

## **Cancer in Estonia 2014**

Estonian Cancer Registry (ECR) is a population-based registry that collects data on all cancer cases in Estonia. More information about ECR is available at the webpage of National Institute for Health Development (<http://www.tai.ee/en/r-and-d/registers/estonian-cancer-registry>). For coding topography and morphology of the tumour ECR uses the Third Edition of International Classification of Diseases for Oncology (ICD-O-3). For this report, the Tenth Revision of the International Classification of Diseases (ICD-10) has been used by converting the ICD-O-3 codes into ICD-10 codes (Ferlay J, Burkhard C, Whelan S, Parkin D.M. Check and Conversion Programs for Cancer Registries. IARC Technical Report No. 42, Lyon 2005).

The calculation of the age-standardized incidence rates is based on the World Standard Population (Waterhouse J, Muir C, Correa P, Powell J, eds. Cancer in Five Continents, Vol III. IARC Scientific Publications No. 15. Lyon, 1976, p. 456).

Incidence data was updated 14.12.2016.

In 2014, 8558 new cancer cases were registered in Estonia of which 4258 were diagnosed in men and 4300 in women. Most common cancers are seen on Figure 1. The leading cancer sites in men were prostate (25% of all cancers in men), lung (14%), non-melanoma skin cancer (13%), colon (6%), stomach (5%) and kidney with renal pelvis (5%). Rectum, bladder, pancreas and non-Hodgkin's lymphoma were also among ten most common sites among men. In women, the leading sites were non-melanoma skin cancer (20% of all cancers in women) and breast (17%), followed by colon (7%) and uterus (6%). Lung, stomach, rectum, cervix, pancreas and ovaries were also among ten most common sites among women.

Table 1 and 2 show the number of new cancer cases and crude and age-standardized incidence rates per 100 000 in men and women. In Table 3 and 4, the corresponding data are presented for malignant neoplasms of lymphoid, haematopoietic and related tissues.

The number of new cancer cases by age groups and age-specific incidence rates by primary site are available in the Health Statistics and Health Research Database ([http://pxweb.tai.ee/esf/pxweb2008/Database\\_en/Morbidity/04Malignant%20neoplasms/04Malignant%20neoplasms.asp](http://pxweb.tai.ee/esf/pxweb2008/Database_en/Morbidity/04Malignant%20neoplasms/04Malignant%20neoplasms.asp)).

In addition to all malignant neoplasms, in situ neoplasms and benign neoplasms and neoplasms of uncertain or unknown behaviour of brain and central nervous system as well as of the endocrine organs that are located in the area of the brain, are also reported to the

registry. The number of new cases of these neoplasms as well as crude and age-standardized incidence rates in men and women are presented in tables 5 and 6.

The proportion of microscopically verified cases in 2014 was 91%, while 1% of cases were registered on the basis of death certificates only (DCO cases). The distribution of new cancer cases by primary site and the most valid basis of diagnosis are presented in Tables 7 and 8.

An important factor in patient's prognosis is the extent of the disease at the time of the diagnosis. About half of the new cancer cases diagnosed in 2014 were locally spread but 20% of the patients already had distant metastasis. In Tables 9 and 10, the number of new cancer cases by the extent of the disease at the time of the diagnosis for different solid cancers can be found.

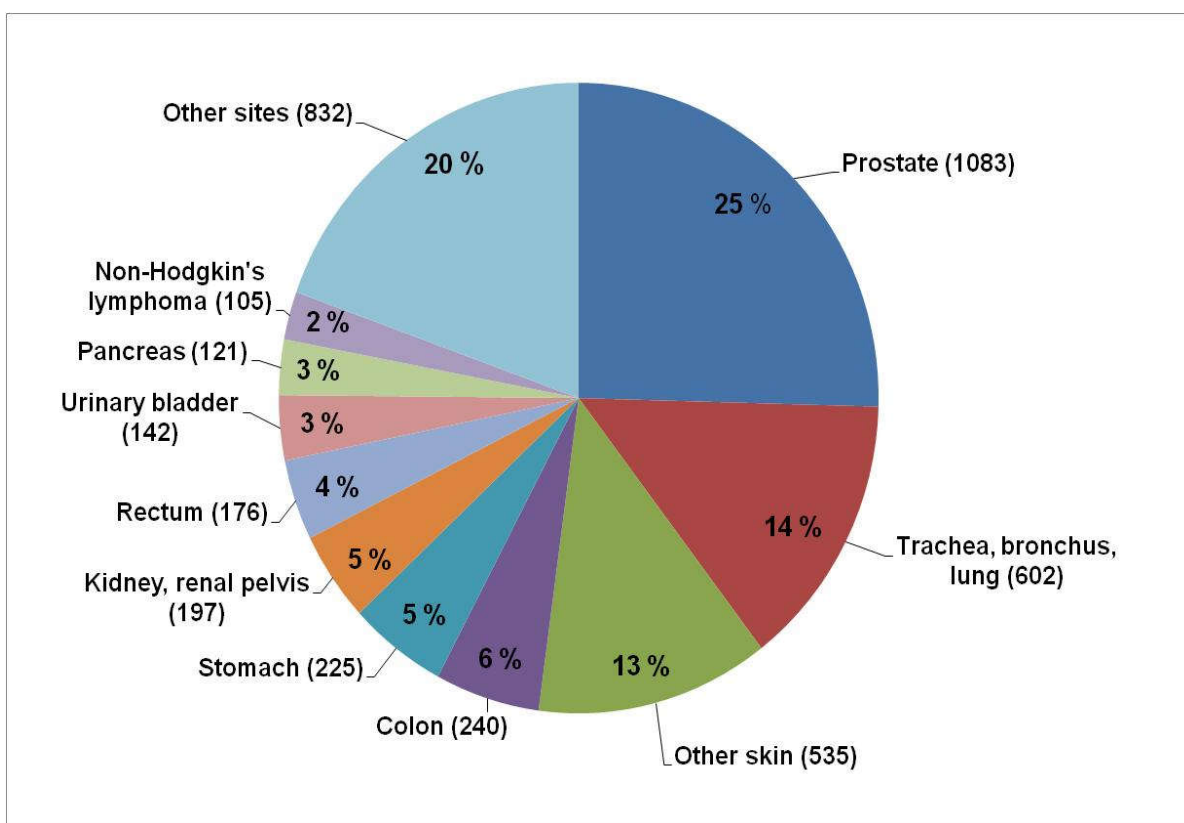
The ECR was founded in 1978 but reliable incidence data is available since 1968. Cancer incidence has continuously increased, reaching about 8500 new cases in 2014 (Figure 2). Time trends of cancer incidence for selected sites in 1968–2014 are presented on Figure 3. In that period, total cancer incidence has doubled both in men and women.

Incidence trends differ among cancer sites. For instance, incidence of prostate and breast cancer is increasing although there has been a slight stabilization in recent years. Incidence of colon, rectum and kidney cancers as well as melanoma and non-Hodgkin's lymphoma are also increasing whereas incidence of stomach cancer is decreasing. Since the second half of 1990s, the lung cancer incidence in men started decreasing but it is still increasing in women. Cervical cancer that seriously affects younger women is an important issue in Estonia, because its incidence is still increasing although it is largely preventable with population-based screening program.

