

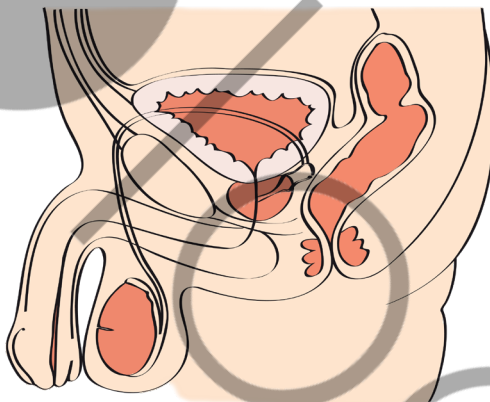
Reproductive system

What is a reproductive system?

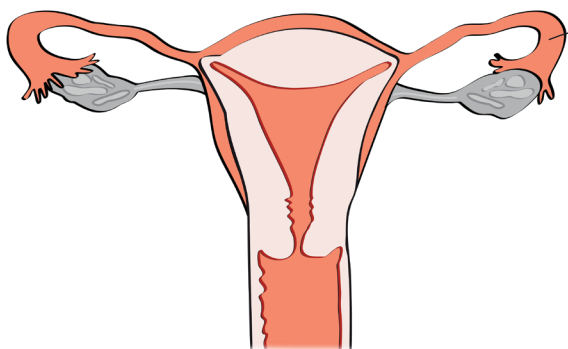
Male pelvis - sagittal section



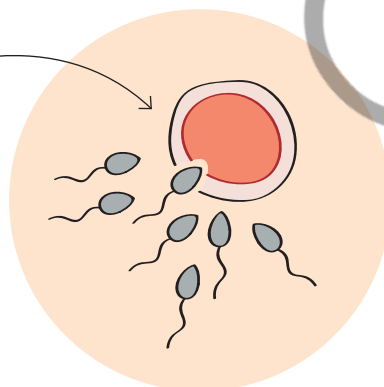
Female pelvis - sagittal section



Uterus and ovaries - frontal view



Fertilization



What diseases can be down there?

STDs*

Infertility

Incontinence

Erectile dysfunctions

Tumour

Inflammation

Genetic disorders

*STDs = Sexually Transmitted Diseases

Reproductive system serves, as its name would suggest, for reproduction. The magic of fertilization, which is a fusion of male and female reproductive cells (the sperm and the egg), happens in a fallopian tube. The fertilized egg then finds its nesting place in the uterus, where it grows and develops for the next 9 months.

Sexually transmitted diseases

Most common STDs

- 1 HPV*
- 2 Chlamydia
- 3 Gonorrhea
- 4 Syphilis
- 5 HIV**
- 6 Hepatitis B and C

How do STDs manifest themselves?

Infertility

Itching

Abnormal vaginal discharge or odor

Pain or bleeding during sex

Blood in urine

Skin changes

No symptoms!*

How are STDs transmitted?

Sexual intercourse
(vaginal, oral and anal)

Sperm and vaginal discharge

Mother-to-child transmission (during pregnancy, giving birth or in breast milk)

Blood
(infected needle)

Saliva

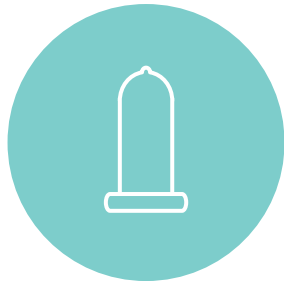
*HPV = Human Papilloma Virus

**HIV is a virus causing AIDS (Acquired Immune Deficiency Syndrome), which is a disease. AIDS is a late stage of HIV infection, however, if someone is HIV positive, it doesn't have to mean he/she has AIDS yet.

*Don't forget to get tested regularly!

Sexually transmitted diseases

How to prevent STDs?



Use a condom.



Get vaccinated against HPV infection.



Get regularly tested with your partner.



Maintain appropriate intimate hygiene (use intimate soap, wear breathable underwear).

Where to get tested, if...

...you had an unprotected sex?

Get tested, but wait for at least 3 months (that's how long it takes HIV to be detectable in your body).

...you have a long term relationship and you want to have sex without a condom?

Ask your gynecologist or dermatovenerologist to test you for STDs.

...you experience any of the symptoms?

Don't be shy or ashamed, don't look for advice on the internet and go to your dermatovenerologist or your GP.

