



The binary terms “male”, “female”, “masculine”, “feminine”, “masculinizing”, and “feminizing” do not accurately reflect the diversity of all people’s bodies or identities. To describe how blockers and hormones work, it is helpful to know how puberty works in non-intersex, nontrans men’s bodies and how blockers and hormones work in non-intersex, nontrans women’s bodies. We keep these binary terms in quotes to emphasize that they do not fit everyone’s identity and they are imperfect concepts.

## A Guide to Puberty Blockers

Puberty blockers are medicines that block puberty-related hormones that make your body go through puberty. Starting puberty blockers is a decision that is different for everyone. To make the most informed decision, this handout is meant to help you gain more information to help you make the best and most informed decision you can. This handout will cover the following:

- What is puberty?
- What do blockers do?
- What are the changes that will or can happen to my body?
- What are the benefits, risks, and costs involved?

### How does puberty begin?

Puberty is the process the body goes through to become capable of making a baby (reproduction), as well as to reach adult size and brain development. Puberty starts when your brain tells your pituitary gland to start releasing puberty-related hormones. This happens at different ages for different people. During this time, your body starts to increase the amount of certain puberty-related hormones (Luteinizing Hormone (LH) and Follicle-Stimulating Hormone (FSH)). This causes your testicles to start producing testosterone or your ovaries start producing estrogen. These hormones do not cause acne, pubic or armpit hair – those are caused by other hormones.

#### Body changes in people with testicles (without puberty blockers)

- Testicle growth (improves the body’s ability to make testosterone)
- Penis growth
- Pubic hair
- Increased acne, increased armpit and facial hair
- Rapid growth (growth spurt)
- Voice changes (lowers and deepens)

#### Body Changes in people with ovaries (without puberty blockers)

- Breast changes
- Changes in the body shape (the “pear shape”)
- Menstrual periods start

### How do puberty blockers work?

Puberty blockers (called GnRH analogues) cause your body to stop releasing puberty hormones (LH and FSH). This is like hitting a ‘pause button’ on puberty.

#### Will puberty blockers stop all changes in my body?

No, puberty blockers will not stop pubic or armpit hair from growing or improve acne. Puberty blockers only make a difference for the puberty changes that make you look “female” or “male”. For example, in bodies with ovaries, breast size may get smaller if they have already started to develop. In bodies with testicles, testicle size may decrease, and penis growth will be halted.

### **What happens if I start puberty blockers late?**

If started late, blockers are not able to reverse changes that have already happened. Blockers can stop any further puberty changes.

### **Are puberty blockers permanent?**

No, blockers are not permanent. If you decide to stop puberty blockers without starting cross sex hormones, your body will start going through the puberty of your assigned sex at birth. You can stop the puberty blockers at any time. Our clinic staff can help you learn how to stop your blockers safely.

### **How long does it take for blockers to start working?**

It can take anywhere from 1 to 2 months for blockers to start working. Everyone is different and it is hard to determine how quickly your body will respond. In the beginning, your body may show more signs of puberty, but this will decrease as you continue to take blockers.

## **What are the different kinds of puberty blocking medicines?**

### **Depo Lupron (Leuprolide)**

Lupron is given as a shot once every 3 months. If you use this type of blocker you will need to come into our clinic every 3 months for the shot.

### **Histrelone**

This is placed under the skin as an implant in the upper arm. Histrelone usually works for little over a year and sometimes up to two years. After it stops working, it needs to be removed and replaced at a clinic appointment.

## **Is puberty blocking medication painful?**

### **Will the Lupron injection hurt?**

The injection is given in your arm or leg. The area may be sore for about 1 day after the shot. There are options for topical numbing cream that reduces the pain.

### **Will the Histrelone implant hurt?**

After the implant is placed, your arm may be sore for about 2 days. We will numb the area before your procedure. Talk with us about the options.

## **What are the risks of starting puberty blockers?**

The long-term safety of puberty blocking medicines is not completely understood. There may be long-term risks that we do not yet know about.

### **Bone Health**

Blocking puberty can make your bones weaker (lower bone density). This may get better when you stop the puberty blockers or start cross-hormone therapy. While on puberty blockers, we recommend taking

calcium, vitamin D and doing bone strength-building exercises like walking, jumping and weightlifting. We may want to perform certain tests to check the health of your bones.

### Fertility

Taking puberty blockers should not affect your fertility (your ability to have a baby in the future.) However, permanent damage to fertility is a concern for people who stay on puberty blockers and then take cross-sex hormones. The doctor will review the risk of infertility with you prior to starting any cross-sex hormones.

## Are blockers right for me?

We will work hard to answer all your questions about the benefits and risks of puberty blockers. We want you to have a good understanding of what to expect before you decide to start. Starting puberty blockers can give you time before making more permanent decisions, like the starting cross-sex hormones. Puberty blockers prevent some of the “male” or “female” specific changes to the body that puberty causes. It can be distressing for transgender people to go through puberty. Puberty blockers can help with this distress by pushing the “pause button” on your puberty, which prevents puberty changes that do not match with your chosen gender identity.

We will assist you in navigating your insurance coverage and other resources that may be helpful to you; as well information on our financial aid program.

## When should I start taking puberty blockers?

You begin puberty blockers after your body shows signs of puberty. Usually this is after bodies with testicles have started to have increased testicle size and growth of the penis, and bodies with ovaries have started to have breast changes (breast buds). *It is not safe to start puberty blockers before puberty.*

### How will my doctor know puberty has started?

Before starting blockers, we may recommend testing to confirm that puberty has started or to determine how far along you are. Our doctor will help guide you through this physical exam, as some may find it uncomfortable.

## How long can I stay on blockers?

Puberty blockers are used until you decide you want to either resume your regular puberty process, or until you are ready to start cross-sex hormone therapy. Blockers can make your bones weaker over time, so it is best to stop using them after 4 years.



*Mary Bridge Children's Gender Health Clinic follow the World Professional Association for Transgender Healthcare. Although, the information in this handout are based on evidence-based practice, each patient needs are unique. Before you act or rely this information, talk with our doctor, other medical care professionals, and conduct your own research in addition to this handout.*