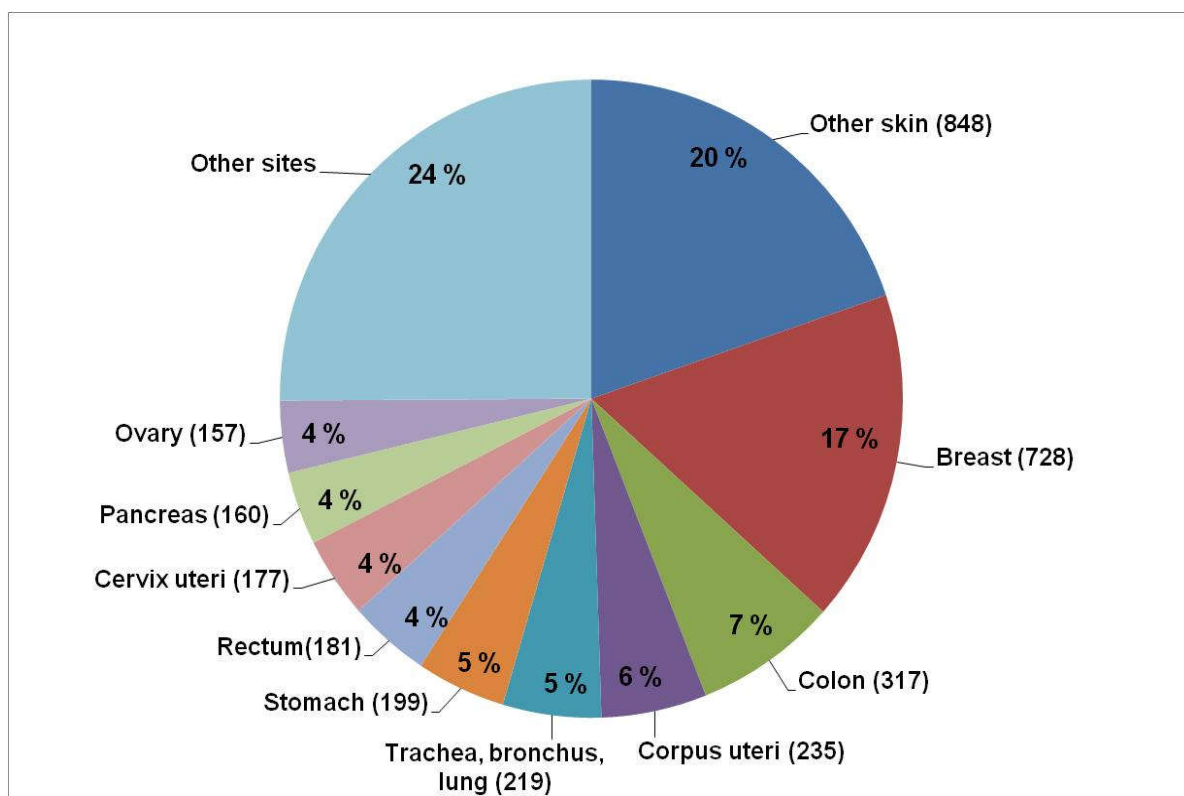
Tables 11 and 12 present data on cancer prevalence in Estonia at the end of the year 2014 (cases diagnosed in 1968–2014). The rates were calculated based on the population data at the beginning of the year 2015. Number of prevalent cases of cancer and crude as well as age-standardized prevalence rates per 100 000 by cancer site for males and females are presented. On 31 December 2014, there were 55 166 persons (21 660 men and 33 506 women) in the population of Estonia with a cancer history.

Tables 13a and 13b present basic data (number and percent of new cases, crude and age-standardized incidence rate) for the ten leading cancers in 2014 for males and females.

## MALES



## FEMALES



**Figure 1.** Leading primary sites of cancer in Estonia in 2014.

**Table 1.** The number of new cases, crude and age-standardized incidence rates (ASIR) of cancer per 100 000 in Estonia in 2014, by primary site, MALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
All sites	C00–C97	4258	692.7	401.9
All sites but other skin	C00–C97 but C44	3723	605.7	353.3
Lip, oral cavity, pharynx	C00–C14	137	22.3	14.4
Lip	C00	8	1.3	0.7
Tongue	C01–C02	30	4.9	3.1
Gum, floor of mouth etc.	C03–C06	27	4.4	2.9
Major salivary glands	C07–C08	6	1.0	0.6
Tonsil, oropharynx	C09–C10	35	5.7	3.8
Nasopharynx	C11	4	0.7	0.5
Pyriiform sinus, hypopharynx	C12–C13	26	4.2	2.8
Other lip, oral cavity, pharynx	C14	1	0.2	0.1
Digestive organs	C15–C26	926	150.7	84.2
Oesophagus	C15	65	10.6	6.5
Stomach	C16	225	36.6	20.6
Small intestine	C17	13	2.1	1.3
Colon	C18	240	39.0	21.0
Rectum etc.	C19–C21	176	28.6	15.9
Liver etc.	C22	50	8.1	4.4
Gallbladder etc.	C23–C24	33	5.4	2.9
Pancreas	C25	121	19.7	11.4
Other digestive organs	C26	3	0.5	0.3
Respiratory, intrathoracic organs	C30–C39	664	108.0	60.3
Nasal cavities, ear, sinuses	C30–C31	6	1.0	0.6
Larynx	C32	51	8.3	5.0
Trachea, bronchus, lung	C33–C34	602	97.9	54.2
Thymus, heart, mediastinum, pleura	C37–C38	5	0.8	0.6
Respiratory organs etc.	C39	–	–	–
Bone, articular cartilage	C40–C41	11	1.8	1.4
Melanoma of skin	C43	88	14.3	8.7
Other skin	C44	535	87.0	48.5
Mesothelial and soft tissues	C45–C49	36	5.9	3.9
Breast	C50	4	0.7	0.3
Male genital organs	C60–C63	1109	180.4	104.6
Penis	C60	8	1.3	0.8
Prostate	C61	1083	176.2	101.0
Testis	C62	17	2.8	2.6
Other male genital organs	C63	1	0.2	0.1
Urinary organs	C64–C68	343	55.8	32.0
Kidney, renal pelvis	C64–C65	197	32.1	19.1
Ureter	C66	4	0.7	0.3
Bladder	C67	142	23.1	12.6
Other urinary organs	C68	–	–	–
Eye	C69	11	1.8	1.4
Brain, central nervous system	C70–C72	59	9.6	7.5
Meninges	C70	1	0.2	0.0
Brain	C71	57	9.3	7.4
Other central nervous system	C72	1	0.2	0.1
Thyroid gland	C73	15	2.4	1.7
Other endocrine	C74–C75	3	0.5	0.3
Site unknown or uncertain	C76–C80	67	10.9	5.8
Hodgkin's disease	C81	19	3.1	2.9
Non-Hodgkin's lymphoma	C82–C85/96	105	17.1	11.5
Immunoproliferative diseases	C88	3	0.5	0.2
Multiple myeloma	C90	34	5.5	3.2
Leukaemia	C91–C95	89	14.5	8.9
Independent multiple sites	C97	–	–	–

