



# MDH/MLS Challenge Set 2025 Instructions

**Response deadline:** March 6, 2026.

**Challenge Set 2025 Website** (<https://www.health.state.mn.us/diseases/idlab/challengeset.html>)

**Link to enter results:** [2025 MDH/MLS Challenge Set \(https://survey.vovici.com/se/56206EE34EB6D208\)](https://survey.vovici.com/se/56206EE34EB6D208)

The results entry link is also on the Challenge Set website and will be emailed to all laboratories.

## CONTENTS

Enclosed in this shipping container you should find the following items:

- Four lyophilized specimens in glass vials
- Instructions

## SAFETY

- All specimens should be considered potentially infectious and handled as though they are capable of transmitting disease.
- These organisms **must be handled in a properly functioning, certified Class II Biological Safety Cabinet (BSC)** whenever aerosolization of the organism is anticipated (e.g. vortexing, catalase testing, etc.).
- Use the same precautions and techniques that your laboratory normally uses for infectious materials. Routine disposal of infectious waste is appropriate.
- If you suspect or cannot rule out a potential bioterrorism agent, **DO NOT** utilize an automated identification system.

## SPECIMEN PROCESSING INSTRUCTIONS

- Specimens can remain at room temperature or refrigerated temperature before rehydration.
- Rehydrate the specimens by adding 1.0 mL of sterile saline to each vial. Incubate the vials at 35-37° C for 15 minutes.
- Swirl the vial to ensure adequate mixing of the liquid and inoculate media appropriate for each specimen type with at least one large drop of suspension (see "Culture Workup Instructions" for specimen information). **NOTE:** DO NOT inoculate blood culture bottles for any of the samples.
- Incubate culture media for each specimen type according to your standard protocol. Anaerobic set-up and incubation are not necessary for any of the isolates.
- Each of the organisms included in this challenge set should grow within the incubation time normally recommended for the specimen type; however, if any of the specimens do not grow after **5 days** of incubation, please call to request a replacement.

***Thank you for participating in Challenge Set 2025!***

**CULTURE WORKUP INSTRUCTIONS**

Identify the isolates to the same level of identification that you would normally report at your laboratory following your standard protocol.

Methods for rule out of a possible bioterrorism agent are available at the **American Society for Microbiology** website on the page titled: "[Laboratory Response Network \(LRN\) Sentinel Level Clinical Laboratory Protocols](https://asm.org/articles/cphmc/laboratory-response-network-lrn-sentinel-level-c)" (<https://asm.org/articles/cphmc/laboratory-response-network-lrn-sentinel-level-c>)" or at the **Minnesota Department of Health** website on the page titled "[Biological Emergency Preparedness and Response](https://www.health.state.mn.us/diseases/idlab/labep/bt.html)" (<https://www.health.state.mn.us/diseases/idlab/labep/bt.html>). These documents are also linked to on the Challenge Set website.

**Background Information for Specimens:** Specimen types are given to aid in determining proper set up. We encourage labs who are performing limited micro to still work up and report an identification even if you do not routinely work up the specimen type described in the scenario.

Specimen 1: Blood culture from a 23-year-old woman. She was seen for flu-like symptoms (cough, fever, muscle aches). She works as a field geologist.

Specimen 2: Wound swab from a 45-year-old man. He was recently seen in the ED for a tick bite behind his left knee that has become infected and purulent. He also has a fever of 104°F and painfully swollen lymph nodes in his groin.

Specimen 3: Blood culture from a 68-year-old man. He was seen in the ED for heart palpitations, and an intermittent fever with a cough lasting several weeks. He recently returned from a culinary tour throughout Mexico.

Specimen 4: Blood culture from a 50-year-old woman. She was seen for fever, chills and painfully swollen lymph nodes in her left armpit. She works as a veterinarian in Utah.

**INSTRUCTIONS FOR REPORTING ANSWERS**

- Use this link to enter results: [2025 MDH/MLS Challenge Set \(https://survey.vovici.com/se/56206EE34EB6D208\)](https://survey.vovici.com/se/56206EE34EB6D208)
- Please complete a response for each specimen, *even if your lab does not routinely perform testing on the indicated specimen types*.
- Submit Form and Print Results: After clicking on the "Submit Form" button, a summary of your responses for that specimen will be generated automatically; it is not necessary to print the pages while you are completing the responses. You may print a copy of this summary for your records, or you may email a copy of the summary to an email address of your choosing using the link at the top of the summary page.
- Following completion of the Challenge Set, you will receive a customized summary of your results as well as an aggregate report of results from all participating labs. Your results are considered confidential, and no other laboratory, hospital, or other entity will be able to view your individual results.

***Thank you for participating in Challenge Set 2025!***