The map of STD test centers can be found here:

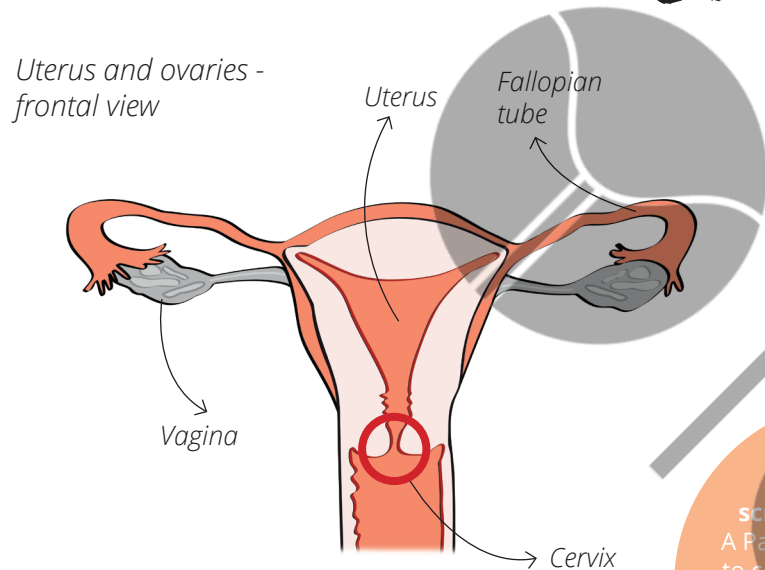


Naměř foťák chytrého telefonu

How much does it cost?

If you had unprotected sex or if you experience any of the symptoms, the test is **free**. If you want to get tested "just in case", it costs about 500 CZK.

Cervix and HPV



What is cancer?

You can imagine cancer as an "out of control" cell multiplication, which can occur in any organ of your body. This affected organ can then grow and push other organs out of their location or even lose its function.

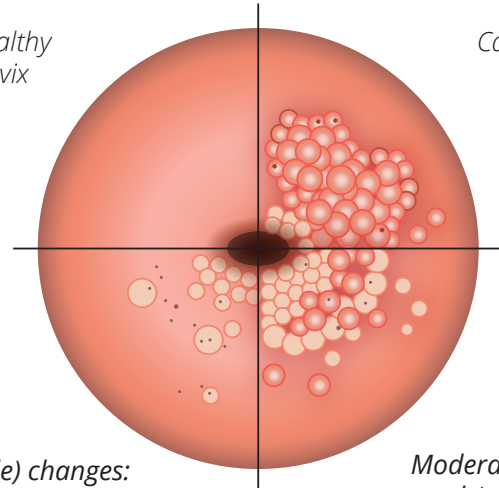
Cervical cancer screening (Pap test):

A Pap test is a procedure to collect tissue from the surface of the cervix and vagina, performed once a year during the annual check-up.

Cervical changes

Healthy cervix

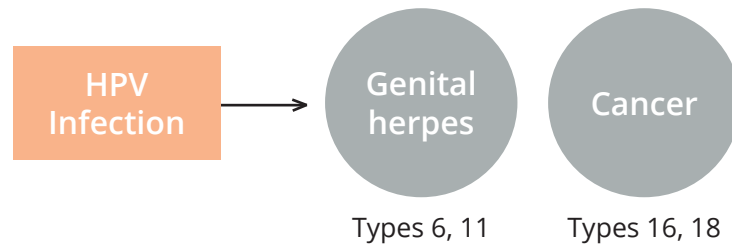
Cancer



Mild (low - grade) changes: in this case, the cervical smear (or Pap smear) is repeated after 6 months.

Moderate to severe (high - grade) changes: in this case, conization of the cervix is needed in order to prevent cancer (conization is a mild surgery during which the doctor gets a small sample of the tissue).

How can a cervix get sick?



Cervical cancer is predominantly caused by human papilloma-virus (HPV 16 or 18). This virus transforms healthy cells into cancerous ones and can also be responsible for genital herpes type 6 or 11.

How does cervical cancer manifest itself?

Bloody discharge

Lower abdominal pain

Bleeding after sex

No symptoms!



This project was made thanks to the support of Ministry of Health

Cervix and HPV

How to prevent cervical cancer?



Don't underestimate your genital problems, go to your gynecologist once a year.