\*Standardized to the world standard population

**Table 2.** The number of new cases, crude and age-standardized incidence rates (ASIR) of cancer per 100 000 in Estonia in 2014, by primary site, FEMALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
All sites	C00–C97	4300	614.4	275.4
All sites but other skin	C00–C97 but C44	3452	493.2	228.3
Lip, oral cavity, pharynx	C00–C14	42	6.0	3.1
Lip	C00	3	0.4	0.1
Tongue	C01–C02	11	1.6	0.8
Gum, floor of mouth etc.	C03–C06	8	1.1	0.6
Major salivary glands	C07–C08	11	1.6	0.9
Tonsil, oropharynx	C09–C10	7	1.0	0.6
Nasopharynx	C11	–	–	–
Pyriform sinus, hypopharynx	C12–C13	2	0.3	0.2
Other lip, oral cavity, pharynx	C14	–	–	–
Digestive organs	C15–C26	991	141.6	51.1
Oesophagus	C15	10	1.4	0.6
Stomach	C16	199	28.4	10.7
Small intestine	C17	17	2.4	1.1
Colon	C18	317	45.3	16.8
Rectum etc.	C19–C21	181	25.9	9.0
Liver etc.	C22	44	6.3	2.3
Gallbladder etc.	C23–C24	56	8.0	2.4
Pancreas	C25	160	22.9	8.0
Other digestive organs	C26	7	1.0	0.2
Respiratory, intrathoracic organs	C30–C39	232	33.1	13.8
Nasal cavities, ear, sinuses	C30–C31	4	0.6	0.1
Larynx	C32	5	0.7	0.3
Trachea, bronchus, lung	C33–C34	219	31.3	12.9
Thymus, heart, mediastinum, pleura	C37–C38	4	0.6	0.4
Respiratory organs etc.	C39	–	–	–
Bone, articular cartilage	C40–C41	6	0.9	0.6
Melanoma of skin	C43	132	18.9	10.6
Other skin	C44	848	121.2	47.2
Mesothelial and soft tissues	C45–C49	26	3.7	2.2
Breast	C50	728	104.0	53.8
Female genital organs	C51–C58	622	88.9	48.2
Vulva, vagina	C51–C52	40	5.7	2.1
Cervix uteri	C53	177	25.3	17.3
Corpus uteri	C54	235	33.6	17.0
Uterus unspecified	C55	3	0.4	0.1
Ovary	C56	157	22.4	10.7
Other female genital organs	C57	9	1.3	0.6
Placenta	C58	1	0.1	0.3
Urinary organs	C64–C68	203	29.0	11.7
Kidney, renal pelvis	C64–C65	152	21.7	9.2
Ureter	C66	6	0.9	0.4
Bladder	C67	44	6.3	2.1
Other urinary organs	C68	1	0.1	0.1
Eye	C69	11	1.6	0.8
Brain, central nervous system	C70–C72	61	8.7	4.6
Meninges	C70	4	0.6	0.2
Brain	C71	56	8.0	4.3
Other central nervous system	C72	1	0.1	0.1
Thyroid gland	C73	57	8.1	5.6
Other endocrine	C74–C75	1	0.1	0.1
Site unknown or uncertain	C76–C80	70	10.0	3.3
Hodgkin's disease	C81	24	3.4	3.7
Non-Hodgkin's lymphoma	C82–C85/96	102	14.6	6.3
Immunoproliferative diseases	C88	2	0.3	0.1
Multiple myeloma	C90	52	7.4	2.8
Leukaemia	C91–C95	90	12.9	5.9
Independent multiple sites	C97	–	–	–

\*Standardized to the world standard population

**Table 3.** The number of new cases of malignant neoplasms of lymphoid, haematopoietic and related tissues, crude and age-standardized incidence rates (ASIR) per 100 000 in Estonia in 2014, MALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
Hodgkin's disease	C81	19	3.1	2.9
Non-Hodgkin's lymphoma	C82-C85/96	105	17.1	11.5
Immunoproliferative diseases	C88	3	0.5	0.2
Multiple myeloma	C90	34	5.5	3.2
Leukaemia	C91-C95	89	14.5	8.9
Lymphoid leukaemia	C91	59	9.6	5.8
Acute lymphoid leukaemia	C91.0	4	0.7	0.9
Chronic lymphoid leukaemia	C91.1	50	8.1	4.5
Other lymphoid leukaemia	C91.2-C91.9	5	0.8	0.4
Myeloid leukaemia	C92	28	4.6	2.8
Acute myeloid leukaemia	C92.0	12	2.0	1.4
Chronic myeloid leukaemia	C92.1	11	1.8	0.9
Other myeloid leukaemia	C92.2-C92.9	5	0.8	0.6
Other leukaemia	C93-C95	2	0.3	0.2
Polycythaemia vera	D45	5	0.8	0.4
Myelodysplastic syndromes	D46	15	2.4	1.4
Other neoplasms of lymphoid, haematopoietic and related tissue	D47	25	4.1	2.4

\*Standardized to the world standard population

**Table 4.** The number of new cases of malignant neoplasms of lymphoid, haematopoietic and related tissues, crude and age-standardized incidence rates (ASIR) per 100 000 in Estonia in 2014, FEMALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
Hodgkin's disease	C81	24	3.4	3.7
Non-Hodgkin's lymphoma	C82-C85/96	102	14.6	6.3
Immunoproliferative diseases	C88	2	0.3	0.1
Multiple myeloma	C90	52	7.4	2.8
Leukaemia	C91-C95	90	12.9	5.9
Lymphoid leukaemia	C91	59	8.4	3.8
Acute lymphoid leukaemia	C91.0	9	1.3	1.3
Chronic lymphoid leukaemia	C91.1	49	7.0	2.4
Other lymphoid leukaemia	C91.2-C91.9	1	0.1	0.0
Myeloid leukaemia	C92	27	3.9	1.8
Acute myeloid leukaemia	C92.0	15	2.1	0.8
Chronic myeloid leukaemia	C92.1	9	1.3	0.5
Other myeloid leukaemia	C92.2-C92.9	3	0.4	0.4
Other leukaemia	C93-C95	4	0.6	0.3
Polycythaemia vera	D45	15	2.1	1.1
Myelodysplastic syndromes	D46	24	3.4	0.8
Other neoplasms of lymphoid, haematopoietic and related tissue	D47	47	6.7	2.7

