

Because numbers of temporary infections or short-term infestations of e.g. the penis are very high, screening of men in context with their individual potential transferability to women is not recommendable.

## Vaccination

Since 2007, HPV vaccinations have been recommended for young girls between 9 – 14 years (prior to first sexual contacts). Major studies have proven a significant decrease of HPV-associated diseases in connection with vaccinations. Furthermore, vaccines proved efficient against other types of HPV, which were not included in the vaccine (cross-protectivity).

## Contact

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Supplied by:

Practice stamp

Please note that information regarding reimbursement is only valid for patients who are either members of German statutory or private health insurance.

### Patients covered by statutory health insurances:

Some medical services are as a matter of principle not or not in every case (e.g. upon the patient's individual request) covered by health insurance providers. In these cases, patients have to bear the costs themselves. Current prices are to be found on the order form for individual health care services.

### Patients covered by private health insurances:

Private insurance companies cover the costs in accordance with the German Scale of Medical Fees (GÖA), unless such benefits had been explicitly excluded from a policy. Your physician will be happy to answer any questions on the matter.

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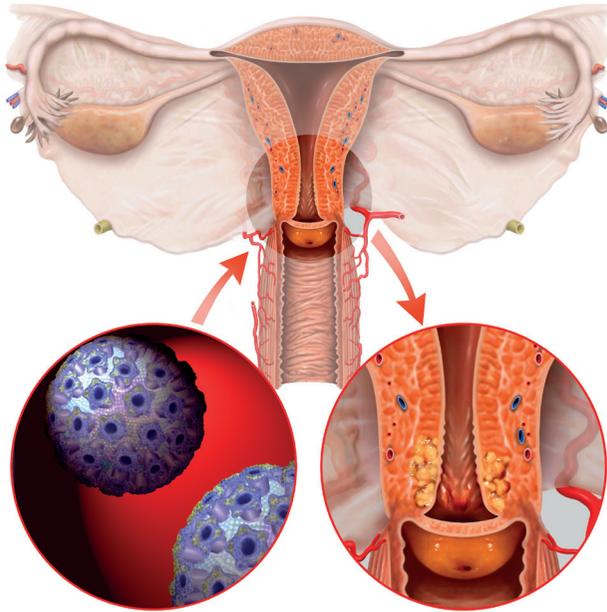
# Cervical Cancer

## Medical Prevention and Early Detection



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## Human Papillomavirus (HPV)

The human papillomavirus is widespread, infects the human epithelium and can trigger diverse diseases. More than 130 HPV types exist and about 48 of these can cause infection of the female and male genital area. Infections of the female genital tract are frequent. At first, these infections are innocuous, since infections are most often only temporary. Thus, in about 50% of young women between 15 – 25 years, an HPV infection can be detected. Many of these infections simultaneously feature different HPV types.

Some HPV types merely cause genital warts. However, other types may lead to abnormal modifications of cervix cells that may eventually (10 to 15 years) develop into cervical cancer. Testing for HPV in cases with cytological anomalies aims at an early detection of these processes. The HPV test possesses a high negative predictive value (no carcinoma development in case of a negative result for HPV during the next 5 years) for changes of cervix cells.

### HPV genotyping

HPV types are divided into three groups:

- **High-risk (HR) types**

The risk of developing a carcinoma due to a persisting infection is elevated in context with these HPV types): 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73, 82

- **Potential HR types**

(Possible association with carcinoma): 26, 53, 66

- **Low-risk (LR) types**

(These types possess only a very low risk of developing a carcinoma): 6, 11, 42, 43, 54, 70, 72, 90, and others.

- mother-to-child transmission

IHPV 16 and HPV 18 are the types most frequently associated with carcinoma development.

### Advantages of the HPV test

- High-risk differentiation (HPV 16, 18 or other HR types)
- Evidence of multiple infections
- Differential diagnosis in cases with suspected recurrence after therapy with the same or a new HPV type
- Facilitation of assessment in cases with difficult cytology of intracervical lesions (especially HPV18 / adenocarcinoma)

### Luminex-based HPV genotyping

With this method, the most important HPV types are detected by PCR, hybridisation, and subsequent use of the Luminex method. Here, the differentiation of individual HPV types is possible. The medical examination is executed in close co-operation with the Charité's Cervix Centre (Department of Gynaecology).

### Medical examination of male patients

The human papillomavirus can be found on various parts of the human body surface, without existing persistent infections or tumorous changes.

For example, HPV testing in men's genital area is called for only when skin alterations (genital warts, precancerosis, etc.) are discernible.