



TESTOSTERONE FOCUSED GENDER AFFIRMING CARE INFORMATION

When you are considering taking testosterone, it is important to learn about some of the risks, expectations, and long-term considerations associated with it.

It is very important to remember that everyone is different, and the rate at which your body will change depends on many factors. These factors include your genetics, the age at which you start taking hormones, and your overall state of health.

It is also important to remember that because everyone is different, your medicines or dosages may vary widely from those of your friends, or what you may have read online. Many people are eager for changes to take place rapidly; please remember that you are going through a second puberty, and puberty normally takes several years for the full effects to be seen. Taking higher doses of hormones will not necessarily make things move more quickly—it may, however, endanger your health.

Effects of gender affirming medical care with testosterone:

Effect	Onset (months)	Time to maximum effect (years)
Skin oiliness/acne	1-6	1-2
Facial/body hair growth ***	6-12	4-5
Scalp hair loss ***	6-12	May need treatment
Increased muscle mass/strength	6-12	2-5
Fat redistribution	1-6	2-5
Cessation of menses	2-6	
Clitoral enlargement **	3-6	1-2
Vaginal atrophy	3-6	1-2
Deepening of voice **	6-12	1-2, may desire speech therapy/vocal coaching

**frequently permanent even with cessation of hormone therapy



1) Physical

Skin:

The first changes you will probably notice are that your skin will become a bit thicker and oilier. Your pores will become larger, and there will be more oil production. You may develop acne, which in some cases can be bothersome or severe. Acne can be managed with good skin care technique as well as typical acne treatments. You may notice that you perceive pain or temperature differently, or that things just “feel different” when you touch them. You will probably notice skin changes within a few weeks. In these first few weeks you will notice that the odors of your sweat and urine will change, and that you may sweat more overall.

Chest:

Your chest will not change much during transition, though you may notice some breast pain, or a slight decrease in size. For this reason, many top surgeons recommend waiting for at least six months after beginning testosterone therapy before having chest reconstruction surgery.

Weight:

Weight will begin to redistribute around your body. Fat will diminish somewhat around your hips and thighs and the fat under your skin throughout your body will become a bit thinner, giving your arms and legs more muscle definition and a slightly rougher appearance. Testosterone may cause you to gain fat around your abdomen. Your muscle mass will increase significantly, as will your strength. However, in order to maximize your development and maintain your health, you should exercise most days (4-6 times a week) with a goal of at least 60 minutes a day mixing resistance training with aerobic training. It is helpful to focus some weight training on the upper body as this will enhance muscle development of arms, chest and back. If you plan to have top surgery, then it is important to develop these muscles so that you get the best results.

The fat under the skin in your face will decrease and shift around to give your eyes and face in general a more angular, sharper appearance. Please note that your bone structure will not change, though some people in their late teens or early twenties may see some subtle bone changes. The facial changes can take up to two years or more to see the final result.

Hair:

The hair on your body (chest, back, and arms) will increase in thickness, become darker, and will grow at a faster rate. You may expect to develop a pattern of body hair similar to other men in your family. However, again, please remember that everyone is different and that it can take up to five years or longer to see the final results. Most people notice some degree of frontal scalp balding, mostly in the area of the temples. Depending on your age and family history, you may develop thinning or even complete hair loss on the top and front of the head first.

Facial hair varies from person to person. Some people develop a thick beard quite rapidly, others may take several years to do so, while others may never develop a full thick beard. This is a result of genetics and the age at which you start



testosterone therapy. You might notice that cisgender men also have a varying degree of facial hair thickness, and a varying age at which their facial hair fully developed.

2) Emotional

Your overall emotional state may or may not change, this varies from person to person. Puberty is a roller coaster of emotions, and the second puberty that you will experience during your transition is no exception. You may find that you have access to a narrower range of emotions or feelings, have different interests, tastes or pastimes, or behave differently in relationships with other people. While psychotherapy is not for everyone, most people would benefit from a course of supportive psychotherapy while in transition to help you explore these new thoughts and feelings, and get to know your new self. Most studies show a significant improvement in overall well-being after gender affirming hormone therapy has begun. This is most likely due to better alignment of the physical body with psychological gender identity.

3) Sexuality:

Soon after beginning hormone treatment, you will likely notice a change in your libido. Quite rapidly, your clitoris will begin to grow, and will become larger when you are aroused. You may find that there are different sex acts or different parts of your body that bring you erotic pleasure. Your orgasms will feel different, with perhaps more peak intensity, and more focused on your genitals, as opposed to a whole body experience. It is recommended that you explore and experiment with your new sexuality through masturbation, using sex toys, and involving your sexual partner(s).

4) Reproduction & Fertility

Periods:

You may notice at first that your periods become lighter, arrive later, or are shorter in duration than previously. Some people will actually notice heavier or longer lasting periods for a few cycles before they stop altogether. Usually it takes 6-12 months for menstrual periods to stop completely.

