Are you an FTM+ who has decided that testosterone is the route you want to go? Have you jumped over the hurdles of figuring out if/when/how to come out to your parents, friends, partner(s), employer? Have you made your way through the twists and turns of parsing out your identity? Are you ready to get going and finally start testosterone?

Well, there’s one little thing that’s stopping you, right? That inch and a half of metal that carries the longed-for testosterone into your body!

Many FTM+s suffer from needle anxiety or shot phobia. In fact, so do over 10% of the population. Belonephobia—needle anxiety—is a defined medical condition that keeps over 1 in 10 people from getting the medical care they need or leaves them scared and shaky before and after an injection experience.

There are many options and alternatives available to FTM+s that address needle anxiety. This paper will discuss alternatives to injectable testosterone (other delivery methods and choices); alternatives to self-injection (having someone else do the injection); anxiety reduction techniques (many useful and successful techniques that can help reduce or eliminate needle anxiety); tools and aids (things that will make injecting easier); and finally reaching the mark (steps on taking the final plunge in self-injecting).

Just as there are many, many ways to “do” masculinity, there are LOTS of options for handling needle anxiety. You may find some things are not successful or useful for you, while other suggestions may have beneficial effects.

* We use “FTM+” to include a wide ranges of identities and experiences. FTM+ includes butches and genderqueers and a long list of identity markers. We do NOT presume that all who identify as FTM(+) have the desire to take testosterone.
Non-Injectable Alternatives to Testosterone

Some people may be so afraid or anxious that they literally cannot complete an injection - even if given by another person. For some people, the anxiety and fear are so strong that it causes too much distress for them to tolerate or try to work through.

For those who desire taking testosterone, but who have decided they cannot inject, there are currently at least five non-injectable options.

1. **Patch.** The use of transdermal androgen patches has become more popular. Patches are approximately the same size as nicotine patches available at most drug stores. They are placed on the skin so the testosterone is absorbed directly through the skin. The positives associated with this method are the steady dose of testosterone, as well as no scarring at the injection sites. The downsides include: skin irritation from the adhesive; painful removal, due to the presence of body hair; loss of adhesion because of sweating or showering; painful application/removal, if there is a high prevalence of acne or other skin blemishes; expense; visibility of patches which may infringe on privacy issues; and the need to remember to apply a new patch each day (or as frequently as prescribed).

2. **AndroGel.** This non-invasive method of testosterone delivery is a viable alternative to injections and patches. AndroGel is applied daily (in most cases) and rubbed into the skin on the shoulders, upper arms and abdomen. The main advantage is a steady dose of testosterone, which reduces peaks and valleys typically associated with injections. The negatives of AndroGel include: remembering to apply each day; the need to apply at least 1-2 hours prior to showering or swimming; and the requirement for caution in having skin-to-skin contact with others, since the testosterone may transfer to the untreated individual.

3. **Testosterone pellets.** The surgical implantation of pellets that contain a slow released testosterone allows an individual to go several months without having to resupply/reapply their testosterone source. The low level of maintenance is perhaps the greatest positive. The negatives include the invasiveness of the procedure, scarring at the surgical site, post-operative care of the surgical site, the medical expense of the procedure and pellets, and the resistance of many physicians to prescribe this invasive procedure when other options are readily available.

4. **No Testosterone.** Another viable option is to not take testosterone. Many FTM+s for hundreds of years have chosen routes to masculinity.
other than by using synthetic or natural hormones. While testosterone does provide a significant masculinizing effect, many of these characteristics can be achieved through a variety of other ways: clothes; mannerisms; hairstyle; binding; vocal patterning, intonation, and pitch; and attitude.

5. Herbal Supplements. The moderate use of herbs and supplements may enhance a masculine presence. Herbs and supplements such as DHEA, yohimbe, valerian root, ginseng root, sarsaparilla root, tribulus terrestris, adenosine triphosphate, black cohosh and others may stimulate the desired effects. Use caution when using herbs and supplements: high doses can be dangerous to your health.

**Alternatives to Self-Injection**
For those who desire taking testosterone, but who have decided they cannot self-inject, there are at least two options that would allow for injecting testosterone.