Get vaccinated (your gynecologist can recommend you a suitable vaccine both for you and your partner).



Use a condom - it lowers the risks of HPV transmission.

HPV Vaccination

Both men* and women can get the HPV vaccine in order to protect themselves and their partners - the sooner the better (to get it around the age of 12 to 14 is appropriate). It's only for the best if you get the vaccine before you start living your sex life to its fullest. Just go and talk to your doctor, he / she will recommend you the most suitable vaccine for you (Cervarix, Gardasil, Gardasil 9 or others).

*HPV can cause oral or anal cancer as well, that's why it's important to vaccinate boys / men as well.

Every vaccine is used for something different:

Cervarix

protects from HPV type 16 and 18

Gardasil

(formerly known as Sildegard) – protects from HPV types 6, 11, 16, 18

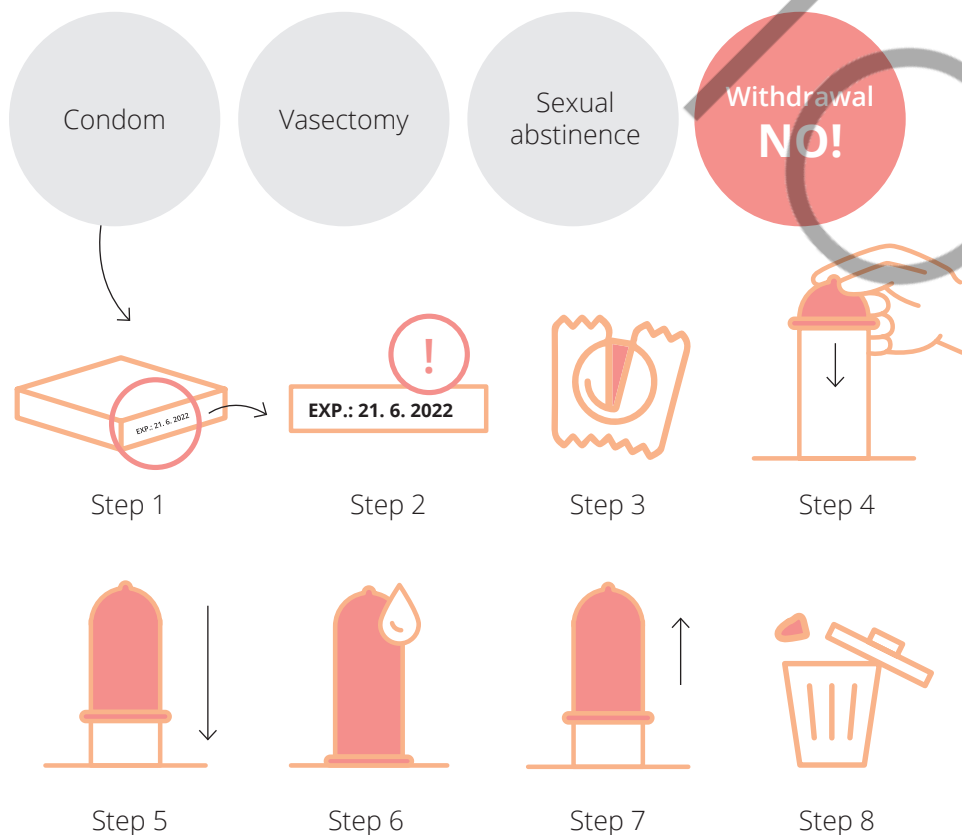
Gardasil 9

protects from previous types + 5 more types

Male birth control

Birth control (or contraception) is used to prevent against unwanted pregnancy.

Male birth control

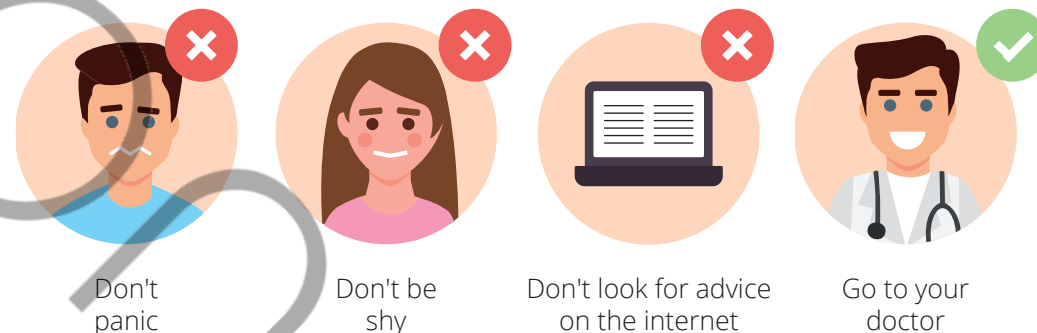


How to choose the right birth control method?

