caution is required in interpreting cancer-specific incidence and survival according to stage, particularly given the time-varying proportion of staging recorded as unknown. A visual description of survival trends in colon, breast and prostate cancer by stage was provided in the Special Issue included in Cancer in Norway 2007

Table 19 1-, 5-, 10-, and 15-year relative survival proportions (95% CI) by cancer site* and sex, period approach 2008 - 2010

ICD10	Site	Sex	1-year		5-year		10-year		15-year	
C00-14	Mouth, pharynx	M	85.4	(82.6, 87.8)	62.0	(57.9, 66.0)	52.2	(47.3, 57.1)	43.8	(38.3, 49.6)
		F	85.5	(81.8, 88.6)	72.0	(66.7, 76.9)	65.2	(58.1, 72.0)	63.1	(54.2, 72.0)
C15	Oesophagus	M	41.6	(37.1, 46.1)	11.4	(8.2, 15.2)	10.8	(7.0, 15.6)	5.0	(1.6, 11.9)
		F	34.4	(27.5, 41.4)	9.2	(5.0, 15.0)	9.8	(4.9, 17.1)	4.5	(0.8, 15.2)
C16	Stomach	M	50.0	(46.5, 53.5)	24.5	(21.1, 28.0)	22.9	(19.0, 27.2)	21.6	(17.0, 26.9)
		F	44.1	(40.0, 48.2)	24.0	(20.3, 27.9)	23.1	(18.7, 27.9)	21.8	(16.8, 27.7)
C18	Colon	M	77.8	(76.2, 79.3)	60.6	(58.4, 62.8)	55.5	(52.5, 58.4)	55.0	(51.0, 59.1)
		F	77.3	(75.8, 78.7)	62.1	(60.0, 64.1)	56.9	(54.3, 59.6)	54.1	(50.8, 57.5)
C19-21	Rectum, rectosigmoid, anus	M	85.0	(83.3, 86.7)	65.1	(62.3, 67.8)	57.1	(53.5, 60.7)	56.0	(51.3, 60.7)
		F	86.0	(84.1, 87.8)	67.5	(64.6, 70.4)	61.4	(57.6, 65.1)	60.0	(55.2, 64.8)
C22	Liver	M	33.2	(27.5, 39.0)	12.5	(8.3, 17.6)	7.3	(3.1, 14.3)	7.0	(2.5, 15.4)
		F	33.4	(26.2, 40.8)	14.8	(8.9, 22.2)	10.9	(5.5, 18.8)	14.3	(7.2, 24.7)
C23-24	Gallbladder, bile ducts	M	45.3	(37.8, 52.5)	15.7	(10.3, 22.5)	14.4	(8.4, 22.6)	12.9	(6.2, 23.2)
		F	42.4	(35.7, 48.9)	17.4	(12.2, 23.5)	16.3	(9.9, 24.5)	19.6	(11.3, 30.7)
C25	Pancreas	M	21.2	(18.7, 23.8)	5.0	(3.6, 6.6)	3.9	(2.4, 5.9)	3.9	(2.0, 6.9)
		F	19.2	(16.9, 21.7)	4.4	(3.1, 6.0)	3.9	(2.5, 5.9)	3.8	(2.0, 6.5)
C33-34	Lung, trachea	M	34.7	(33.3, 36.2)	11.7	(10.7, 12.8)	9.1	(8.0, 10.3)	7.6	(6.3, 9.0)
		F	42.2	(40.5, 43.9)	16.8	(15.4, 18.3)	12.6	(11.1, 14.2)	9.9	(8.2, 11.8)
C43	Melanoma of the skin	M	92.9	(91.5, 94.2)	76.9	(74.3, 79.4)	71.5	(68.1, 74.8)	71.2	(67.2, 75.2)
		F	96.5	(95.4, 97.4)	89.4	(87.3, 91.3)	84.6	(81.7, 87.3)	82.6	(79.2, 85.9)
C50	Breast	F	97.1	(96.6, 97.6)	89.3	(88.3, 90.2)	82.6	(81.2, 83.9)	77.6	(75.9, 79.3)
C53	Cervix uteri	F	90.0	(87.7, 91.9)	76.6	(73.4, 79.6)	74.9	(71.2, 78.3)	74.7	(70.6, 78.6)
C54	Corpus uteri	F	92.8	(91.5, 94.0)	85.2	(83.0, 87.2)	81.5	(78.5, 84.4)	80.6	(76.7, 84.4)
C56	Ovary	F	76.6	(74.0, 78.9)	44.6	(41.6, 47.6)	36.4	(33.2, 39.6)	35.5	(32.1, 39.1)
C61	Prostate	M	98.0	(97.6, 98.4)	89.6	(88.6, 90.6)	79.6	(77.8, 81.3)	69.2	(66.2, 72.3)
C62	Testis	M	98.9	(97.9, 99.5)	97.5	(96.0, 98.6)	96.2	(94.2, 97.8)	94.6	(92.1, 96.7)
C64	Kidney except renal pelvis	M	82.2	(79.8, 84.5)	66.7	(63.1, 70.1)	58.9	(54.2, 63.5)	56.4	(50.1, 62.8)
		F	83.7	(80.5, 86.5)	71.7	(67.2, 75.9)	65.6	(59.3, 71.7)	62.4	(54.2, 70.6)
C66-68	Bladder, ureter, urethra	M	87.4	(85.8, 88.8)	73.1	(70.7, 75.5)	68.1	(64.8, 71.5)	65.5	(61.0, 70.0)
		F	81.9	(79.1, 84.4)	68.1	(64.1, 72.0)	68.3	(63.0, 73.6)	65.1	(58.1, 72.2)
C70-72	Central nervous system	M	75.2	(72.7, 77.5)	61.0	(57.9, 63.9)	57.5	(53.9, 60.9)	57.1	(52.8, 61.3)
		F	85.0	(83.1, 86.7)	77.0	(74.5, 79.3)	77.4	(74.4, 80.3)	77.5	(73.6, 81.3)
C73	Thyroid gland	M	89.2	(83.4, 93.2)	82.0	(74.4, 88.2)	81.3	(72.1, 89.2)	78.2	(66.5, 88.8)
		F	95.8	(93.4, 97.4)	94.9	(91.4, 97.6)	94.8	(90.1, 98.7)	96.1	(90.1, 101.3)
C81	Hodgkin lymphoma	M	91.4	(86.5, 94.7)	87.9	(81.9, 92.4)	87.0	(80.1, 92.4)	89.1	(81.6, 95.1)
		F	92.4	(86.0, 96.1)	89.3	(81.8, 94.6)	91.3	(82.5, 97.7)	88.8	(78.5, 96.7)
C82-85, C96	Non-Hodgkin lymphoma	M	79.3	(76.9, 81.5)	68.6	(65.4, 71.7)	60.9	(56.7, 65.0)	57.7	(52.4, 63.1)
		F	82.0	(79.4, 84.3)	73.5	(70.1, 76.7)	69.2	(64.7, 73.7)	67.0	(61.1, 72.9)
C91-95	Leukaemia	M	78.0	(75.5, 80.2)	62.9	(59.6, 66.2)	56.8	(52.2, 61.3)	58.2	(52.3, 64.2)
		F	76.7	(74.0, 79.2)	62.6	(59.0, 66.1)	56.3	(51.5, 61.0)	55.0	(48.9, 61.2)

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

Figure 9A: All sites (ICD10 C00–96, D32–33, D35.2–35.4, D42–43, D44.3–44.5, D46, D47)

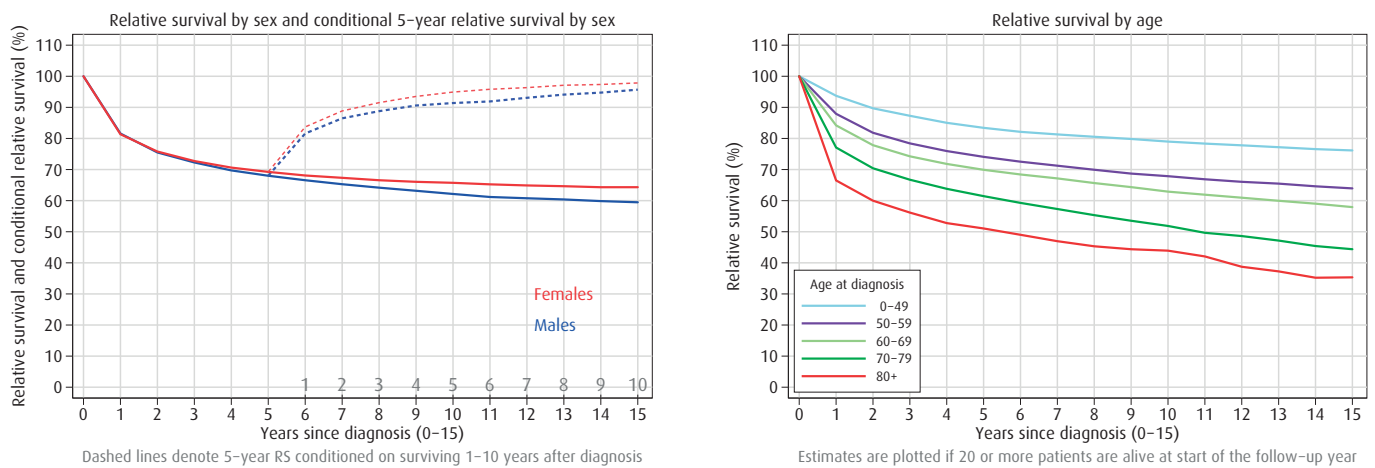


Figure 9B: Mouth, pharynx (ICD-10 C00–14)

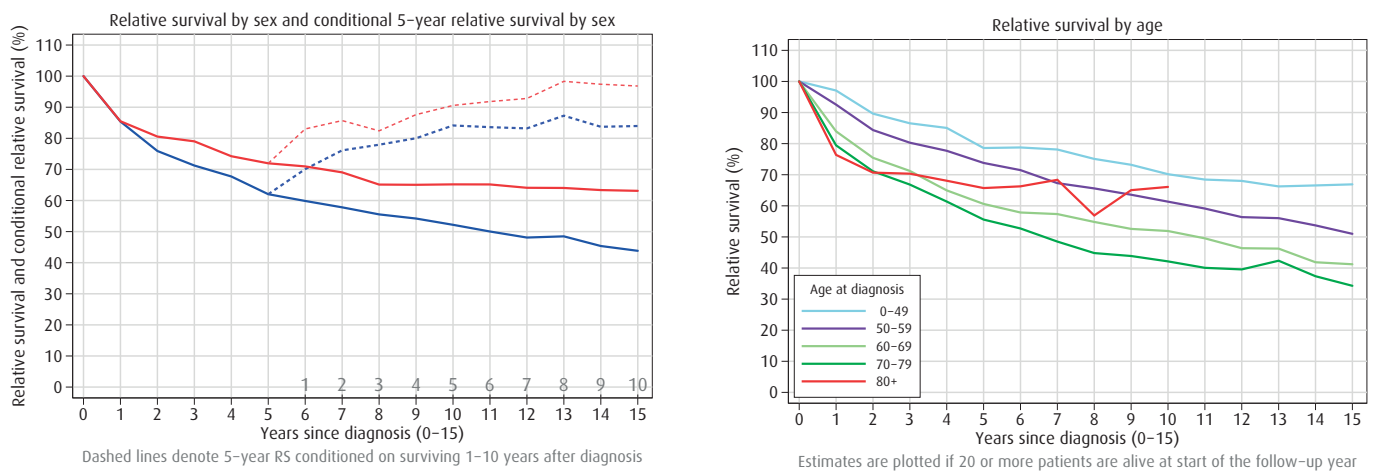
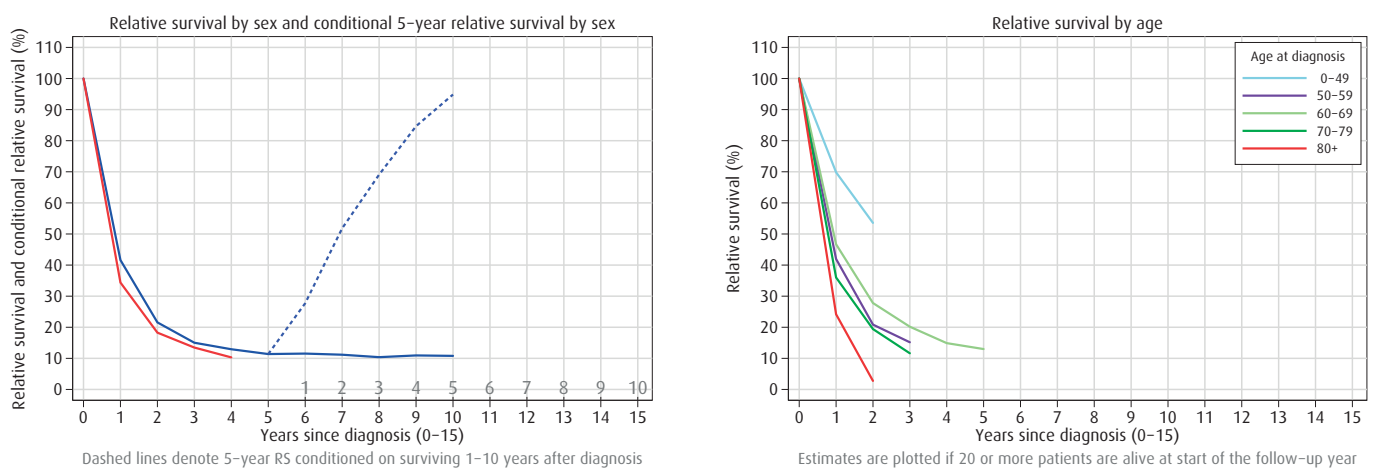


Figure 9C: Oesophagus (ICD-10 C15)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

Figure 9D: Stomach (ICD-10 C16)

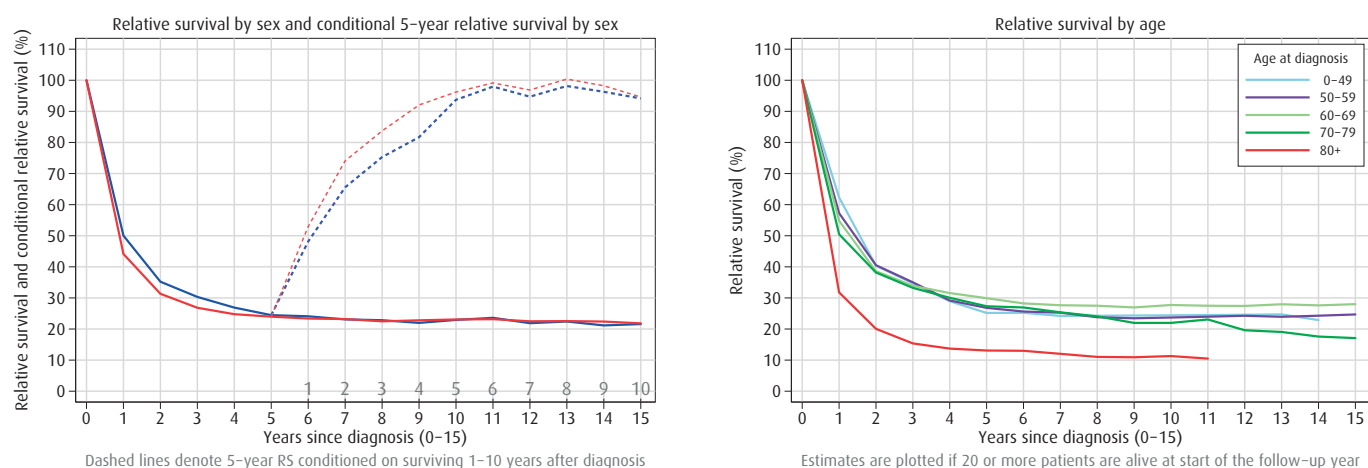


Figure 9E: Colon (ICD-10 C18)

