

San Diego County Public Health Laboratory

Measles NAAT

CPT Code(s): 87798

NOTE: All requests for measles testing must be first assessed for the epidemiologic and clinical history, and must be approved for testing by the Immunization Program staff (866-358-2966) or by the Epidemiology & Immunization Services Branch (EISB) Medical Director during business hours, or by the Epidemiology Program (EPI) Duty Officer (858-565-5255) during weekends and after hours.

Description of Test:

This assay is utilized for detection of measles virus nucleic acids in cases associated with rash-related respiratory disease.

Test Method:

Real-time Reverse Transcriptase-Polymerase Chain Reaction (real-time RT-PCR)

Acceptable Specimens:

- Respiratory swabs collected within 2 weeks of rash onset
 - o Nasopharyngeal swabs: firmly rub posterior nasopharynx with sterile synthetic swab (e.g. Dacron or flocked swab)
 - o Nasal aspirates
 - o Oropharyngeal (Throat) swabs: the preferred respiratory specimen. Vigorously swab tonsillar areas with sterile synthetic swab.
- Urine from a first morning voided specimen collected up to 10 days after rash onset
 - o Collect as much as 50-100ml (no minimum amount)
 - o Urine specimen must be shipped within 24 hours of collection, otherwise, process by centrifugation at 2500 x g for 15 minutes at 4°C. Discard supernatant and resuspend the pellet in 2-3 ml UTM for extraction. Freeze at -70°C, preferably.
 - o Note: If centrifugation is not available, DO NOT freeze the urine specimen. The entire specimen must be stored at 4°C and shipped on cold pack

NOTE: Swab specimens must be collected using only swabs with a synthetic tip, such as nylon (flocked swabs), or polyester Dacron®, and an aluminum or plastic shaft. Calcium alginate swabs are unacceptable and cotton swabs with wooden shafts are not recommended.

Storage and Transport Conditions:

Specimens should be stored refrigerated for up to 72 hours before processing and must be transported in viral (VTM) or universal transport media (UTM) at 2-8°C. Do *not* use bacterial transport media. If unable to transport or process within 72 hours after collection, freeze at ≤ -70°C and transport frozen and keep frozen at ≤ -70°C until processing.

Shipment of approved specimens:

- Complete the SDPHL Specimen Requisition Form
https://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/
- Include SDPHL requisition form with the specimens being submitted
- Transport **approved specimens** to: San Diego County Public Health Laboratory
3851 Rosecrans Street, Suite 716
San Diego, CA 92110