- Discuss it with your gynecologist
- Discuss it with your partner

Use water-based lubricant with condoms, oil-based lubricants can damage them.

What to do if birth control fails?

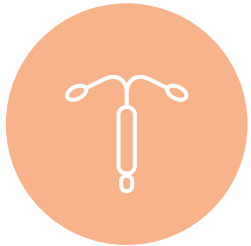


1. Discuss the situation with your partner.
2. **Call your gynecologist.** He / she can recommend you the most suitable contraceptive method for you.

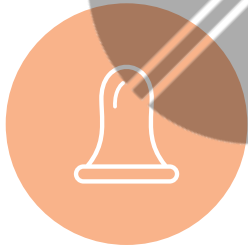
Female birth control

Non-hormonal

Hormonal



Intrauterine device
(non-hormonal IUD)



Female condom



Diaphragm



Spermicides*



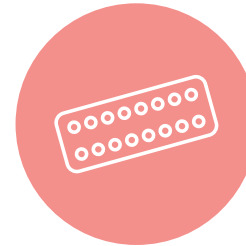
Natural family planning**



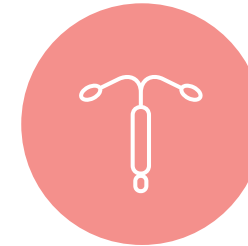
Sexual abstinence



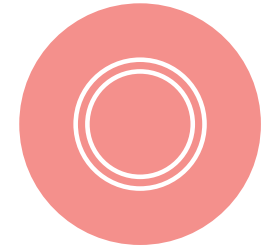
Sterilization



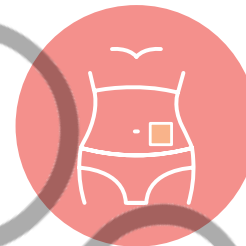
Birth control pills



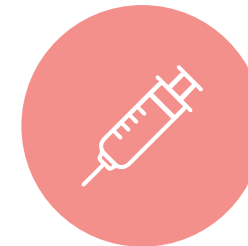
Intrauterine device
(Mirena, Jaydess...)



Hormonal ring



Skin patch



Injectable birth control



Birth control implant

*In many different forms: creams, gels, foams, and suppositories
**Monitoring of cervical mucus changes and basal body temperature

(In)fertility

Infertility is a state, during which a woman cannot get pregnant for a year, while having sexual intercourse twice a week. In 40 % of the cases, the problem is on the male side, in 40 % on the female side and in 20 % of the cases, there is a problem with both of them.

3 %

of children born in Czech Republic are conceived via assisted reproductive technology (ART).

15 %

of the cases of infertility are caused by STDs.

15-20 %

of couples experience fertility problems.

In the last 50 years, the male limit for "being still fertile" decreased by half, to 15 millions sperm per milliliter of semen.

Causes of infertility in male

- **STDs** - they can cause obstructions in vasa deferentia
- **Age** - after 40, fertility decreases
- **Sperm quality** - small quantity and slow movement speed of sperm can lower the chances of conceiving
- **Genetic disorders** - undescended testicles or congenital absence of the vas deferens, for example.

How to prevent infertility?

Don't overheat testicles (don't wear tight pants, don't put your laptop on your lap)

Conceive at a young age

Don't smoke

Don't drink alcohol

Have a healthy diet (avoid underweight or overweight)

Go to your regular check-ups

Causes of infertility in female

- **STDs** - they can cause obstructions in fallopian tubes
- **Age** - after 35, fertility decreases
- **Endometriosis** - a condition in which cells similar to those in the uterus grow outside of it
- **Genetic disorders** - obstructions in fallopian tubes or in the uterus, for example.

Incontinence

Incontinence is any accidental or involuntary loss of urine from the urinary bladder. It affects up to 50 % of women, however only 10 % of them are seeking help. Men experience similar problems as well. Don't be shy and ask your urologist or gynecologist for help in time!

