Testing specimens for laboratory confirmation of viral and bacterial diseases for Operation Allies Welcome

Specimens collected at military bases as part of Operation Allies Welcome (OAW) should be sent to the same testing laboratories that are routinely used to provide testing for infectious diseases. For example, if specimens for serologic testing are routinely sent to a commercial laboratory and specimens for virus detection are routinely sent to the State Public Health Laboratory (SPHL), those channels should be used for specimens collected from suspected cases among evacuees and contacts. Submitters should follow the guidelines for specimen submission issued by the relevant testing laboratories.

For tests not available in-state, the SPHL should send the specimens to the appropriate APHL VPD Reference Centers. SPHLs that have not established submission of specimens to an APHL VPD Reference Center should send specimens to CDC. Also, if specimen submission to a SPHL is not available, specimens can be shipped to CDC; however, SPHLs should be made aware of any shipment of specimens to CDC.

- For information about specimen collection and shipping to CDC, please choose the relevant Test Order link(s) below.
- For information about additional tests, email the appropriate testing contact listed below.

For **each** specimen submission, complete a **CDC Specimen Submission Form 50.34**, either through the specimen submission form link or the individual Test Order links below.

- Form 50.34 must be filled out electronically; there can be **no** handwritten entries.
- If more than 10 specimens are submitted at one time, you can use the Global File Accessioning Template (GFAT). The GFAT can be requested from the testing contacts below.

Note: Afghanistan has one of the highest rates of measles infection in the world and is one of only two countries that have circulation of wild-type polio virus. Evacuees are receiving several vaccines, including MMR and polio. Vaccine reactions that mimic measles infections can occur in approximately 5% of MMR recipients. The VPD-RCs and CDC can perform the Measles Vaccine Assay (MeVA), which is a real-time RT-PCR assay that can rapidly distinguish between vaccine reactions and measles infections. Submitters are encouraged to request the MeVa for suspect cases that are within 21 days of receipt of MMR and have a likely exposure to wild-type measles. Poliovirus isolation in culture is the most sensitive method to diagnose poliovirus infection. Poliovirus is most likely to be isolated from stool specimens. Samples for polio detection should be sent to the CDC.

CDC Specimen Submission Form 50.34

- Specimen Submission Form | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC

First-line confirmatory tests for measles, mumps, rubella, varicella, and polio

- Measles serology*: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10244
- Measles detection: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10543
- Measles vaccine virus detection: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10528
- Mumps Serology*: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10245
- Mumps detection: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10544
- Rubella serology*: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10246
- Rubella detection: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10242
- Varicella zoster virus (VZV) serology: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10255
- Varicella zoster virus (VZV) detection (wild-type vs vaccine): Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10254
- Poliovirus isolation: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC

*Note: The online test directories for measles, mumps and rubella, serologic testing are being updated. The following guidance supersedes the shipping instructions currently listed on the CDC Test Directory. Effective September 27th, 2021, all serum specimens submitted for measles, mumps, and rubella serology must be stored refrigerated (2-8°C) for no more than 48 hours after specimen collection. Serum specimens that can arrive at the CDC within 48 hours of collection must be shipped on ice packs to maintain acceptable storage temperatures. If serum specimens cannot be shipped to the CDC within 48 hours of collection, the serum specimen must be frozen (< -20°C) and shipped on dry ice. Specimens received under storage conditions other than those indicated will be rejected for testing.

Genotyping at CDC

If genotyping is not available at the SPHL, specimens from confirmed cases of measle, mumps, and rubella can be submitted to CDC for genotyping.

- Measles genotyping: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10240
- Mumps genotyping: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10241
- Rubella genotyping: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10550

First-line confirmatory tests for diphtheria and pertussis

Corynebacterium diphtheriae/ulcerans/pseudotuberculosis Detection, Identification, and Toxin Testing:

- *Corynebacterium diphtheriae/ulcerans/pseudotuberculosis* Detection, Identification, and Toxin Testing: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC
- *Corynebacterium diphtheriae/ulcerans/pseudotuberculosis* Detection, Identification, and Toxin Testing: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10168

Bordetella pertussis and Related Species Detection and Identification:

- *Bordetella pertussis* and Related Species Detection and Identification: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10163

First-line confirmatory tests for *Streptococcus pneumoniae* and other streptococcal species

- *Streptococcus* (Catalase-Negative, Gram-Positive Coccus) Identification: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC-10213

First-line confirmatory tests for Neisseria meningitidis and Haemophilus influenzae

- *Neisseria meningitidis* identification and serogrouping: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC
- *Haemophilus influenzae* identification and serotyping: Test Order | Submitting Specimens to CDC | Infectious Diseases Laboratories | CDC

Background information on tests available at CDC

- Laboratory Testing for Measles: CDC Measles Lab Tools
- Laboratory Testing for Mumps: Laboratory testing for Mumps
- Laboratory Testing for Rubella: Laboratory Testing for Rubella
- Laboratory Testing for Varicella: Laboratory Testing for Varicella Zoster Virus
- Laboratory Testing for Poliovirus: Poliovirus Laboratory Testing | CDC
- Laboratory Testing for Diphtheria: Diphtheria: Laboratory Support and Resources | CDC
- Laboratory Testing for Pertussis: Pertussis Laboratory Information | CDC
- Laboratory Testing for *S. pneumoniae* and other Streptococci: Streptococcus Laboratory
- Laboratory Testing for *Neisseria meningitidis* and *Haemophilus influenzae*: Meningitis Lab Manual: Methods for Diagnosis | CDC

Testing contacts at CDC

- Measles and mumps serology: Dr. Stephen Crooke (qjf9@cdc.gov), Dr. Paul Rota (par1@cdc.gov)
- Measles and mumps molecular diagnostics and sequencing: Dr. Bettina Bankamp (bfb9@cdc.gov), Dr. Paul Rota (par1@cdc.gov)
- Rubella serology, molecular testing and sequencing: Dr. Joseph Icenogle (jci1@cdc.gov), Dr. Paul Rota (par1@cdc.gov)
- Varicella serology and molecular diagnostics: Dr. Joseph Icenogle (jci1@cdc.gov), Dr. Paul Rota (par1@cdc.gov)
- Poliovirus testing: Dr. Cara Burns (zqd1@cdc.gov), Dr. Janell Routh (iyp1@cdc.gov)
- Diphtheria and pertussis: Dr. M. Lucia Tondella (mlt5@cdc.gov), Dr. Margaret Williams (cux6@cdc.gov), Pam Cassiday (pxc1@cdc.gov)
- *Streptococcus pneumoniae* and other Strep species: Dr. Lesley McGee (afi4@cdc.gov)
- Bacterial meningitis laboratory: Dr. Xin Wang (gqe8@cdc.gov) and Dr. Henju Marjuki (vsd1@cdc.gov)

Additional information

- EpiX: Guidance for Clinicians Caring for Individuals Recently Evacuated from Afghanistan
- APHL: Operation Allies Welcome | Measles and Other VPD Testing Resources