A Guide for Parents, Caregivers and Children on How to Reduce Vaccine Injection Pain in Children

After the Procedure

1. Ask your child (or judge yourself) how much pain or hurt he/she had.
2. How satisfied are you and your child with the pain strategies used?
3. Review with your health care provider.
4. Plan for the next vaccination.

Add to your vaccine diary:
- What you did for pain
- How much pain your child had
- Your satisfaction
- Notes for next time

During the Procedure

Combine strategies to improve pain relief

- Breastfeeding or Sugar Water: babies only
- Topical Anaesthetics: under 12 months and over 12 months
- Rub skin near injection site: 4 years of age and older
- Distraction: all ages
- Upright/Holding: all ages
- Deep Breathing: 3 years of age and older

Read this information sheet to learn about ways to reduce pain and distress in children during vaccine injections.

Discuss and plan with your child (when appropriate) and health care provider what you will do to reduce pain and distress in your child.

Appendix 1 (as supplied by authors)

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Preparation

Read this information sheet to learn about how to reduce pain and distress in your child during vaccine injections. Use the information to plan for your child's vaccine injections. Discuss the information with your health care provider and child (when appropriate).

During the Procedure

Prepare Your Child Ahead of Time

- Tell your child what they need to know and answer their questions:
  - What will happen?
  - You will get a medicine called a vaccine in the arm with a needle.
  - Why is the vaccine being given?
  - To keep you healthy.
  - How will it feel?
  - There may be a pinch and some pushing or pressure that will last a few seconds.
  - How can we minimize any potential discomfort?
  - Some children think it is uncomfortable and some think it is OK. We don't know how it will feel for you. We are going to do different things so that it is not uncomfortable for you. (Then discuss what you will do.) You can help by (suggest strategies such as playing with a favourite toy).
- In general, tell young children (under 4 years old) just before the procedure and older children at least 1 day before – it helps them to plan how they will cope.
- Involve and listen to your child – they often have helpful suggestions for how to manage their pain (for example, let them choose a toy to bring).

Stay Calm

- Your actions and words can influence your child's reaction. Infants and children often look to their parents to understand how to act and feel. If you are calm, and use your normal voice, your child will feel that everything is OK.
- Avoid the following words and phrases because they increase distress:
  - Everything is OK.
  - If you are calm, and use your normal voice, your child will feel that everything is OK.
- Avoid high anxiety words:
  - "Hurt," "pain" or "shot"
- Reassuring words:
  - "It'll be over soon" or "You'll be OK"
- Apologizing words:
  - "I'm sorry you have to go through this" or "I know it hurts"

Upright Position and Holding

- You should not lay your baby, child or teen down.
- Have your child sit up-right.
- Infants and young children should be held (for example, bear hug, on your lap). Hugging feels comfortable and helps children to stay still. Children can lie down after the injection.
- Sit on a chair or stand against the examination table to minimize the risk for accidental falls. Keep limbs exposed. Secure your child if necessary but do not use undue force – this increases child distress.

Rub Skin Near Injection Site

- In children aged 4 years and older, offer to rub/stroke their arm near the injection site before and during vaccine injections.

Distraction

- Distraction involves taking your child's attention away from the procedure. It is effective for children of all ages.
- Distraction can be provided by either the parent, health care provider, or by the child (if the child is old enough).
  1. Choose something that will work for the age of your child:
     - Babies: toys, bubbles, singing, directing the baby's attention to something in the room.
     - Toddlers: toys, bubbles, pop-up books, songs, party blowers, dancing, directing the child's attention to something in the room.
     - School-aged children: toys, stories, videos, books, joking, music, counting, talk about something else (favourite movie, etc.)
     - Teens: games, videos, books, joking, music (iPods, MP3 players), talk about something else (favourite video game, etc.)
  2. Stay focused on your child and interact with your child.
  3. Help your child pay attention to the distraction being used.
  4. Try different distractions if needed.
  5. Maintain a positive attitude. Praise your child for engaging in distraction behaviours.

Deep Breathing

- Prompt your child 3 years or older to take slow deep breaths. Deep breaths can be made easier by using bubbles or pinwheels, which also act as distractions.

Breastfeeding OR Sweetening Agent

- **Sugar + Water**
  - Start breastfeeding your baby a few minutes before the vaccine injection and continue to breastfeed during, and for a few minutes after, the injection.
  - Alternatively, feed your baby sugar water right before the vaccine injection.
  - Sugar water is made by mixing 1 packet of sugar with 2 teaspoons of water. Feed some to the baby with a syringe or pacifier 1-2 minutes before the needle.
  - Sugar water should only be used for the management of painful procedures, not for general comfort or as food.

Medicine: Topical Anaesthetics

- These are pain-relievers that are applied on the skin where the vaccine is being injected. They are effective and safe for all ages.
- Available for purchase without a prescription in a pharmacy.
- Must be applied ahead of time (up to 1 hour): at home or upon arrival to the appointment. Check the product instructions.
- Be sure to apply to the correct location: either upper arm (over 12 months) or upper outer thigh (under 12 months).
- Two doses may be needed (one for each arm or leg) if 2 or more injections are being given.
- Can cause temporary changes in skin colour (redness or whitening). If there is a rash, it could be an allergic reaction – check with your health care provider.

After the Procedure

Ask your child (or judge yourself) how much pain or hurt he/she had. Discuss this with your health care provider and make a plan for how you will manage pain the next time your child has vaccine injections.

Combine strategies described above to improve pain relief.