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14 Health

Neuchâtel, April 2017

Swiss Cancer Report 2015

Cancer of the gallbladder and bile ducts

1 New cases and mortality

Current situation

Between 2008 and 2012 an average of 140 men and 160 women were diagnosed with gallbladder or bile duct cancer each year. This type of cancer accounts for 1% of all cancers among men and women. The lifetime risk of developing gallbladder or bile duct cancer is 0.3% (equal to roughly 3 out of 1000 people; T 1). The standardised incidence rate varies little between men and women (it is 1.2 times higher among men than women).

An average of fewer than 70 men die from cancer of the gallbladder and bile ducts each year and slightly more than 100 women, representing 0.8% of cancer deaths among

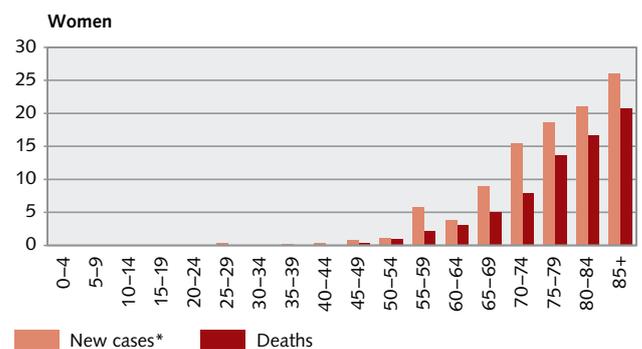
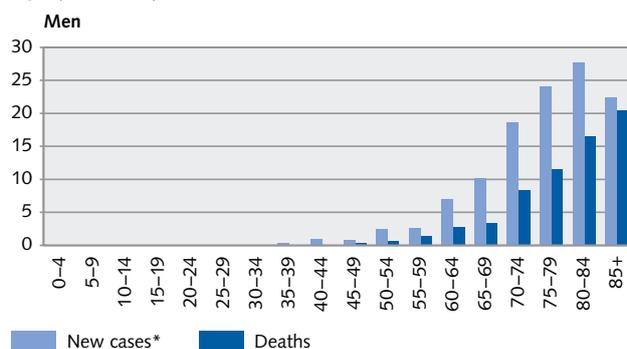
This chapter deals with cancers of the gallbladder (C23) and cancers of the bile ducts (C24), excluding cancers of the intra-hepatic bile ducts (classified with liver cancer under C22). The gallbladder is an organ located between the liver and the intestines, where bile (produced by the liver) is stored and concentrated. Bile is released into the small intestine via the bile ducts. Diagnosis of cancer of the gallbladder and of the bile ducts is often late when the tumour prevents bile from being transported to the small intestine.^{1,2}

men and 1.4% among women. The risk of dying from cancer of the gallbladder or bile ducts is 0.1% for men and 0.2% for women. This means that 1 out of 1000 men and 1 out of 500 women die from this cancer.

Cancer of the gallbladder and bile ducts by age, 2008–2012

G 1

Age-specific rate per 100,000 inhabitants



* New cases estimated on the basis of cancer registry data

Sources: NICER – New cases; FSO – Deaths

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Incidence and mortality rates are less than 1 in 100,000 persons until the age of 49 and 54 respectively, after which they increase (G 1). The median age at diagnosis is 73 for men and 76 for women. The median age at death from this cancer is 76 for men and 78 for women.

Regional and international comparisons

There are no differences between German-speaking Switzerland and French and Italian-speaking Switzerland (G 2). Among the nine European countries compared with Switzerland, incidence and mortality rates are in the middle range (G 3).

Trends over time

Incidence and mortality rates have fallen over the past 30 years. This decline has been considerable for incidence rates among women (-44%) and for mortality rates (approximately -52% for men and -63% for women). The decline in incidence rates has been less pronounced for men (-18%; G 4).

