

# Georgia Division of Public Health

## Vaccine Preventable Disease Epidemiology Unit

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### **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 Division 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 the polymerase chain reaction (PCR) method, the presence of viral 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.

#### 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 at the base of the lesion is important because they usually contain a significant amount of virus).
- Place swab into empty tube, breakage-resistant snap-cap, or screw top tube
- **DO NOT PLACE TRANSPORT MEDIUM INTO THE TUBE; THE SPECIMEN MUST BE KEPT DRY**
- Specimen can remain at room temperature

#### Glass Slide Method

- Rake the edge of the glass slide over the selected lesion to disrupt it
- Press the flat surface of the slide against the opened lesion, rocking it back and forth several times (with young children it may be less stressful if you ask them to help with this)
- Air-dry the specimen
- Place glass slide in a container that protects against breakage. Cardboard mailers work well
- Specimen can remain at room temperature

#### Crusts (Scabs)

- Remove a scab from the patient
- Place specimen into empty tube, breakage-resistant snap cap, or screw top tube
- Specimen can remain at room temperature

#### **Laboratory Submission Instructions**

- Notify County or District Public Health Office **immediately** for coordination.
- Label specimen transport tube with the patient name and date of birth
- **UNLABELED SPECIMENS WILL NOT BE TESTED**
- Complete the Molecular Biology lab submission form:  
<http://health.state.ga.us/pdfs/lab/manual/Molecular%20Form%203409.pdf>  
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
  - Molecular Biology Form: Test requested – VZV (PCR)

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- Ship specimens to the following address :  
Georgia Public Health Laboratory  
1749 Clairmont Road  
Decatur, GA 30033-4050  
ATTN: Molecular Biology Laboratories

### **Interpretation of Results**

Sequence analysis of a RT-PCR product derived from a virus isolate or from clinical material confirms the presumptive positive PCR results and provides epidemiologically important information