

Uterine cervical carcinoma is a malignant illness in which surface cells of the uterine cervix multiply at an uncontrolled pace. The tumor itself is preceded by pre-tumor changes in cells known as precancerosis; at this point the organism can manage the condition alone. Precancerosis is not accompanied by any medical problems and can only be identified by a specialized cytological examination. Early discovery of this pre-cancerous change can be successfully treated. A late diagnosis is associated with more demanding and less successful treatment.

1 050 to 1 100 new cases of uterine cervical cancer are diagnosed each year in the Czech Republic and about 350 to 400 women die of the disease each year. The incidence is estimated to be about 20 new cases per 100 000 women per year.

The biggest risk factor today is thought to be infections caused by the oncogenic type of the human Papillomavirus, which is transferred by sexual intercourse in 99.9 % of the cases. Young girls are the most susceptible to the infection. Two thirds of all women aged 35 have been in contact with the virus; most of them, however, do not even know of the infection, as their immunity systems managed to destroy the virus. In five of 100 women who smoke or have immunity disorders the virus can remain in the epithelium of the cervix for up to ten years. In some cases this seemingly harmless infection can change to a pre-cancerous condition, which can later lead to a malignant tumor.

The newest and most reliable method of protection against the HPV infection is vaccination; this leads to the development of type-specific humoral immunity against the viral genotypes found in the vaccine. In the Czech Republic there are two vaccines presently available – Cervarix and Silgard.