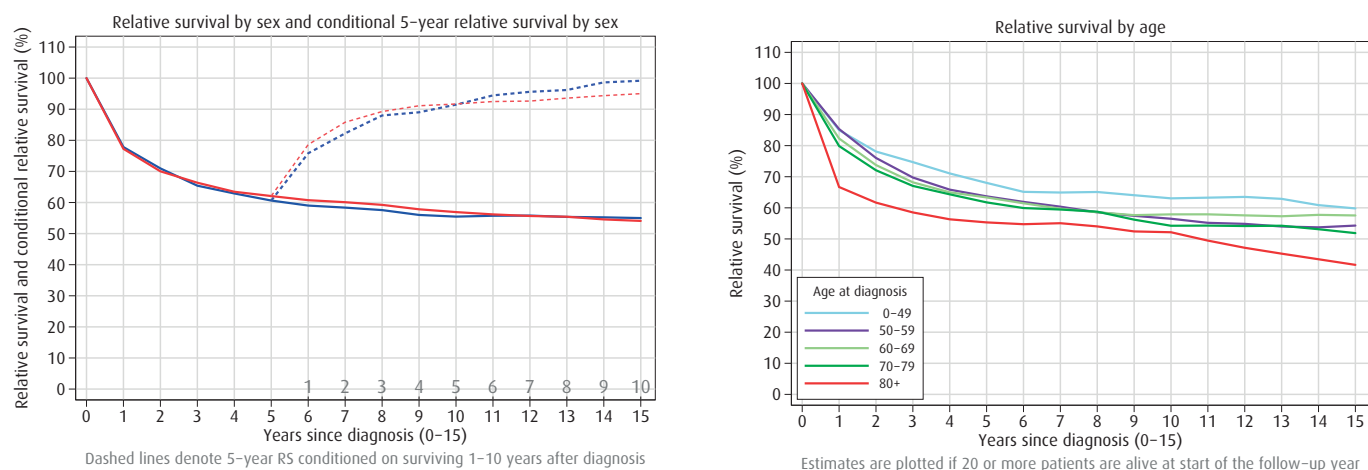
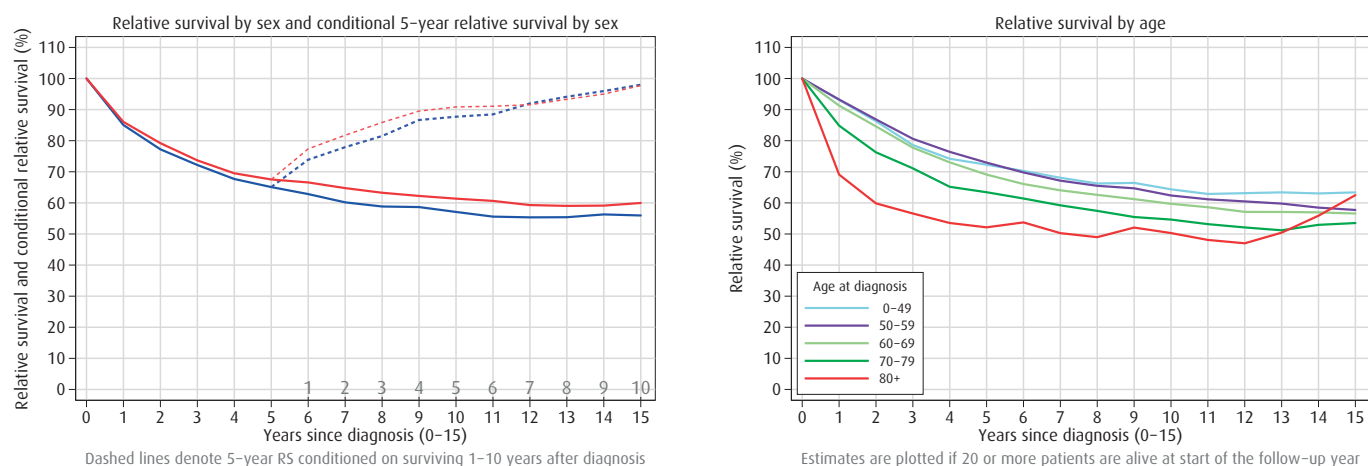


Figure 9F: Rectum, rectosigmoid, anus (ICD-10 C19–21)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

Figure 9G: Liver (ICD-10 C22)

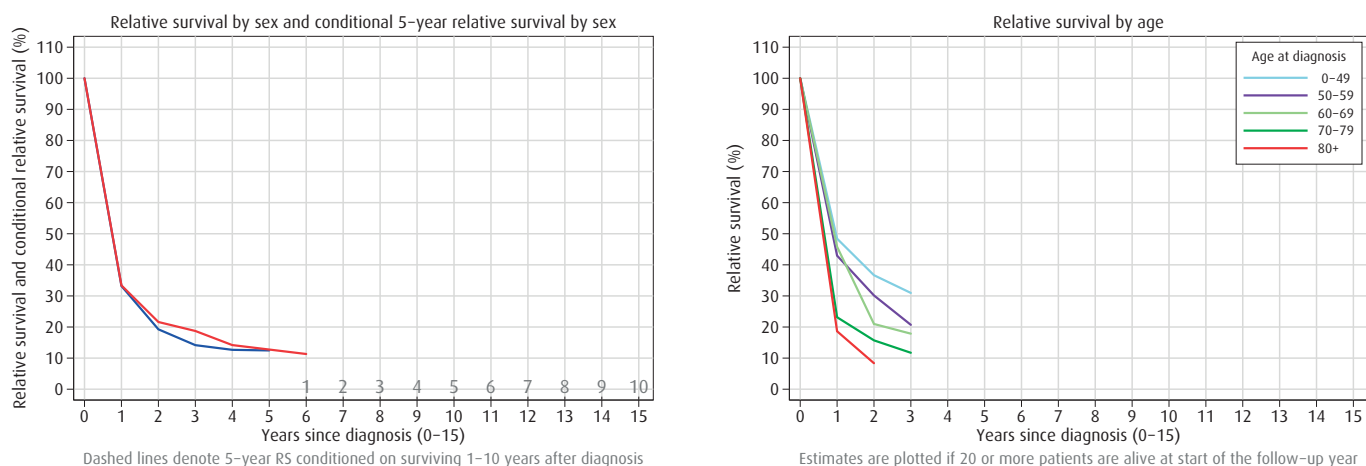


Figure 9H: Gallbladder, bile ducts (ICD-10 C23–24)

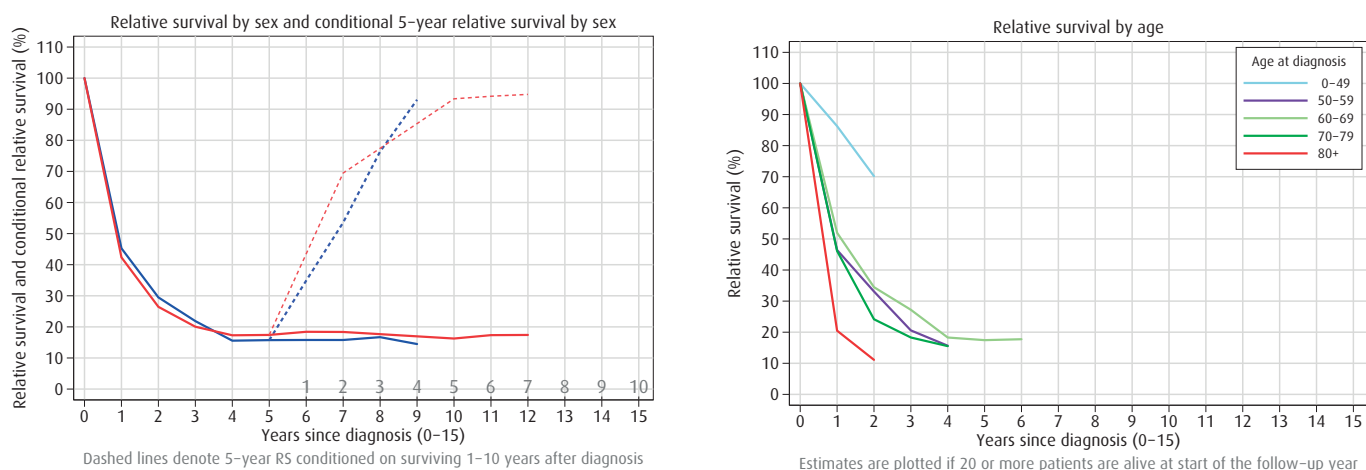
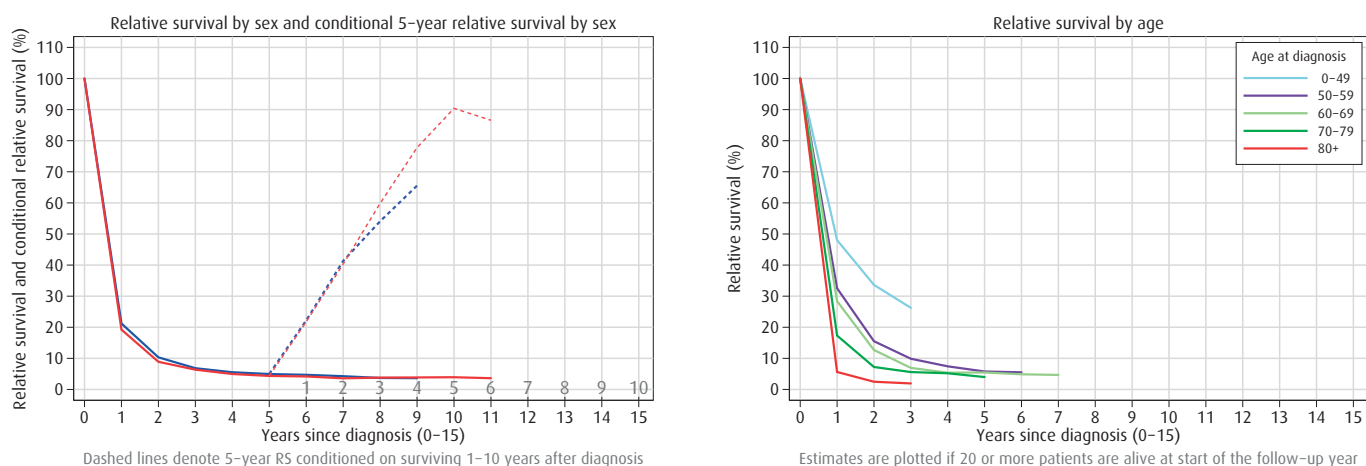


Figure 9I: Pancreas (ICD-10 C25)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

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

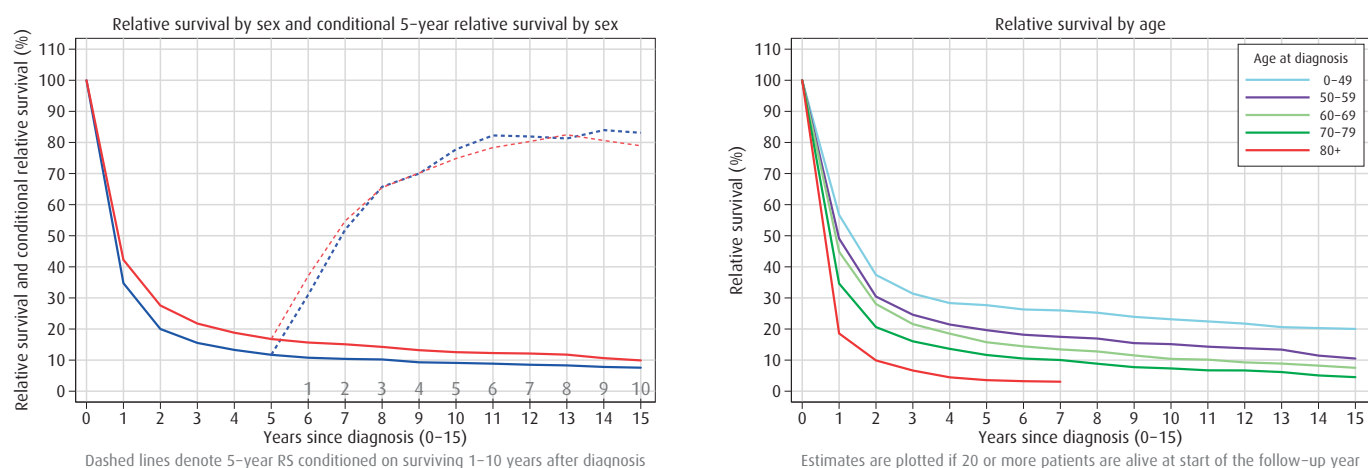


Figure 9K: Melanoma of the skin (ICD-10 C43)

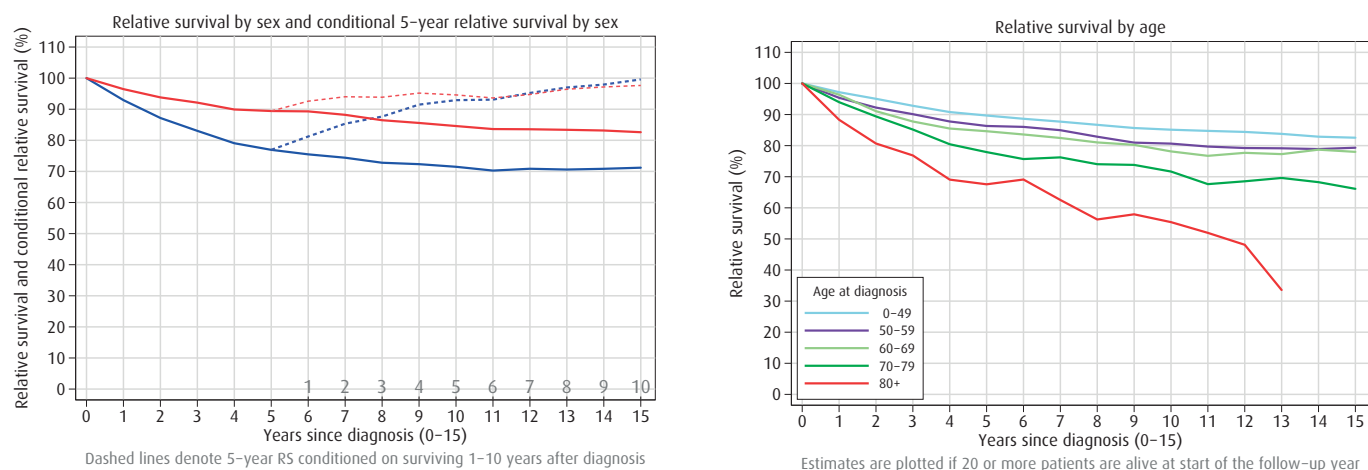
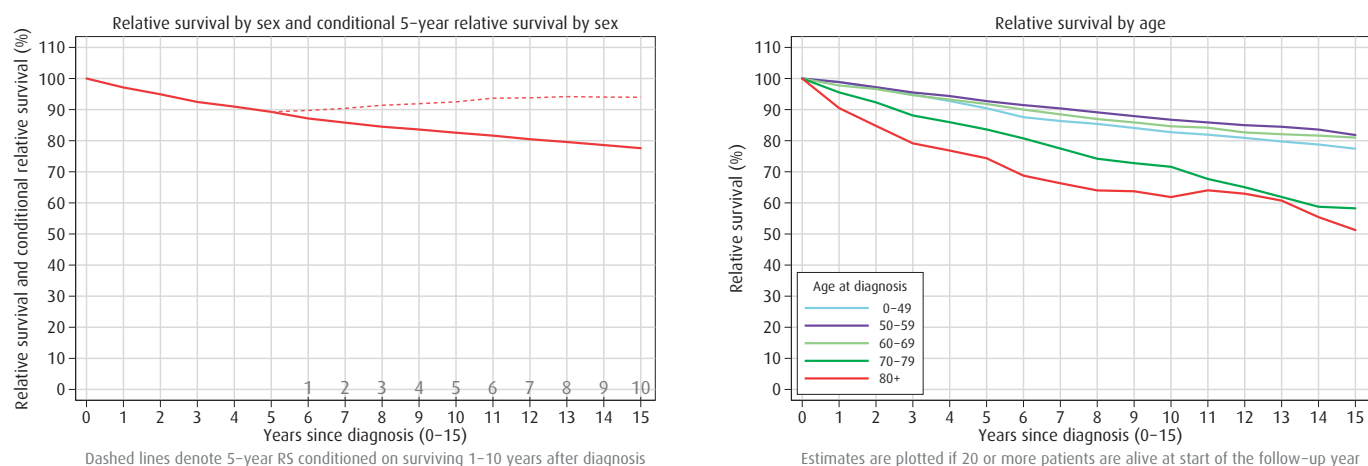


