Vaccination-Related Syncope:
Information for Healthcare Personnel

What is Syncope?

Syncope (fainting) is a brief loss of consciousness caused by a sudden, temporary change in blood flow to the brain. A person who is about to faint (presyncope) may feel lightheaded, dizzy, weak, nauseated, sweaty or cold. They may feel tingly or have changes in vision.

Muscles may twitch during a syncopal episode, which may be mistaken for a seizure. However, recovery is rapid and spontaneous. Syncope-related falls can result in serious injury. Syncope is more common in people with high levels of needle fear.

Vaccination-Related Syncope

Syncopal reactions to vaccination are most likely to occur in adolescents or young adults but can occur at any age. This reaction is related to the act of injection, and is not an adverse reaction to a specific vaccine ingredient. It is not a contraindication or a a precaution to the administration of any vaccine. Some people have a pattern of fainting related to injections.

Reduce the Risk of Vaccination-related Presyncope and Syncope[1]

- **Ask about a history of dizziness or fainting** related to vaccination or other injections. If present, ask what they do to prevent fainting.
- **Help recipients feel less anxious.** Ask how they prefer to handle their anxiety and support their choices. Make suggestions, if needed; slow, deep breaths, or distractions (by a mobile device or conversation) may help. Keep wait times to a minimum. Keep needles out of view until necessary.
- **Offer techniques to reduce pain,** if feasible. Consider topical analgesia or other non-pharmacological techniques to minimize pain sensations.
- **Address hunger or thirst,** which may increase the likelihood of syncope.
- **Have the vaccine recipient sit or lie down** for vaccinations and stay in the clinic for 15 minutes after, as recommended by CDC for all vaccine recipients. This also allows staff to respond if the recipient develops an immediate allergic reaction to vaccination.
- **Watch your words!** Using fear-provoking words (e.g., "shot," "sting") or giving false reassurances ("this won't hurt a bit") can increase distress and pain, and may increase the risk of syncope.[2]
- **Consider using simple muscle tension exercises** to prevent vaccination-related syncope in patients likely to faint (age 7 years and older).[3]

Respond to Presyncope and Syncope

If a patient experiences presyncopal symptoms, act quickly to have them sit or lie down. If they lose consciousness, lay the patient down with legs elevated, if possible. Observe the patient's vital signs and clinical signs until symptoms resolve. If syncope happens outside the medical setting and the patient does not recover quickly, contact local emergency medical services.[4]

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1. Visit Immunize.org's "Addressing Vaccination Anxiety" clinical resources at www.immunize.org/handouts
2. *Improving the Vaccination Experience: What Health-Care Providers Can Say* from AboutKidsHealth (Canada) at assets.aboutkidshealth.ca/AKHassets/CARD_HCP_WhatYouCanSay.pdf?hub=cardcommvac#card
3. Example of muscle tension exercise: Sit in a chair. For about 10 to 15 seconds, tense/squeeze the leg and stomach muscles, but not the arm where the needle will go. Release the tension for 20 to 30 seconds. Repeat the tense and release steps until the feeling of faintness passes. From *Needle Related Fainting: Why Does It Happen? What to Do About it?* from AboutKidsHealth (Canada) at assets.aboutkidshealth.ca/AKHAssets/CARD_Muscle_Tension.PDF?hub=cardcommvac#card
4. *Medical Management of Vaccine Reactions in Adults in a Community Setting* from Immunize.org at www.immunize.org/catg.d/p3082.pdf and in *Medical Management of Vaccine Reactions in Children and Teens in a Community Setting* from Immunize.org at www.immunize.org/catg.d/p3082a.pdf