How to Administer Intradermal, Intranasal, and Oral Vaccinations

While most vaccines are administered by either intramuscular or subcutaneous injection, there are several vaccines that are administered through other means. These include the intradermal route, the intranasal route, and the oral route. Here are some simple instructions to use as a guide. Complete information is available in the package inserts and can also be obtained at www.immunize.org/packageinserts.

Intradermal (ID) administration
Fluzone by Sanofi Pasteur, Intradermal Inactivated Influenza Vaccine

1. Gently shake the microinjection system before administering the vaccine.
2. Hold the system by placing the thumb and middle finger on the finger pads; the index finger should remain free.
3. Insert the needle perpendicular to the skin, in the region of the deltoid, in a short, quick movement.
4. Once the needle has been inserted, maintain light pressure on the surface of the skin and inject using the index finger to push on the plunger. Do not aspirate.
5. Remove the needle from the skin. With the needle directed away from you and others, push very firmly with the thumb on the plunger to activate the needle shield. You will hear a click when the shield extends to cover the needle.
6. Dispose of the applicator in a sharps container.

Intranasal (NAS) administration
FluMist by MedImmune, Live Attenuated Influenza Vaccine (LAIV)

1. FluMist (LAIV) is for intranasal administration only. Do not inject FluMist.
2. Remove the rubber tip protector. Do not remove the dose-divider clip at the other end of the sprayer.
3. With the patient in an upright position, place the tip just inside the nostril to ensure LAIV is delivered into the nose. The patient should breathe normally.
4. With a single motion, depress the plunger as rapidly as possible until the dose-divider clip prevents you from going further.
5. Pinch and remove the dose-divider clip from the plunger.
6. Place the tip just inside the other nostril, and with a single motion, depress plunger as rapidly as possible to deliver the remaining vaccine.
7. Dispose of the applicator in a sharps container.

Oral administration: Rotavirus vaccines

Rotarix by GlaxoSmithKline

1. Remove the cap of the vial and push the transfer adapter onto the vial (lyophilized vaccine).
2. Shake the diluent in the oral applicator (white, turbid suspension). Connect the oral applicator to the transfer adapter.
3. Push the plunger of the oral applicator to transfer the diluent into the vial. The suspension will appear white and cloudy.
4. Withdraw the vaccine into the oral applicator.
5. Twist and remove the oral applicator from the vial.
6. Administer the dose by gently placing the applicator plunger into the infant’s mouth toward the inner cheek until dosing tube is empty. (A residual drop may remain in the tip of the tube.)
7. Discard the empty vial, cap, and oral applicator in an approved biological waste container according to local regulations.

Note: If, for any reason, an incomplete dose is administered (e.g., infant spits or regurgitates the vaccine), a replacement dose is not recommended.

Technical content reviewed by the Centers for Disease Control and Prevention