

Measles VIRAL Specimen Collection

PCR Testing (Preferred)

MATERIALS

- Viral transport media (VTM) (preferred) or UTM and tubes
- Specimen submission forms (G2V)
- Personal protective equipment
- Tongue depressors
- Polyester fiber tipped swabs - either Dacron or Rayon
- NO cotton-tipped or wooden shaft swabs or any that contain calcium alginate

PROPER SPECIMEN COLLECTION

1. Do not use expired media – be sure to check the expiration date.
 2. With mouth open, depress tongue.
 3. Swab both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums.
 4. Put tip of swab in the VTM, breaking applicator stick.
 5. Seal properly.
 6. Freeze or refrigerate.
 7. Prepare for shipment.
- Throat swabs are the preferred specimens for DSHS testing.
 - Nasopharyngeal swabs and urine also acceptable specimens for measles testing.
 - Note: Urine specimens are sent to the CDC for testing

SPECIMEN HANDLING

- Transport specimens to the laboratory as soon as possible.
- Specimens should be placed in biohazard bag, stored 4°C (cold) or -70° C (frozen).
- Store cold (2° to 8°C) if will arrive at Lab <48 hours after day of collection (DOC).
- Store specimens frozen if they will arrive at the lab >48 hours after DOC.
- DO NOT store samples in a standard freezer – this inactivates the virus.
- DO NOT have repeated freeze thaw cycles – this inactivates the virus.

SPECIMEN SHIPPING

- Do not ship on Fridays or before federal holidays.
- Specimens stored at 4°C are shipped using cold packs.
- Specimens stored at -70°C are shipped on dry ice.
- Complete the G2V form for each specimen with as much information as possible about the patient.
- All specimens must be labeled with at least two patient specific identifiers, both a primary and a secondary identifier. The identifiers must appear on both the specimen tube and the associated specimen submission form. Specimens that do not meet these criteria will be considered unsatisfactory for testing.
- Check the “Measles PCR” box in Section 4 of the G2V.
- The name on the tube should match the name on the form exactly.
- Payor source can be the patient’s insurance or Immunizations.
- Ship to the physical address ATTN: Lab Services.
- Record shipping tracking number and notify EAIDU that specimen is being shipped.

[DSHS Specimen Collection and Submission Guidance for Measles \(Rubeola\) Specimens](#)

ADDITIONAL INFORMATION

- Collect as soon as possible after rash onset, preferably within three days.
- Do not collect more than 10-14 days after onset.
- [CDC – Laboratory Testing for Measles](#)



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Measles VIRAL Specimen Collection

IgM and IgG Antibody Testing

**** MEASLES SPECIMENS ****

MATERIALS

- Red top tubes and serum separator tubes OR gold top OR tiger top tubes
- Specimen submission forms (G2A)
- Personal protective equipment
- Centrifuge

PROPER SPECIMEN COLLECTION

- Do not use expired tubes – be sure to check the expiration date.
- RED TOP TUBE
 - o Collect at least 5 mL of blood in red top tube.
 - o Centrifuge the red top tube.
 - o Transfer the serum into a serum transport tube.
- GOLD/TIGER TOP TUBE
 - o Collect at least 5 mL of blood in gold/tiger top tube.
 - o Centrifuge the gold/tiger top tube.
- Seal properly.
- Refrigerate or freeze; do not freeze serum separator tube, gold top tube or whole blood.
- Prepare for shipment.

SPECIMEN HANDLING

- Transport specimens to the laboratory as soon as possible.
- Specimens should be placed in biohazard bag and stored at 4°C or -20° C (if using a courier instead of shipping, secure ice pack to tube to maintain proper temperature until lab arrival).
- If specimens are shipped the same day of collection, ship cold at 4°C.
- If specimens will be stored and shipped after the date of collection, freeze at -20° C.
- Do not freeze whole blood in red top tube for shipping.
- Do not freeze serum in gold top or serum separator tube for shipping.

SPECIMEN SHIPPING

- Do not ship on Fridays or before federal holidays.
- Do not ship whole blood.
- Specimens that will arrive at the lab within 48 hours of collection can be stored at 4°C and should be shipped using cold packs.
- Specimens that will arrive at the lab more than 48 hours after collection should be stored at -20° C and shipped on dry ice.
- Complete the G2A form for each specimen with as much patient information as possible.
- Check “Rubeola screen” and “Rubeola IgM” in Section 7 of the G2A.
- The name on the tube should match the name on the form exactly.
- Payor source can be the patient’s insurance or Immunizations.
- Ship to the physical address ATTN: Lab Services.
- Record shipping tracking number and notify EAIDU that a specimen is being shipped.

ADDITIONAL INFORMATION

- Collect as soon as possible after rash onset, up to 30 days.
- Serology testing is not recommended for patients with an MMR vaccine in past six to 45 days.
- [CDC – Measles Serology Testing](#)



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