Figure 9L: Breast (ICD-10 C50)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

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

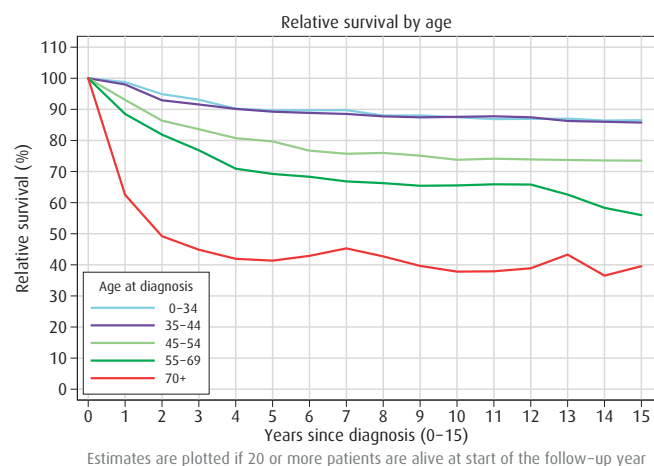
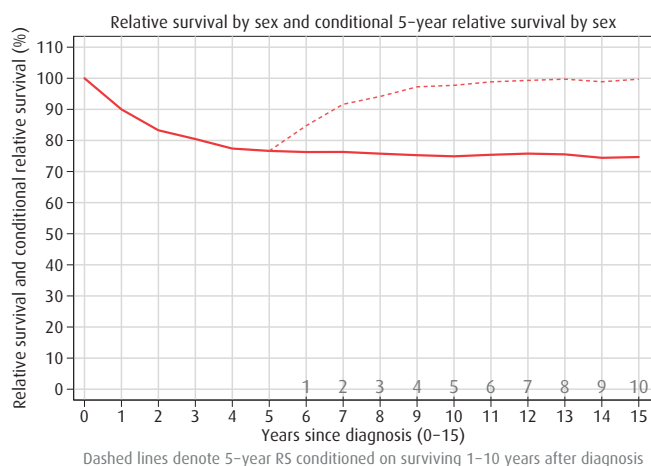


Figure 9N: Corpus uteri (ICD-10 C54)

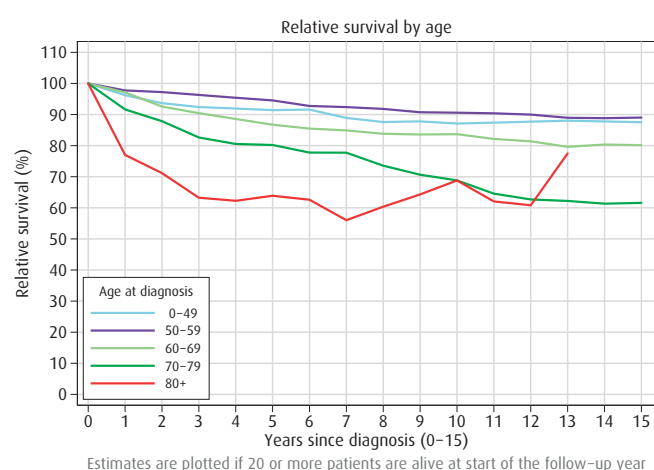
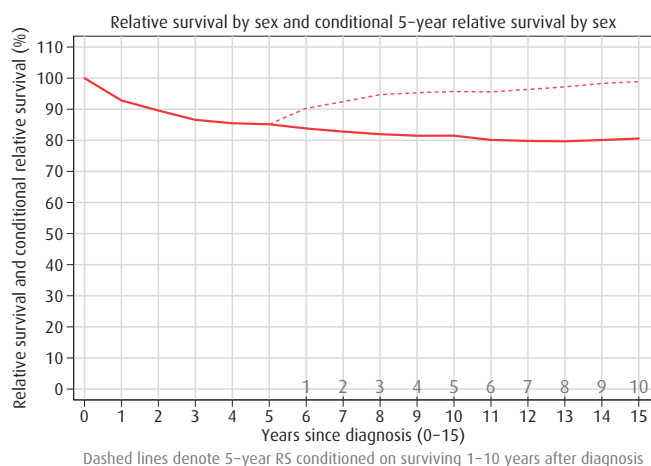
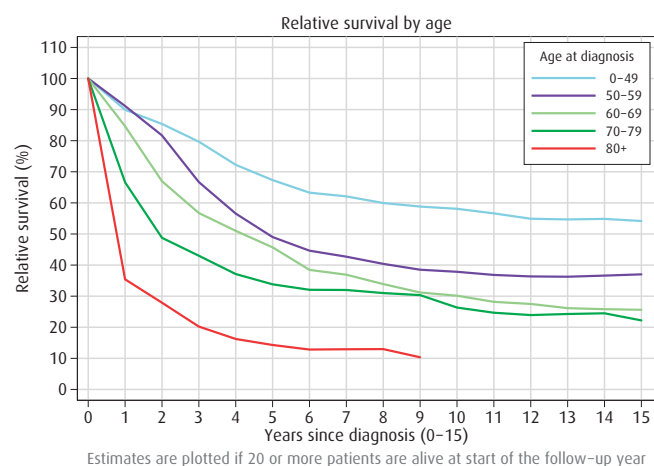
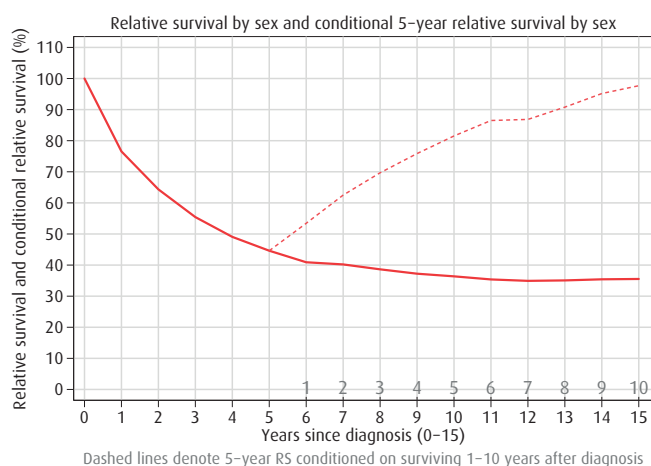


Figure 9O: Ovary (ICD-10 C56)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

Figure 9P: Prostate (ICD-10 C61)

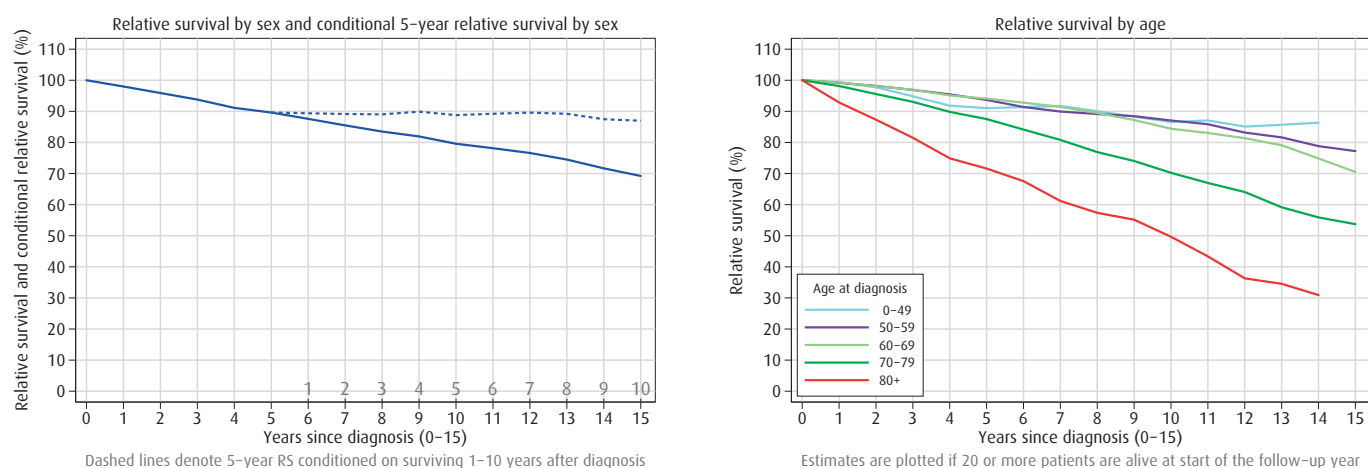


Figure 9Q: Testis (ICD-10 C62)

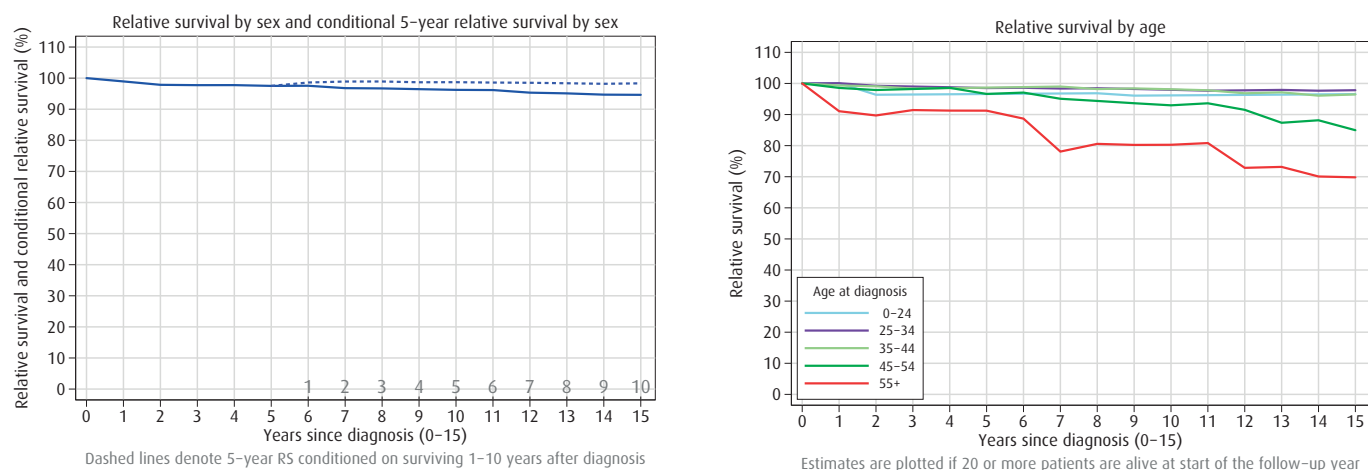
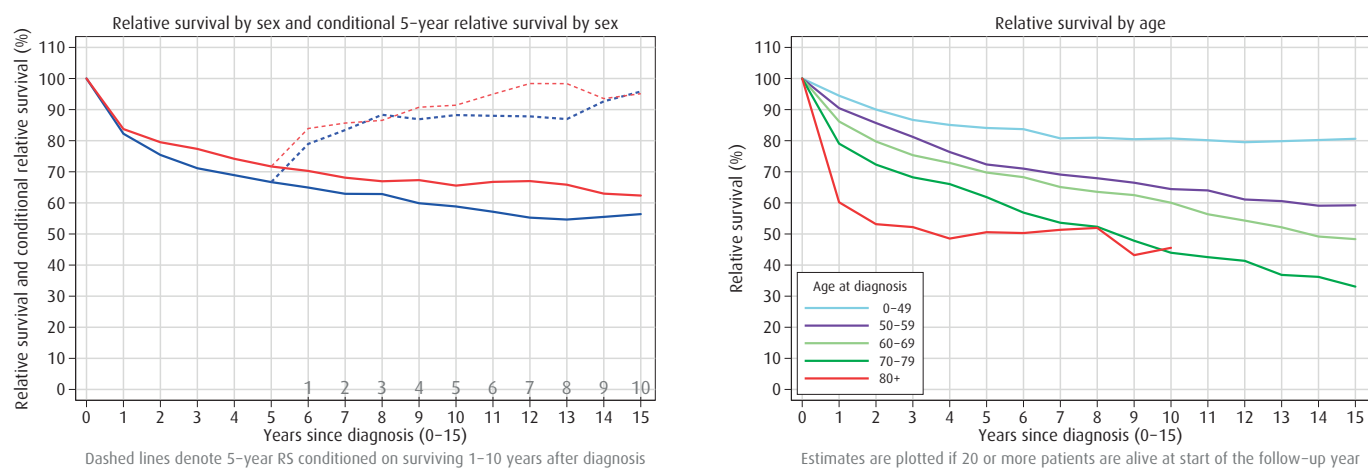


Figure 9R: Kidney excluding renal pelvis (ICD-10 C64)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

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

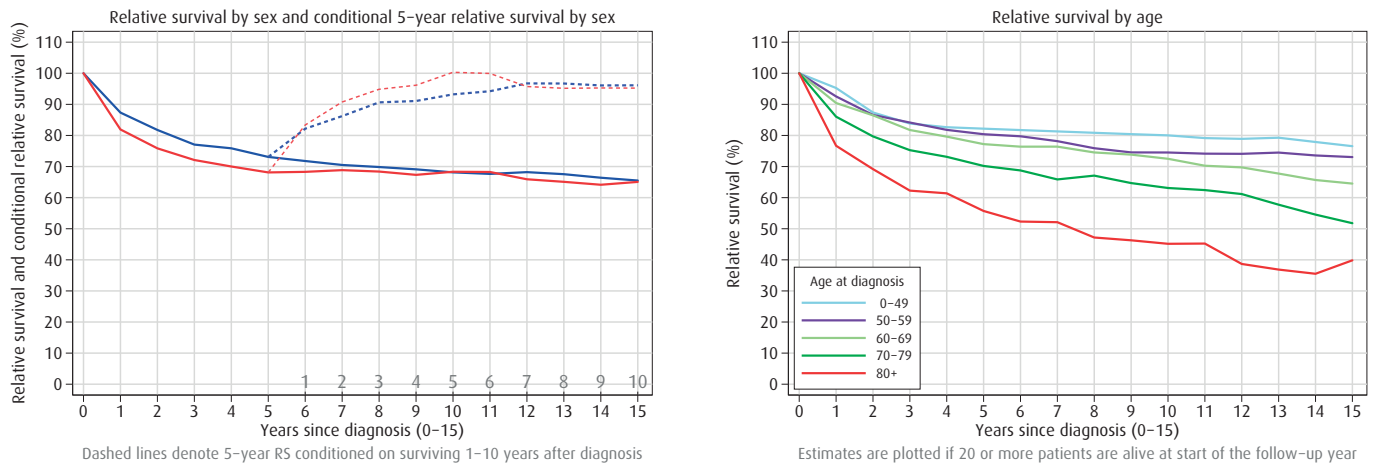


Figure 9T: Central nervous system (ICD-10 C70–72, D32–33, D35.2–35.4, D42–43, D44.3–44.5)