\*Standardized to the world standard population

**Table 5.** The number of new cases of neoplasms in situ, benign and uncertain or unknown behavior\* and crude and age-standardized incidence rates (ASIR) per 100 000 in Estonia in 2014, by primary site, MALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
In situ neoplasms	D00-D09	96	15.6	9.2
Neoplasms of benign and uncertain or unknown behaviour of brain and central nervous system	D32, D33, D42, D43	38	6.2	4.9
Meninges	D32, D42	20	3.3	2.1
Brain, central nervous system	D33, D43	18	2.9	2.8
Neoplasms of benign and uncertain or unknown behavior of intracranial endocrine glands	D35.2-D35.4, D44.3-D44.5	12	2.0	1.5

\*Neoplasms reportable to the Estonian Cancer Registry

\*\*Standardized to the world standard population

**Table 6.** The number of new cases of neoplasms in situ, benign and uncertain or unknown behavior\* and crude and age-standardized incidence rates (ASIR) per 100 000 in Estonia in 2014, by primary site, FEMALES

Primary site	ICD-10	Number of new cases	Crude	ASIR*
In situ neoplasms	D00-D09	285	40.7	21.7
Cervix uteri	D06	56	8.0	7.1
Neoplasms of benign and uncertain or unknown behaviour of brain and central nervous system	D32, D33, D42, D43	113	16.1	10.3
Meninges	D32, D42	81	11.6	6.2
Brain, central nervous system	D33, D43	32	4.6	4.1
Neoplasms of benign and uncertain or unknown behavior of intracranial endocrine glands	D35.2-D35.4, D44.3-D44.5	24	3.4	3.0

\* Neoplasms reportable to the Estonian Cancer Registry

\*\*Standardized to the world standard population

**Table 7.** The distribution of new cancer cases in Estonia in 2000, by primary site and the most valid basis of diagnosis, MALES

Primary site	ICD-10	Number of new cases	Microscopic*	Non-microscopic**	Death certificate only***
All sites	C00–C97	4258	91.2	7.8	1.0
All sites but other skin	C00–C97 but C44	3723	90.2	8.7	1.1
Lip, oral cavity, pharynx	C00–C14	137	95.6	4.4	–
Lip	C00	8	100.0	–	–
Tongue	C01–C02	30	96.7	3.3	–
Gum, floor of mouth etc.	C03–C06	27	92.6	7.4	–
Major salivary glands	C07–C08	6	83.3	16.7	–
Tonsil, oropharynx	C09–C10	35	97.1	2.9	–
Nasopharynx	C11	4	100.0	–	–
Pyriiform sinus, hypopharynx	C12–C13	26	96.2	3.8	–
Other lip, oral cavity, pharynx	C14	1	100.0	–	–
Digestive organs	C15–C26	926	87.6	11.7	0.8
Oesophagus	C15	65	96.9	1.5	1.5
Stomach	C16	225	91.1	8.0	0.9
Small intestine	C17	13	100.0	–	–
Colon	C18	240	92.1	7.5	0.4
Rectum etc.	C19–C21	176	95.5	3.4	1.1
Liver etc.	C22	50	86.0	14.0	–
Gallbladder etc.	C23–C24	33	66.7	33.3	–
Pancreas	C25	121	61.2	38.0	0.8
Other digestive organs	C26	3	66.7	33.3	–
Respiratory, intrathoracic organs	C30–C39	664	80.3	17.6	2.1
Nasal cavities, ear, sinuses	C30–C31	6	66.7	33.3	–
Larynx	C32	51	96.1	3.9	–
Trachea, bronchus, lung	C33–C34	602	79.1	18.6	2.3
Thymus, heart, mediastinum, pleura	C37–C38	5	80.0	20.0	–
Respiratory organs etc.	C39	–	–	–	–
Bone, articular cartilage	C40–C41	11	100.0	–	–
Melanoma of skin	C43	88	98.9	1.1	–
Other skin	C44	535	98.7	1.3	–
Mesothelial and soft tissues	C45–C49	36	97.2	2.8	–
Breast	C50	4	100.0	–	–
Male genital organs	C60–C63	1109	96.5	2.4	1.1
Penis	C60	8	87.5	12.5	–
Prostate	C61	1083	96.6	2.3	1.1
Testis	C62	17	94.1	5.9	–
Other male genital organs	C63	1	100.0	–	–
Urinary organs	C64–C68	343	93.6	6.1	0.3
Kidney, renal pelvis	C64–C65	197	90.4	9.1	0.5
Ureter	C66	4	100.0	–	–
Bladder	C67	142	97.9	2.1	–
Other urinary organs	C68	–	–	–	–
Eye	C69	11	63.6	36.4	–
Brain, central nervous system	C70–C72	59	86.4	11.9	1.7
Meninges	C70	1	–	–	100.0
Brain	C71	57	87.7	12.3	–
Other central nervous system	C72	1	100.0	–	–
Thyroid gland	C73	15	100.0	–	–
Other endocrine	C74–C75	3	100.0	–	–
Site unknown or uncertain	C76–C80	67	50.7	44.8	4.5
Hodgkin's disease	C81	19	100.0	–	–
Non-Hodgkin's lymphoma	C82–C85/96	105	97.1	1.9	1.0
Immunoproliferative diseases	C88	3	100.0	–	–
Multiple myeloma	C90	34	100.0	–	–
Leukaemia	C91–C95	89	96.6	–	3.4
Independent multiple sites	C97	–	–	–	–

\*Histology, autopsy with histology, cytology, haematology

\*\* Clinical only, instrumental clinical, biochemical/immunological, surgery/autopsy without histology

\*\*\*Only information about the cancer case in the Cancer Registry comes from the Causes of Death Registry



**Table 8.** The distribution of new cancer cases in Estonia in 2000, by primary site and the most valid basis of diagnosis, FEMALES

