
Lab Dept: Microbiology/Virology

Test Name: CARBAPENEMASE-PRODUCING ORGANISMS
SCREENING (MDH)

General Information

Lab Order Codes: CPO

Synonyms: CPO

Carbapenem-Resistant Organisms (CRO)

Combined CPO (Carbapenemase-producing organisms) and *C. auris* admission screening

CPT Codes: 87481 – Infectious agent detection by nucleic acid (DNA or RNA)

Test Includes: This assay is FDA-approved and detects the five most common carbapenemases (KPC, NDM, OXA-48, VIM, and IMP) by PCR

Logistics

Test indications: Screening to prevent nosocomial and post-acute transmissions

The Minnesota Department of Health recommends screening patients upon hospital admission for CPO and *C. auris* with a history of:

- Overnight stay in a health care facility outside the United States or Canada in the previous 12 months.
- Ambulatory surgery or hemodialysis outside of the United States or Canada in the previous 12 months.
- Inpatient or skilled nursing facility stay in the previous 12 months in areas with documented transmission according to tracking data from the Centers for Disease Control and Prevention (CDC).

Lab Testing Sections: Sendouts

Referred to: Minnesota Department of Health (MDH) Test Code: CARBAR

(Culture code for alternative ostomy/stool swabs: CPOCX. See Limitations below.)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Monday-Friday

Turnaround Time: Results are available in 1-4 business days

Special Instructions: Ordering provider or Infection Prevention must obtain prior approval from AR Lab Network Central Region Lab before collection of specimens.
arlnmn@state.mn.us

Testing is reserved for patients who meet Hospital Admission Screening requirements. Consult with Infection Prevention if there questions. This test is typically ordered in conjunction with *C. auris* colonization screening (MDH).

Call Children's Sendouts Laboratory to obtain collection swab.

Specimen

Specimen Type: Preferred: Rectal swab

Alternate: If rectal swab is not possible, swab specimen may be collected from stool or ostomy. See Limitations below.

Container: Copan™ Transystem dual swab



Must call Sendouts laboratory department for MDH CPO collection kit

Draw Volume: n/a

Processed Volume: n/a

Collection:

Rectal swabs are the preferred specimen.

If needed, the dual swab *may* be moistened with sterile saline or transport medium **ONLY**. Do NOT use tap water or lubricating gel. Take care to avoid swab contamination.

Carefully insert both swab tips approximately 1 cm beyond the anal sphincter and gently rotate against the walls of the rectum 3 times.

Diapered infants: The cotton swab may be used to swab the stool present in the soiled diaper.

Patients with an ostomy: Use the cotton applicator to obtain specimen from the stoma site.

See MDH Sampling Instructions for further details on sampling and for examples of acceptably loaded swabs:

[Guidance for Carbapenem-Resistant organism \(CRO\) Colonization Test Sampling and Specimen Handling Methods \(state.mn.us\)](#)

Special Processing:

Lab Staff:

Hold specimen at room temperature.

Package according to MDH kit instructions. Must be sent out in Category B Biological Substance box with MDH ARLN test request form (Check Project 2179 Carbapenem Resistant Organism Colonization Screening box). [Antibiotic resistance Laboratory Network \(ARLN\) Clinical Testing and Submission Form \(state.mn.us\)](#)

Send out at room temperature with standard MDH courier, picked up in St Paul lab Monday-Saturday.

Specimen must be tested within **five** days of collection.

Patient Preparation:

n/a

Sample Rejection:

Specimen will be rejected if not received in the Copan Dual Swab Transystem; Unlabeled or mislabeled specimens will be rejected. Labeling must contain a minimum of 2 patient identifiers, date of collection and site of collection (source); Swabs may be rejected by reference lab if underloaded or overloaded with specimen.

Interpretive**Reference Range:**

Negative

Critical Values:

MDH will call Infection Prevention with positives

Limitations: Testing on stool or ostomy specimens will be performed by culture rather than PCR. Turnaround time for cultures may be > 3 days.

Methodology: Cepheid GeneXpert Carba-R assay

References: [Frequently Asked Questions about Admission Screening for CPO and C. auris Colonization \(state.mn.us\)](#)

[Hospital Admission Screening for CPO and C. auris Colonization - Minnesota Dept. of Health \(state.mn.us\)](#)

Updates: 10/18/2022