

Utah Public Health Laboratory

Vaccine Preventable Disease Reference Laboratory Project Testing Referral

Viral Specimen Shipping and Submission Instructions

Testing is offered for suspect cases of measles, mumps, rubella, and varicella-zoster virus.

Labeling Specimens:

The specimen(s) should be clearly labeled with unique patient identifier(s).

Results Reporting:

The CDPH VRDL will report results with patient identifiers to Utah Public Health Laboratory.

Following sample receipt, results will be reported back to Utah Public Health Laboratory within:

- PCR: 2 business days
- Serology: 3 business days
- Genotyping: 10 business days

Specimens and Testing:

General Specimen Submission Note: Each test method has been validated on the specimen types listed in the table below. Alternate specimen types may be submitted to CDC for testing. See the CDC Test Directory for further information: <http://www.cdc.gov/laboratory/specimen-submission/list.html>.

| Test Menu: Specimens Accepted and Shipping Recommendations | | | | |
|---|--|--|---|--|
| Assay | Specimen Type | Minimum Volume | Shipping and Storage | Anticipated Turn Around Time |
| Measles Virus PCR and Genotyping | Throat swab, Nasopharyngeal swab or Nasopharyngeal aspirate Urine acceptable ** | Respiratory: 250µL with swab Urine: 20 – 50 ml | · Swab/Aspirate: store in 2mL viral transport media at 4°C if shipping within 24 hours. Ship on cold packs ·If shipping is delayed freeze at -70°C. Ship frozen. · Urine: see below | · PCR: 2 business days · Genotyping: 10 business days |
| Measles Serology* | Serum | 300µL | Refrigerate at 4°C. Ship with samples for PCR. | 3 business days |
| Mumps Virus PCR and Genotyping | Buccal swab or Throat swab | 250µL with swab | · Swab: store in 2mL viral transport media at 4°C if shipping within 24 hours. Ship on cold packs ·If shipping is delayed, freeze at -70°C. Ship frozen. | · PCR: 2 business days · Genotyping: 10 business days |
| Rubella Virus PCR and Genotyping | Throat swab, Nasopharyngeal swab or Nasopharyngeal aspirate | 250µL with swab | · Swab/Aspirate: store in 2mL viral transport media at 4°C if shipping within 24 hours. Ship on cold packs ·If shipping is delayed, freeze at -70°C. Ship frozen. | · PCR: 2 business days · Genotyping: 10 business days |
| Varicella-zoster Virus PCR and Genotyping | Scabs and/or Dry skin lesion swab | Scab or dry swab | Should be stored and shipped at ambient temperature. | · PCR: 2 business days · Genotyping: 10 business days |

***Measles Serology:** Serum specimens **WILL NOT** be accepted for serology testing without the simultaneous submission of a specimen type appropriate for measles PCR (Throat swab, nasopharyngeal aspirate or swab, or urine). There will be no exceptions to this rule.

****Urine Samples:** Throat swabs are the preferred sample for measles PCR when patient presents within 7 days of rash onset. However, urine is acceptable if collected 3-10 days after rash onset. Collect up to 50-100 ml of urine. Process urine by centrifugation at 2500 x g for 15 minutes at 4C. Resuspend the pellet in 1-2 ml of viral transport medium (VTM). Store and ship at -70°C or colder. If these conditions are not available, the entire urine sample should be stored and shipped at 4°C by overnight delivery.

Genotyping: Genotyping will be performed on all **PCR positive** specimens unless otherwise implicated as a part of a larger outbreak. Clinical specimens, nucleic acid extracts, and viral isolates are acceptable.

Appendix A

**California Department of Public Health – Viral and Rickettsial Disease Laboratory
Vaccine Preventable Disease (VPD) Submittal Form**

| | | | | | | | |
|---|--|--|-------------------|--|--|--|--|
| Patient Information | | | | Submitter Information | | | |
| Name (Last, First): | | | | (Your Institution's Agency Number If Known) 2.16.840.1.114222.4.1.10023 | | | |
| Date of Birth: | Age | Age Units | Gender: M F | (Your Institution's Name) Utah Public Health Laboratory | | | |
| City: | | | State: | | | (Your Institution's Address) 4431 South 2700 West | |
| Occupation: | | | | (City, State, Zip Code) Taylorsville, UT 84129 | | | |
| Your Patient ID Number (optional): | | CatREDIE # if available | | (Telephone Number) (801) 965 - 2554 | | (Secure Fax Number) (801) 965 - 2551 | |
| Your Specimen ID#: | | Date Collected: | | Date Shipped: | | Lab Point of Contact: Kirk Bengé | |
| CDPH Use Only VRDL Accession # | | | | Specimen Type: <input type="checkbox"/> Serum <input type="checkbox"/> Stool <input type="checkbox"/> Buccal Swab <input type="checkbox"/> NP Swab <input type="checkbox"/> Scab <input type="checkbox"/> Other _____ <input type="checkbox"/> Throat Swab <input type="checkbox"/> Urine <input type="checkbox"/> Skin Lesion Swab | | | |
| Symptom Onset: ___/___/___ (MM/DD/YYYY) | | Rash Onset: ___/___/___ (MM/DD/YYYY) | | Parotitis Onset: ___/___/___ Mumps only (MM/DD/YYYY) | | | |
| Vaccination History: Was patient vaccinated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, Date of Last Vaccination: <input type="checkbox"/> MMR ___/___/___ <input type="checkbox"/> MMRV ___/___/___ <input type="checkbox"/> Varicella ___/___/___ <input type="checkbox"/> Rotavirus ___/___/___ <input type="checkbox"/> Other ___/___/___ | | | | | | | |
| Submitter Lab Results: | | | | | | | |
| Test | Specimen/Date Collected/Results | | | | | | |
| Culture | _____ | | | | | | |
| PCR | _____ | | | | | | |
| Serology IgM | _____ | | | | | | |
| Serology IgG | _____ | | | | | | |
| Test Order: <input type="checkbox"/> Rubella virus PCR <input type="checkbox"/> Measles IgM Serology <u>and</u> PCR <input type="checkbox"/> Rubella Genotyping <input type="checkbox"/> Varicella zoster virus PCR <input type="checkbox"/> Measles virus PCR <input type="checkbox"/> Mumps virus PCR <input type="checkbox"/> Varicella zoster virus Genotyping <input type="checkbox"/> Measles virus Genotyping <input type="checkbox"/> Mumps virus Genotyping <input type="checkbox"/> Rotavirus PCR | | | | | | | |