Primary site	ICD-10	Number of new cases	Microscopic*	Non-microscopic**	Death certificate only***
All sites	C00–C97	4300	91.1	7.9	1.0
All sites but other skin	C00–C97 but C44	3452	89.2	9.5	1.2
Lip, oral cavity, pharynx	C00–C14	42	97.6	2.4	–
Lip	C00	3	66.7	33.3	–
Tongue	C01–C02	11	100.0	–	–
Gum, floor of mouth etc.	C03–C06	8	100.0	–	–
Major salivary glands	C07–C08	11	100.0	–	–
Tonsil, oropharynx	C09–C10	7	100.0	–	–
Nasopharynx	C11	–	–	–	–
Pyriform sinus, hypopharynx	C12–C13	2	100.0	–	–
Other lip, oral cavity, pharynx	C14	–	–	–	–
Digestive organs	C15–C26	991	83.7	15.3	1.0
Oesophagus	C15	10	80.0	20.0	–
Stomach	C16	199	87.9	11.6	0.5
Small intestine	C17	17	88.2	11.8	–
Colon	C18	317	93.4	6.0	0.6
Rectum etc.	C19–C21	181	97.2	2.8	–
Liver etc.	C22	44	75.0	25.0	–
Gallbladder etc.	C23–C24	56	66.1	33.9	–
Pancreas	C25	160	55.0	41.9	3.1
Other digestive organs	C26	7	14.3	57.1	28.6
Respiratory, intrathoracic organs	C30–C39	232	79.3	19.8	0.9
Nasal cavities, ear, sinuses	C30–C31	4	100.0	–	–
Larynx	C32	5	100.0	–	–
Trachea, bronchus, lung	C33–C34	219	78.1	21.0	0.9
Thymus, heart, mediastinum, pleura	C37–C38	4	100.0	–	–
Respiratory organs etc.	C39	–	–	–	–
Bone, articular cartilage	C40–C41	6	100.0	–	–
Melanoma of skin	C43	132	100.0	–	–
Other skin	C44	848	98.6	1.2	0.2
Mesothelial and soft tissues	C45–C49	26	96.2	3.8	–
Breast	C50	728	96.7	2.3	1.0
Female genital organs	C51–C58	622	93.9	4.7	1.4
Vulva, vagina	C51–C52	40	100.0	–	–
Cervix uteri	C53	177	94.4	4.0	1.7
Corpus uteri	C54	235	98.3	1.3	0.4
Uterus unspecified	C55	3	–	100.0	–
Ovary	C56	157	88.5	8.9	2.5
Other female genital organs	C57	9	66.7	22.2	11.1
Placenta	C58	1	100.0	–	–
Urinary organs	C64–C68	203	84.7	14.3	1.0
Kidney, renal pelvis	C64–C65	152	82.9	15.8	1.3
Ureter	C66	6	100.0	–	–
Bladder	C67	44	88.6	11.4	–
Other urinary organs	C68	1	100.0	–	–
Eye	C69	11	36.4	54.5	9.1
Brain, central nervous system	C70–C72	61	68.9	24.6	6.6
Meninges	C70	4	100.0	–	–
Brain	C71	56	66.1	26.8	7.1
Other central nervous system	C72	1	100.0	–	–
Thyroid gland	C73	57	100.0	–	–
Other endocrine	C74–C75	1	100.0	–	–
Site unknown or uncertain	C76–C80	70	45.7	45.7	8.6
Hodgkin's disease	C81	24	100.0	–	–
Non-Hodgkin's lymphoma	C82–C85/96	102	98.0	1.0	1.0
Immunoproliferative diseases	C88	2	100.0	–	–
Multiple myeloma	C90	52	100.0	–	–
Leukaemia	C91–C95	90	98.9	–	1.1
Independent multiple sites	C97	–	–	–	–

\*Histology, autopsy with histology, cytology, haematology

\*\* Clinical only, instrumental clinical, biochemical/immunological, surgery/autopsy without histology

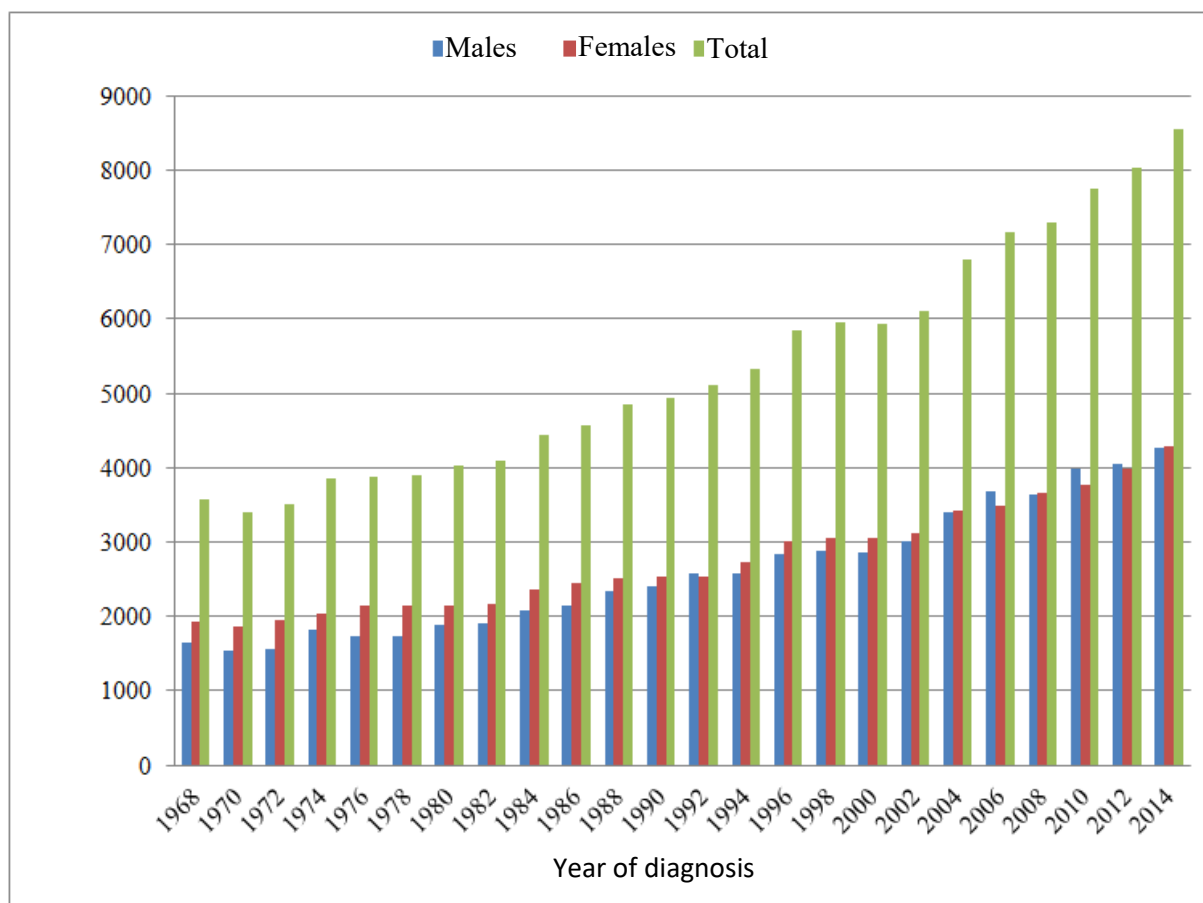
\*\*\*Only information about the cancer case in the Cancer Registry comes from the Causes of Death Registry

