Immunize.org Suite of Materials to Improve the Vaccination Experience

Kelly L. Moore, MD, MPH Immunize.org President & Chief Executive Officer



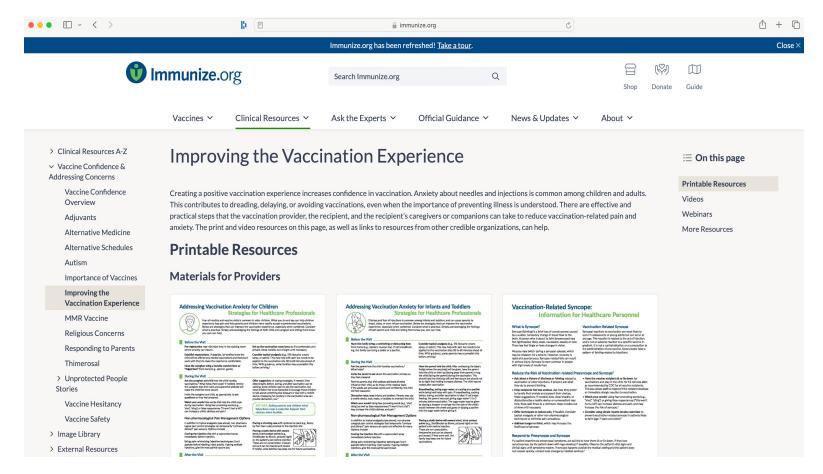


Overview

- 1. The (underappreciated) problem
- 2. Materials for HCP
- 3. Materials for vaccine recipients & families
- 4. Time for questions



One stop for all resources:



www.immunize.org/clinical/vaccine-confidence/topic/improving-vaccine-experience/



SECTION 1: The problem



The (underappreciated) problem: Vaccination anxiety \rightarrow vaccination hesitancy

- Fear of needles is common: 2-of-3 children and 1-of-4 adults
- Negative consequences
 - Anxiety (fear) can fuel pain (pain is subjective)
 - Anxiety & pain can lead to vaccination stress-related responses (e.g., dizziness, headache, nausea, fainting)
 - Negative vaccination experiences contribute to negative attitudes about vaccination and vaccine hesitancy



Up to 1 in 10 people refuse vaccinations

because of fear



SECTION 2
Materials for Healthcare
Professionals





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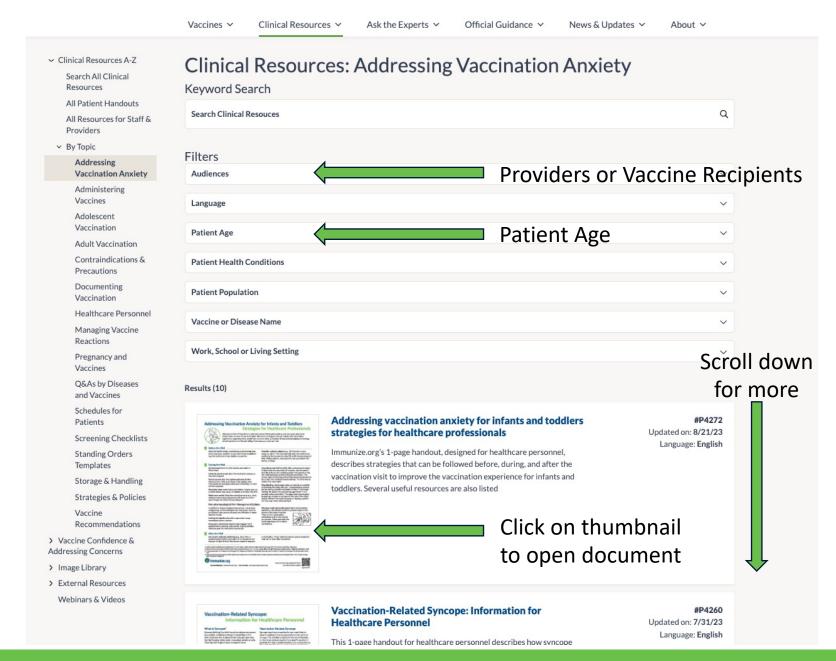
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Two Webinars