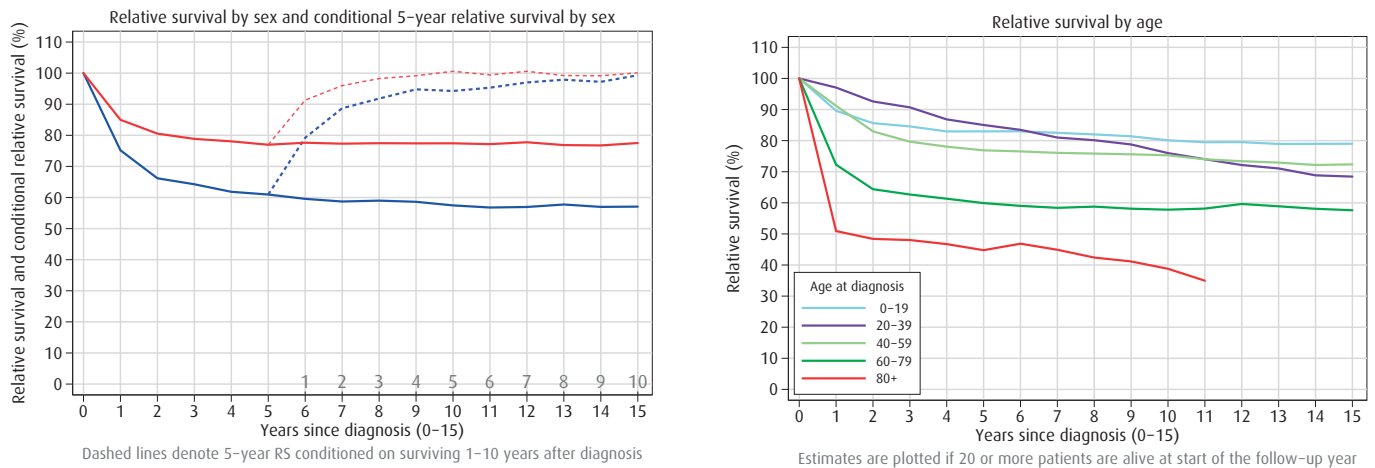
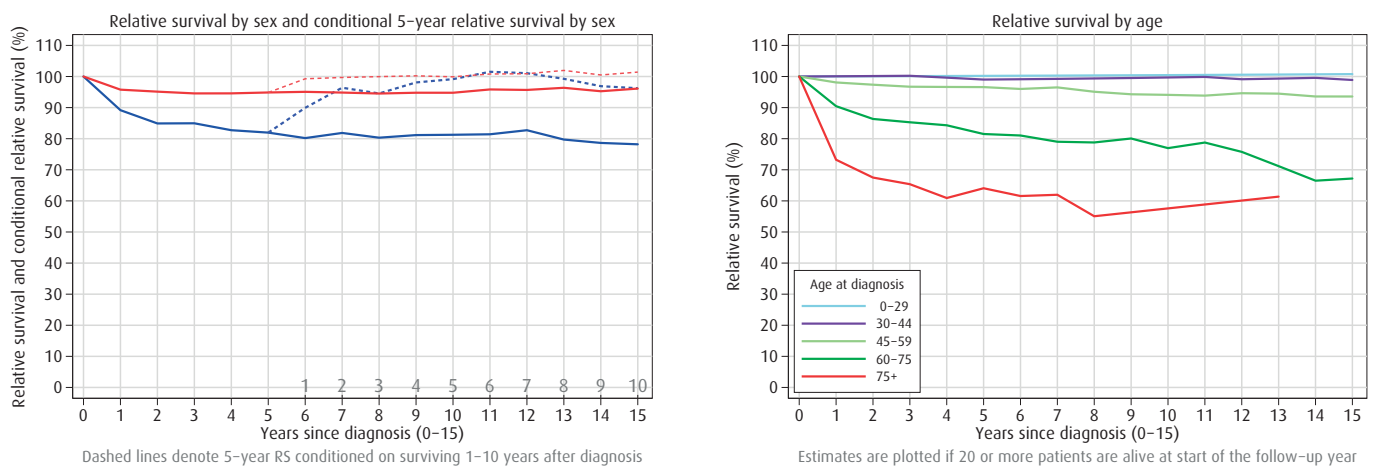


Figure 9U: Thyroid gland (ICD-10 C73)



Relative survival (RS) up to 15 years after diagnosis by sex and age (2008–10)

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

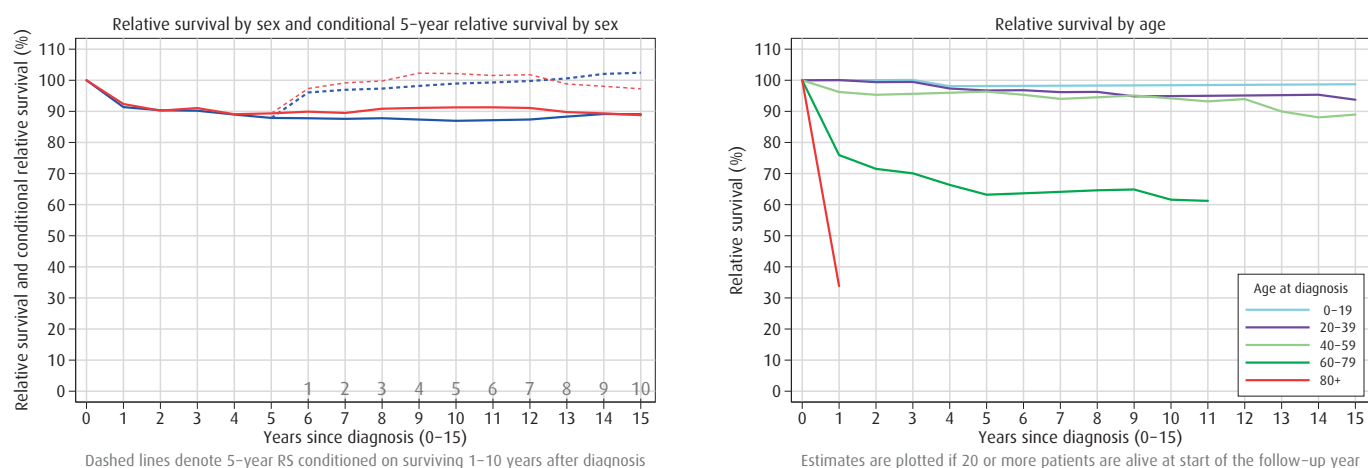


Figure 9W: Non-Hodgkin lymphoma (ICD-10 C82–85, C96)

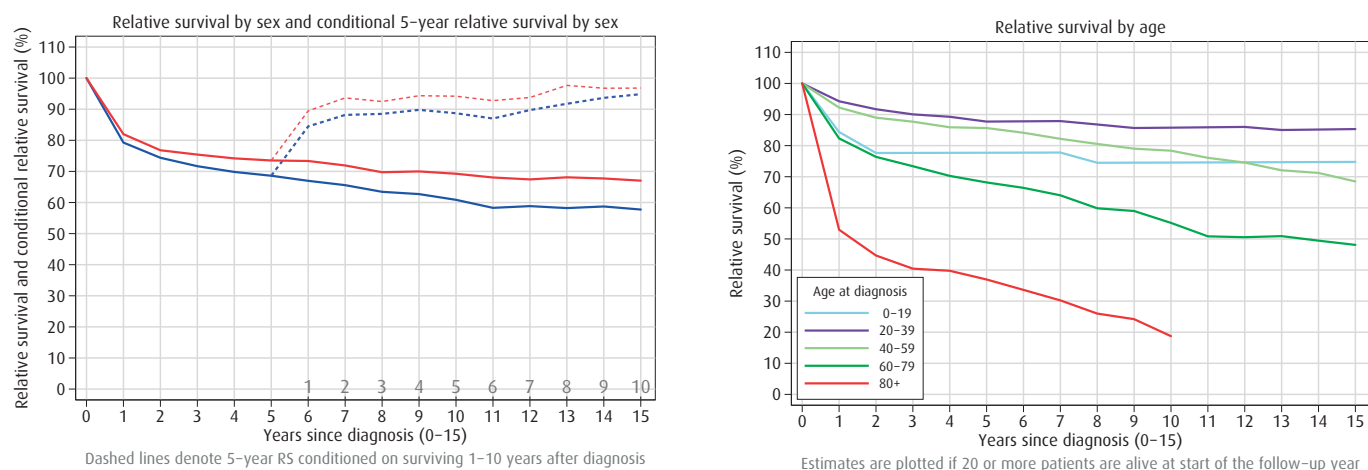
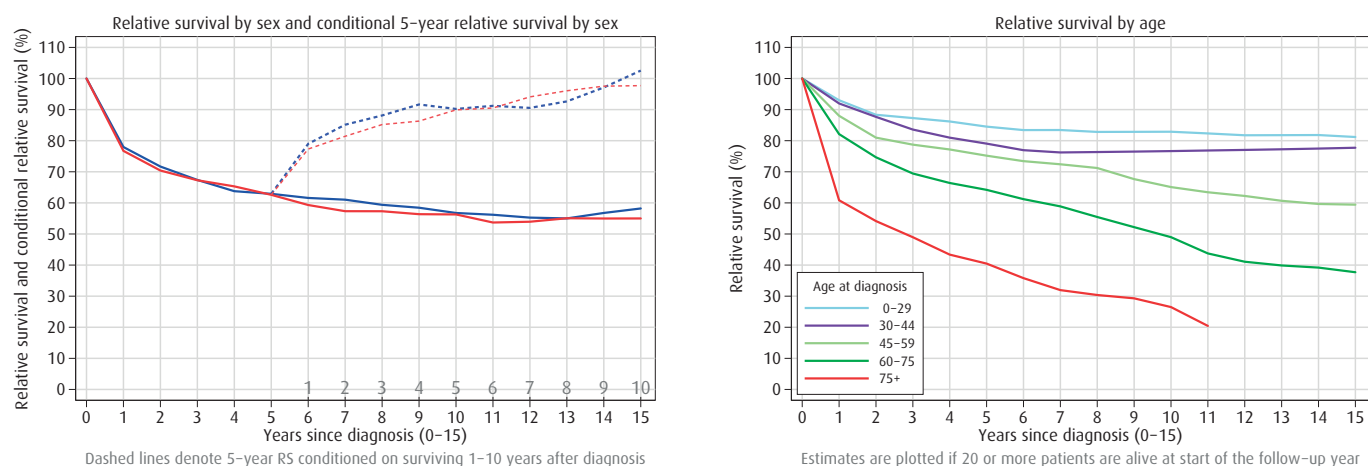


Figure 9X: Leukaemia (ICD-10 C91–95, D45–47)



Prevalence

As of 31 December 2010, more than 207 000 persons were alive and previously diagnosed with cancer in Norway. The cancer prevalence in Table 20 provides the numbers of cancer survivors a given number of years after diagnosis (<1, 4-9, 5-9 and ≥10 years), and approximates the number of patients in Norway (of both sexes) potentially requiring some form of cancer care. Breast, colorectal and prostate cancer, commonly-diagnosed cancers with reasonable 5-year patient survival, have the highest 10-year prevalence in Norway.

The 9 210 persons alive and diagnosed with melanoma of the skin 10 or more years after diagnosis ranks second only to breast cancer (15 147 persons), while the prevalence of melanoma is eleven times that of lung cancer (846 persons). Differences in prognosis - rather than incidence - may explain much of the site-specific variability in prevalence. Lung cancer in terms of new cases, for example, almost doubles that of melanoma in Norway, and the considerably higher melanoma prevalence reflects the vast difference in survival between those two cancers.

Table 20. Prevalence of cancer* 31.12.2000 and 31.12.2010, both sexes

ICD10	Site	Total no. of persons alive		Years after diagnosis			
		31.12.00	31.12.10	<1	1-4	5-9	10+
C00-96	All sites	143612	207224	20237	60778	48717	77492
C00-14	Mouth, pharynx	3134	3883	451	1218	827	1387
C00	Lip	1320	1318	122	402	214	580
C01-02	Tongue	431	658	85	222	149	202
C03-06	Mouth, other	563	650	79	202	155	214
C07-08	Salivary glands	398	498	56	114	114	214
C09-14	Pharynx	462	810	121	306	201	182
C15-26	Digestive organs	23345	31351	4190	10005	7282	9874
C15	Oesophagus	214	376	151	125	57	43
C16	Stomach	2187	1940	305	537	371	727
C17	Small intestine	419	790	109	303	206	172
C18	Colon	12623	17311	2073	5590	4136	5512
C19-21	Rectum, rectosigmoid, anus	7607	10270	1178	3236	2487	3369
C22	Liver	142	277	74	105	32	66
C23-24	Gallbladder, bile ducts	245	365	112	115	59	79
C25	Pancreas	385	629	273	213	72	71
C26	Other digestive organs	76	149	45	36	40	28
C30-34, C38	Respiratory organs	4597	6707	1752	2390	1196	1369
C30-31	Nose, sinuses	258	305	33	106	64	102
C32	Larynx, epiglottis	1028	1103	105	318	279	401
C33-34	Lung, trachea	3275	5284	1616	1965	857	846
C38	Mediastinum, pleura (non-mesothelioma)	50	47	9	10	6	22
C40-41	Bone	487	686	49	142	122	373
C43	Melanoma of the skin	12967	18356	1454	4199	3493	9210
C44	Skin, non-melanoma	8051	12257	1453	4417	3066	3321
C45	Mesothelioma	67	113	58	43	4	8
C46	Kaposi's sarcoma	99	88	9	23	18	38
C47	Autonomic nervous system	229	256	10	39	28	179
C48-49	Soft tissues	943	1257	116	351	225	565
C50	Breast	26026	37079	2726	9568	9638	15147
C51-58	Female genital organs	17993	20864	1477	4346	4042	10999
C53	Cervix uteri	6720	6803	302	913	1029	4559
C54	Corpus uteri	6706	8960	707	2254	2060	3939
C55	Uterus, other	45	41	3	7	11	20
C56	Ovary	3751	4088	363	908	731	2086
C51-52, C57	Other female genital	935	1162	122	329	272	439
C58	Placenta	130	146	3	6	17	120
C60-63	Male genital organs	20222	38218	4269	15193	10142	8614
C61	Prostate	15840	31728	3979	13983	8866	4900
C62	Testis	4123	6167	264	1134	1193	3576
C60, C63	Other male genital	302	448	47	138	116	147
C64-68	Urinary organs	11976	16055	1731	5059	3914	5351
C64	Kidney excl. renal pelvis	2956	4786	587	1634	1162	1403
C65	Renal pelvis	431	558	80	172	113	193
C66-68	Bladder, ureter, urethra	8767	10987	1105	3370	2695	3817
C69	Eye	779	917	42	201	187	487
C70-72, D32-33	Central nervous system	5624	10307	826	2837	2696	3948
C73	Thyroid gland	3392	4411	249	778	771	2613
C37, C74-75	Other endocrine glands	1560	2911	179	865	681	1186
C39, C76, C80	Other or unspecified	495	556	130	159	102	165
C81-96	Lymphoid and haematopoietic tissue	9808	16915	1983	5635	3951	5346
C81	Hodgkin lymphoma	1575	2216	121	409	439	1247
C82-85, C96	Non-Hodgkin lymphoma	4343	7079	812	2268	1703	2296
C88	Malignant immunoproliferative diseases	234	388	42	155	114	77
C90	Multiple myeloma	1046	1569	296	737	325	211
C91-95, D45-47	Leukaemia	2629	5759	739	2113	1389	1518

* A list of ICD-10 codes where morphologies are excluded or included is given on page 9 in this report.

Trends in Incidence, Mortality and Survival, Norway 1966-2010

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

The importance of determining artefacts and considering their contribution to observed cancer incidence and mortality trends have been comprehensively addressed by Saxen (Saxen, 1982) and Muir et al. (Muir & al, 1994), while many studies have investigated the accuracy of death certificates (e.g. (Percy & al, 1981; Alfsen & al, 2010)). Other than artefacts related to registration practices, many of the factors that affect incidence equally apply to mortality, given that both rely on the accuracy of the initial cancer diagnosis. As with incidence, survival estimates are susceptible to changes in diagnostic practices and disease classifications, as well as the spread of screening tools that detect cases earlier.

There is a general consensus that a combined description of trends in incidence, mortality and survival often serves to confirm and clarify understanding of the underlying biological, epidemiological and clinical processes. As each indicator is subject to unique or shared artefacts that tend to vary according to cancer type over time, their simultaneous assessment often enables the identification of systematic deviations in one or more of the three measures. Figure 10-A to 10-X present annual age-standardised (world) incidence (1966-2010) and mortality (1966-2010) rates together with period-based (3-year window 1966-2010) 5-year relative survival probabilities for all cancers combined and for 23 specific cancer sites. The survival trends are plotted as crude rather than

age-adjusted estimates for purposes of consistency; the age-specific numbers were sparse for certain neoplasms for certain years, and thus standardised estimates could not be calculated. It should be noted that these summary measures will often fail to reflect true underlying age-calendar year interactions for specific cancers, such as differentials in survival and mortality trends by age with respect to calendar time, or the presence of strong birth cohort influences in incidence trends.