What can cause incontinence?



Childbirth

Can damage pelvic floor muscles.



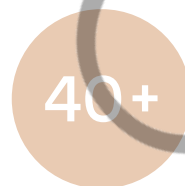
Surgery

Can damage nerves or pelvic floor muscles.



Obesity

Puts pressure on pelvic floor muscles.



Age

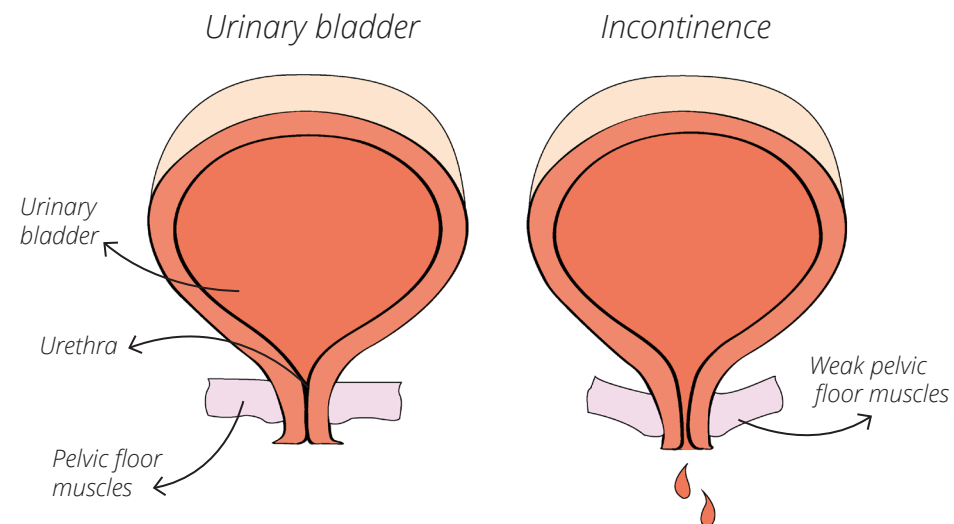
The flexibility of pelvic floor muscles naturally decreases with age.

How to prevent incontinence?

Go to your GP, urologist or gynecologist in time

Strengthen your pelvic floor muscles with exercise

Have a healthy lifestyle



What to do if you experience incontinence?



Don't panic



Don't be shy



Don't look for advice on the internet



Go to your gynecologist or GP

Erectile dysfunction

Erectile dysfunction is an inability to get or keep an erection for time needed to fully enjoy sex. More than 50 % of men over the age of 50 experience problems with erection, however it can affect young men as well. Don't hesitate, don't be shy and go to your urologist in time!

What causes erectile dysfunctions?



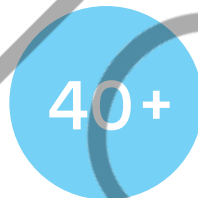
Smoking



Alcohol



Diabetes



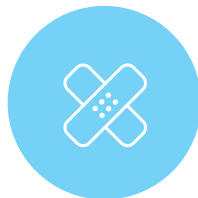
Age



Obesity



Surgery



Injury



Mental state

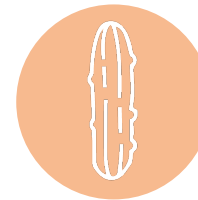
How to prevent erectile dysfunction?

Go to your regular check-ups

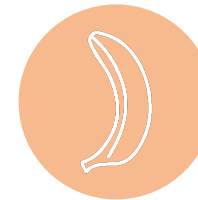
Go to your GP or urologist if you experience any problems

Have a healthy lifestyle

What are the stages of erectile dysfunction?



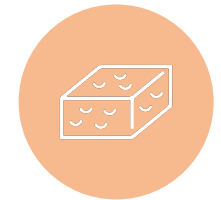
1. Cucumber
optimal erection



2. Banana
almost optimal erection



3. Peeled banana
mild dysfunction

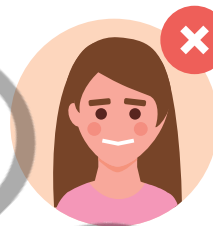


4. Tofu
severe dysfunction

What to do if you experience erectile dysfunctions?



Don't panic



Don't be shy



Don't look for advice on the internet



Go to your doctor (urologist or GP)



Discuss it with your partner.