Improving the Vaccination Experience: Reducing Pain and **Anxiety for Children and Adults**

February 28, 2023





Download slides &





WEBINAR

Improving the Vaccination **Experience: Reducing Pain** and Anxiety for Children and Adults

February 28, 2023



Anna Taddio, BScPhm, MSc, PhD Professor, Senior Associate Scientist Leslie Dan Faculty of Pharmacy, University of Toronto The Hospital for Sick Children (SickKids)



Lucie Marisa Bucci, BA, MA Consultant: Director, Policy and Government Relations **Bucci-Hepworth Health Services** Inc. (BHHS); Society for Infodemic Management (SIM)



Kelly L. Moore, MD, MPH President and CEO,

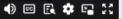


Sharon G. Humiston, MD, MPH Director for Research,









Improving the Vaccination Experience: Accessible Vaccination for Neurodiverse People at Any Age

December 13, 2022





Enhanced screening checklists for contraindications

13. Have you ever felt dizzy or faint before, during, or after a shot?

Fainting (syncope) or dizziness is not a contraindication or precaution to vaccination; it may be an anxiety-related response to any injection. CDC recommends vaccine providers consider observing all patients for 15 minutes after vaccination. See Immunize.org's resource on vaccination and syncope at www.immunize.org/catg.d/p4260.pdf.

14. Are you anxious about getting a shot today?

Anxiety can lead to vaccine avoidance. Simple steps can help a patient's anxiety about vaccination. Visit Immunize.org's "Addressing Vaccination Anxiety" clinical resources at www.immunize.org/handouts.



Screening Checklist for Contraindications

YOUR NAME	
DATE OF BIRTH/	

to HPV, MenACWY, MenB, and Tdap Vaccines for Teens

For parents/guardians: The following questions will help us determine if human papillomavirus (HPV), meningococcal conjugate (MenACWY), meningococcal serogroup B (MenB), and tetanus, diphtheria, and acellular pertussis (Tdap) vaccines may be given to your teen today. If you answer "yes" to any question, it does not necessarily mean your teen should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please

ask your healthcare provider to explain it.	yes	no	don't know	
1. Is your teen sick today?				
2. Does your teen have allergies to a vaccine component or to latex?				
3. Has your teen had a serious reaction to a vaccine in the past?				
4. Has your teen had a brain or other nervous system problem?				
5. Is your teen pregnant?				
6. Has your teen ever felt dizzy or faint before, during, or after a shot?				
7. Is your teen anxious about getting a shot?				
FORM COMPLETED BY	DATE . DATE .			
Did you bring your teen's immunization record card with you? yes no lt is important to have a personal record of your teen's vaccinations. If you don't have one, ask your healthcare provider to give you one with all of your teen's vaccinations on it. Keep it in a safe place and be sure your teen carries it every time he/she seeks medical care. Your teen will likely need this document to enter school or college, for employment, or for international travel.				
men, need and decument to enter school of conege, for employment, or for	micina	cional	adve.	



www.immunize.org/catg.d/p4062.pdf Item #P4062 (8/4/2023)



FOR PROFESSIONALS www.immunize.org / FOR THE PUBLIC www.vaccineinformation.org

Information for Healthcare Professionals about the Screening Checklist for Contraindications to HPV, MenACWY, MenB, and Tdap Vaccines for Teens

Are you interested in knowing why we included a certain question on the screening checklist? If so, read the information below. If you want to find out even more, consult the references listed in Notes below.

