Administering Influenza Vaccines: Intramuscular, Intranasal, and Intradermal

Intramuscular Injection
Inactivated Influenza Vaccines (IIV3, aIIV3, HD-IIV3, IIV4, ccIIV4, RIV4)

1. Use a needle long enough to reach deep into the muscle. For infants ≥ 6 months and children, use a 1" needle. For adolescents and adults, a 1-1 1/2" needle should be used.1
2. Choose the appropriate site. With your left hand2, spread the skin taut between the thumb and forefinger, isolating the muscle.
3. With your right hand2, insert the needle at a 90° angle to the skin with a quick thrust.
4. Push down on the plunger and inject the entire contents of the syringe. There is no need to aspirate.
5. Withdraw the needle and apply light pressure to the injection site for several seconds with a gauze pad.
6. If there is any bleeding, cover the injection site with a bandage.
7. Put used syringe in a sharps container.

Assessment of needle size & injection site must be made for each person based on size of the muscle, thickness of adipose tissue at the injection site, volume of material to be administered, and injection technique. For more information, see Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html.

2 Use the opposite hand if you are left-handed.

Children who need 2 doses of flu vaccine should receive an age-appropriate vaccine & dosage each time. Refer to: “Who Needs 2 Doses of 2018-19 Seasonal Flu Vaccine” and “2018-19 Seasonal Influenza Vaccine Dosage for Children” at www.michigan.gov/flu.


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Adapted with permission from the Immunization Action Coalition (IAC)

Intranasal Administration
Live Attenuated Influenza Vaccine (LAIV4)

1. FluMist® (LAIV4) 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. Put applicator in a sharps container.

Intradermal Administration
Inactivated Influenza Vaccine Intradermal (IIV4-ID)

1. Gently shake the IIV4-ID applicator before administering the vaccine. Some experts suggest having the patient sit with arm bent at the elbow, hand resting on hip.
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. Put applicator in a sharps container.