Importance of Proper Vaccine Administration Technique

- Promote optimal antibody response
- Reduce risk of local adverse reactions

Subcutaneous (SubQ) Tissue

- Dermis
- Fatty Tissue (SubQ)
- Muscle Tissue

45° Angle

Subcutaneous Sites

Subcutaneous Needle

- Gauge: 23 to 25
- Length: 5/8 inch

Subcutaneous Injection Technique
Intramuscular (IM) Tissue

- Dermis
- Fatty Tissue (SubQ)
- Muscle Tissue

90° Angle

Intramuscular Sites

- Site selection depends on
  - person’s age
  - muscle development
- Use deltoid muscle for older children, adults (toddlers only if adequate muscle mass)
- Use anatomical landmarks to locate site

- Never administer vaccines into the buttock
- May administer large doses of immune globulin into buttock of older children or adults

Intramuscular Needle

- Gauge: 22 to 25
- Length: Infant 7/8 to 1 inch
  Older Children 7/8 to 1¼ inch
  Adults 1 to 1½ inch

Intramuscular Injection Technique
Infection Control

- Hand hygiene
  - recommended between patients
  - alcohol-based waterless antiseptic can be used
- Gloves
  - not mandatory unless
  - potential for exposure to blood or body fluids,
  - open lesions on the hands, or
  - agency policy

Infection Control

- Equipment disposal
  - never detach, recap or cut a used needle
  - place in puncture-proof container
  - dispose as infectious medical waste
  - use safety needles or needle-free devices whenever available to reduce risk of injury

Other Vaccine Administration Issues

- Not necessary to change needles between drawing or reconstituting vaccine and administration unless needle is contaminated or bent
- NEVER mix vaccines in the same syringe unless approved for mixing by the FDA

Other Vaccine Administration Issues

- Injection sites in same limb should be separated by at least 1 inch if possible
- Aspiration
  - not required, but not contraindicated
  - no reports of injury from failure to aspirate
  - can result in wastage of vaccine

Latex Allergy

- Most often a contact-type allergy
- Person with anaphylactic allergy to latex generally should not receive vaccines supplied in vials or syringes that contain rubber
- Persons with latex allergies that are not anaphylactic can be vaccinated

Injection Pain

- Pain is subjective and influenced by:
  - person’s age
  - anxiety level
  - previous healthcare experiences
  - culture
- Pain management
  - medical (e.g., anesthetics)
  - non-medical (e.g., diversionary techniques)
National Immunization Program
Contact Information

• Telephone 800.CDC.INFO
• Email nipinfo@cdc.gov
• Website www.cdc.gov/nip