



Testosterone

What is the goal of testosterone therapy?

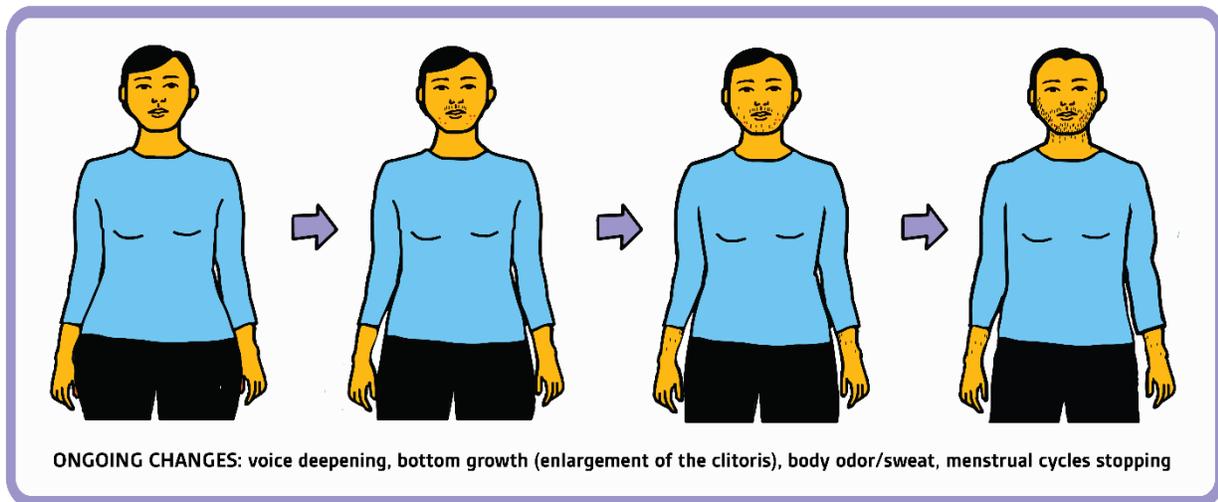
Testosterone has two main jobs: It causes masculinizing changes to occur throughout the body, and it suppresses the production of estrogen. Some of the changes caused by testosterone are permanent and others are reversible.

How is testosterone given?

Testosterone is available as injections, patches, gel, and pellets. Injections are given every 1 to 2 weeks, usually in the layer of fat underneath the skin. Our nursing staff provides training for giving yourself testosterone injections. Gel and patch forms are applied daily and absorb through the skin. Pellets are inserted under the skin during a minor procedure and are replaced every 3 months.

What are the permanent effects of testosterone?

Testosterone causes the following permanent changes: voice deepening, clitoral growth, body/facial hair growth, and sometimes balding. Testosterone may also irreversibly affect fertility, though the likelihood of this is not known. Fertility goals should be considered before starting testosterone, as fertility preservation may be an option. We work with the Lurie Children's fertility preservation team to provide these services.



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What are the reversible (non-permanent) effects of testosterone?

Testosterone causes increased muscle tone, fat redistribution (hips, thighs, stomach area), skin oiliness and acne. It can cause an increase in body odor and sweat. Mood changes (often irritability, having a “shorter fuse”) and heightened sex drive may occur. Menstrual cycles will change and eventually stop. There may be genital changes like thinning of the tissue or dryness caused by low estrogen levels.

What are the side effects and risks of taking testosterone?

Testosterone may impact your metabolic health – that is, the risk for conditions including diabetes, high cholesterol, and high blood pressure. These things can increase your risk for heart disease. People who take testosterone should have monitoring for these conditions and should focus on strategies to prevent these conditions, like eating well, exercising, and avoiding smoking cigarettes.

Testosterone causes an increase in the red blood cells in the body. If this number becomes very high, it can increase the risk of stroke or blood clot, so this is monitored for people taking testosterone.

Testosterone can also cause increase in appetite, weight gain, headaches, and acne.

How is testosterone treatment monitored?

Blood test (labs) are collected before starting testosterone and every 3 months for the first year of treatment. In the second year, labs are checked every 3 months. After that, test frequency depends on the patient but is usually every 6 to 12 months. Testing includes cholesterol, diabetes screening, hormone levels, and blood counts. These blood tests can be drawn at Lurie Children's or another facility closer to home.

How long will I need to take testosterone?

Many people plan on taking testosterone indefinitely because some of the effects of testosterone are not permanent and can reverse if testosterone is stopped. But the decision to take testosterone is up to the individual, and there is not one right amount of time to take it for everyone. We support patients in continued decision making about testosterone during their treatment.



How quickly will changes develop?

It's normal to want to see changes quickly, but these changes take time. Most changes start in about 3 to 6 months but can take years to develop. The table below provides the expected timeline. Remember – everyone's experience on testosterone is different and can be influenced by your body composition and genes. It's impossible to predict *exactly* how your body will change with testosterone.

The right dose of testosterone is different for different people. It's important to take the prescribed dose of testosterone and talk with your provider if you have concerns about the effects of testosterone.

Change	Beginning of change	Maximum effect
Fat redistribution	3 to 6 months	2 to 5 years
Oily skin and acne	1 to 6 months	1 to 2 years
Facial and body hair growth	3 to 6 months	3 to 6 years
Increased muscle mass and strength	6 to 12 months	2 to 5 years
Periods stop	2 to 6 months	Not applicable
Deeper voice	3 to 12 months	1 to 2 years
Clitoral growth	1 to 6 months	1 to 2 years
Scalp hair loss and balding	12 months or more (not everyone experiences this)	Varies

**** Information in this table is based on guidelines from the World Professional Association for Transgender Health ****

The information included in this document is for informational purposes only and is not intended to substitute in any way for medical education, training, treatment, advice, or diagnosis by a healthcare professional. A qualified healthcare professional should always be consulted before making any healthcare-related decision.