
HIGH NEEDLE FEAR AND COVID-19 VACCINES

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What do you do if you are terrified of needles and even seeing or hearing about needles on the news makes you break out in a cold sweat? Will you shut out all of the news? Or cross your fingers and hope that your fear will suddenly disappear when your turn comes to take the vaccine?

In order for vaccines to protect us against COVID-19, we need 70 to 80% uptake to reach community immunity. There are many reasons why people may not get a vaccine, one being needle fear. Frequently ignored or dismissed, needle fear is incredibly common occurring in approximately 2 in every 3 children and 1 in every 3 adults. Many of us fall in the lower end of the needle fear spectrum, considering needles as a nuisance or a short-term unpleasantness that can be easily endured for the long-term benefit. This represents the lower end of the needle fear spectrum. But at the other end of the spectrum are high and phobic levels of needle fear which can be a big problem. The words “phobic” and “phobia” are thrown around a lot in everyday conversation and the media - often incorrectly. A phobia is a diagnosed mental health disorder which has to meet certain diagnostic criteria. If someone is “phobic” of needles this is called blood injection injury phobia and means they have extremely high anxiety and fear about needles leading to avoidance and/or significant distress, impairments, and potential attempts to escape when in the feared situation. This reaction is out of proportion to the danger actually posed. The thing is, even if someone hasn’t been diagnosed by a mental health professional with a phobia, high levels of needle fear can get in the way. About 1 in 10 people have high needle fear. People with high levels of needle fear may still avoid vaccinations or endure them with a lot of distress. People with high levels of needle fear are more likely to get dizzy or faint during needle procedures (this certainly doesn’t help with the fear!).

So, what can be done? People with high levels of needle fear don’t benefit from the pain and management strategies that are often recommended for those with low fear levels. Instead, a different approach is needed: *exposure therapy*, which falls under the umbrella of cognitive behavioural therapies. In exposure therapy, you face your fear gradually in a way that is manageable. First, you create a list of everything you fear about the injection, then arrange them from the least scary to most. This is called a hierarchy, which is like a ladder you work your way up. The idea is for you to stay in each experience or on each step until your fear comes down and/or you realise that what you are most worried about (catastrophic thought) won’t happen or if it does, you can survive it. Below is an example.

Step	Fear rating (0 = no fear; 100 = worst fear possible)
Driving past where vaccine injection will occur	15
Looking at simple line drawings of needles	20
Reading about COVID-19 injection procedures from a trusted source	30
Looking at real pictures of needles	42
Watching someone else hold a needle	50
Holding a needle	58
Watching a video of a vaccine injection	66
Watching someone else receive an injection in person	75
Going through all the steps of an injection before needle insertion	85
Receiving a vaccine injection	100

It's really important to stay on each step until the fear comes way down. You may need to do each step more than once before you feel ready to move up the ladder to the next step. Think of a hill that goes up, has a rounded top, and then comes down – this is like your fear in the situation. If you escape the situation right at the height of your fear, you don't learn that your fear will come down; instead, you are stuck in the "worst case scenario". Avoidance and escape from a feared situation (that isn't actually dangerous) maintain the fear. Exposure therapy is designed to address this head on.

Exposure therapy is structured and takes a lot of motivation. Don't try to rush through: the steps will likely need to be repeated and progress can be made in fits and starts, so it may help to give yourself a reward after completing each step. It's important to remember that the order of the steps in the hierarchy is specific to you - it doesn't have to make sense for someone else, remember the fear isn't rational. The exposures have to target the focus of your fear or otherwise, it won't work. For example, if you are worried about any sight of blood and you don't practice viewing blood, you aren't really facing your fear.

Another component needs to be added if you get really dizzy or faint during needles. This happens because your blood pressure and heart rate increase and then suddenly decrease, which can lead to a faint. Other warning signs that this may be happening are headache, weakness, sweating, pins and needles, and nausea. A technique called muscle tension, which involves tensing and then releasing major muscle groups like your legs (squeeze your knees and thighs together tightly) or your stomach (clench the muscles like you're doing a sit up or someone is going to step on your belly), is designed to keep your blood pressure up so fainting doesn't happen. Tense the muscles for ~10-15 seconds or until you feel flushed in your face, then release the tension. Don't fully relax, just release back to baseline for ~20-30 seconds. Then tense the muscles again. Keep repeating this before, during, and after your exposures until any feeling of faintness passes. As you practice muscle tension while you do your exposures, you learn how to keep yourself from feeling faint or dizzy. It may also help to lay down when you get your needle.

In the ideal scenario, when you have successfully completed your hierarchy, you need to have a long-term plan for continuing your exposures, otherwise the fear can build up again. How will you continue your exposures – through screen savers with needle-related pictures, watching needle procedures online, trips to the pharmacy where people are getting vaccinated?

Exposure therapy can be tricky which is why it usually delivered by mental health professionals. If you have other mental health issues, or have tried your best with these steps but something isn't working, it is likely time to seek professional help.

Once the high level of fear is addressed, people can more fully benefit from the pain management strategies at the time of the needle like topical anesthetics, and the comfort of a trusted loved one being there for you. Together, with both you and I getting our COVID vaccines, we can work towards community immunity and an end to the COVID-19 pandemic.

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