NOTE: For supporting documentation on the answers given below, go to the specific ACIP vaccine recommendation found at the following website: www.cdc.gov/vaccines/hcp/acip-recs/index.html

1. Is your teen sick today? (HPV, MenACWY, MenB, Tdap.)

There is no evidence that acute illness reduces vaccine effectiveness or safety. However, as a precaution, all vaccines should be delayed until moderate or severe acute illness has improved. Mild illnesses with or without fever (such as otitis media, "colds," diarrhea) and antibiotic use are not contraindications to routine vaccination.

2. Does your teen have allergies to a vaccine component or to latex?V (HPV, MenACWY, MenB, Tdap,)

Latex: An anaphylactic reaction to latex is a contraindication to vaccines with latex as part of the vaccine's packaging (e.g., vial stoppers, prefilled syringe plungers, prefilled syringe caps). For details on latex in vaccine packaging, refer to the package insert (listed at www. fda.gov/vaccines-blood-biologics/vaccines/vaccineslicensed-use-united-states).

An injection-site reaction (e.g., soreness, redness, delayed-type local reaction) to a prior vaccine dose or vaccine component, including latex, is not a contraindication to a subsequent dose or vaccine containing that

3. Has your teen had a serious reaction to a vaccine in the past? (HPV, MenACWY, MenB, Tdap.)

Anaphylaxis to a previous vaccine dose or vaccine component is a contraindication for subsequent doses of corresponding vaccines (see question 2). Usually, one defers vaccination when a precaution is present unless the benefit outweighs the risk (e.g., during an outbreak). A history of encephalopathy within 7 days of DTP/DTaP is a contraindication for further doses of any pertussiscontaining vaccine, including Tdap.

4. Has your teen had brain or other nervous system problems? (Td/Tdap.)

Tdap is contraindicated in teens who have a history of encephalopathy within 7 days following DTP/DTaP. An unstable progressive neurologic problem is a precaution to the use of Tdap. For people with stable neurologic

NOTE: For summary information on contraindications and precautions to vaccines, go to the ACIP's General Best Practice Guidelines for Immunization t www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html

disorders (including seizures) unrelated to vaccination, or for people with a family history of seizures, vaccinate as usual. A history of Guillain-Barré syndrome (GBS) within 6 weeks of a tetanus-toxoid vaccine is a precaution; if the decision is made to vaccinate, give Tdap instead of Td.

5. Is your teen pregnant? (HPV and MenB.)

MenB should not be given except to those with an elevated risk of exposure during pregnancy. HPV vaccine is not recommended during pregnancy. Injectable influenza vaccine, COVID-19 vaccine, and Tdap are explicitly recommended during pregnancy.

6. Has your teen ever felt dizzy or faint before, during, or

Fainting (syncope) or dizziness (presyncope) is not a contraindication or precaution to vaccination. However, for some people these can be a response to vaccination anxiety. People in adolescent and young adult age groups are more likely to experience syncope. CDC recommends that vaccine providers consider observing all patients for 15 minutes after vaccination. This is especially important for people with a pattern of injection-related syncope. For more information about vaccination-related syncope, see www.immunize.org/catg.d/p4260.pdf.

7. Is your teen anxious about getting a shot?

Anxiety can lead to vaccine hesitancy or avoidance. Simple steps can ease a patient's anxiety about vaccination, Visit Immunize.org's "Addressing Vaccination Anxiety" clinical resources at www.immunize.org/handouts.

VACCINE ABBREVIATIONS

DTP = Diphtheria, tetanus, pertussis vaccine DTaP - Diphtheria, tetanus, (acellular) pertussis vaccine HPV = Human papillomavirus vaccine MenB = Meningococcal serogroup B vaccine MenACWY = Meningococcal serogroups A. C. W. Y Td/Tdap = Tetanus, diphtheria, (acellular) pertussis vaccine

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www.immunize.org/catg.d/p4062.pdf / Item #P4062 (8/4/2023)



Addressing vaccination anxiety: Strategies for healthcare professionals

- Adolescents and Adults
- Children
- Infants and Toddlers

Immunize.org

Addressing Vaccination Anxiety for Children

Strategies for Healthcare Professionals Fear of needles and vaccine visits is common in older children. What you do and say can help children experience less pain and help parents and children more readily accept recommended vaccinations.



