

UPDATE:

Temperature Requirements for Specimens Received at the Bureau of Laboratories (BOL)

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The proper collection and shipment of clinical diagnostic specimens to a testing laboratory is a critical component of ensuring a quality test result. Per accreditation requirements, and to comply with quality standards for clinical testing, the BOL will be monitoring specimen temperature upon receipt in the laboratory. Recorded temperatures will be used to determine if the specimen meets proper temperature requirements for testing.

Samples that do not meet temperature requirements upon arrival at the BOL WILL BE REJECTED.

Here are key points to ensure samples arrive in proper testing conditions:

- All serum specimens must be transported to the BOL at refrigerated temperatures (2-8°C) on frozen cold packs or frozen on dry ice.
- Specimens for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* detection may also be submitted in the same package as serums if there is no dry ice (only frozen cold packs), since the acceptable temperatures for these samples are ambient and cold. Continue to submit bacterial isolates at ambient temperatures.
- HIV-1 treatment monitoring specimens require two shipping conditions:
 1. CD4/CD8 EDTA whole blood specimens must be shipped at room temperature.
 2. HIV-1 Viral Load plasma specimens must be shipped frozen or at refrigerated temperatures (2-8°C).
- For Measles, Rubella, and Mumps IgM testing, specimens stored at refrigerated temperature must be shipped immediately. If sample processing is delayed > 48 hours, specimens must be frozen at $\leq -20^{\circ}\text{C}$ and shipped on dry ice to remain frozen during transport.
- Samples that have been stored in a freezer overnight must be sent on frozen cold packs. It is encouraged to include multiple frozen cold packs in one container to ensure maximum contact with the specimens. Please split shipments into two boxes (or more) if there is not enough room to pack two frozen cold packs with the specimens.
- Please pack specimens in a Styrofoam container so the specimens and frozen cold packs retain the appropriate temperature during transport. Specimens shipped with only a cardboard box may warm or thaw during transport, resulting in rejection upon arrival.
- Specimens transported via courier should still be packed in a Styrofoam container with frozen cold packs, even if specimens are transported in coolers. Please label the outermost container "Refrigerate Upon Arrival." For specimens that require freezing, please label the outermost container "Freeze Upon Arrival."
- Updated collection information and requisition forms can be found here:
 - www.michigan.gov/mdhhs/lab
 - www.michigan.gov/mdhhs/doing-business/providers/labservices/a-z-test-listing
- Shipping supplies can be ordered through <https://milkots.michigan.gov/login>. Select Kit 8A for serum shipping supplies and Kit 45 for Viral PCR testing. Individual items (e.g., Styrofoam coolers, cold packs, collection tubes, etc.) may be ordered as needed by contacting mdhhslab@michigan.gov.
- Please contact Matthew Bashore at BashoreM@michigan.gov for packaging instructions and with any questions.

Examples of improper and proper submissions are shown on the following pages.

Update:

Temperature Requirements for Specimens Received at the Bureau of Laboratories (BOL)

...continued from Page 1

Improper Specimen Submission Examples



Errors include:

-Missing
Styrofoam box.



-Missing frozen
cold packs or
dry ice.



-Thawed out
cold packs.
-Requisition
forms bagged in
with specimens.

Update:

Temperature Requirements for Specimens Received at the Bureau of Laboratories (BOL)

...continued from Page 2

Proper Specimen Submission Steps



-Specimens packed in Styrofoam box with multiple frozen cold packs and then placed in cardboard box.



-Requisition form bagged separately from specimens and placed above frozen cold packs to ensure maximum contact between specimens and cold packs.



- "Refrigerate (or freeze) upon Arrival" label on outermost container.