**Table 9.** The distribution of new cancer cases in Estonia in 2014, by site and extent of disease, MALES

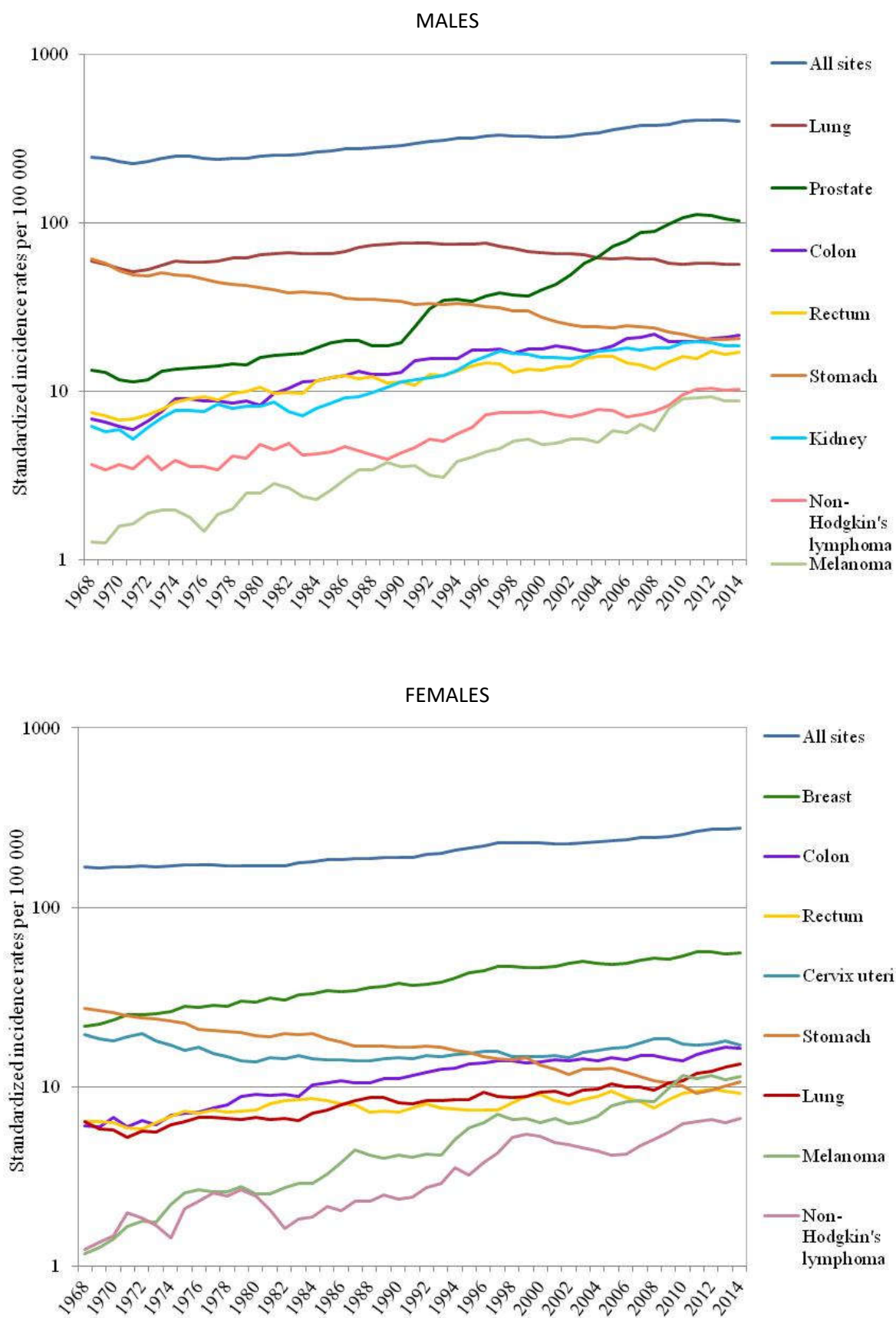
Primary site	ICD-10	Number of new cases	Localized	Regional, lymph nodes only	Regional, adjacent tissues	Distant metastasis	Unknown
All sites	C00–C80	4008	51.5	10.3	7.0	21.0	10.2
All sites but other skin	C00–C80 but C44	3473	44.8	11.9	8.0	24.2	11.1
Lip, oral cavity, pharynx	C00–C14	137	17.5	42.3	27.0	6.6	6.6
Lip	C00	8	75.0	12.5	–	–	12.5
Tongue	C01–C02	30	10.0	43.3	30.0	10.0	6.7
Gum, floor of mouth etc.	C03–C06	27	18.5	40.7	33.3	3.7	3.7
Major salivary glands	C07–C08	6	16.7	16.7	33.3	16.7	16.7
Tonsil, oropharynx	C09–C10	35	20.0	51.4	25.7	2.9	–
Nasopharynx	C11	4	25.0	25.0	50.0	–	–
Pyriform sinus, hypopharynx	C12–C13	26	3.8	50.0	23.1	11.5	11.5
Other lip, oral cavity, pharynx	C14	1	–	–	–	–	100.0
Digestive organs	C15–C26	926	28.0	17.7	9.5	35.1	9.7
Oesophagus	C15	65	24.6	16.9	15.4	30.8	12.3
Stomach	C16	225	24.9	20.0	3.1	40.4	11.6
Small intestine	C17	13	38.5	23.1	15.4	23.1	–
Colon	C18	240	36.3	20.0	8.8	29.6	5.4
Rectum etc.	C19–C21	176	28.4	27.3	7.4	30.1	6.8
Liver etc.	C22	50	30.0	8.0	10.0	32.0	20.0
Gallbladder etc.	C23–C24	33	39.4	3.0	9.1	36.4	12.1
Pancreas	C25	121	14.0	3.3	22.3	47.1	13.2
Other digestive organs	C26	3	–	–	–	66.7	33.3
Respiratory, intrathoracic organs	C30–C39	664	19.9	19.7	6.8	43.1	10.5
Nasal cavities, ear, sinuses	C30–C31	6	–	–	83.3	–	16.7
Larynx	C32	51	64.7	13.7	9.8	5.9	5.9
Trachea, bronchus, lung	C33–C34	602	16.1	20.4	5.8	47.0	10.6
Thymus, heart, mediastinum, pleura	C37–C38	5	40.0	20.0	–	–	40.0
Respiratory organs etc.	C39	–	–	–	–	–	–
Bone, articular cartilage	C40–C41	11	54.5	–	9.1	27.3	9.1
Melanoma of skin	C43	88	69.3	11.4	–	5.7	13.6
Other skin	C44	535	94.8	–	0.9	0.2	4.1
Mesothelial and soft tissues	C45–C49	36	63.9	2.8	11.1	11.1	11.1
Breast	C50	4	50.0	25.0	–	25.0	–
Male genital organs	C60–C63	1109	69.2	2.8	7.8	9.3	10.9
Penis	C60	8	25.0	37.5	12.5	12.5	12.5
Prostate	C61	1083	69.7	2.2	7.9	9.3	10.8
Testis	C62	17	52.9	23.5	–	5.9	17.6
Other male genital organs	C63	1	100.0	–	–	–	–
Urinary organs	C64–C68	343	63.3	4.4	3.8	17.8	10.8
Kidney, renal pelvis	C64–C65	197	63.5	2.0	0.5	23.4	10.7
Ureter	C66	4	75.0	25.0	–	–	–
Bladder	C67	142	62.7	7.0	8.5	10.6	11.3
Other urinary organs	C68	–	–	–	–	–	–
Eye	C69	11	63.6	–	–	9.1	27.3
Brain, central nervous system	C70–C72	59	84.7	–	–	–	15.3
Meninges	C70	1	–	–	–	–	100.0
Brain	C71	57	86.0	–	–	–	14.0
Other central nervous system	C72	1	100.0	–	–	–	–
Thyroid gland	C73	15	46.7	20.0	13.3	13.3	6.7
Other endocrine	C74–C75	3	33.3	–	33.3	–	33.3
Site unknown or uncertain	C76–C80	67	–	–	–	58.2	41.8