Fear of needles and vaccine visits is common in older children. What you do and say can help children experience less pain and help parents and children more readily accept recommended vaccinations. Below are strategies that can improve the vaccination experience, especially when combined. Consider what is practical. Simply acknowledging the feelings of both child and caregiver and letting them know you care can help.

Before the Visit

Pre-registration may minimize time in the waiting room where anxiety can mount.

Establish expectations. If possible, let families know the child will be offered any needed vaccinations and that you'll work with them to make the experience comfortable.

Have the caregiver bring a favorite comfort item or "fidget item" from home (e.g., spinner, game).

Set up the vaccination room/area so it's comfortable and private. Keep needles out of sight until necessary.

Consider topical analgesia (e.g., 5% lidocaine cream, spray, or patch). This may help with pain but needs to be applied to the vaccination site 30 to 60 minutes ahead of time. With guidance, some families may accomplish this before arriving.¹

During the Visit

Ask the caregiver and child how the child handles vaccinations. What helps them cope? If needed, remind the caregiver that their calm and supportive attitude will make the child feel more secure.

Invite the caregiver and child, as appropriate, to ask questions so they feel prepared.

Watch your words! Use words that help the child cope during vaccination. Using fear-provoking words (e.g., 'shot', 'sting') or false reassurances ("It won't hurt a bit") can increase a child's distress and pain.³

Non-pharmacological Pain Management Options

In addition to topical analgesics (see above), non-pharmacological pain control strategies can temporarily "confuse and distract" pain sensors. Options include:

Cooling the injection site with a vapocoolant spray immediately before injection.

Using pain-minimizing injection techniques: Don't aspirate before injecting. Inject quickly. If giving multiple injections, give the most painful vaccine last.

Offer suggestions of coping strategies, if needed. Slow deep breaths before, during, and after vaccination can be calming. Some children want to see the vaccination, but most children like to be distracted. Encourage those children to talk about something else pleasant or play with a mobile device. Displaying fun posters in the vaccination area can provide distraction, too.⁴

KEY IDEA: Asking parents and children what helps them cope is essential. Support their choices, when feasible.

Placing a vibrating case with optional ice pack (e.g., Buzzy by Pain Care Labs) proximal to the injection site.

Placing a plastic device with several short, blunt contact points (e.g., ShotBlocker by Bionix, pictured right) on the patient's skin before injection. These are non-prescription, inexpensive and can be cleaned and reused.



If helpful, some families may keep one for future vaccinations.

After the Visit

Use of pain-reducing medicines (e.g., ibuprofen or acetaminophen) before vaccination is not recommended because it might diminish the immune system's response

to vaccination. These medicines may be used as needed to treat pain or fever after vaccination.

- Guide to Topical Anesthetics and Numbing Cream from the Meg Foundation at www.megfoundationforpain.org/2022/7/22/topical-anesthetics-infographic/
 Screening Checklists about Vaccine Contraindications and Precautions from Immunize.org at www.immunize.org/clinic/screening-contraindications.asp
- 3. Improving the Vaccination Experience: What Health-Care Providers Say from AboutKidsHealth (Canada) at assets.aboutkidshealth.ca/AKHassets/CARD_HCP_WhatYou-CanSay.odf?hub=card.commyac#card
- $4. Search and Find Poster from AboutKidsHealth (Canada): assets. aboutkidshealth. ca/AKHAssets/CARD_SearchAndFind_Poster.pdf? hub=cardcommvac#card$



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www.immunize.org/catg.d/p4271.pdf Item #P4271 (8/21/2023)



www.immunize.org/catg.d/p4271.pdf

Vaccination-Related Syncope





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 Syncope¹

- 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

- 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
- Example of muscle tension exercise: Sit in a chair. For about 10 to 15 seconds, tenses/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 if Yom AboutKidsHealth (Canada) at assets.aboutkidshealthca/AKHAssets/CARD, Juscle_Tension,PDF?hub=cardcommvacfEard
- 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



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www.immunize.org/catg.d/p4260.pdf Item #P4260 (7/31/2023)



Video Series







Using Enhanced Screening Checklists for...

