

Providers should follow the steps below for vaccinia specimen labeling and handling, infection control procedures, and specimen collection.

Specimen Labeling and Handling

Label all tubes, vials, and microscope slide holders with patient's name, unique identifier, date of collection, sources of specimen (vesicle, pustule, scab, or fluid), and name of person collecting the specimen.

Infection Control Procedures

Wear appropriate personal protective equipment. (Contact appropriate infection control personnel.)

Specimen Collection

Vesicular Material

1. Sanitize the patient's skin with an alcohol wipe and allow skin to dry.
2. Open the top of a vesicle or pustule with a scalpel, sterile 26-gauge needle, or slide. Collect the skin of the vesicle top in a dry, sterile 1.5- to 2-mL screw-capped tube. Label the tube.
3. Scrape the base of the vesicle or pustule with the wooden end of an applicator stick or swab and smear the scrapings onto a glass or plastic light microscope slide. Allow slide to dry for ten minutes.
4. Label the slide and place it in a slide holder. To prevent cross-contamination, do not place slides from more than one patient in the same slide holder.
5. Take another slide, and touch it repetitively to the opened lesion using progressive movements of the slide in order to make a touch prep. Allow slide to dry for ten minutes.
6. Label the slides as touch preps and place in the same slide holder. To prevent cross-contamination, do not place slides from more than one patient in the same slide holder.
7. If plastic-coated electron microscopic (EM) grids are available, lightly touch the shiny side of three EM grids to the base of the open lesion, allow EM grids to air-dry for ten minutes, and place grids in an appropriately labeled grid box. Use varying degree of pressure (minimal, light, and moderately firm) in application of the three grids to the unroofed lesion. EM grids and collection materials will soon be available at Laboratory Response Network (LRN) sites.
8. If a slide or EM grid is not available, swab the base of the lesion with a polyester or cotton swab, place in screw capped plastic vial, break off applicator handle, and seal.
9. Repeat this procedure for two or more lesions.

Scab Specimens

1. Sanitize the patient's skin with an alcohol wipe and allow skin to dry.
2. Use a 26-gauge needle to remove two to four scabs.
3. Place one or two scabs in each of two dry, sterile screw-capped plastic tubes.
4. Wrap parafilm around the juncture of the cap and vial.
5. Label the tube.

Biopsy Lesions (At least two specimens obtained by using a 3.5- or 4-mm punch biopsy kit.)

1. Use sterile technique and appropriate anesthetic.
2. Place one sample in formalin for immunohistochemical or histopathologic evaluation and store at room temperature.
3. The second specimen should be placed dry (do not add transport medium) in a sterile 1.5- to 2-mL screw-capped container (do not add transport medium).
4. Refrigerate if shipment occurs within 24 hours; otherwise, the specimen should be frozen.

For consultation or testing information call the epidemiologist-on-call at the Communicable Disease Division at (405) 271-4060 (24 hour number).

OSDH 08/06