The trends for “all sites” in Figure 10-A conveys a general picture of uniform increases in cancer incidence and survival in Norway over the last four decades, coupled with fairly constant mortality trend up until the early-1990s. The decline in mortality that follows is more evident in men than in women. The interpretation of these aggregated estimates is evidently a non-trivial exercise, in that they comprise many different cancer forms variable in terms of their capacity to be diagnosed as well as treated. In combination however, prostate, breast, lung and colorectal cancer represent half of the total incidence and mortality burden, specifically, 48.7% of the new cancers cases in Norway in 2010, and 49.6% of the deaths in 2010.

For men, more than one-fourth of all cancers diagnosed in 2010 were prostate cancers. The marked increases in both incidence and 5-year relative survival from 1990 (Figure 10-O) reflects the availability of the PSA test and the upsurge in its use in the detection of the disease in a subsequent biopsy. Mortality has declined from around 1996 and both early diagnosis and improved and more active treatment may have had an impact.

Breast cancer among women comprises more than 20% of all female cancer cases. There has been a notable decline in the incidence rate of breast cancer since 2005. The 5-year relative survival has increased in the last two decades, while mortality began declining around 1996 (Figure 10-M). The Norwegian Breast Cancer Screening Programme began screening women aged 50-69 at the end of

1995 as a four-year pilot project in four of the 19 Norwegian counties, and gradually expanded to become national by 2005. The implementation of screening may explain much of the recent year's trend with increases in incidence from the mid-1990s to 2005 with subsequent declining rates and, partly as a consequence of advancing time of diagnosis, the increasing survival. The recent declines in mortality in Norway most likely reflect a number of interventions acting in combination, amongst them improvements in breast cancer therapy and management from the 1990s, as well as the increasing screening coverage.

Trends in lung cancer incidence and mortality are quite similar and reflect the uniformly poor survival over time, whereas the varying trends by sex reflect the differing phases of the smoking epidemic in Norwegian men and women (Figure 10-J). Overall lung cancer incidence and mortality rates among males began to plateau in the early-1990s, in contrast to the continuing increases in female rates. As these rates are for all ages however, they do not capture a possible recent plateau in trends among generations of women born around 1950. While five-year relative survival for lung cancer patients has not changed substantially, the observation of moderately increasing survival in the 1990s, more evident in women, is intriguing. It is not clear as to the degree to which these changes are real and might reflect genuine improvement of lung cancer management, earlier stage at presentation, less co-morbidity, or changes in other factors that contribute to improved life expectancy.

Both colon and rectal cancer incidence has been increasing for many decades, but the overall picture the last decade is one of stabilisation (Figure 10-E and 10-F). Of particular note is the increasing survival and declining mortality following rectal cancer in Norway in both sexes. Among the likely determinants is the introduction of total mesorectal excision, increasing specialisation, and use of preoperative radiation.

Among specific sites, several are worthy of note. The constant decline in stomach cancer incidence and mortality, for example, is considered part of an unplanned success of primary prevention of the intestinal type, with survival only moderately increasing over time (Figure 10-D). In contrast, the uniform and presently-unexplained increases in testicular cancer incidence in the last decades (Figure 10-Q) are contrary to the rapid increases in survival (and concomitant declines in mortality) in the 1970s following the introduction of cisplatin therapy for advanced germ-cell tumours, and a correspondingly improved prognosis in these young- and middle-aged men.

In summary, the overall trends in cancer survival probably reflect both artifacts (screening and improved diagnostics) as well as improvements in treatment. For prostate and breast cancer both early diagnosis and improvements in treatment are likely to have played a role. The recent increments in rectal cancer survival in both sexes will also have partially contributed to the recently overall decline in cancer mortality.

The remaining cancer types also contribute substantially to explaining the overall trends.

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

Figure 10-A: All sites (ICD10 C00-96, D32-33, D35.2-35.4, D42-43, D44.3-44.5, D46, D47)

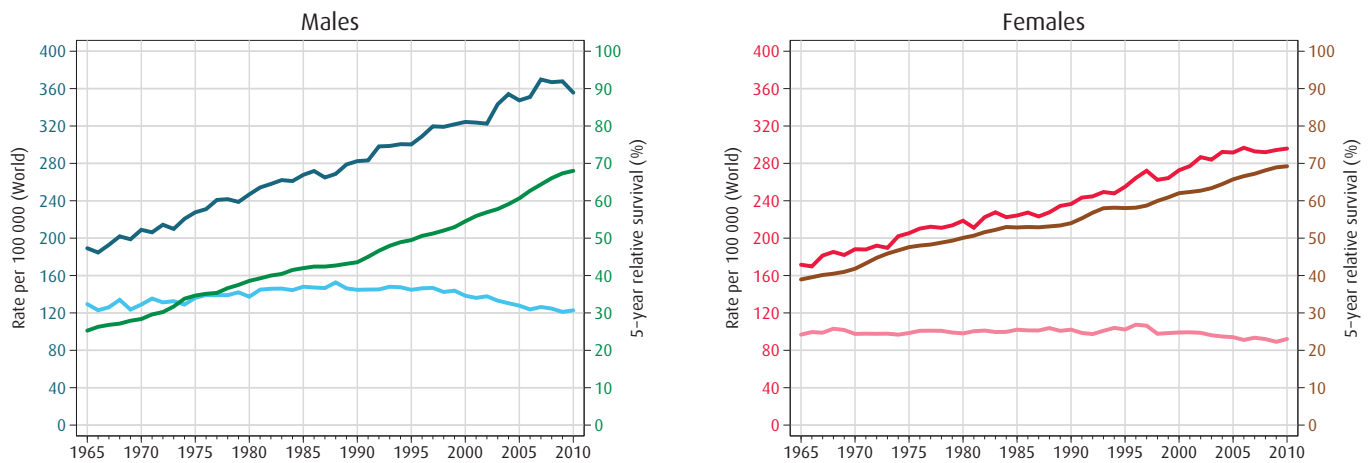


Figure 10-B: Mouth, pharynx (ICD-10 C00-14)

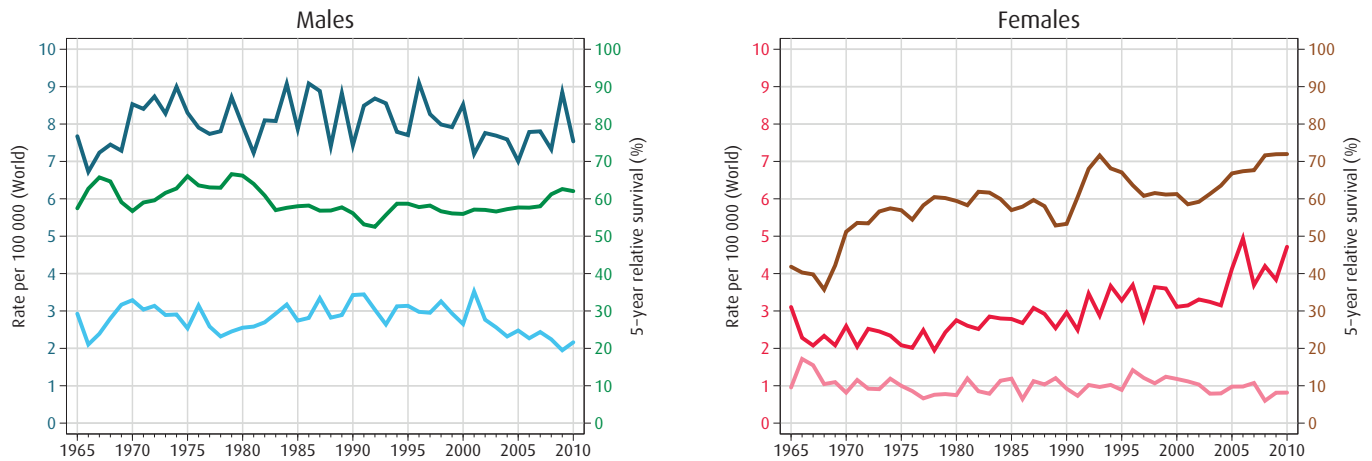
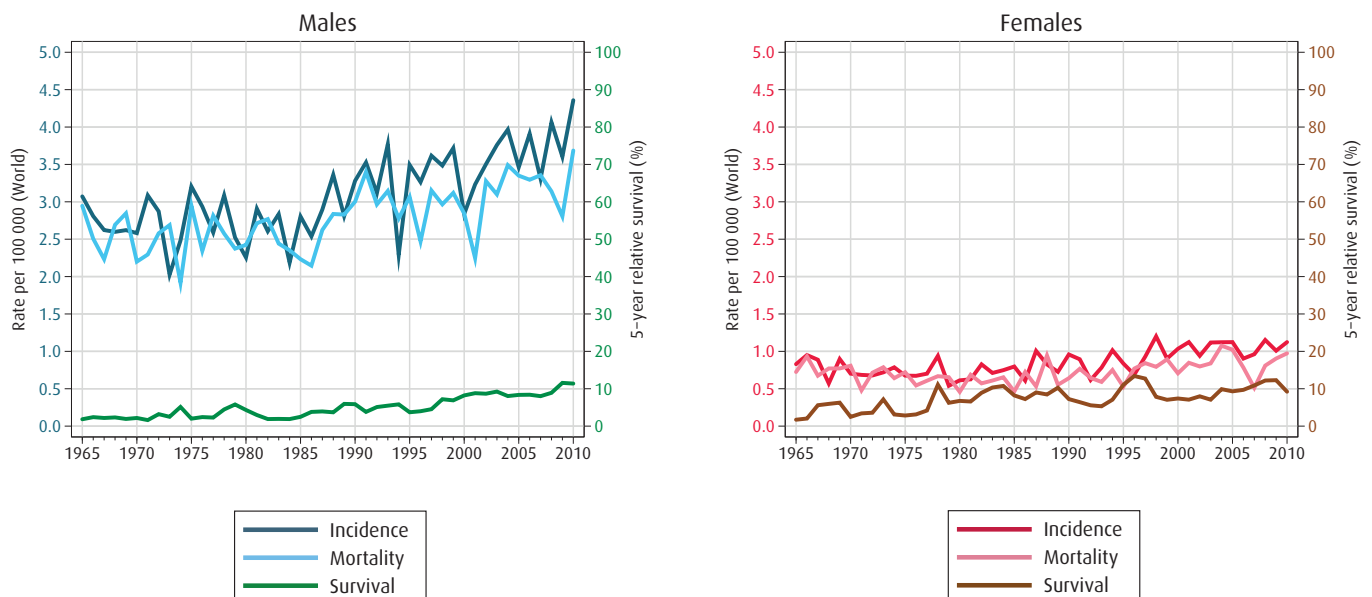


Figure 10-C: Oesophagus (ICD-10 C15)



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

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

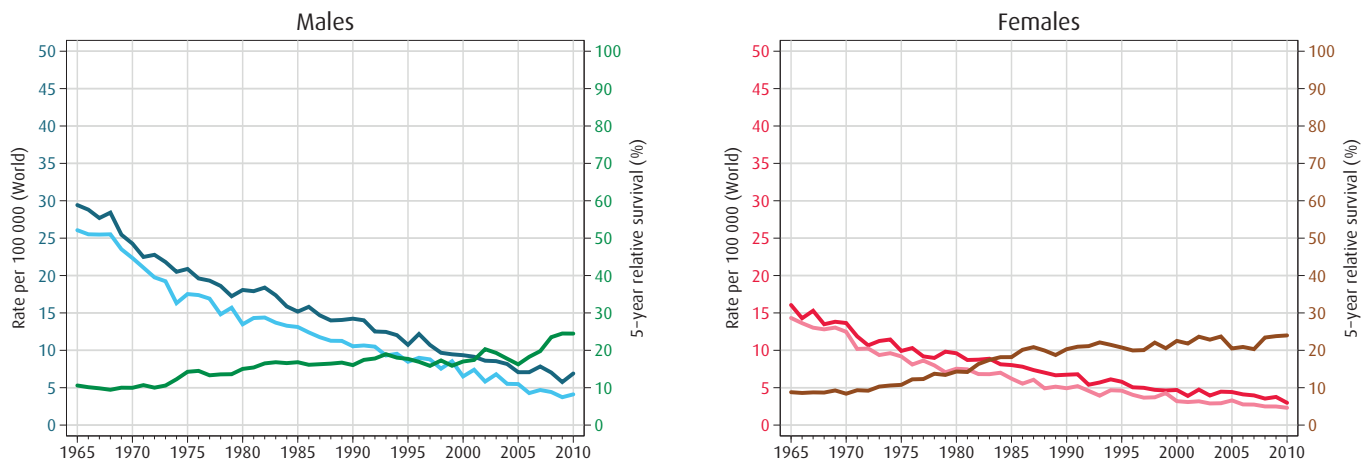


Figure 10-E: Colon (ICD-10 C18)

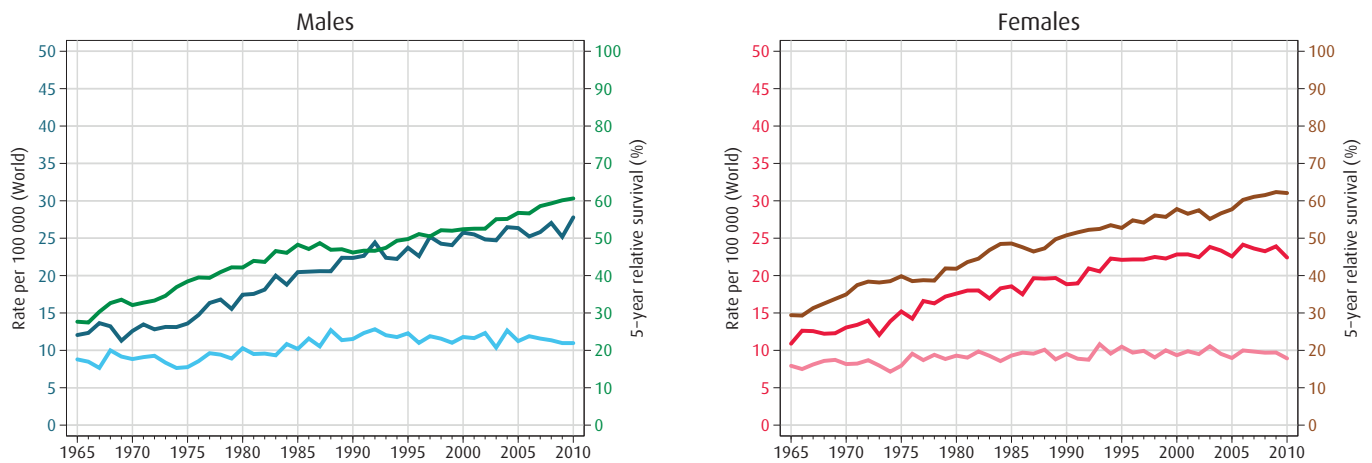
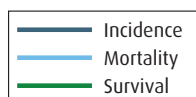
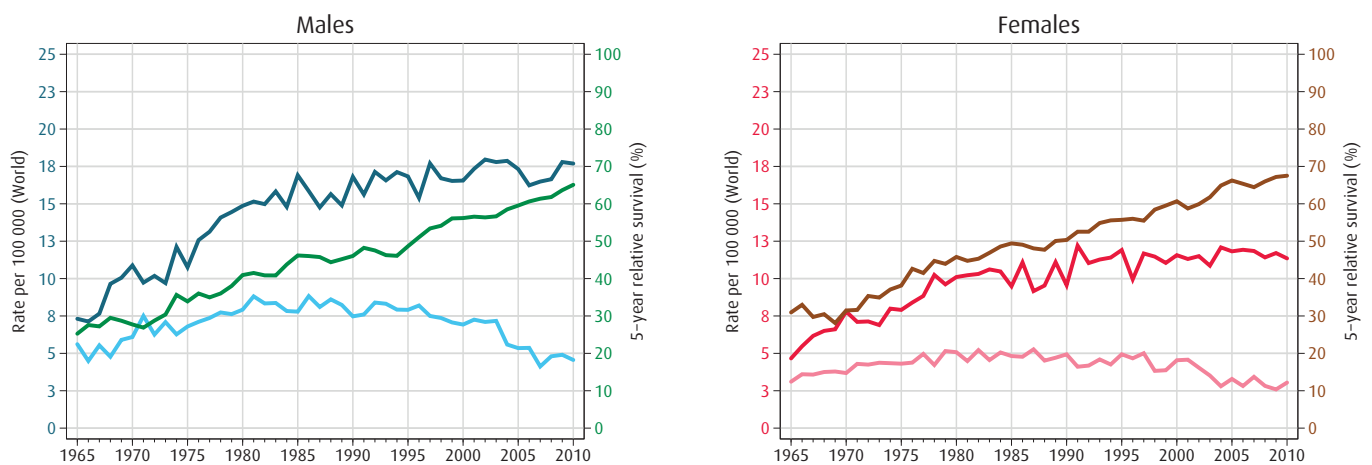