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SECTION 3
Materials for Vaccine
Recipients & Parents



Addressing vaccination anxiety: Strategies for vaccine recipients and caregivers

- Adolescents and Adults
- Children
- Infants and Toddlers

Addressing Vaccination Anxiety in Adolescents and Adults



Strategies for Vaccine Recipients and Caregivers

Anxiety about injections is common for people of all ages, including adolescents and adults. Some feel so anxious that they dread, delay, or even avoid vaccination...even when they know vaccines are important. You can do simple things to make yourself (or the person you are with) feel better about the vaccination visit while being protected from serious diseases.

Before the Visit

Pre-register for your visit, if possible, so your wait time is shorter.

Know what to expect. When setting up the visit, ask if vaccinations are expected. If you are a caregiver of an anxious person, do not reassure them falsely. For example, don't promise "no shots today" in case their healthcare provider recommends that they need one or more vaccinations.

Consider a numbing medicine that you can put on the skin. It may be a 5% lidocaine cream, spray, or patch. This can help with injection pain. To take effect, these medicines need to be put on the skin 30 to 60 minutes ahead of time. Many clinics do not have time to do this. Consider asking the clinic or a pharmacist how to do this before you arrive, using a numbing medicine you can get without a prescription.¹

During the Visit

Ask questions about the vaccination process so your feel prepared.

Tell the person vaccinating you what helps you feel better. Do you prefer sitting (most do) or lying down? Do you prefer to look away or to watch what is happening?

Relax. For example, taking a few slow deep breaths before, during, and after vaccination can be calming.

Distract. Most people prefer to be distracted during vaccination. Consider using an app or game on your mobile device or simply talking about something else.

(For caregivers) Your words, tone, and attitude are important. The person getting the vaccine will be less anxious if you act calm, positive, and confident. On the other hand, using fear-provoking words (like "shot" or "sting") or giving false reassurances ("I promise it won't hurt a bit") may increase distress and pain.²

KEY IDEA: Let the person vaccinating you know if you are anxious and what helps you feel calmer. They want to help!

Options for Making Shots Less Painful without Medicine

In addition to numbing medicines described in "Before the Visit," there are other ways to distract pain sensors in the skin so the person getting the vaccine won't notice it as much. Options include:

Cooling the injection site. The person giving the vaccine may use a "freezing" spray just before injection.

A vibrating case with optional ice pack (such as Buzzy by Pain Care Labs) can be held against the shoulder or thigh above the injection site.

Before the injection, a plastic device with several short, blunt contact points can be placed on the skin around the injection site. One brand is ShotBlocker by Bionix (pictured right). This is non-

prescription and inexpensive. It can be cleaned and reused.

After the Visit

Experts do not recommend pain medicines (such as ibuprofen or acetaminophen) before vaccination because they might lower the body's response to vaccines. You may use these medicines to help with pain or fever that develops after vaccination, if needed.

1, Guide to Topical Anesthetics and Numbing Cream from the Meg Foundation: www.megfoundationforpain.org/2022/07/22/topical-anesthetics-infographic/

2. Improving the Vaccination Experience: What Health-Care Providers Can Say from AboutKidsHealth (Canada): assets.aboutkidshealth.ca/AKHAssets/CARD_HCP_WhatYouCanSay.pdf?hub=cardcommvac#card



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www.immunize.org/catg.d/p4270a.pdf Item #P4270a (8/8/2023)





Fainting Related to Vaccination





Fainting Related to Vaccination:

What You Need to Know

What is Fainting?

