

A close-up photograph of a man's torso and arms in a gym setting. He is wearing a black t-shirt with a white towel draped over his shoulders. He is holding a black hexagonal dumbbell with both hands, performing a bicep curl. The dumbbell has the number '52' embossed on it. The background is blurred, showing other people in the gym.

Testosterone Replacement Therapy

Testosterone Replacement Therapy (TRT)

PATIENT GUIDE

This guide covers what TRT is, what to expect, and when to reach out to your clinical team.

What Is Testosterone Replacement Therapy (TRT)?

Testosterone replacement therapy (TRT) is an FDA-approved treatment for confirmed low testosterone (male hypogonadism). It supplies your body with testosterone directly, which is the most reliable and potent way to raise your levels.

However, because your brain detects testosterone coming from outside, it stops sending its own signals to the testicles. This means your testicles slow down or stop producing testosterone and sperm on their own, so testicular shrinkage and reduced fertility are expected with TRT unless hCG is added alongside it.

Testosterone is offered as a subcutaneous injection (cypionate) or a topical cream. The right form depends on your lifestyle, preferences, and goals.

Why is TRT Prescribed?

TRT may be prescribed if you have confirmed low testosterone along with symptoms such as:

- Low energy or persistent fatigue
- Low libido or erectile dysfunction
- Decreased muscle mass or increased body fat
- Difficulty with memory, concentration, or motivation
- Mood changes or irritability
- Reduced bone density, endurance, or work performance

What to Expect

Injection (testosterone cypionate):

- Typically started at 50mg, injected subcutaneously or intramuscularly twice weekly. **See additional documentation for how to administer a subcutaneous or intramuscular injection** as applicable to your specific prescription.

Topical cream:

- A pea-sized amount applied every morning as instructed. **See additional documentation for how to administer cream using Topi-Click dispenser.**
- Testosterone cream can transfer to a partner, child, or pet through skin contact. Make sure to cover the application site and wash your hands and skin before close contact

Both forms:

- Most men notice improvements in energy and libido within 3–6 weeks; body composition changes (more muscle, less fat) take 3–6 months of consistent therapy combined with exercise and nutrition
- **This is a long-term commitment.** Testosterone levels return to your pre-treatment baseline over several months if you stop, and you may notice a symptomatic dip while your body adjusts. Your clinician may use a restart protocol, often involving hCG or enclomiphene, to help support your body's natural production coming back online rather than waiting for it to recover on its own

Dosing Adjustments:

- Your dose may need to be optimized over time based your symptoms, side effects, and lab results and as determined by your clinician
- **Based on the information from your initial medical intake, subsequent monthly check-ins, and routine required lab testing,** your clinician determines your starting dose, whether and when to increase it, and your maximum dose

Testosterone is a Controlled Substance. What does that mean for you?

- Federal law prohibits more than 1 month's supply being shipped at a time
- State and Federal restrictions prohibit testosterone therapy via telehealth in a few US states and require telehealth appointments at specified points in your treatment

Expiration

The injectable form of this medication expires 28 days after first puncture, regardless of how much remains. After that time, it should no longer be used.

Required Labs

Lab testing is required to start TRT. You must have the follow lab biomarkers tested within 6 months of requesting to initiate therapy:

- Complete blood count (CBC) and comprehensive metabolic panel (CMP)
- Total and free testosterone by LC/MS, LH, FSH, DHEA-S, SHBG, and estradiol
- PSA (free and total)
- Thyroid labs (TSH and free T4)
- AM serum cortisol
- Ferritin and prolactin

Ongoing Monitoring:

- Labs are rechecked 60–90 days after starting, and at least annually after that
- CBC and CMP
- Total testosterone — your clinician is generally targeting a range of 800–1000 ng/dL, and may adjust your dose up or down based on this result

- Estradiol, LH, FSH, and SHBG
- PSA (free and total)

Recommended Lab Draw Timing:

- Drawn around 8am in the morning
- Testosterone injection: draw 2–3 days after your last injection
- Testosterone cream: draw within 12 hours of applying

This lab testing is essential to monitor various hormonal levels to evaluate the impact of your treatment plan on your biomarkers in addition to what can be reported in the monthly checkins.

Who Shouldn't Take TRT

Do not take this medication if any of the following apply to you:

- Current or history of breast or prostate cancer
- Recent heart attack or stroke, or congestive heart failure
- Untreated or severe sleep apnea
- Elevated hematocrit, hemoglobin, or platelets, or a history of blood clots
- PSA level above age-based thresholds, or an undiagnosed prostate nodule
- Pituitary tumor or liver disease
- **Plans to conceive in the near term — hCG or enclomiphene are generally better starting points if fertility is a near-term goal**
- Known allergy to testosterone or formulation components (MCT oil)
- **Under age 30** — It is recommended that younger men first see a PCP or endocrinologist to investigate the underlying cause of low testosterone

Talk to your clinician if any of the following apply to you:

- Poorly controlled blood pressure or other cardiovascular risk factors
- Treated sleep apnea — TRT may worsen it
- Recent blood clot (DVT), even if resolved

Possible Side Effects

Individual responses vary. Side effects aren't guaranteed, and some people experience none at all.

Common:

- Signs of excess estrogen: breast tenderness or enlargement, water retention, mood changes, or decreased libido despite higher testosterone
- Acne or oily skin
- Injection site redness, bruising, or mild swelling
- Mood changes or irritability
- Worsening sleep apnea
- Testicular atrophy — expected and reversible if TRT is stopped; adding hCG can prevent/reverse it

Less Common:

- Mild ankle swelling or fluid retention, especially at higher doses
- Hair thinning or accelerated male pattern baldness

Rare but important:

- Blood clots (DVT/PE) — risk is higher with elevated hemoglobin, hematocrit, or platelets
- Cardiovascular effects — most relevant in men with existing cardiovascular disease

If you experience any side effects, notify your clinician through the portal or indicate this in your monthly check-in. A dosage or medication change may be appropriate.

When to Contact the Clinical Team

Contact your clinician through the portal if you develop:

- A significant rise in PSA, or new urinary symptoms
- New or worsening sleep apnea symptoms (loud snoring, gasping during sleep, morning headaches)

Go to your nearest Emergency Room or call 911 right away if you have any of the following:

- difficulty breathing or swelling of your face, lips, tongue, or throat
- pain, swelling, or warmth in your leg
- sudden chest pain or shortness of breath
- signs of a stroke — sudden numbness or weakness of the face, arm, or leg, trouble speaking, confusion, loss of balance or coordination, a severe headache, or vision changes

Questions?

Ask your clinical team through the portal if you have any questions or concerns.

This Information is made available to you through Altro. All content was provided, reviewed, and approved by the medical director of the clinical team.