Figure 10-F: Rectum, rectosigmoid, anus (ICD-10 C19-21)



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

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

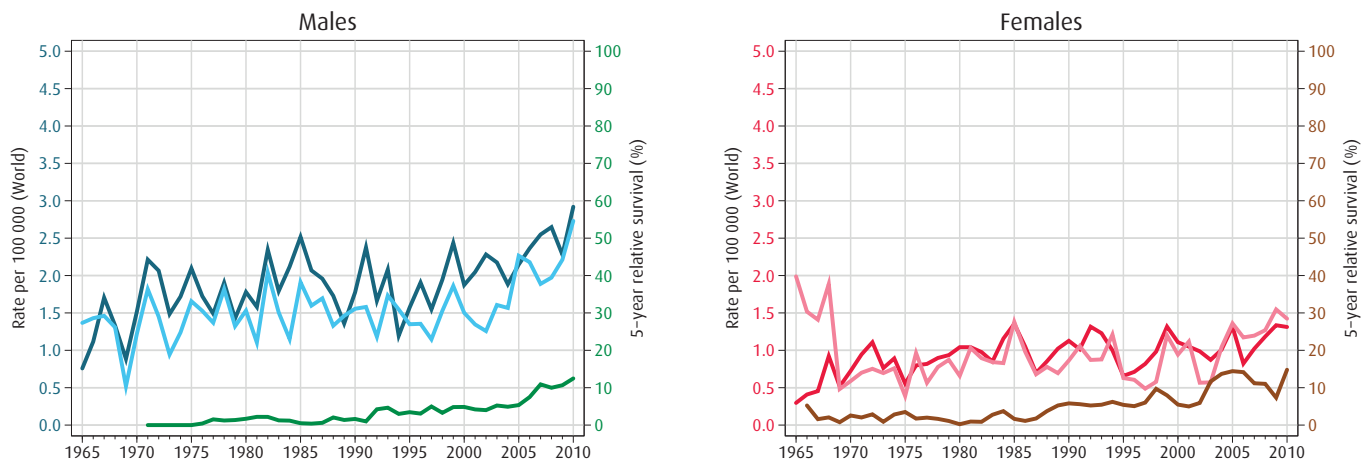


Figure 10-H: Gallbladder, bile ducts (ICD-10 C23-24)

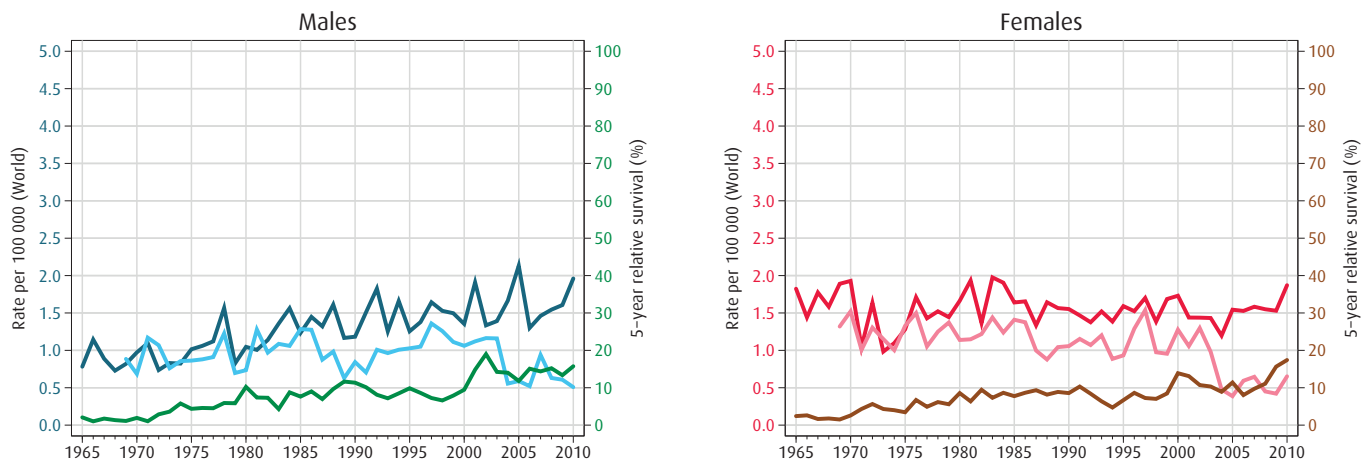
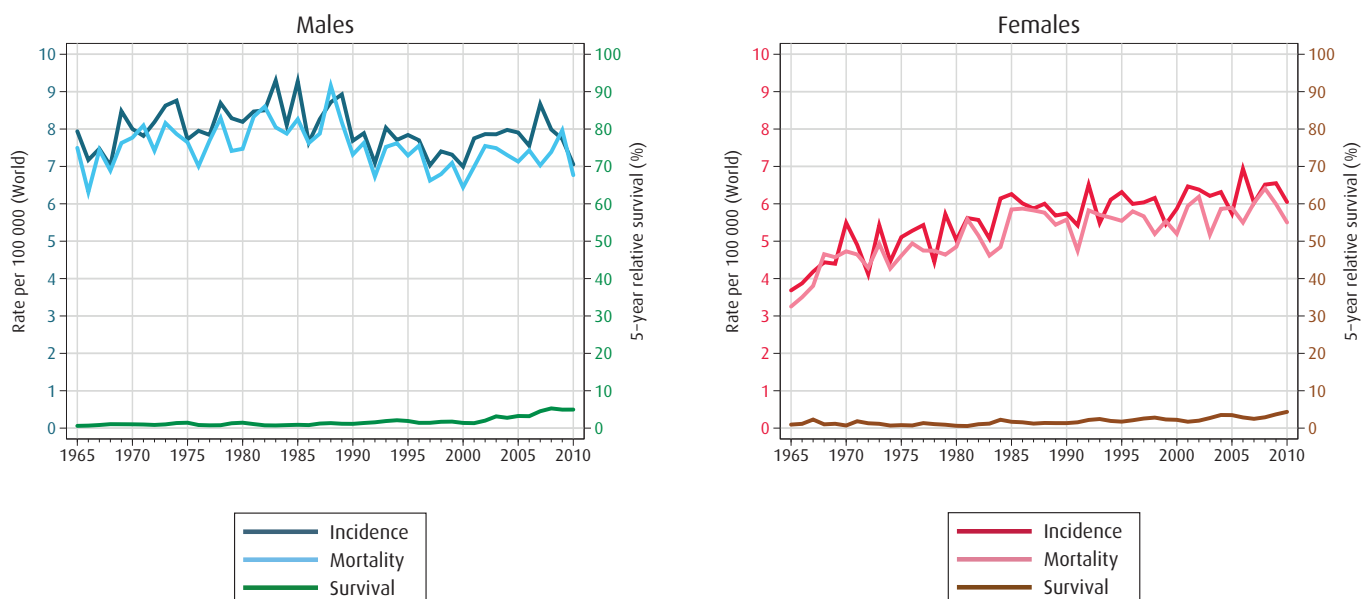


Figure 10-I: Pancreas (ICD-10 C25)



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

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

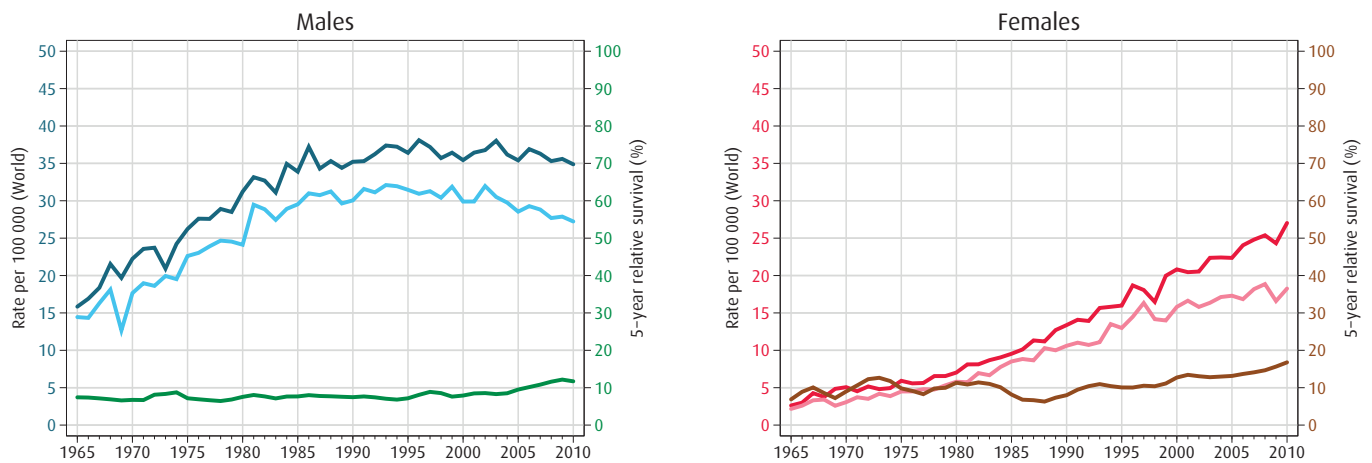


Figure 10-K: Melanoma of the skin (ICD-10 C43)

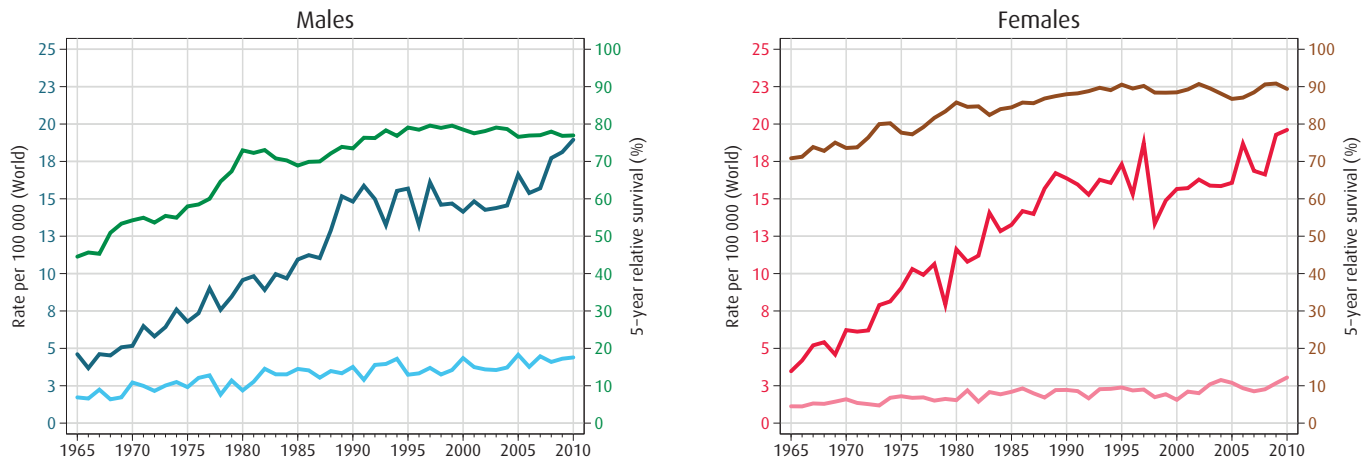
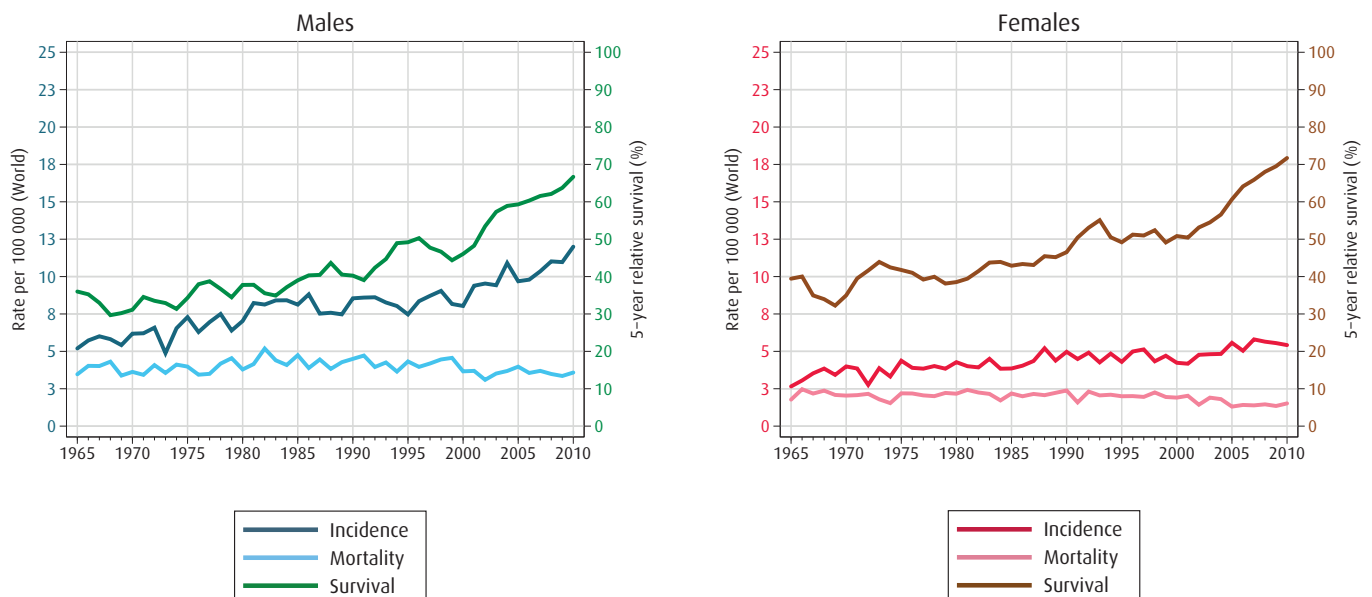


Figure 10-L: Kidney excluding renal pelvis (ICD-10 C64)



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

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

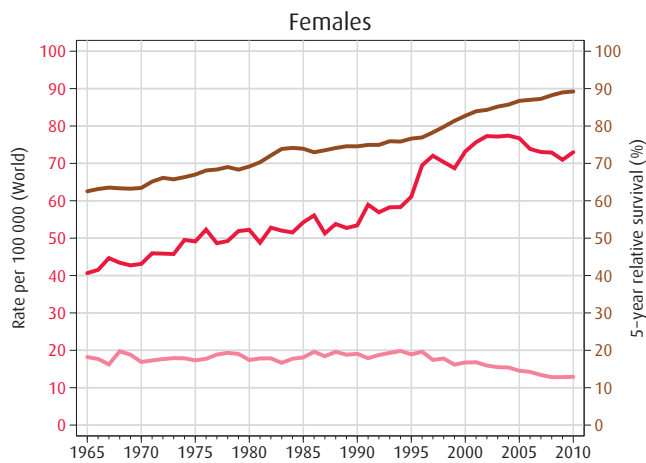


Figure 10-N: Cervix uteri (ICD-10 C53)