**Table 10.** The distribution of new cancer cases in Estonia in 2014, by site and extent of disease, FEMALES

Primary site	ICD-10	Number of new cases	Localizes	Regional, lymph nodes only	Regional, adjacent tissues	Distant metastasis	Unknown
All sites	C00–C80	4030	53.0	14.1	6.9	15.7	10.4
All sites but other skin	C00–C80 but C44	3182	42.2	17.8	8.6	19.7	11.6
Lip, oral cavity, pharynx	C00–C14	42	47.6	33.3	11.9	–	7.1
Lip	C00	3	66.7	–	–	–	33.3
Tongue	C01–C02	11	45.5	45.5	9.1	–	–
Gum, floor of mouth etc.	C03–C06	8	50.0	25.0	25.0	–	–
Major salivary glands	C07–C08	11	63.6	9.1	18.2	–	9.1
Tonsil, oropharynx	C09–C10	7	28.6	57.1	–	–	14.3
Nasopharynx	C11	–	–	–	–	–	–
Pyriform sinus, hypopharynx	C12–C13	2	–	100.0	–	–	–
Other lip, oral cavity, pharynx	C14	–	–	–	–	–	–
Digestive organs	C15–C26	991	28.5	19.5	9.3	31.5	11.3
Oesophagus	C15	10	10.0	40.0	10.0	40.0	–
Stomach	C16	199	28.6	18.6	3.5	32.7	16.6
Small intestine	C17	17	17.6	17.6	11.8	41.2	11.8
Colon	C18	317	37.9	22.7	6.0	26.2	7.3
Rectum etc.	C19–C21	181	35.4	30.4	9.4	19.3	5.5
Liver etc.	C22	44	22.7	18.2	11.4	27.3	20.5
Gallbladder etc.	C23–C24	56	26.8	5.4	19.6	32.1	16.1
Pancreas	C25	160	7.5	6.9	18.8	53.8	13.1
Other digestive organs	C26	7	–	–	–	28.6	71.4
Respiratory, intrathoracic organs	C30–C39	232	20.3	20.7	6.9	41.4	10.8
Nasal cavities, ear, sinuses	C30–C31	4	–	–	100.0	–	–
Larynx	C32	5	80.0	20.0	–	–	–
Trachea, bronchus, lung	C33–C34	219	19.2	21.5	5.0	42.9	11.4
Thymus, heart, mediastinum, pleura	C37–C38	4	25.0	–	25.0	50.0	–
Respiratory organs etc.	C39	–	–	–	–	–	–
Bone, articular cartilage	C40–C41	6	50.0	–	–	16.7	33.3
Melanoma of skin	C43	132	67.4	7.6	–	4.5	20.5
Other skin	C44	848	93.4	–	0.4	0.4	5.9
Mesothelial and soft tissues	C45–C49	26	46.2	–	26.9	19.2	7.7
Breast	C50	728	46.3	31.5	4.0	8.4	9.9
Female genital organs	C51–C58	622	51.8	9.8	17.4	13.3	7.7
Vulva, vagina	C51–C52	40	60.0	20.0	10.0	5.0	5.0
Cervix uteri	C53	177	46.3	19.2	13.6	12.4	8.5
Corpus uteri	C54	235	76.6	7.2	5.1	8.1	3.0
Uterus unspecified	C55	3	–	–	–	–	100.0
Ovary	C56	157	21.7	1.3	41.4	24.8	10.8
Other female genital organs	C57	9	22.2	–	33.3	–	44.4
Placenta	C58	1	–	–	–	100.0	–
Urinary organs	C64–C68	203	67.0	2.5	6.4	13.3	10.8
Kidney, renal pelvis	C64–C65	152	67.1	2.0	5.3	15.8	9.9
Ureter	C66	6	83.3	–	16.7	–	–
Bladder	C67	44	65.9	2.3	9.1	6.8	15.9
Other urinary organs	C68	1	–	100.0	–	–	–
Eye	C69	11	45.5	–	–	9.1	45.5
Brain, central nervous system	C70–C72	61	80.3	–	1.6	–	18.0
Meninges	C70	4	75.0	–	25.0	–	–
Brain	C71	56	80.4	–	–	–	19.6
Other central nervous system	C72	1	100.0	–	–	–	–
Thyroid gland	C73	57	71.9	12.3	5.3	5.3	5.3
Other endocrine	C74–C75	1	–	–	–	100.0	–
Site unknown or uncertain	C76–C80	70	1.4	–	1.4	45.7	51.4



**Figure 2.** Number of new cancer cases in Estonia in 1968–2014.



**Figure 3.** Trends in cancer incidence in Estonia in 1968–2014 (selected sites).

**Table 11.** The number of prevalent cancer cases, crude and age-standardized prevalence rates per 100 000 in Estonia on 31 December 2014 by site (diagnosed in 1968–2014), MALES

Primary site	ICD–10	Number of prevalent cases	Crude	Age-standardized*
All sites	C00–C97	23945	3897.4	2 178.6
All sites but other skin	C00–C97 but C44	19600	3190.2	1 809.8
Lip, oral cavity, pharynx	C00–C14	551	89.7	53.2
Lip	C00	119	19.4	9.4
Tongue	C01–C02	96	15.6	9.5
Gum, floor of mouth etc.	C03–C06	111	18.1	11.4
Major salivary glands	C07–C08	47	7.6	4.7
Tonsil, oropharynx	C09–C10	99	16.1	10.2
Nasopharynx	C11	26	4.2	2.7
Pyriiform sinus, hypopharynx	C12–C13	52	8.5	5.2
Other lip, oral cavity, pharynx	C14	1	0.2	0.1
Digestive organs	C15–C26	3643	592.9	317.2
Oesophagus	C15	91	14.8	9.1
Stomach	C16	858	139.7	77.0
Small intestine	C17	53	8.6	4.9
Colon	C18	1346	219.1	113.3
Rectum etc.	C19–C21	1022	166.3	86.7
Liver etc.	C22	65	10.6	6.9
Gallbladder etc.	C23–C24	69	11.2	6.0
Pancreas	C25	139	22.6	13.2
Other digestive organs	C26	0	0.0	0.0
Respiratory, intrathoracic organs	C30–C39	1661	270.3	152.3
Nasal cavities, ear, sinuses	C30–C31	32	5.2	2.9
Larynx	C32	490	79.8	45.1
Trachea, bronchus, lung	C33–C34	1103	179.5	100.1
Thymus, heart, mediastinum, pleura	C37–C38	33	5.4	4.0
Respiratory organs etc.	C39	3	0.5	0.2
Bone, articular cartilage	C40–C41	77	12.5	10.2
Melanoma of skin	C43	637	103.7	63.9
Other skin	C44	4345	707.2	368.8
Mesothelial and soft tissues	C45–C49	198	32.2	23.3
Breast	C50	38	6.2	3.5
Male genital organs	C60–C63	8211	1336.4	718.7
Penis	C60	79	12.9	7.3
Prostate	C61	7766	1264.0	664.1
Testis	C62	354	57.6	45.8
Other male genital organs	C63	12	2.0	1.5
Urinary organs	C64–C68	2483	404.1	222.8
Kidney, renal pelvis	C64–C65	1312	213.5	123.0
Ureter	C66	24	3.9	2.0
Bladder	C67	1143	186.0	97.4
Other urinary organs	C68	4	0.7	0.4
Eye	C69	62	10.1	7.0
Brain, central nervous system	C70–C72	224	36.5	31.5
Meninges	C70	0	0.0	0.0
Brain	C71	204	33.2	29.3
Other central nervous system	C72	20	3.3	2.2
Thyroid gland	C73	163	26.5	17.9
Other endocrine	C74–C75	19	3.1	2.5
Site unknown or uncertain	C76–C80	58	9.4	5.9
Hodgkin's disease	C81	289	47.0	38.6
Non-Hodgkin's lymphoma	C82–C85/96	571	92.9	62.7
Immunoproliferative diseases	C88	8	1.3	0.6
Multiple myeloma	C90	137	22.3	13.1
Leukaemia	C91–C95	570	92.8	64.9
Independent multiple sites	C97	–	–	–

