# What are the risks of silicone pumping?

Right after pumping, infections can occur. These can be severe enough to need hospitalization and can cause severe permanent scars.

Less commonly, people can get Acute Silicone Syndrome where the injected silicone enters the blood and goes to the heart, lungs, and brain. If this happens people may get a cough, have trouble breathing, fever, confusion, and even can become unconscious. If you get ANY of these symptoms in the first few days after pumping, it is a medical emergency! You must go immediately to the hospital. Bring this flier with you. Even in a hospital, 1 in 4 people may die from this complication, but with the right treatment many survive.

Months to years after pumping the most common problem is that the silicone can harden and can move to other parts of the body. This can cause significant disfigurement and can be very painful. Sometimes to treat this people need surgery or medicines that can have side effects. Unfortunately, there is no way to predict who will get these complications.

# Are there ways to make silicone pumping safer?

Injecting silicone is dangerous. There is no definite method to lower the risk of Acute Silicone Syndrome or the chronic complications. However, there are some things you can do to prevent infections, and *maybe* help prevent other problems. Also, if you have problems, there are treatments that help. When you go to a doctor, take this flyer. There is information for your doctor on the back.

- 1. Wait at least 1-2 years after starting hormones.
- 2. Make sure the person pumping uses ONLY Silicone (preferably medical-grade).
- 3. Use Chlorhexidine Soap (Hibiclens) to clean the area before pumping. Shower with it 2 days before.
- 4. Use small amounts and space out injections over time.
- 5. When injecting, pull back on the syringe plunger to make sure you are not in a blood vessel before injecting.
- 6. Ask your doctor if there are safer treatments to enhance your body (that may even be covered by your insurance!)





## **Silicone Pumping**

and Harm Reduction in the Transgender Community







### What is pumping?

The injection of substances (often silicone) into the body to enhance breasts, hips, and other areas of the body.

#### Who does it?

Generally, either transgender women or cisgender (non-transgender) women who want a lower cost alternative to plastic surgery will self-inject silicone. In a study in transgender women in San Francisco, one in six transgender women had pumped somewhere on their body. However this was mostly in women who were over 40.

# Don't doctors also use silicone for cosmetic surgery?

Yes, but this is silicone that is encased in a bag that keeps it from interacting with your body. Some doctors do inject free silicone directly but this is generally tiny amounts and they use sterile medical grade silicone. When people do silicone pumping they use silicone that is often the same kind used in construction. Other substances can be injected with or instead of the silicone which can be even more dangerous.

### **Information for your doctor:**

Acute Silicone Syndrome usually has onset usually within 72 hours of silicone injection. It often presents like acute respiratory distress syndrome or fat emboli syndrome. Pneumonitis with prominent hilar lymphadenopathy can be a clue. The cornerstone of treatment is high dose systemic steroids and aggressive respiratory support. Severe neurological symptoms have a very poor prognosis. Those with pulmonary predominant symptoms (with no or milder neurological symptoms) generally survive with aggressive treatment. Those who don't may die from reactivation of TB. If there is any history or risks for TB consider cotreatment. Antibiotics for pneumonia are also appropriate given the differential diagnosis includes pneumonia.

Localized reactions in the immediate term after injection are often infectious and inflammatory processes. Atypical mycobacteria may be causative (especially *M. abscessus*). Regimens could include Clarithromycin AND either Cefoxitin OR Azithromycin.

#### References:

https://transline.zendesk.com/home
For printable copies visit:
http://project-health.org/transline

### **Information for your doctor:**

Chronic silicone complications may include chronic or relapsing cellulitis like reactions with or without subcutaneous nodules, ulceration, lymphadenopathy, and constitutional symptoms. This is a chronic granulomatous reaction associated with high levels of TNF- $\alpha$ . It can be at the site where silicone was initially injected or distant from that site because of the migration of silicone.

Steroids are the most effective treatment, but need to be tapered. Use alternate drugs for maintenance (steroid sparing). Using tetracycline antibiotics for their anti-inflammatory effect rather than their antimicrobial effect has been most often reported in the literature. It may take months to have an effect if used alone. Other treatments reported in the literature include topical imiquimod, TNF- $\alpha$  inhibitors, hydroxychloroquine, allopurinol, high dose antihistamines, and even tacrolimus with cyclosporine for refractory cases.

Surgery may be effective although difficult. Good cosmesis may be possible replacing breast silicone with implants. Chronic inflammation should be addressed before surgery is attempted to decrease the risk of formation of ulcers, migration, infection, and fistulas post-op.