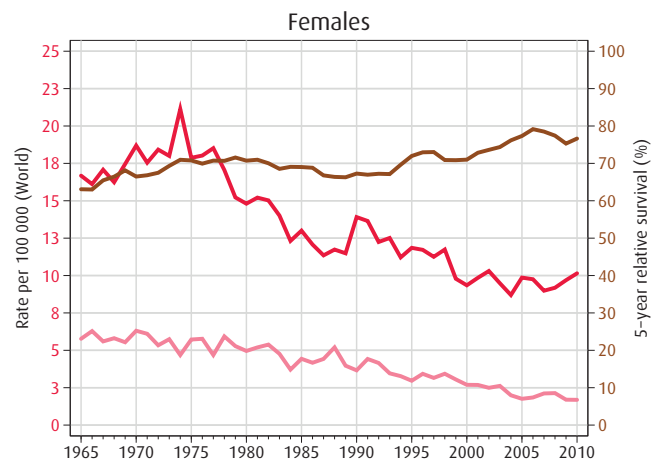


Figure 10-O: Prostate (ICD-10 C61)

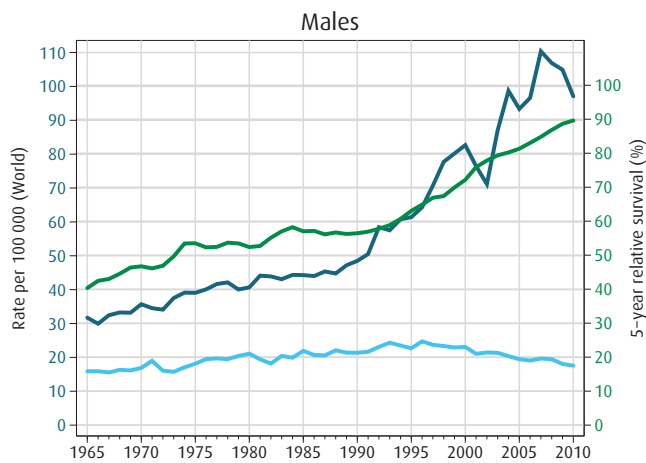


Figure 10-P: Corpus uteri (ICD-10 C54)

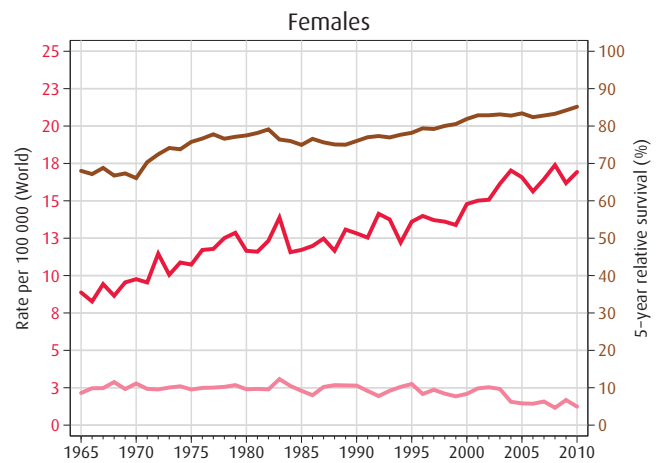


Figure 10-Q: Testis (ICD-10 C62)

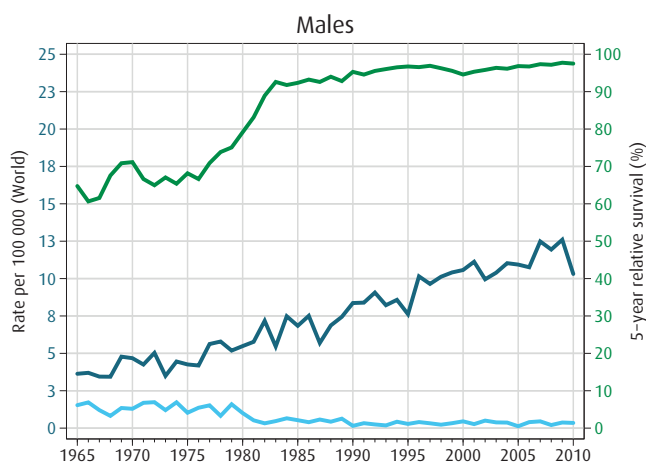
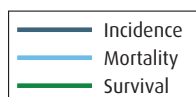
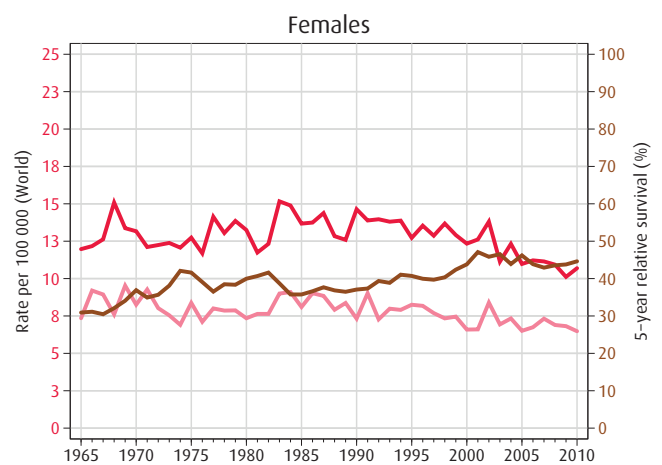


Figure 10-R: Ovary (ICD-10 C56)



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

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

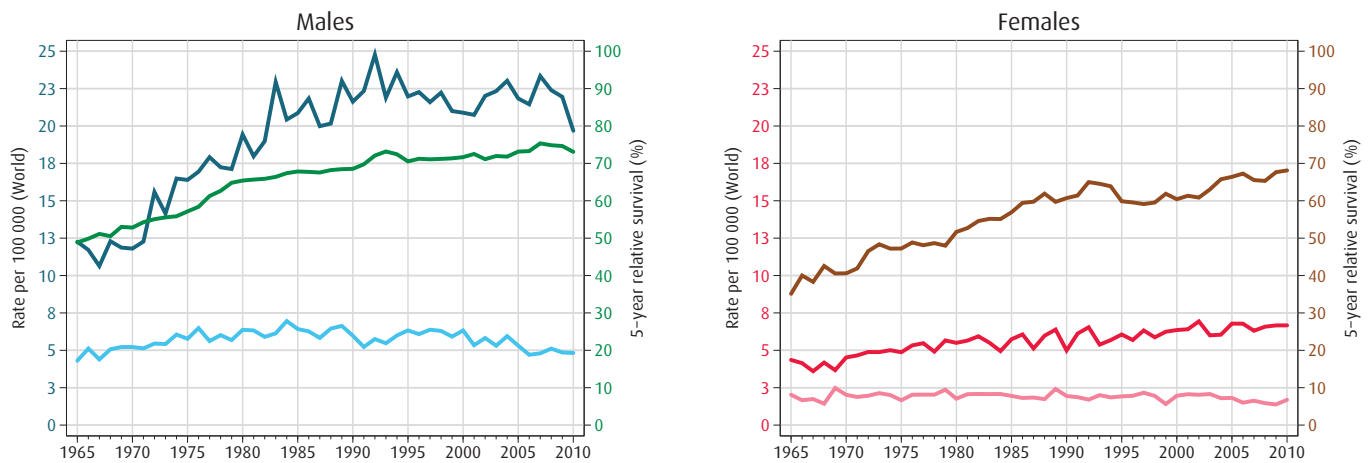


Figure 10-T: Central nervous system (ICD-10 C70-72, D32-33, D35.2-35.4, D42-43, D44.3-44.5)

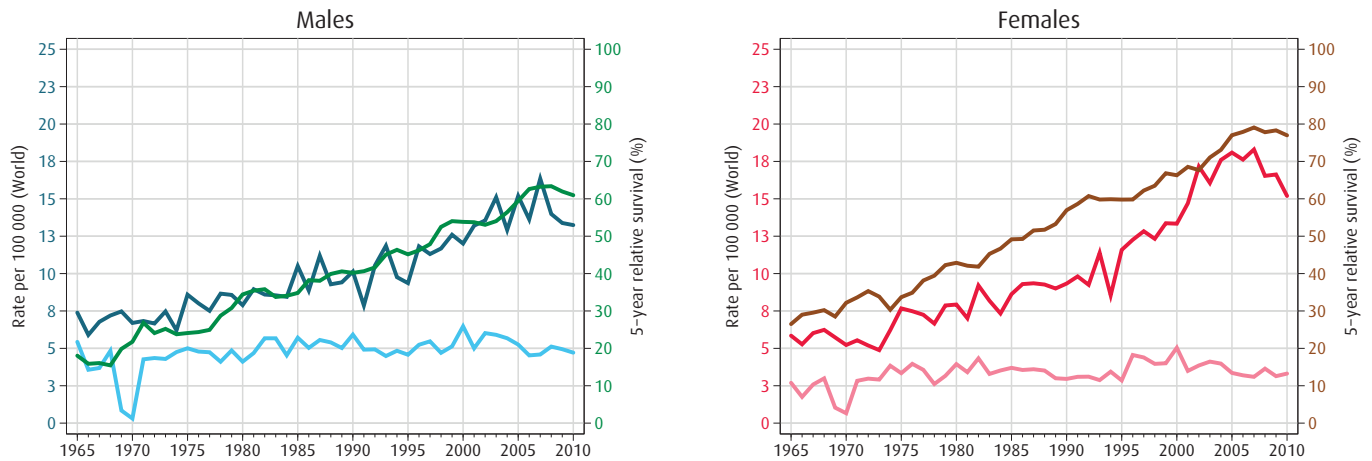
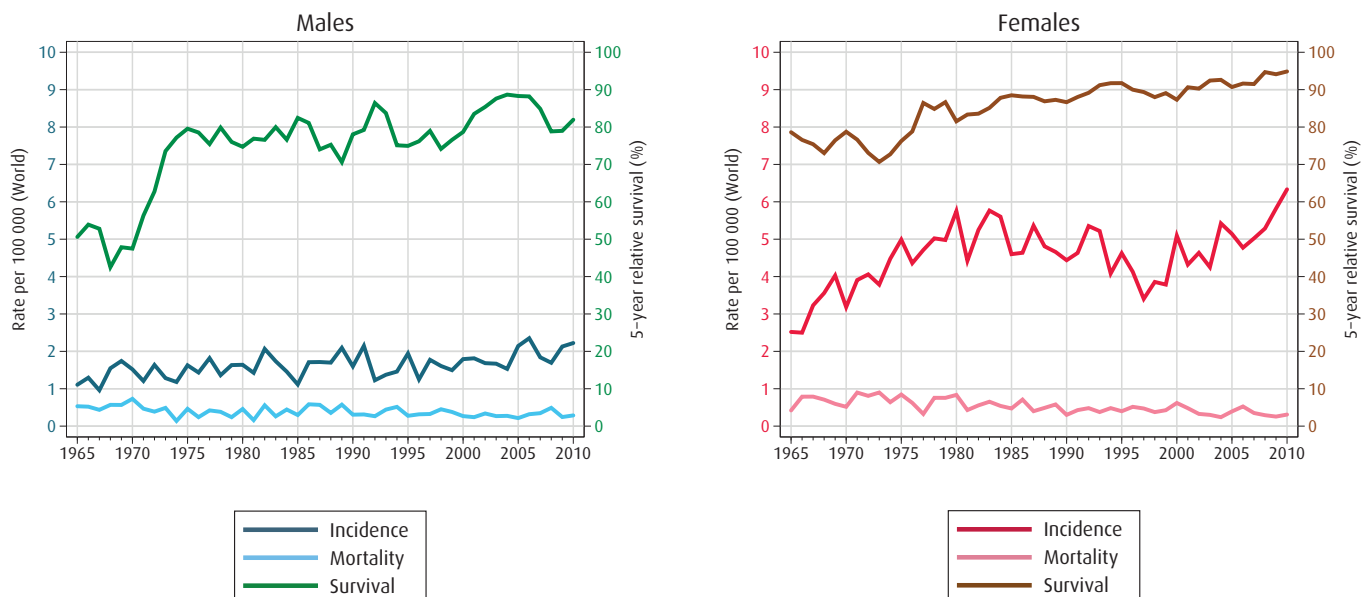


Figure 10-U: Thyroid gland (ICD-10 C73)



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

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

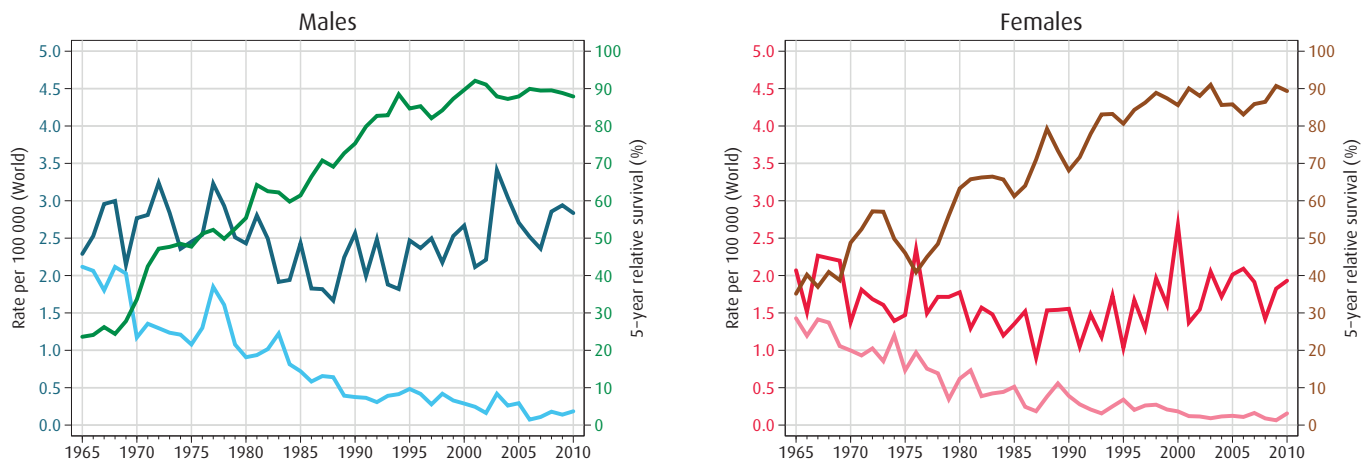


Figure 10-W: Non-Hodgkin lymphoma (ICD-10 C82-85, C96)