2 Survival rates

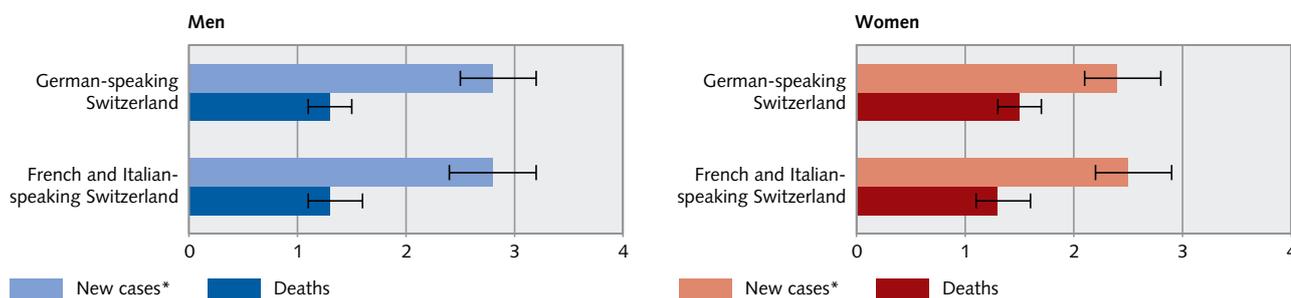
In the period 2008–2012, some 17% of male patients and 14% of female patients survived at least five years after having been diagnosed with gallbladder or bile duct cancer (observed survival rate; T 1). Taking into account the risk of dying from other causes, the five-year survival rate is 19% for men and 16% for women (relative survival rate; G 5). However, during the 1998–2002 period, this rate was slightly lower at 18% for men and 12% for women. Between 1998 and 2012, the ten-year survival rate saw little improvement rising from 12% to 13% for men and from 9 to 11% for women.

Compared with the nine selected European countries for the period 2000–2007, Switzerland has the second highest five-year survival rate (G 6).

Cancer of the gallbladder and bile ducts in regional comparison, 2008–2012

G 2

Rate per 100,000 inhabitants, European standard



* New cases estimated on the basis of cancer registry data

Sources: NICER – New cases; FSO – Deaths

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Cancer of the gallbladder and bile ducts in international comparison, 2012

G 3

Rate per 100,000 inhabitants, European standard



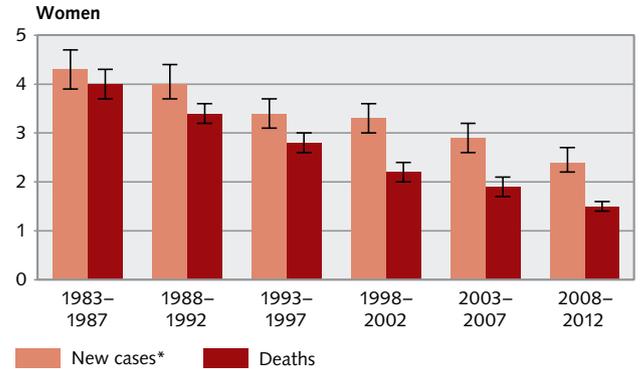
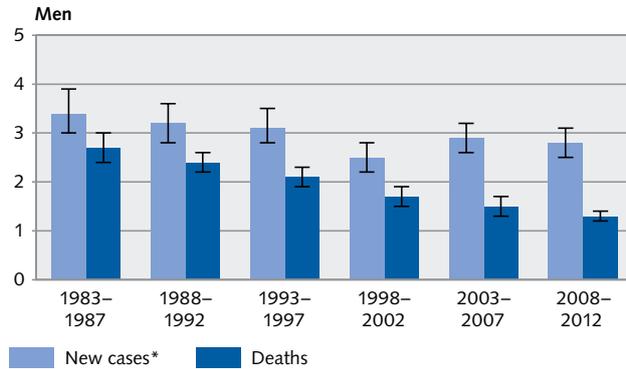
Source: Ferlay J. et al. (2013). Cancer incidence and mortality patterns in Europe: Estimates for 40 countries in 2012

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Cancer of the gallbladder and bile ducts: Trends over time