1. **Physician injection.** Receiving injections at your physician's office may be tolerable, especially since doctor's offices may be able to provide other injection procedures such as local numbing agents, pre-injection administration of anti-anxiety medication, and a medical environment that can handle any medical emergencies that arise. The negatives of injections in a physicians' office include scheduling hassles, inconvenience of missing work or family time, and high cost.

2. **Partner/Friend injection.** A temporary or permanent solution may be for a partner, family member or friend to do all injections. This allows you to have independence from strict reliance on your physician, it demedicalizes the process and keeps the costs low. You may want to have at least one backup person, in case your primary injector is sick or not available on your scheduled shot day.

**Addressing the Anxiety**
If the desire to self-inject is great enough and enough de-escalating skills can be acquired, a person might be successful in overcoming their fear(s). Addressing and reducing a phobia or anxiety to needles may take some persistence and a willingness to try several approaches. Depending on the cause, severity and nature of the phobia or anxious-response, some reduction techniques may be more effective than others. Using multiple reduction techniques may also be necessary for success.

- **Awareness and acknowledgement.** The first step in reducing anxiety is to be consciously aware of the fear and anxiety,
Why do many FTM+s self-inject?
The majority of physicians teach their FTM+ clients how to inject themselves and most trans+ people prefer this method of injection since it is...

- **more convenient**
  - [no routine trips to the doctor’s office to receive injections, which often results in time lost from work]

- **less expensive**
  - [doctors typically charge an office visit fee, as well as an inflated cost for the testosterone, syringe and injection itself]

- **de-medicalized & de-pathologized**
  - [self-injecting allows FTM+s to feel like healthy people not patients being treated for an illness]

- **empowering**
  - [by self-injecting, FTM+s own the course of their transition and/or masculinity]

acknowledging it to yourself and then to someone else you trust (partner, friend, family member, therapist, physician, co-worker, etc.).

- **Talk about your phobia/anxiety.** Discuss, in as much detail as you feel comfortable, your fear at a social support group for FTM+s/SOFFAs, with your partner, doctor, therapist, or friends. Remember that 10% of the population also shares this anxiety, so you aren’t alone!

- **Hypnosis.** Consider working with a trained therapist and/or reading self-help books on reducing anxiety and phobia through hypnotherapy. This is often a highly effective technique.

- **Systematic desensitization.** An extremely useful tool in working with phobias and in reducing anxieties is to gradually desensitize your response to the stimulus that generates the phobic response - in this case, needles. Working with a trained therapist or using self-help books may offer more information than can be provided in this forum. However, the process involves very slowly becoming more familiar and comfortable with needles until you are able to inject yourself. Many people start with laying out their testosterone, alcohol pads, tissues, and syringes - literally handling the items. As you become more comfortable just holding the items needed for your injection, you can move to uncapping and recapping the needle, drawing the testosterone into the syringe and pushing it back into the vial. Slowly, step by step, becoming more comfortable with needles will happen through repeated exposure. This process may take months - which may require a physician or trained partner/friend to perform the injections until the desensitization process progresses to the point where you can inject yourself.

- **Deep/regulated breathing.** Slowing down and taking deeper breaths can help with relaxation, dropping heart rate/pulse, and reducing blood pressure which can all feed feelings of anxiety. Sitting or laying down for a few minutes, closing your eyes, and focusing solely on breathing can greatly assist in the general reduction of anxiety. After becoming adept at slowing your breathing down, this technique can be useful in a variety of situations. Many books and audio tapes/CDs are available that can guide you to deeper, healthier, more relaxed breathing.

- **Visualization/Guided Imagery/Meditation.** Like deep breathing, visualization, guided imagery and/or meditation can help you reach a relaxed state and assist in shifting your thoughts from fear to calmness and confidence. Practicing visualization and incorporating it into your every day life will allow you to more quickly and effectively reach that calm state directly before or after your injection.
■ **Affirmations.** Simple or complex affirmations can have a profound effect in shifting fear and anxiety. Remember to create affirmations that are stated in the positive - they can be phrases that you don't yet believe to be true. Many books are available to provide examples, however, tailoring affirmations to your particular needs and style is essential. Some people verbally repeat their affirmations many times throughout the day, while others post them on their bathroom mirror or on their car's visor, others spend several minutes writing out their affirmation(s) each morning, etc. [See samples in sidebar.]

