Needle Related Fainting:
Why does it happen? What to do about it?

Why does someone faint?

Fainting is caused by a sudden drop in blood pressure.

This occurs when the brain (your control center) does not receive enough fuel (oxygen), and you lose control and awareness for a short period of time. This drop in blood pressure is called the vasovagal response.

Vasovagal syncope: an overreaction to a trigger (like a needle or blood).

It is one of the most common causes of fainting.

Warning signs

- Headache
- Sweating
- Weakness
- Light headedness (dizziness)
- Pins & Needles
- Changes in Vision
- Nausea

Does fainting mean someone is afraid of needles?

Fainting is more common in those with needle fear.

But, not everyone who faints due to needles is afraid of them. And, not everyone who is afraid of needles will faint.

What happens when someone gets a needle?

- Presented
- Blood pressure & heart rate increase
- Blood pressure & heart rate decrease
- Feelings of faintness & dizziness

Muscle tension: alternating between tensing and releasing muscle(s) in the body (e.g., legs, stomach).

Muscle tension increases someone’s blood pressure prior to and during the needle. When the needle is presented, their blood pressure does not drop to a low level, preventing fainting.

Important: The person should not fully relax their muscles after tensing but instead just go back to “normal” or baseline.

Helpful Tip: Laying down while getting a needle may also help prevent fainting.

Remember! A person should not clench or tense the arm where the needle will go.

Who can use this technique?

Muscle tension is a safe technique that children 7 and older and adults can use. Muscle tension can help anyone who gets dizzy and faints during needles.

Ask the person to follow these steps:

1. Sit in a chair.
2. Tense or squeeze the muscles in their legs and stomach.
3. Squeeze for about 10-15 seconds until their face feels flushed or warm.
4. Release the tension for 20-30 seconds.
5. Repeat steps 2, 3, and 4 until the needle is over, or until the feeling of faintness passes.

Taddio et al., CMAJ; 187(13):975-82. McMurtry et al., Cogn Behav Ther. 2016;45(3):217-35. https://www.uoguelph.ca/pphc/PediatricPainHealthandCommunicationLab