Fainting (the medical term is "syncope") is when a person loses consciousness (passes out) briefly after a sudden, temporary, change in blood flow to the brain. A person who is about to faint may feel lightheaded, dizzy, weak, nauseated, sweaty or cold. They may feel flushed or have a change in vision.

When people faint, their muscles may twitch, and this may be mistaken for a seizure. However, they usually wake up quickly after fainting. The reason fainting is important is that people who faint may be injured if they fail. Fainting is more common in people who are very afraid of needles.

Fainting Related to Vaccination

Adolescents and young adults are most likely to faint after vaccination, but it can occur at any age. Fainting is a reaction to getting an injection. It is not caused by any specific vaccine ingredient and is not a reason to avoid any future vaccination. Some people have a pattern of fainting related to injections, especially if anxious.

You Can Reduce the Risk of Vaccination-Related Fainting

The basics:

- Before the visit, eat or drink if needed. If you are very hungry or thirsty you may be more likely to feel faint when vaccinated.
- Let the person giving the vaccination know if you have a history of dizziness or fainting related to vaccination or injections. Also, let them know what helps you.
- Sit or lie down for the vaccinations and stay for about 15 minutes after vaccination is complete.
- If you are the parent or companion of the vaccine recipient, be supportive. Avoid using scary words, but don't give false comfort either ("You won't feel a thing.").¹

One or more of these options also may help:

- · Distract yourself with a game or app on a mobile device.
- Take slow, deep breaths before, during, and after vaccination.
- Most people prefer to look away, but watch the vaccinator if that makes you calmer.
- Talk about something pleasant with the vaccinator or someone who is with you.
- Learn to use simple muscle tension exercises to prevent vaccination-related fainting.²
- For more ideas, visit Immunize.org's "Addressing Vaccination Anxiety" resources for recipients and caregivers at www.immunize.org/handouts.

What if You Feel Faint During the Vaccination?

If you start to feel faint, sit or lie down if you can. If you faint, the healthcare provider will support you. You should feel better in a few minutes.

^{2.} Example of a 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. Form: Needle Related Fainting: Why Does It Happer? What to Do About it? From AboutKide-Health (Canada) at assets aboutkidshealth (Canada).



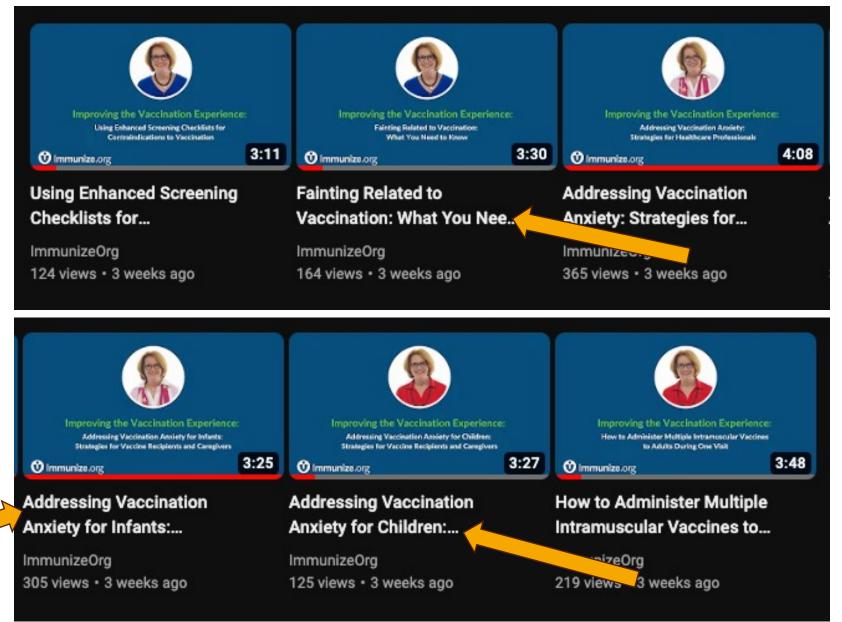
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www.immunize.org/catg.d/p4260a.pdf Item #P4260a (7/31/2023)



