Dr. Elizabeth Young

During Needle Procedures

Procedures, especially those involving a needle or poke, can be stressful for children or teenagers.

Helpful Tips:

- Caregiver being a calm and attentive presence before, during, and after needle procedures.
- Being honest about needle procedures. Avoid threatening or teasing about needle procedures.
- Giving reasonable choice to give child a sense of control.
- Sitting in a position of comfort, upright in caregiver's arms, or with caregiver next to them.
 Please gently keep infants' and childrens' hands away from the poke site. The staff can assist you in positioning.
 Babies can be swaddled and held or placed skin to skin.
- Provide distraction and validation of feelings.
- For more details, please reference our "Supporting Your Child at the Doctor's Office" handout.



Specifically Helping with the Hurt

Young infants established in breastfeeding can begin breastfeeding 2-5 minutes prior to the needle procedure, continue during the poke, and after for comfort as infant desires. This is especially helpful during vaccines.



24% Sucrose

Concentrated sugar (Sweet Tooth/Sweet Em/Sweet Ease) acts as a pain reducer during infancy and can be given orally with a pacifier, syringe, or on a finger. There is not evidence this will interfere with breastfeeding. A dose should be given 1-2 minutes prior to the procedure and a partial dose can be given at the beginning of the procedure.



Buzzy the Bee

Buzzy the Bee or Lady Buzz combines vibration and cold at the poke site to lessen the hurt.



Shot Blocker

Shot Blocker saturates the sensory signals around the poke site distracting from the hurt signals associated with needle procedures. It is helpful for some pre-school and older children.



Cold Spray (numbing)

It can be helpful for some older children.



4% Lidocaine (numbing)

Can be used for 3 months and older who are not at risk for methemoglobinemia.

*see back for additional instructions



Scan to visit our Child Life website for additional information.



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Reducing Hurt During Needle Procedures

4% Lidocaine (numbing)

- For children 3 months and older with supervision.
- 4% Lidocaine cream applied to the child's skin is available over the counter. *see examples at bottom of page
- Do not apply to skin that is cut, scraped, red, swollen, or sore. There is no need to wash skin prior to application.
- Apply a thick layer (do not rub in) about 2 stacked pennies worth for infants and a quarter size for older children at the sites of the anticipated poke.
- Cover with a clear non-absorbing dressing such as tegaderm, plastic wrap, non-absorbent bandaid or press and seal.
- With Tegaderm, fold small portion of diagonal corners under for easier removal.*see photo F
- Do not allow child to put the cream or plastic covering in their mouth as it presents a choking hazard or suffocation risk. Infants and young children should be watched continually.
- 4% lidocaine cream should be applied 20-60 minutes prior to needle procedures.
- Consider applying in car upon arrival to office for immunizations.

Well Check Age	Location to Place Lidocaine
4 months old	A on both legs
6 months old	A on both legs
1 year old	A on 1 leg B on 2 legs E on both arms
15 months old	A on both legs
18 months old	If planning to get Hepatitis A vaccine, A on 1 leg
2 years old	If Hepatitis A vaccine has not been given, A on 1 leg E on both arms
4 years old	A and B on 1 leg
11 years old	C on both arms if child is very thin or prefers pokes in legs then A on both legs. *The 2 nd HPV is usually given 6 months after 1 st . Place lidocaine at C on 1 arm or leg if child prefers pokes in leg.
16 years old	C on both arms

If planning for flu vaccine, usually given in fall/winter, or COVID vaccine, A for children 4 years of age or younger or are very thin. C for children 5 years of age and older.

*If child has missed vaccine doses, catch up doses may be needed. Please speak to doctor's office for numbing locations.

Three examples of 4% lidocaine cream available over the counter. Do not use if child is allergic to product contents.







middle thigh



В side of thigh



upper arm deltoid muscle



back of upper arm



bend of arm for lab draws



fold 2 opposite corners for easy removal



F