

WHAT YOU NEED TO KNOW ABOUT **PROSTATE** **CANCER**

*Warning signs
you shouldn't ignore!*




LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Santé
et de la Sécurité sociale

Direction de la santé

FIGURES	3
PROSTATE GLAND	4
BENIGN PROSTATE DISEASES	5
<i>Benign prostatic hyperplasia</i>	5
<i>Prostatitis</i>	6
PROSTATE CANCER	7
<i>Risk factors</i>	7
<i>Symptoms</i>	8
DIAGNOSTIC EXAMINATIONS FOR PROSTATE CANCER	9
<i>PSA (Prostate-Specific Antigen)</i>	9
<i>Digital rectal exam</i>	10
<i>MRI</i>	10
<i>Prostate biopsy</i>	10
PROSTATE CANCER TREATMENTS	11
RECOVERY AND SURVIVAL	11
THINGS TO KNOW	12





From the age of about 50, changes in the prostate gland occur in approximately one of two men. Most of the time, it is only a benign increase in the size of the gland. However, sometimes the lesion is malignant.

FIGURES

Prostate cancer is the most common cancer in men in Luxembourg.

The incidence, the number of new cases, reaches a maximum between the ages of 75 and 79. Mortality, for its part, reaches a maximum in men aged 85 and over.

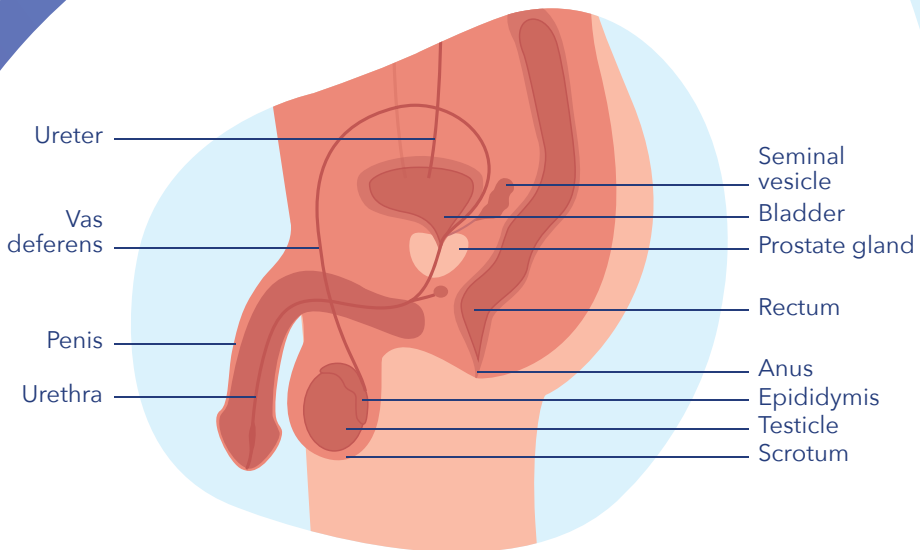
With 520 new cases in 2019, prostate cancer ranks first among cancers diagnosed in men. In terms of mortality, this cancer ranks second with 55 deaths in 2019 (source: Registre National du Cancer, Luxembourg).

PROSTATE GLAND

The prostate is a 3 x 4 cm gland, located in the lower pelvis, below the bladder and in front of the rectum. It surrounds the urethra and is part of the male reproductive system.

It develops and works under the influence of the male sex hormones (notably testosterone).

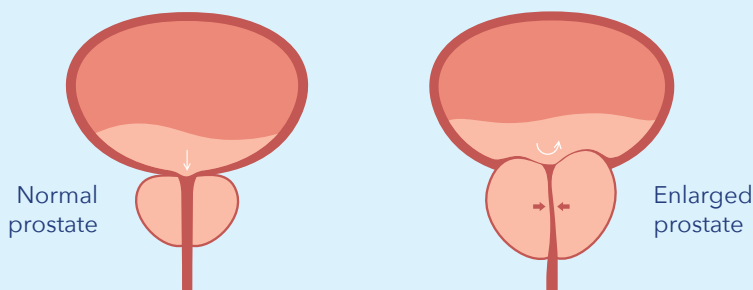
It secretes a liquid which, at the time of ejaculation, mixes with the spermatozoa, formed by the testicles. In this way, the prostatic fluid contributes to the composition of semen.



BENIGN PROSTATE DISEASES

BENIGN PROSTATIC HYPERPLASIA

Benign enlargement of the prostate, called benign prostatic hyperplasia, is age-related. Indeed, with age, the prostate often increases in volume and changes in consistency.



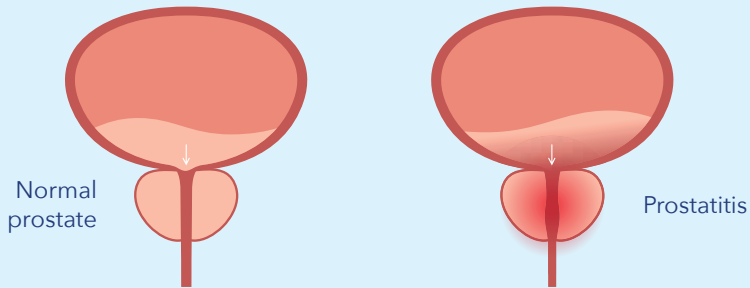
The disease may present the following symptoms, among others:

- ☐ Difficulty urinating
- ☐ Weak urine stream
- ☐ Not being able to fully empty the bladder
- ☐ Frequent or urgent need to urinate
- ☐ Leakage of urine
- ☐ Frequent waking up during the night

Diagnosed early, benign prostatic hyperplasia can in most cases be treated with medication. If this treatment proves insufficient, or the disease is already advanced, surgery will provide the desired relief.