■ **Bach Flower Remedies.** Bach Flower Remedies were developed by Dr. Edward Bach. He identified 38 basic negative states of mind and created a plant or flower based remedy for each one. These plant or flower extracts can have a remarkable impact on curbing negative emotions and thoughts. Please consult a homeopath or one of the many books written on Bach Flower Remedies to select the right Remedy for you. You can also use the Remedy Chooser online at www.bachessences.com. Suggested remedies that may help with anxiety or fear include:
  - Rescue Remedy
  - Mimulus
  - Rose Rock
  - Aspen

Other brands are available, such as Healing Herbs and FES.

■ **Reward system.** The use of incentives or rewards may provide enough momentum to proceed and complete an injection, or any step of the process (including having someone else perform the injection). Knowing that you can do something you enjoy if you muster up the courage adds a little encouragement. Rewards can be as small as going outside to smell the fresh air, to brewing a fresh cup of tea, to going to or renting a movie, to making your favorite dinner, to indulging in reading a fiction book, taking a bike ride or walk in the park, calling a friend, etc. Rewards are to serve as positive reinforcement, not to add undue pressure or cause more anxiety. Remember that you may need to reward yourself for many small steps along the way. Use rewards as something fun and positive and/or something soothing. Be good to yourself. Honor your fears and pat yourself on the back when you do things that are difficult.
Tools and aids

- **Needle size.** Sometimes longer and thicker needles create more anxiety. Discussing with your physician the shortest needle length appropriate for your body, as well as the thinnest gauge, may make the injection process much less daunting. (Most people inject with needles that are 1 - 1.5 inches in length, ranging in thickness from 20 to 28 gauge. The higher the gauge number, the smaller/thinner the needle.)

- **Auto-Injectors.** Auto-injecting devices, such as BD's INJECT-EASE, insert the needle into your body without the user seeing the needle. If your phobia stems from viewing the needle, rather than the injection itself, this device might be an ideal solution. Discuss this possibility with your physician. Body size may influence the appropriateness of this tool, since testosterone needs to be injected deep into a large muscle, and most auto-injectors have short needles of thin gauges.

- **Prescription numbing agents:**
  - **EMLA (Eutectic Mixture of Local Anesthetic)** This unique topical anesthetic cream is typically used for intravenous cannulation and venepuncture, but it can easily be used for intramuscular injections too. While slow acting (it needs to be applied an hour before an injection), it is a quite effective numbing agent and is readily available through most US pharmacies. (In Canada, this product is available over the counter and does not require a prescription.) EMLA is manufactured by Astra Pharmaceuticals.
  - **NeedleBuster.** Topical anesthetics typically only numb the skin 2-3 mm in depth. The NeedleBuster device (made by Life-Tech), uses a mild electrical current to drive the topical anesthetic (usually lidocaine) deeper into the skin and tissue (1-2 centimeters) through a process called iontophoresis. This device is generally only available to healthcare providers, but is sometimes made available to consumers. (A similar product, made by Iomed Clinical Systems, is called Numby Stuff.)

- **Other medication.** If you decide to have a partner, friend or family member give you your shots, another option is to consider a prescription anti-anxiety drug that can be used before each shot. This option is not advised for individuals who would be performing their own injection, since the medication may affect coordination, judgment or ability to perform the task correctly and safely. Discussing this option with your doctor is crucial and may not be a long term solution.

Where does needle phobia come from?

It is believed that 80% of needle phobics have a first degree relative (parent, sibling, etc.) who also exhibits some form of needle phobia. This could imply a genetic component or the strength of social/emotional messages passed down (consciously or not) from generation to generation.

Reasons

People may develop anxiety or fears of needles for a variety of reasons. Most people learn to avoid things that are painful and have experienced a shot at some point in their lives that was uncomfortable or had a traumatic component to an injection experience. The desire (conscious or not) to avoid painful stimuli, though, isn’t the only reason people develop needle anxiety. Some reasons people may acquire anxieties or fears of needles (whether self-injecting and/or when others inject) include:
**Reaching the Mark—Shot Time**

The following suggestions are practical and focus on completing your shot. Remember to draw on the anxiety reducing techniques as you need them.