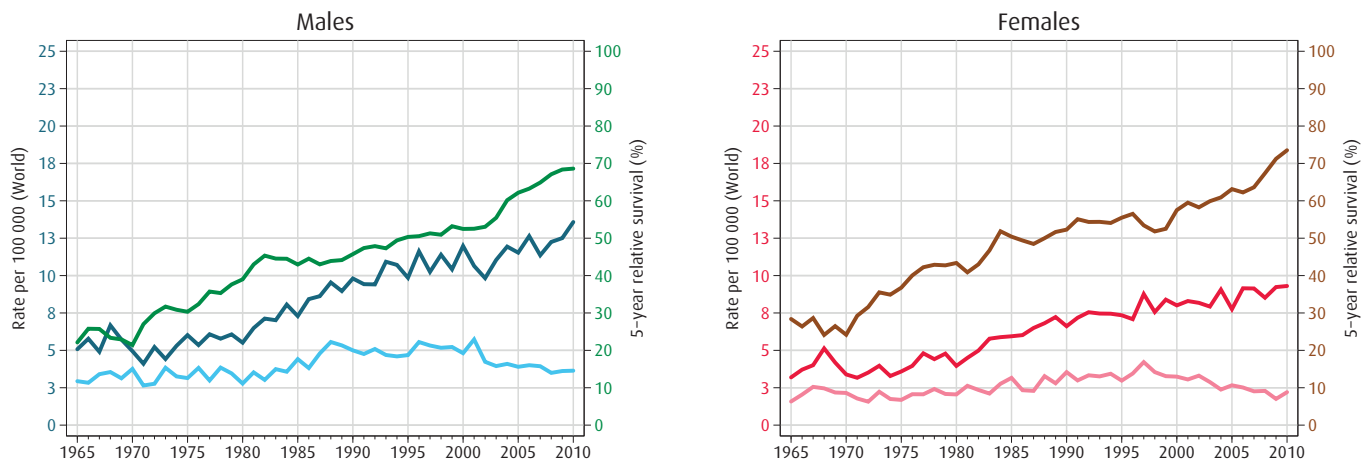
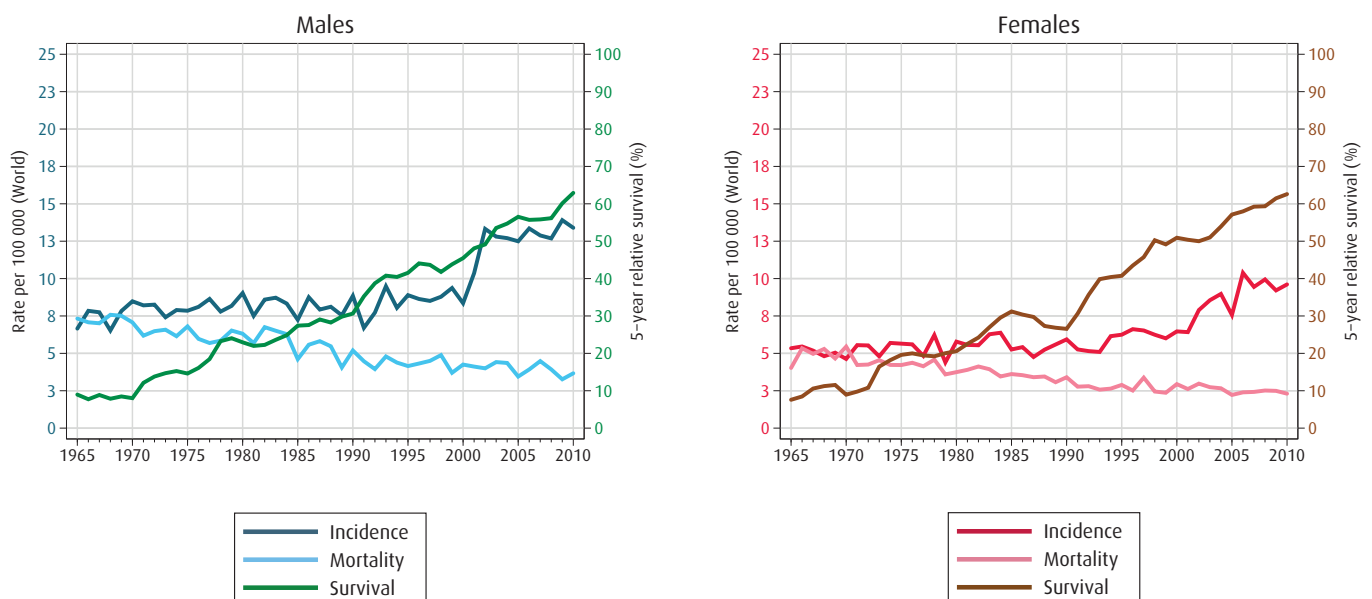


Figure 10-X: Leukaemia (ICD-10 C91-95, D45-47)



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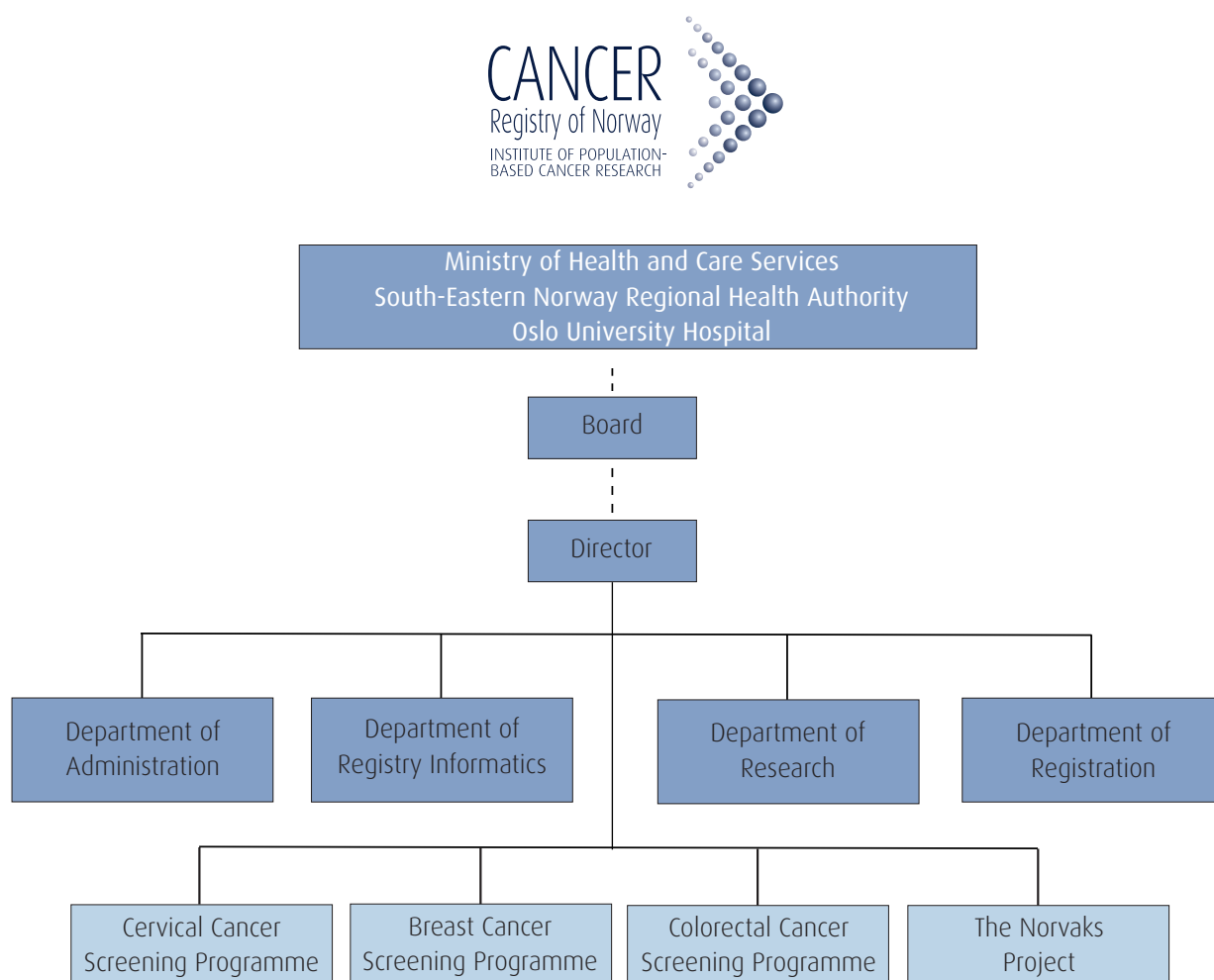
Research activities at the Registry

Organisation and founding principles

The Cancer Registry of Norway is a national, population-based cancer research institute, which was founded and financed by the Cancer Society 1951-1979. Since then the institution has been governmental, with a board (except for the period 1994-2002) and a chapter in the National Budget plan. Since 2002 it has been allied to the Norwegian Radium Hospital and from 2009 to Oslo University Hospital Trust. This organisational platform signals the importance attached to close links with cancer research milieus and cancer clinics. It also increases the possibilities for Norway as a nation to move towards the Comprehensive Cancer Centre organisational model.

As early as 1951, reporting of cancer and some precancers has been mandatory from all milieus that diagnose and treat cancer. From 2002 however, new regulations have strongly enforced the legal premises, substantially improving the Registry's capacity to perform clinical population-based research and evaluate the quality control of health care. Comparative advantages are compulsory reporting without patients' consent and the uniquely identifying personal number. As a result of these advantages, organ-specific treatment quality registries (Clinical registries) are increasingly part of the Registry's duties, in close collaboration with the clinical milieus.

Structure of the Cancer Registry of Norway (September 2012)



Department of Research

Head: Steinar Tretli Professor PhD

Department objectives

The principal goal of the Department of Research is to bring forth new knowledge on carcinogenesis and the causes of cancer. In recent years the Department has covered several topics within epidemiological cancer research, such as: heredity, infectious diseases, biomarkers, occupation, lifestyle, and environmental factors. The main objectives of the Department in years to come, are:

- To initiate/stimulate new research of high quality by use of registry data and biobanks
- To contribute to the development of bio-statistical methods in cancer epidemiology
- To initiate, lead and participate in national and international research collaborations
- To maintain our position as a leading research institution on cancer epidemiology in Norway

Current research priorities

Research on long-term effects of exposures during fetal life, childhood, youth and adult life ("life course epidemiology") will have high priority in the Department. Several of our studies have already investigated the impact of early life on adult cancer risk, specifically for hormone related cancers such as breast, prostate, and testicular cancer. Studies on cancer development related to life style and environmental and societal factors will also be emphasised. This life course epidemiology will often include the study of molecular, genetic, and hereditary aspects of cancer development, in for instance the study of gene-environment interactions.

Research on cancers associated with occupational and environmental exposures has a long tradition in the Department, and the identification and quantification of such risks will still be important. Studies on working populations may often be the only method to obtain knowledge of possible population effects of low-dose exposures. Occupation is also an important classification variable concerning the knowledge on differences in cancer risk by social class.

The understanding of the carcinogenic process has traditionally been based on experimental research. New bio-statistical methods have been developed in recent years in order to assess the importance of different mechanisms in the disease process. Currently, the Department is focusing on research related to statistical modelling and simulation.

Biorepositories have become an important resource in medical research. In the Department, this research activity is related to the Janus Serum Bank with studies on the quality of the samples and the component stability in relation to long time storage. The Janus Serum Bank is utilised in a large number of national and international research collaborations. Cancer survivorship is a relatively new research area, and in addition to the Cancer Registry, several population based Norwegian registries are very well suited for this kind of research. In the Department, studies on marriage, divorce, parenthood and employment and earnings among cancer survivors, have been performed. These studies have received much attention internationally.

Recent important results

In 2010, the research activity at the Department led to 45 scientific publications in national and international journals, some from international collaborations. In addition, one doctoral dissertation was defended.

In addition to research activities, the Department is running, in collaboration with the Norwegian Labour and Welfare Administration (NAV), a project to improve the utilization of the compensation scheme for occupational cancer. This project has led to an increased number of claims and that claims were made more quickly after diagnosis. Also, the Department has assisted in the response to a number of cancer cluster inquiries (see special issue).

Theses published in 2010

Gislefoss RE. Quality aspects of long-term stored samples. Studies in the Janus Serum Bank of Norway. Faculty of Medicine, University of Oslo, 2010.

Department of Registration

Head: Bjørn Møller PhD

Department objectives

The Department of Registration has a broad remit. One of its fundamental responsibilities is the continued collection, storage and quality control of data on all cases of cancer in Norway, as defined by the Statutory Regulations. This information is collected from clinicians, pathologists, administrative patient discharge files, and the Cause of Death Registry. The Department provides relevant information on cancer patterns and changes in cancer over time in Norway, via various dissemination routes including scientific publications and reports such as the Cancer in Norway series. The Department has put an emphasis on initiating and collaborating in good research projects at the national and international level, in-house, or via external requests or invitations, focusing on building strong ties with the clinical community in Norway.

The Department is organised into two sections, according to the key areas of ongoing activity:

1. Section for Registration. Management of the incidence register and development of the clinical registries. The section is divided into four broader organ groups, which manages all the cancer types within the group. The clinical registries offer novel opportunities for population-based research into cancer care (see below).
2. Section for Research. Research using the incidence register, focusing on areas of particular public health importance alongside the application of appropriate methodologies.

In addition, the Department has a medical advisory group, responsible for guidance in medicine coding and revision of in-house coding procedures.

Current research priorities

Research on time trends in cancer incidence, mortality and survival is important for the management of cancer treatment, and is therefore given high priority in the Department. The establishment of clinical registries for the most common cancers is of great importance for evaluation of the outcome of different treatments. A lot of effort has been devoted to obtain full funding for these registries. The Department has

also had an increased focus on data-quality projects. Recently, we have been involved in a data-quality project for evaluating the validity and completeness of cancer data in the National Patient Register, by linkage of the registries. This linkage enables evaluation of data validity in both registries, and is helping to improve the overall data quality.

Recent important results

In 2010, the research activity in the Department led to 34 scientific publications in national and international journals, some from international collaborations. In addition, one doctoral dissertation was defended. About half of the papers described and interpreted trends in survival of cancer patients in Norway. In addition, research on data from the clinical registries was published for prostate and lung cancer.

Theses published in 2010

Kvåle R. Changing Epidemiological Patterns of Prostate Cancer: A Nordic Perspective. Incidence, Mortality, Diagnostic Procedures and Treatment. Faculty of Medicine, University of Oslo, 2010

Colorectal Cancer Screening Programme

Leader: Geir Hoff, Professor, MD, PhD

Section objectives

In 2010, the colorectal cancer (CRC) screening section administered two screening trials – the follow-up phase of the NORCCAP randomised trial on flexible sigmoidoscopy screening (www.kreftregisteret.no/norccap) and the ongoing NordICC randomized trial on colonoscopy screening in Poland, the Netherlands, Sweden and Norway (www.nordicc.org). In 2010, it was decided to initiate a pilot study of a colorectal cancer programme with an organising secretariat located at the Cancer Registry of Norway. During 2010, it was decided to leave the original plan of piloting screening using only an immunochemical test for occult blood in stool (iFOBT) and randomize invitees to two arms - screening with iFOBT or flexible sigmoidoscopy. The concept of comparative effectiveness research (CER) was launched as a prerequisite for a future

CRC screening programme to take responsibility for continuously optimizing this health-service-to-be. Through 2010, an understanding and realization developed that much of the scientific proof to achieve this goal will have to be produced within the framework of future screening programmes themselves. The one major objective for years to come is to extract as much scientific proof of benefits and drawbacks with different screening modalities from ongoing trials and to design future CRC screening activities in Norway to be based on CER principles to further optimize the validity of findings.

Current research priorities

Our top priority is to contribute to the development of CRC screening modalities and targeting strategies - to continuously develop the best possible screening service on a population level. This implies research on possible unwanted effects of screening (e.g. lifestyle and other lifestyle-related disease than CRC). Long-term (10-year follow-up) results from the NORCCAP trial are expected by 2013. The NordICC trial is still recruiting and the first results are not expected to emerge for more than 10 years from now. The quality assurance (QA) aspect of screening is taken care of through the Gastronet QA programme (Gastronet leader is Geir Hoff). There has been much research activity within this programme in the interval between reporting baseline findings and follow-up results from the screening trials.

Recent important results

There have been no original publications from the CRC screening trials in 2010, but many published contributions from our group to promote the CER concept for screening programmes in general. In 2010, two PhD candidates have been working on Gastronet data (Birgitte Seip and Tom Glomsaker) and one on NORCCAP data (Øyvind Holme) and one (Magnus Løberg) was granted funding to work on NORCCAP data as from January 2011.

Cervical Cancer Screening Programme

Leader: Stefan Lönnberg, MD

Section objectives

The Norwegian cervical cancer screening programme is a joint programme of the Cancer Registry, the Institute of Public Health and the Directorate of Health. The cervical cancer screening section at the Cancer Registry administers central registers of all cervical cytology tests, cervical HPV tests, cervical histology results, and treatments for any cervical intraepithelial lesions in Norway. These screening registers allow monitoring and evaluation of screening, quality assurance feed-back to screening providers and the provision of information used for informed decisions about programme modifications and development. The section also provides information to women about the programme, with the aim of ensuring high programme coverage while maintaining informed choice to participate. Information to professionals involved in the screening infrastructure is provided through screening recommendations and the publication of quality assurance manuals. Women aged 25-69 are recommended to undergo conventional or liquid-based cytology every three years; personal reminder letters are sent out if the interval is exceeded. The main objectives of the programme include high coverage of three-yearly screening tests in the target population and a reduction of cervical cancer incidence and mortality in the population to a level equivalent or lower than countries with comparable resources. The research activities of the section are aligned with these overarching objectives.

Current research priorities

The analysis of the screening history of cervical cancer cases in the population provides valuable data on barriers to effectiveness in cervical cancer prevention. A failure audit of cervical cancer cases diagnosed in 2000-2009 is underway.

Further evaluations of policies for triage of minor cytological changes are needed in order to optimise the triage algorithm and risk stratification.

Solutions to overcome barriers to participation can provide avenues to improve the effectiveness of the programme. The investigation of reasons for non-participation in the Norwegian setting is important for a rational direction of efforts.

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