

Smallpox Vaccination Process

Step 1 - Skin Preparation: None



No skin preparation is required. **Under no circumstances should alcohol be applied to the skin prior to vaccination** as it has been shown to inactivate the vaccine virus.

Step 2 - Dip Needle



The needle is dipped into the vaccine vial and withdrawn. The needle is designed to hold a minute drop of vaccine of sufficient size and strength to ensure a take if properly administered.

Step 3 - Make 15 Perpendicular Insertions within a 5mm Diameter Area



The needle is held perpendicular to the site of insertion. The wrist of the vaccinator should be maintained in a firm position (*) by resting on the arm of the vaccinee or other firm support.

Fifteen perpendicular insertions are made in rapid order in an area approximately 5 mm in diameter.

Strokes should be vigorous enough to evoke a trace of blood at the site after 15-30 seconds.

The bifurcated needle is for single usage only and should be discarded in an appropriate biohazard container immediately after vaccinating each patient.

Caution: Needles should never be dipped into the vaccine vial more than once, in order to avoid contamination of the vial.

Step 4 - Absorb Excess Vaccine



After vaccination, excess vaccine should be absorbed with sterile gauze. Discard the gauze in a safe manner (usually in a hazardous waste receptacle) in order not to contaminate the site or infect others who may come in contact with it.

Step 5 - Cover Vaccination Site



It is important that the vaccination site be covered to prevent dissemination of virus.

Recommended covering:

- Sterile gauze loosely held down by tape (†)

Other coverings that have been used:

- Perforated plastic bubble
- Semipermeable membrane occlusive dressing (§)

Step 6 - Caution Vaccinee and/or Guardian

To avoid contact transmission of the virus, vaccinees and guardians must be cautioned:

- No rubbing or scratching of vaccination site
- Discard gauze carefully
- Wash hands thoroughly after handling gauze

For further information on preventing dissemination of virus, please visit the [Preventing Contact Transmission](#) page.

Accidental Administration by Oral or Parenteral Route

Ingestion and intramuscular injection of a dose of vaccine are NOT recommended routes of administration. However, no harm has been recorded from such events. For further information please visit the [Accidental Administration page](#).

* When vaccinating infants or children, it may be necessary to appropriately restrain the child to avoid accidents during administration.

† Some also advise pinning an additional piece of sterile gauze to clothing over the vaccination site.

§ In recent trials, a semipermeable membrane occlusive dressing resulted in a macerated lesion in a number of vaccinees and may increase the risk of secondary bacterial infection.