

# Incidence of Tumors

## Basic concepts

- *'Incidence of tumors'* - number of newly detected cases; indicates the number of newly diagnosed cancers during the observed period in the monitored population.
- *'Tumor mortality'* - number of deaths; indicates the number of patients who died during the study period in the study population (number of deaths from tumor out of all).
- *'Tumor lethality'* - number of deaths; indicates the number of patients who died during the observed period in the monitored population of oncological patients (number of deaths from tumor out of the number of patients with cancer).
- *'Tumor prevalence'* - number of living patients; indicates the number of patients living with cancer.

## General epidemiology

In terms of the epidemiology of cancer, the Czech Republic is one of the busiest countries in Europe and the world. All neoplasms excluding tumors of the skin (C44) show a total incidence of almost 511 people per 100,000 inhabitants, the mortality is more than 262 deaths per 100,000 inhabitants. Mortality has been stabilizing for a long time since 1995. Nevertheless, due to the increasing incidence, there is a steady increase in prevalence. In 2007, there were almost 290,000 people (all neoplasms excluding skin tumors). The most significant factor in the increase in the incidence of cancer is the *increasing average age of the population* '. There is an increase in the number of cancers mainly in the age category over 70 years, the oncological burden has also been growing in the long term also in the age group 50–59 years. Another factor is the increasing incidence of multiple primary tumors (so-called duplications) in one patient. The relative frequency of findings of multiple malignancies in the period 1998–2007 reaches 12–14% of their total incidence in a number of diagnoses. In more than 95% of cases, these are recurrent malignancies of a different location than the first tumor. The incidence of tumors is further influenced by, smoking, food composition, excessive salt intake, and uncontrollable factors such as genetic predisposition etc. Despite the growing incidence, we have long managed to stabilize mortality. New treatment methods and the detection of cancer in an earlier clinical stage contribute to this. However, there is still a very high proportion of patients in the Czech Republic in whom cancer is diagnosed at an advanced stage.

## The most common cancers in the Czech Republic

The most common cancers in men in the Czech Republic are:

- prostate cancer,
- colorectal cancer,
- malignant tumors of the trachea, bronchi and lung tumors.

Compared to the global incidence of these tumors, Czech men are in 40th place in the number of prostate cancers (1st place in the USA), in 1st place in the number of cancers of the colon and rectum and 9th in the number of cancers of the trachea, bronchi and lungs (1st place Hungary).

The most common cancers in women in the Czech Republic are:

- breast cancer,
- cancer of the colon and rectum,
- cancer uterus,
- cancer of the trachea, bronchi and lungs.

Compared to the global incidence of these tumors, Czech women are in 30th place in the number of breast cancers (1st place is the USA), in 9th place in the number of cases of carcinoma in the colon and rectum (1st place is New Zealand), in 3rd place in the number of cancers of the uterine body (1st place is the USA), in 106th place in the number of cancers of the cervix (1st place is Haiti) and in 25th place in the number of cancers of the trachea, bronchi and lungs.

Mortality has stabilized in these most common diagnoses in recent years, but has increased in prevalence. An exception is the malignant tumors of the trachea, bronchi and lungs, whose significant mortality reduces the prevalence value even at high incidence. It is interesting that the incidence of tracheal, bronchial and lung tumors in men in the Czech Republic has been declining in recent years, while it has been increasing in women. In addition to the above-mentioned tumors, the number of carcinomas pancreas, stomach and in women carcinoma ovary is increasing in the Czech Republic.

## Links

## Related Articles

- Tumor registries

## External links

- Graphs of tumors occurring in the Czech Republic can be found here (<http://www.svod.cz/>)

## References

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