- **Company.** The supportive presence of a partner, friend or family member is often useful for a number of reasons. The simple concept of not being alone can help reduce anxiety. Also, coordinating a time for another person to be there with you can produce a small amount of pressure which acts as encouragement to go through with completing the injection task. The other person, of course, can offer supportive conversation, be a cheerleader, help you get ready or do some of the steps of the injection process, and can be available to relax and celebrate with you following the injection.

- **Injection site.** There are several places on the body where you can safely inject testosterone. Because of the high viscosity, the majority of testosterone injections are given into the vastus lateralis muscle (outer side of thigh / quadracep) or gluteus medius muscle (upper outer quadrant of the buttocks). You may find that it is physically and/or emotionally more comfortable to inject in one location over another. Your body size, flexibility, and comfort will all also determine where you choose to inject. Discuss the options with your healthcare provider.

- **Body Position.** Because lightheadedness, dizziness, and fainting are common results of needle anxiety, the location of the injection site and positioning of your body are important to consider. Thigh injections may provide the greatest stability, since they can easily be completed by sitting in a chair, couch or bed. Many people are able to flexibly inject into the buttocks in a prone position (rather than standing and twisting). A discussion with your physician, as well as experimentation, will help you determine if one injection site or positioning of your body is psychologically or physically more comfortable. Also, positions that are either prone or securely sitting down (i.e. couch, firm and strong chair) are useful in case you become lightheaded or feel faint.

- **Pain reduction/distraction.** Several techniques can be employed to decrease or alter the sensation of the upcoming injection. (Part of the needle phobia reaction is a great amplification of any pain that does occur, not that it actually causes all that much pain to inject.)
  - Slapping or pinching the injection site may cause a slight numbing and tingling sensation which will mask the poke of the injection.
  - Running ice over the injection site can create significant numbing.

- **Setting the mood**
  - Reduce intrusive distractions. Clearing debris away from the area where you will be injecting, isolating noisy or highly active pets, turning off the TV and/or phone ringer, etc. will allow you to focus more clearly, reducing anxiety about issues in your environment which may impact on
your concentration and calmness.

- **Music.** Some people enjoy music and find it relaxing, while others find it annoying, distracting or disturbing. Different types of music create different moods. Check in with yourself and determine if you would benefit from music with or without words, slow or fast paced, or a particular CD/radio station.

- **Aromas.** Smell is the sense that can stimulate the deepest and strongest memories and can shift moods more effectively than stimulus to other senses. Scents such as brewing coffee, incense, a specific essential oil (e.g. lavender, bergamont, etc.), or cologne might be soothing and help decrease anxiety.

- **Objects.** Some people find that they appreciate having favorite objects near them on shot day. Wearing a favorite shirt or hat, or placing a rock or totem on the table where you’ll be injecting, or having other objects that feel good around you can provide a sense of comfort and confidence.

- **Positive Self-Talk.** While it might sound simplistic, the use of positive self-talk can greatly enhance confidence and create an emotional environment that leads to a successful injection experience. Just like the Little Engine that Could, thinking (and even saying out loud), "I think I can, I think I can, I know I can, I know I can" may have results that surprise you! If this is too "new age", create a football-type chant and try shouting it.

- **Rituals.** Any of the above suggestions could be included in the creation of an injection ritual. Rituals might be simply doing things in a particular order or a very elaborate sequence of events that may include many components. Some peoples’ rituals may focus on the placement of items in getting the shot ready, while others may wear ‘lucky’ boxers shorts or play the same CD of music for each injection. The creation of a ritual may also serve as an adequate distraction, generating more energy and focus around the ritual than actually doing the injection. The actual injection may be minimal in comparison to all of the other components and ritual.

**Conclusion:**
There are many viable and safe ways to take testosterone. While many FTM+s (and physicians) choose an injectable form, it might not be the right option for you. If you want to take testosterone, the goal is to find a way that is emotionally comfortable to you.

Don’t feel pressured to do it “like everyone else”. There is no “right” way to use testosterone. Starting (or continuing on) hormones is a joyous journey. There is enough stress around us each day—try not to let this be an additional one.