PROSTATITIS

The prostatitis is an inflammation of the prostate that can occur at any age. It can be caused by infection or inflammation and may become chronic in some cases.



The disease may present the following symptoms, among others:

- ☐ Pain or burning sensation when urinating
- ☐ Presence of blood in urine or semen
- ☐ Urethral discharge
- ☐ Sexual disorders
- ☐ Recurrent urinary tract infections
- ☐ Pain in the pelvic area or lower back

Depending on the cause and the patient's symptoms, the doctor may use different drug treatment options.

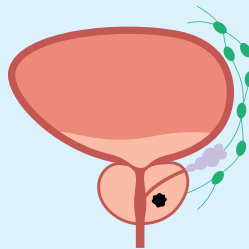
PROSTATE CANCER

Prostate cancer usually develops very slowly. Prostate cells change and multiply uncontrollably. The normal prostate tissue is then destroyed by the growing tumor. Through blood or lymphatic vessels, tumor cells can spread to other organs and form new tumors (metastases). The pelvic lymph nodes and bones are the main sites affected.

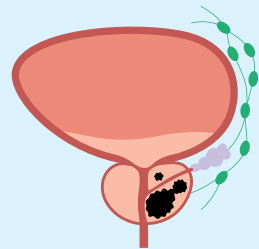
Risk factors

The main risk factors for prostate cancer are:

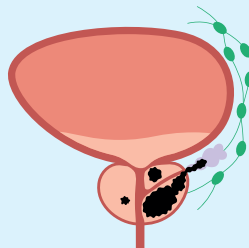
- ☐ **Age**
more common in older men
- ☐ **Ethnicity**
more common in men of African descent
- ☐ **Hereditary factors**
BRCA1 and BRCA2 gene mutation, family history



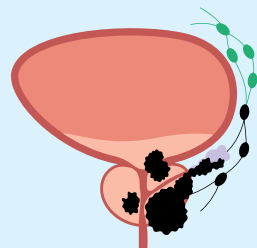
Stage 1



Stage 2



Stage 3



Stage 4

Symptoms

Here are the symptoms that can be observed in case of prostate cancer, and which are similar to those of benign prostate diseases, namely:

- ☐ Difficulty urinating
- ☐ Weak urine stream
- ☐ Not being able to fully empty the bladder
- ☐ Frequent or urgent need to urinate
- ☐ Leakage of urine
- ☐ Frequent waking up during the night
- ☐ Pain or burning sensation when urinating
- ☐ Presence of blood in urine or semen
- ☐ Sexual disorders
- ☐ Pain in the pelvic area or lower back
- ☐ Fatigue

Since the symptoms are nonspecific, a medical examination is necessary to establish the correct diagnosis.

PROSTATE CANCER DIAGNOSTIC TESTS

Prostate cancer detection includes a PSA (prostate specific antigen) test and a digital rectal examination. If an abnormality is detected following these two tests, then the diagnosis must be made by a prostate biopsy which can, if necessary, be preceded by a Magnetic Resonance Imaging (MRI).

PSA (*Prostate-Specific Antigen*)

PSA is a protein produced only by prostate cells, and its level is analyzed through a simple blood test. In various diseases of this organ, PSA appears in higher quantities in the blood. For example, cancer cells are able to produce ten times more PSA than normal prostate cells.

However, an increase in PSA level does not necessarily mean the presence of prostate cancer. Many factors can cause an increase this level, such as benign prostatic hyperplasia, prostatitis, but also sexual activity or intensive cycling.

Only your doctor can correctly interpret the test result and advise you on the necessary steps. It is always important to recheck a high level after 2 to 4 weeks.

If your PSA level is high, your doctor will discuss with you the measures to be taken:

- ☐ Regular PSA level checks
- ☐ Consultation with a urologist

Digital rectal exam

This is a quick examination, performed with the index finger, consisting of palpation of the prostate from the rectum. It allows the doctor to detect irregularities in the gland. These irregularities associated with the PSA level may lead your doctor to schedule further tests.

MRI

MRI of the prostate is necessary before performing biopsies when the PSA level is slightly increased. This imaging technique allows visualization of anatomical sections of the prostate in the three planes of space.

It allows to identify suspicious areas, on which biopsies can be performed in a more targeted manner.

Prostate biopsy

Prostate biopsies are performed either transrectally (the needle is inserted through the rectum to the prostate) or transperineally (the needle is inserted through the skin between the scrotum and the anus to the prostate). The fragments taken are analyzed to identify the cancer but also to assess its aggressiveness.

In practice, this sampling takes about fifteen minutes: it is performed as part of outpatient care, often under local anesthesia. More rarely, it requires outpatient surgery.

PROSTATE CANCER TREATMENTS

For localized tumors, both surgery and radiotherapy provide excellent results. Sometimes it may be necessary to add hormonal treatment (medications) or chemotherapy. Every cancer treatment is individually tailored to the patient's age, stage of disease and personal preferences.

The doctor will inform you about the treatment to be considered and will advise you on the advantages and the disadvantages: together, you will decide on your treatment.

RECOVERY AND SURVIVAL

As long as the tumor has not crossed the limits of the prostate gland and has not yet spread (metastasis), the chances of recovery are very high. Combined with appropriate treatment, early detection allows remission in more than 9 out of 10 cases.

THINGS TO KNOW

For prostate cancer, certain signs should alert you. Although benign, these symptoms should not be neglected.

If in doubt, talk to your doctor who will be able to advise you according to your situation.



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Direction de la santé

Centre de coordination des programmes de dépistages organisés des cancers
20, rue de Bitbourg | L-1273 Luxembourg
Tél. +352 247-75550 | depistage.cancer@ms.etat.lu | www.sante.lu

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