



## Varicella Specimen Collection and Shipping Instructions

Laboratory confirmation of varicella zoster virus is not normally required, because varicella diagnosis is most commonly made by clinical assessment. However, the Georgia Department of Public Health recommends the **collection of lesions to confirm a varicella case**. To coordinate specimen collection and laboratory submission, call your District or County Health Department. **Please do not send specimens directly to the Georgia Public Health Laboratory (GPHL) or the Centers for Disease Control and Prevention (CDC).**

### Specimen Collection Instructions:

**Viral Testing:** To make a laboratory diagnosis of VZV infection using polymerase chain reaction (PCR) method, the presence of the virus DNA should be demonstrated in tissues, vesicular fluid, or crusts from lesions. We recommend the following methods for the collection of specimens for PCR testing. As noted below, scabs generally contain sufficient viral DNA for amplification and as such are also useful specimens.

### Specimen Collection

- Vesicular scab:
  - Place the vesicle skin “roof” in a dry, sterile 1.5-2 ml screw-capped plastic vial with O-ring.
- Vesicular fluid/lesion swabs:
  - Swab the base of the lesion or ocular site and place swab in a sterile screw capped plastic vial with O-ring

### Polyester Swab Method

- Use a sterile needle to unroof the top of the vesicle.
- Use a **synthetic**, sterile swab to vigorously swab the base of the lesion, applying enough pressure to collect epithelial cells without causing bleeding, and collect vesicular fluid (collection of infected epithelial cells in the base of the lesion is important because they usually contain a significant amount of virus).
- Place swab into an empty tube, breakage-resistant snap-cap or screw top tube.
- DO NOT PLACE TRANSPORT MEDIUM INTO THE TUBE; THE SPECIMEN MUST BE KEPT DRY.
- Freeze (-20°C or lower) or refrigerate (2-8°C) specimens promptly after collection. Store frozen samples for up to 60 days. Freezing is strongly recommended. However, if there is no freezer available, refrigerate samples (2-8°C) and store for up to 7 days. It is strongly recommended to send samples within 7 days of collection using the refrigerated (2-8°C) specimen outfit.

### Glass Slide Method

- Rake the edge of the glass slide over the selected lesion, disrupting the lesion with sufficient vigor to ensure that skin cells are gathered onto the slide. Note: with young children, it may be less stressful if you ask them to help you with this.
- Use a **synthetic**, sterile swab to scrub the disrupted lesion and (using the same swab) collect the skin cells collected on the edge of the slide. Note: if more than one lesion is sampled, a separate swab should be used for each one.
- Place the swab into an empty tube, breakage-resistant snap-cap or screw top tube. Note: the swab for each sampled lesion must be placed in a separate swab tube, but multiple tubes can be shipped in the same envelope.

- DO NOT PLACE TRANSPORT MEDIUM INTO THE TUBE; THE SPECIMEN MUST BE KEPT DRY.
- Freeze (-20°C or lower) or refrigerate (2-8°C) specimens promptly after collection. Store frozen samples for up to 60 days. Freezing is strongly recommended. However, if there is no freezer available, refrigerate samples (2-8°C) and store for up to 7 days. It is strongly recommended to send samples within 7 days of collection using the refrigerated (2-8°C) specimen outfit.

### **Crusts (Scabs)**

- Remove a scab from the patient.
- Place specimen into empty tube, breakage-resistant snap cap or screw top tube. Freeze (-20°C or lower) or refrigerate (2-8°C) specimens promptly after collection. Store frozen samples for up to 60 days. Freezing is strongly recommended. However, if there is no freezer available, refrigerate samples (2-8°C) and store for up to 7 days. It is strongly recommended to send samples within 7 days of collection using the refrigerated (2-8°C) specimen outfit.

### **Storage/Transport**

Consultation with district epidemiologist required.

- Vesicular scab should be stored frozen (-20°C or colder) and shipped with dry ice within 60 days of collection. Freezing is strongly recommended.
- Vesicular scab can be maintained at refrigerated temperature (2-8°C) during transit for no more than seven days after collection.
- Vesicular fluid/lesion swabs should be stored frozen (-20°C or colder) and shipped with dry ice within 60 days of collection. Freezing is strongly recommended.
- Vesicular fluid/lesion swabs can be maintained at refrigerated temperature (2-8°C) during transit for no more than seven days after collection.

### **Acceptable Specimen Type(s)**

- Vesicular scab
- Vesicular fluid/lesion swab

### **Laboratory Submission Instructions**

- Notify County or District Public Health Office **immediately** for coordination.
- Contact state VPD Surveillance coordinator
- Label specimen transport tube with the patient's name and date of birth
- **UNLABELED SPECIMENS WILL NOT BE TESTED**
- Complete the [GPHL Submission Form](#) with the following information:
  - Submitter code (if known), address, phone number, and contact name
  - Patient name, address, date of birth, sex, race, and ethnicity (if available)
  - Date of specimen collection, type of specimen, reason for testing, date of illness onset
  - Test requested— (Molecular Biology) – 421000 VZV (PCR)
- Ship specimens to the following address:
 

Georgia Public Health Laboratory  
1749 Clairmont Road  
Decatur, GA 30033-4050  
ATTN: Molecular Biology Laboratories