G 4

Rate per 100,000 inhabitants, European standard



▮ Confidence interval 95%

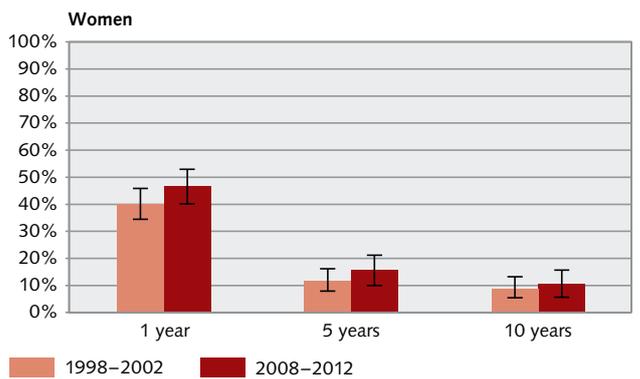
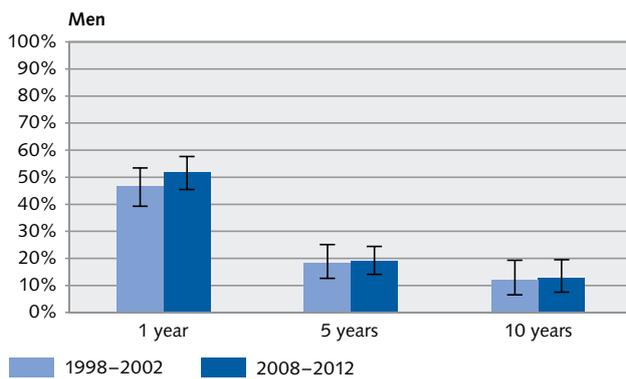
* New cases estimated on the basis of cancer registry data

Sources: NICER – New cases; FSO – Deaths

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Cancer of the gallbladder and bile ducts: Relative survival rate after 1, 5 and 10 years

G 5



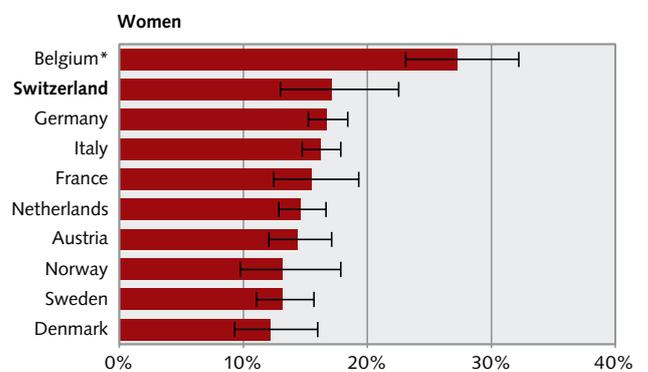
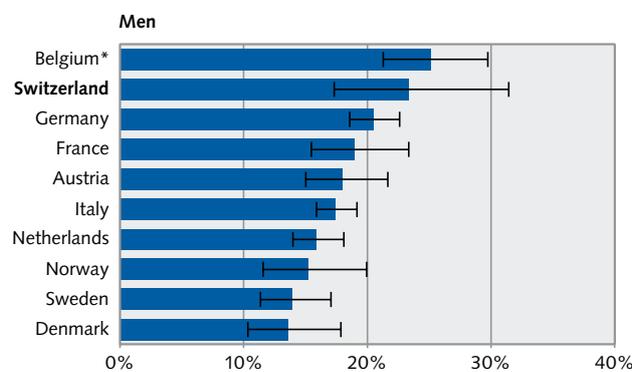
▮ Confidence interval 95%

Source: NICER

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Cancer of the gallbladder and bile ducts: Relative 5-year survival rates in international comparison, 2000-2007

G 6



▮ Confidence interval 95%

* According to the source, the calculated survival rate is exceptionally high with the result that there may be a problem with data collection in this country. Data for Belgium, Germany, France, Italy and Switzerland are based on regional data which do not cover the whole country.

