

# Varicella (Chickenpox) Clinical Guidelines

Chickenpox is a highly contagious febrile rash illness caused by primary infection with varicella-zoster virus (VZV)

## Confirmed Case:

An acute illness with maculo-papulovesicular rash and epidemiologic link to another confirmed case or laboratory confirmation. Unvaccinated person with 200-400 lesions.



Photos: Centers for Disease Control & Prevention

## Probable Case:

An acute illness with maculo-papulovesicular rash and **lack of** epidemiologic link to another confirmed or probable case or **lack of** laboratory confirmation.

## Breakthrough Case:

Vaccinated cases that are milder, less contagious, have lower fever and fewer lesions (<50). Lesions are often maculopapular instead of vesicular. Atypical appearance often leads to misdiagnosis. Consider laboratory confirmation given atypical appearance.



Photo: Centers for Disease Control & Prevention

OR

Contact the health department if you identify any case of chicken pox

## SPECIMEN COLLECTION

### PCR—PREFERRED TESTING METHOD

- Also called *Probe Amplification Target or Nucleic Acid Amplification Test (NAAT)*
- Sensitivity and Specificity is very high

For more information about collecting specimens go to: <https://www.cdc.gov/chickenpox/>

AND

## REPORT TO THE HEALTH DEPARTMENT

Complete the : [CDPH Case Report Forms](https://www.chicagohan.org/varicella)  
<https://www.chicagohan.org/varicella>

Fax Form To: (312) - 746-6388

Questions: (312) - 743-9000

*Suspect Cases should be reported within 24hrs*  
*Do not wait for laboratory confirmation*

Sign up for electronic reporting through the Illinois National Electronic Disease & Surveillance System (I-NEDSS)

<http://portalhome.dph.illinois.gov/>

## HERPES ZOSTER VIRUS (SHINGLES):


Characterized by vesicular lesions in one dermatome. Many labs automatically report + VZV PCRs to the health department. Talk to your lab about filtering out shingles results so they are not reported to CDPH.



**Shingles is not a reportable disease.**

Photo: Centers for Disease Control & Prevention





## CDC GUIDELINES: HOW TO SAMPLE SUSPECTED VARICELLA LESIONS

Method	GUIDELINES FOR COLLECTION	PROCESSING/STORAGE
Polyester Swab Method 	<ul style="list-style-type: none"> <li>• Un-roof the top of the vesicle with sterile needle</li> <li>• Use sterile swab to collect epithelial cells and vesicular fluid from the base of the lesion.</li> <li>• Do not use a cotton swab</li> </ul>	<ul style="list-style-type: none"> <li>• Place swabs individually directly into tubes</li> <li>• Dry specimens should be stored at ambient temperature</li> <li>• Dry specimens should not be frozen or refrigerated</li> </ul>
Glass Slide Method	<ul style="list-style-type: none"> <li>• Rake the edge of the slide over the lesion with vigor</li> <li>• Use a sterile swab to collect material on the slide and to scrub the abraded lesion</li> </ul>	<ul style="list-style-type: none"> <li>• Insert the swab into a tube and close it</li> <li>• Dry maculopapular lesion material is stable for several weeks at ambient temperature</li> </ul>
Collecting Crusts	<ul style="list-style-type: none"> <li>• Lift crust off of skin</li> </ul>	<ul style="list-style-type: none"> <li>• Place crust into break-resistant snap cap or screw top tube</li> </ul>

## VARICELLA TESTING TIPS

**Serology (whole blood) - IgM and IgG detects viral antibodies and can only be used to classify a case as 'probable'. Test results can be false negative. This method is not recommended.**

- Specimens should be collected within 5 days of rash onset
- Get samples from 2 lesions (Swabs must be placed individually in separate tubes to avoid contamination)
- Send to commercial lab immediately

Lab	Processing/Storage	Client Services
<b>ACL</b>	<ul style="list-style-type: none"> <li>◆ <b>Use</b> Skin Swabs, Crust or Scrapings to collect from vesicular lesion</li> <li>◆ <b>Use</b> eSwab Collection Kit or Universal Transport Medium (UTM) (as shown on right) </li> <li>◆ <b>Use</b> the ACL Supply Form to order UTM or eSwab collection kits</li> <li>◆ Keep refrigerated up to 72 hours</li> <li>◆ <a href="#">ACL VZV Specimen Requirements</a></li> </ul>	(800) 877-7016
<b>ARUP</b>	<ul style="list-style-type: none"> <li>◆ <b>Use</b> Fluid, Swab, Crust or Skin Scrapings</li> <li>◆ <b>Use</b> Universal Transport Medium (UTM) (as shown on right) </li> <li>◆ <b>Use</b> the Arup Supply Form to order UTM tubes</li> <li>◆ Keep Refrigerated up to 48 hours, ambient unacceptable</li> <li>◆ <a href="#">Arup Lab VZV Specimen Requirements</a></li> </ul>	(800) 522-2787
<b>LabCorp</b>	<ul style="list-style-type: none"> <li>◆ <b>Use</b> Vesicular fluid, Crust or Scrapings</li> <li>◆ <b>Use</b> Universal Transport Medium (UTM) (as shown on right) </li> <li>◆ Indicate Exact Specimen source on the requisition form</li> <li>◆ Keep refrigerated to 14 days</li> <li>◆ <a href="#">LabCorp VZV Specimen Requirements</a></li> </ul>	(888) 522-2677
<b>Quest Diagnostics</b>	<ul style="list-style-type: none"> <li>◆ <b>Use</b> Swab or Crust to collect fluid and cells from vesicular lesion</li> <li>◆ <b>Use</b> Viral Transport Medium (as shown on right) </li> <li>◆ <b>Use</b> Quest Connect to order supplies</li> <li>◆ Keep cold up to 72 hours</li> <li>◆ <a href="#">Quest Diagnostics VZV Specimen Requirements</a></li> </ul>	(866) 697-8378