Improving the Vaccination Experience: What Parents and Caregivers Can Say from AboutKidsHealth (Canada) at assets.aboutkidshealth.ca/AKHassets/CARD)Parents_ WhatYouCanSay.pdf?hub=cardcommvac#card

Video Series



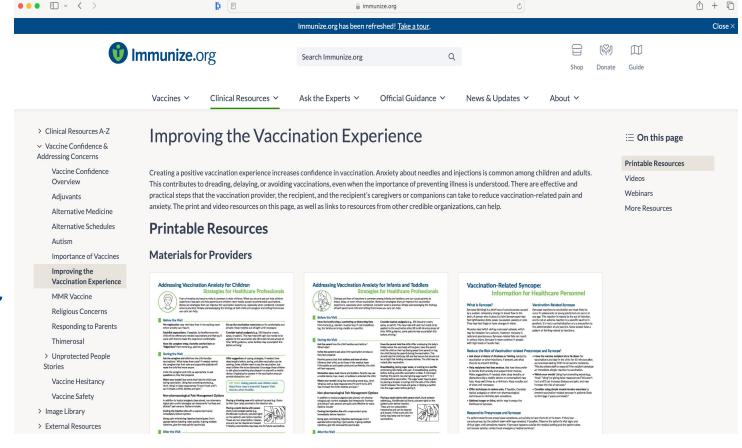


Immunize.org's Next Steps



Next steps:

- Materials available on Immunize.org, YouTube
- Vaccine recipient/parent materials will be on VaccineInformation.org when redesigned site launches
- Featuring each video in IZ
 Express, social media
- Follow and share our posts on social media (@ImmunizeOrg)

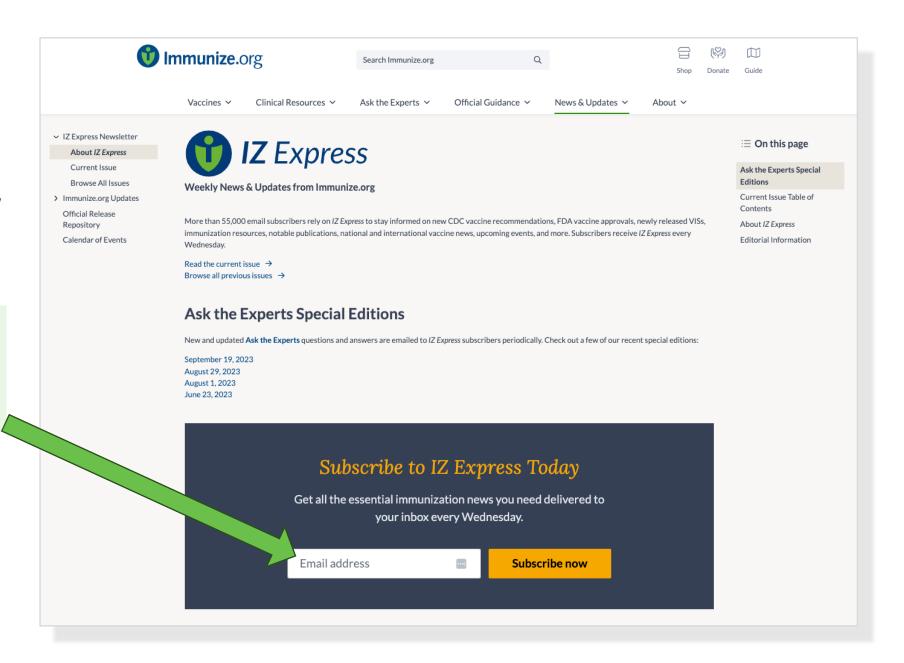


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Acknowledgment: Sharon Humiston, MD, MPH

Questions for us?