Pregnancy:

Testosterone greatly reduces your ability to become pregnant. However, it is not a reliable form of birth control! If you are on testosterone and have sex with a person with sperm into your genitals, you must continue to use an alternative birth control method to prevent pregnancy. Testosterone is not safe to use during pregnancy, as it can cause birth defects.

It is possible for transgender men to become pregnant while on testosterone. If you suspect you may be pregnant, have a pregnancy test as soon as possible, so that you and your doctor can immediately discuss your plans.



If you want to become pregnant, you should stop your testosterone treatment and wait until your doctor tells you that it is okay to begin trying to conceive. Your doctor may check your testosterone levels before clearing you to begin efforts of conception.

Testosterone therapy may alter and decrease ovulation and permanently decrease your ability to become pregnant. If this happens, you may need to use fertility drugs, or use techniques such as in-vitro fertilization in order to become pregnant in the future. It is possible that after taking testosterone, you may completely lose the ability to become pregnant. “Freezing” embryos or eggs is an alternative for preserving your fertility (though expensive and not always successful). *It is quite possible that you will lose your ability to have a biological child completely. This may not be important to you at this time in your life, but it is a major decision and you should spend time thinking about it and discussing it with people close to you.*

Breakthrough bleeding:

After being on testosterone for some time, you may experience a small amount of spotting or bleeding. This may occur if you miss a dose, or change your dosage. You should report any bleeding or spotting to the doctor; in some cases, it must be followed up with an ultrasound to be sure that you do not have a problem with the uterus. Your uterus can be evaluated with an ultrasound and sometimes a biopsy is also needed.

5) Health Monitoring

Cancer risks:

Your risk of cervical cancer relates to your past and current sexual practices. The HPV vaccine can greatly reduce your risk of cervical cancer, depending on the age at which you get the vaccine and how many sexual partners you have had before receiving the vaccine. Pap smears are generally recommended every 3-5 years; more or less frequent pap smears may be recommended by your doctor depending on your sexual history and the results of your prior pap smears.

The risk of cancer of the ovaries while on testosterone treatment is not thought to be increased, but there are not enough studies to know for sure. Ovarian cancer is difficult to screen for, and most cases of ovarian cancer are discovered at an advanced stage. The usual age when ovarian cancer occurs is 45-65. A pelvic examination, where your doctor uses a gloved hand to examine the vagina, uterus, and ovaries, is recommended every 1-2 years to help detect this condition.

The risk of breast cancer while on testosterone treatment is not significantly increased. However, there has not been enough research on this topic to be certain of the actual risk. It is still important to receive periodic mammograms or other screening procedures as recommended by your doctor. After breast removal surgery, there is still a small amount of breast tissue left behind. It may be difficult to screen this small amount of tissue for breast cancer, though there are almost no cases of breast cancer in people after chest reconstruction surgery.



Testosterone may change your overall health risk profile. Your risk of heart disease, diabetes, high blood pressure, and high cholesterol may go up, though these risks may be less than a cisgender man's risks. Since men on average live about five years less than women, theoretically you may be shortening your lifespan by several years by taking testosterone.

Increased blood count:

Testosterone can make your blood become too thick, which can cause a stroke, heart attack or other conditions. Testosterone can cause your liver to work too hard, causing damage. Your doctor will perform periodic tests of your blood count, cholesterol, kidney functions, liver functions, and a diabetes screening test in order to closely monitor your therapy. Testosterone levels need to be routinely checked during the first year or two of transition, and then periodically after that.

***Reversibility:**

Some of the effects of hormone therapy are reversible if you stop taking testosterone. The degree to which the effects can be reversed depends on how long you have been taking the testosterone. Clitoral growth, hair growth, voice changes, and hair loss are not reversible.

If you have had your ovaries removed, it is important to remain on at least a low dose of hormones until at least age 50 years old (and perhaps beyond), to prevent a weakening of the bones, otherwise known as osteoporosis. It is also highly recommended that you take calcium and vitamin D supplements to help maintain healthy bones.

6) How to take testosterone:

Testosterone comes in several forms. Most people begin using an injectable form of testosterone. Generally you are started at a lower dose and slowly increase over several months in order to avoid negative side effects.

There are also transdermal forms (gels and creams) available. Sometimes insurance will not cover these.

The usual blood test schedule is approximately every 3 months for one year, then every 6 months for one year, then yearly.

Taking more testosterone will not make your changes progress more quickly and can be unsafe. Excess testosterone can be converted to estrogen, which can then increase your risks of endometrial hyperplasia or cancer, make you feel anxious or agitated, can harm your liver, and can cause your cholesterol or blood count to get too high. It is important to be patient and remember that this puberty can take years to develop all of its changes.