Source: EUROCARE-5 Database – Survival Analysis 2000-2007

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Cancer of the gallbladder and bile ducts: Key epidemiological figures

T 1

	Men		Women	
	Incidence	Deaths	Incidence	Deaths
Number of cases per year, average 2008–2012	141	68	159	105
Number of cases 2015 (estimated)	153	78	155	101
Proportion of all cancer cases, average 2008–2012	0.7%	0.8%	0.9%	1.4%
Crude rate (per 100,000 inhabitants and year), 2008–2012	3.6	1.8	4.0	2.6
Average annual change in the crude rate, 2003–2012	–0.1%	0.3%	–2.7%	–2.4%
Crude rate 2015 (estimated)	3.8	1.9	3.7	2.4
Standardised rate (per 100,000 inhabitants and year), 2008–2012	2.8	1.3	2.4	1.5
Average annual change in the standardised rate, 2003–2012	–1.0%	–1.1%	–2.8%	–3.0%
Median age at diagnosis and death, average 2008–2012	72.9	75.9	75.9	78.3
Lifetime risk, 2008–2012	0.3%	0.1%	0.3%	0.2%
Cumulative risk before the age of 70, 2008–2012	0.1%	0.0%	0.1%	0.1%
Years of potential life lost before the age of 70, average 2008–2012	–	190	–	217
	Men		Women	
Observed 5-year survival rate, 31.12.2012		16.8%		13.9%
Relative 5-year survival rate, on 31.12.2012		19.0%		15.6%

Sources: NICER – New cases; FSO – Deaths

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3 Risk factors

The risk factors for cancer of the gallbladder and bile ducts are little understood.¹ However, chronic irritation and inflammation do seem to play an important role in the development of these cancers.³ In relation with inflammation, the various risk factors mentioned in the scientific literature are: gallstones, primary sclerosing cholangitis (autoimmune disease), a condition called porcelain gallbladder (calcification of the gallbladder wall in association with chronic inflammation), certain chronic infections (parasitic or viral) or a congenital malformation of the junction between the pancreas and the gallbladder.^{1,3}

Furthermore, an increase in the risk of gallbladder cancer has been observed in overweight or obese persons: excess weight and obesity increase the risk of gallstones which themselves are one of the risk factors for this cancer. Excess weight and obesity also increase hormone levels circulating in the blood and inflammatory response which also encourage the development of certain cancers.¹

The presence of polyps in the gallbladder and certain genetic mutations are also cited as risk factors.^{1,3} Moreover, the International Agency for Research on Cancer has classified Thorium 232 and its decay products as risk factors for

References

- World Cancer Research Fund International/American Institute for Cancer Research (2015). Continuous Update Project Report: Diet, Nutrition, Physical Activity and Gallbladder Cancer. Available at: <http://www.wcrf.org/sites/default/files/Gallbladder-Cancer-2015-Report.pdf>
- Swiss League against Cancer (2016). Cancer of the gallbladder and bile ducts [online] (page consulted on 21/10/2016). www.liguecancer.ch/a-propos-du-cancer/les-differents-types-de-cancer/le-cancer-de-la-vesicule-et-des-voies-biliaires/
- Mathew M. A., Yuman F., Jau Augustine M. M., Fong Y. (2014). Epidemiology and Risk Factors of Biliary Tract and Primary Liver Tumors. *Surg Oncol Clin N Am* 23: 171-188
- WHO International Agency for Research on Cancer Monograph Working Group (2009). A review of human carcinogens – Part A to F. *The Lancet Oncology*; Volume 10. Available from: <http://www.cancer-environnement.fr/212-Monographies-du-CIRC--syntheses.ce.aspx>

Swiss Cancer Report 2015

This publication completes the 2015 report on cancer in Switzerland, published in March 2016. The latter presents the current situation with regard to cancer in Switzerland and developments over the past 30 years: after a general overview of all cancers, the report describes the epidemiology of 23 different cancer sites as well as childhood cancers.

Using the same methodology, this current document focuses on another cancerous site, the gallbladder and bile ducts. The cantonal and regional cancer registries collect data on new cases, the National Institute of Cancer Epidemiology and Registration (NICER) compiles them. Figures on mortality and demographic data come from the Federal Statistical Office.

The methodology, indicators, classifications, sources and the quality of data used are described in detail in the report: "Le cancer en Suisse, rapport 2015 – Méthode" available in French and German.

gallbladder and bile duct cancer.⁴ Lastly, toxins (food, tobacco, and other environmental sources) are excreted and concentrated in bile and can be considered as risk factors.¹

Further information on the internet

www.statistik.ch → Statistiken finden → 14 – Gesundheit → Gesundheitszustand → Krankheiten → Krebs

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Orders: tel. 058 463 60 60, fax 058 463 60 61, order@bfs.admin.ch