\* Standardized to the world standard population.

**Table 12.** The number of prevalent cancer cases, crude and age-standardized prevalence rates per 100 000 in Estonia on 31 December 2014 by site (diagnosed in 1968–2014), FEMALES

Primary site	ICD–10	Number of prevalent cases	Crude	Age-standardized*
All sites	C00–C97	36073	5161.5	2 204.5
All sites but other skin	C00–C97 but C44	27614	3951.2	1 797.4
Lip, oral cavity, pharynx	C00–C14	358	51.2	22.7
Lip	C00	57	8.2	1.8
Tongue	C01–C02	56	8.0	3.8
Gum, floor of mouth etc.	C03–C06	72	10.3	4.7
Major salivary glands	C07–C08	116	16.6	7.9
Tonsil, oropharynx	C09–C10	36	5.2	2.7
Nasopharynx	C11	16	2.3	1.3
Pyriform sinus, hypopharynx	C12–C13	5	0.7	0.4
Other lip, oral cavity, pharynx	C14	0	0.0	0.0
Digestive organs	C15–C26	4594	657.3	221.9
Oesophagus	C15	22	3.1	1.4
Stomach	C16	882	126.2	46.1
Small intestine	C17	67	9.6	4.1
Colon	C18	2109	301.8	95.7
Rectum etc.	C19–C21	1219	174.4	57.2
Liver etc.	C22	50	7.2	3.5
Gallbladder etc.	C23–C24	82	11.7	3.9
Pancreas	C25	161	23.0	9.9
Other digestive organs	C26	2	0.3	0.1
Respiratory, intrathoracic organs	C30–C39	611	87.4	39.0
Nasal cavities, ear, sinuses	C30–C31	27	3.9	1.5
Larynx	C32	65	9.3	4.4
Trachea, bronchus, lung	C33–C34	500	71.5	30.7
Thymus, heart, mediastinum, pleura	C37–C38	19	2.7	2.4
Respiratory organs etc.	C39	0	0.0	0.0
Bone, articular cartilage	C40–C41	71	10.2	8.9
Melanoma of skin	C43	1404	200.9	103.1
Other skin	C44	8459	1210.4	407.1
Mesothelial and soft tissues	C45–C49	253	36.2	20.9
Breast	C50	8350	1194.8	543.2
Female genital organs	C51–C58	6919	990.0	467.7
Vulva, vagina	C51–C52	287	41.1	13.3
Cervix uteri	C53	2424	346.8	197.6
Corpus uteri	C54	2877	411.7	160.6
Uterus unspecified	C55	6	0.9	0.4
Ovary	C56	1225	175.3	87.7
Other female genital organs	C57	62	8.9	4.3
Placenta	C58	38	5.4	3.8
Urinary organs	C64–C68	1712	245.0	89.8
Kidney, renal pelvis	C64–C65	1219	174.4	67.3
Ureter	C66	19	2.7	0.8
Bladder	C67	466	66.7	21.1
Other urinary organs	C68	8	1.1	0.5
Eye	C69	86	12.3	6.3
Brain, central nervous system	C70–C72	220	31.5	27.7
Meninges	C70	10	1.4	0.8
Brain	C71	192	27.5	25.3
Other central nervous system	C72	18	2.6	1.6
Thyroid gland	C73	1088	155.7	82.6
Other endocrine	C74–C75	27	3.9	2.3
Site unknown or uncertain	C76–C80	98	14.0	5.9
Hodgkin's disease	C81	373	53.4	45.2
Non-Hodgkin's lymphoma	C82–C85/96	635	90.9	45.2
Immunoproliferative diseases	C88	11	1.6	0.4
Multiple myeloma	C90	171	24.5	10.5
Leukaemia	C91–C95	633	90.6	54.1
Independent multiple sites	C97	–	–	–

\* Standardized to the world standard population.

**Table 13a.** The leading primary sites of cancer in Estonia in 2014, MALES

Primary site	ICD-10	New cases		Incidence rate (per 100 000)	
		Number	%	Crude	Standardized*
Prostate	C61	1083	25.4	176.2	101.0
Trachea, bronchus, lung	C33–C34	602	14.1	97.9	54.2
Other skin	C44	535	12.6	87.0	48.5
Colon	C18	240	5.6	39.0	21.0
Stomach	C16	225	5.3	36.6	20.6
Kidney, renal pelvis	C64–C65	197	4.6	32.1	19.1
Rectum	C19–C21	176	4.1	28.6	15.9
Bladder	C67	142	3.3	23.1	12.6
Pancreas	C25	121	2.8	19.7	11.4
Non-Hodgkin's lymphoma	C82–C85,C96	105	2.5	17.1	11.5
All sites	C00–C97	4258	100.0	692.7	401.9

\* Standardized by age (to the world standard population).

**Table 13b.** The leading primary sites of cancer in Estonia in 2014, FEMALES

Primary site	ICD-10	New cases		Incidence rate (per 100 000)	
		Number	%	Crude	Standardized*
Other skin	C44	848	19.7	121.2	47.2
Breast	C50	728	16.9	104.0	53.8
Colon	C18	317	7.4	45.3	16.8
Uterus	C54	235	5.5	33.6	17.0
Trachea, bronchus, lung	C33–C34	219	5.1	31.3	12.9
Stomach	C16	199	4.6	28.4	10.7
Rectum	C19–C21	181	4.2	25.9	9.0
Cervix	C53	177	4.1	25.3	17.3
Pancreas	C25	160	3.7	18.9	10.6
Ovary	C56	157	3.7	22.4	10.7
All sites	C00–C97	4300	100.0	614.4	275.4

\* Standardized by age (to the world standard population).