

- a. Usually 2 ml is the maximum volume that should be administered in a single site to small children and older infants.
 - b. New evidence suggests that immunizations at the ventrogluteal site have been found to have fewer local reactions and fever.
 - c. Distraction and prevention of unexpected movement may be more easily achieved by placing the child supine on a parent's lap for ventrogluteal site use.
 - d. The deltoid muscle advantages are less pain and fewer side effects from the injectate compared with the vastus lateralis.
 - e. Aspiration during IM vaccine administration is always recommended.
4. When obtaining a heel stick for lab results:
- a. The heel stick is performed because it is less invasive and less painful than a venipuncture.
 - b. Breastfeeding during a neonatal heel lance is effective in reducing pain and has been found to be more effective than sucrose in some studies.
 - c. Although safe for use in preterm infants when applied correctly, eutectic mixture of local anesthetics (EMLA) has been found to be much more effective than placebo in preventing pain during heel lancing.
 - d. To avoid osteochondritis (underlying calcaneus bone, infection, and abscess of the heel), the puncture should be no deeper than 1 mm and should be made at the inner aspect of the heel.
5. Children and adolescents should be prepared for procedures according to their level of development and understanding. Which interventions by the nurse would be helpful? Select all that apply.
- a. Explain procedure in relation to what child will see, hear, taste, smell, and feel.
 - b. Although older children may associate objects, places, or persons with prior painful experiences, infants will not have a memory of past experiences.
 - c. For school-age children, preparation can take several days in