# **Masculinizing Hormone Therapy**Information

The use of hormone therapy for gender transition/affirmation is based on many years of experience treating transgender people. Research on hormone therapy continues to provide information on the safety and efficacy of hormone therapy, but all of the long-term consequences and effects of hormone therapy may not be fully understood.

This information will help you to consider the expected benefits of hormone therapy and the possible side effects of hormone therapy. You can decide, with your medical provider, if hormone therapy is right for you.

# **Hormone Therapy**

Testosterone is used to masculinize the body, to reduce female features and increase masculine features. Your medical provider will determine the form of testosterone (oral, shots, gels or creams, patches, implanted pellets) and the dose that is best for you based on your personal needs and wishes, as well as any medical or mental health conditions you might have. Each person responds to testosterone differently, and it is difficult to predict how each person will respond. You agree to take the testosterone only as prescribed and to discuss your treatment with your doctor before making any changes.

# **Expected Effects of Testosterone Therapy**

The masculine changes in your body may take several months to become noticeable and usually take 3 to 5 years to be complete.

# PERMANENT CHANGES - these will not go away, even if you decide to stop testosterone treatment:

- The pitch of your voice becomes deeper
- Increased growth, thickening and darkening of hair on the body
- · Growth of facial hair
- Possible hair loss at the temples and crown of the head (male pattern baldness) with possible complete baldness
- Increase in the size of the clitoris/phallus

#### NOT PERMANENT CHANGES - these will likely reverse if testosterone treatment is stopped:

- · Menstrual periods will stop, usually within a few months of starting testosterone
- Possible weight gain. If you gain weight, this fat will tend to go to the abdomen and mid-section, rather than the buttocks, hips and thighs, making the body look more masculine.
- Increased muscle mass and upper body strength
- · Possible feeling of more physical energy



- Skin changes, including acne that may be severe and skin oiliness
- Increased sex drive
- Changes in mood or thinking may occur; you may find that you have a decreased emotional reaction to things and possible increased feelings of anger or aggression. Some people find their mental health improves after starting hormone therapy. The effects of hormones on the brain are not fully understood.

# **Risks and Possible Side Effects of Testosterone Therapy**

- **Possible loss of fertility.** You may not be able to get pregnant after being on testosterone therapy for some time; how long this might take to be a permanent effect is unknown. Some people choose to harvest and bank eggs before starting on testosterone therapy.
- **Testosterone is not reliable birth control.** Even if your periods stop, you could get pregnant. If you are having penetrative sex with a sperm-producing partner, you should discuss using birth control with your partner and/or medical provider.
- **High levels of testosterone may cause harm and even death to a developing fetus.** Other effects of testosterone on the ovaries and on developing eggs are not fully known
- **Pelvic pain.** Some trans men, after being on testosterone for a number of months, may develop pelvic pain. Often this will go away after some time, but it may persist; the cause is not known.
- The lining of the cervix and walls of the vagina may become more dry and fragile. This may cause irritation and discomfort. It also may make you more susceptible to sexually transmitted infections and HIV if you have unprotected penetrative sex.
- The effects on the risk of breast, uterine and ovarian cancer are not known.
- Possible increased risk of cardiovascular disease (heart attacks, strokes and blockages in the arteries) due to changes in cholesterol, higher blood pressure and other changes to the body.
- Possible increased risk of developing diabetes.
- Increased appetite and increased weight gain from both muscle and fat.
- Increased risk of sleep apnea (breathing problems while you are sleeping)
- Possible abnormalities in blood tests for the liver. Possible worsening of damage to the liver from other causes.
- Increase in the hemoglobin and hematocrit (the number of red blood cells). If this increases to levels higher than is normal in males, it may cause problems with circulation, such as blood clots, strokes and heart attacks.
- Increased sweating.
- · Weakening of tendons and increased risk of injury.
- Possible worsening or triggering of headaches and migraines.
- Possible increase in frustration, irritability or anger. Possible increased aggression and worsened impulse control.
- Possible worsening of bipolar disorder, schizophrenia and psychotic disorders or other unstable moods.



#### You understand that:

- · Smoking cigarettes may increase some of the risks of taking testosterone therapy.
- Taking testosterone in doses that are higher than recommended will increase the risks of testosterone treatment. Higher doses will not necessarily work better to masculinize the body. In fact, abnormally high amounts of testosterone can be converted to estrogen that may interfere with masculinization
- Testosterone treatment is expected to be lifelong.
- You may choose to stop hormone therapy at any time and for any reason. You are encouraged to discuss this decision with your medical provider.
- Your provider may decrease the dose of testosterone or stop prescribing testosterone because of medical reasons and/or safety concerns. You can expect that the medical provider will discuss the reasons for all treatment decisions with you.
- Hormone therapy is not the only way that a person may appear more masculine. Your medical provider and/or a mental health provider can help you think about these other options.

### You agree to:

- Take testosterone only at the dosage and in the form that your medical provider prescribes.
- Inform your medical provider if you are taking or start taking any other prescription drugs, dietary supplements, herbal or homeopathic drugs, or street/recreational drugs or alcohol so that you can discuss possible interactions with and effects on your hormone treatment.
- Inform your medical provider of any new physical symptoms or any medical conditions that may develop before or while you are taking testosterone and discuss the evaluation of these conditions. Inform your provider if you think you are having bad side effects from the testosterone.
- Keep regular follow up appointments; this may include appointments for Pap smears, pelvic exams and mammograms.
- Have regular monitoring blood testing done. Your provider will discuss with you what tests are necessary in order to monitor for potential harmful effects and to ensure that your testosterone treatment is safe and effective.



