Procedures for CRE Colonization Screening through the Maryland ARLN Laboratory

FACILITIES AND THEIR ROLES

Requesting Healthcare Facility: Facility with CP-CRE detected from a patient specimen or shared equipment.

Requesting Clinical Laboratory: Laboratory affiliated with the Requesting Healthcare Facility

Requesting State/Jurisdictional Health Department: State or Jurisdictional Health Department (hereafter referred to as State Health Department) with authority for the Requesting Healthcare Facility that has identified the CP-CRE positive patient or shared equipment.
(MidAtlantic Regional jurisdictions: MD, DC, DE, PA, VA, WV, NC, SC)

Requesting State Public Health Laboratory: Public Health Laboratory affiliated with the Requesting State/Jurisdictional Health Department

MD ARLN Laboratory Gatekeepers: MD HAI Program contacts who approve testing. Gatekeeper contact information:

Primary Gatekeeper: Dr. Richard Brooks, 410-767-7395; Richard.brooks@maryland.gov
Secondary Gatekeeper: Elisabeth Vaeth, 410-767-9843; Elisabeth.vaeth@maryland.gov

ARLN Investigation Code # = code that identifies all specimens and requisitions as belonging to a single CRE investigation.

REQUEST AND SUBMISSION PROCEDURES

1. Healthcare facilities (and/or affiliated laboratories) that have isolated CP-CRE from a patient specimen or from shared equipment and who wish to request colonization screening must contact their State Health Department's HAI program. Alternatively, a State Health Department's HAI program may identify CP-CRE during routine surveillance and reach out to the facility to determine if colonization screening is warranted.
2. The Requesting State Health Department will gather as much information as possible including but not limited to:

    - Organism identified, antibiotic susceptibilities, whether a molecular mechanism has been determined or if this needs to be done at the State Public Health Laboratory or at the MD ARLN Lab prior to requesting screening
    - Type of facility and type of care provided at the facility
    - Total population at risk, e.g. census on the affected unit of a hospital or nursing home; number of patients dialyzed on same day in same center as index patient, etc. (provides an estimate of # of tests needed)
    - Specifics of care delivered on the affected unit/facility (e.g. dialysis, mechanical ventilation, etc.)

- Points of contact at the requesting facility (both a facility IP/epidemiologist and clinical laboratory contact)
- If contaminated shared equipment is a concern, information on the type of device, number of potentially exposed patients
- Clinical and epidemiological information on index patient, e.g. dates present at requesting facility, past medical history, risk factors for CRE, travel history

3. Once information has been gathered, the Requesting State Health Department should reach out to the MD ARLN Laboratory Gatekeeper to obtain approval for testing.

4. If the request for testing is approved, the Gatekeeper will issue an ARLN Investigation Code (formatted as XX-000000, where XX is the state abbreviation and the six digits following form a unique identifier) to be included on all clinical materials and documentation throughout the screening process. The Requesting State Health Department should communicate approval (or denial) of testing to the Requesting Healthcare Facility and/or the Requesting Clinical Laboratory, as well as provide them with the ARLN Investigation Code

5. The Requesting State Public Health Laboratory delivers the locally stored swab kits to the Requesting Healthcare Facility. Alternatively, if the kits are not available at the Requesting State Public Health Lab, then the MD ARLN lab ships the kits directly to the healthcare facility overnight via Fedex.

6. Swabs are collected by facility staff as part of routine daily care (ideally) or by qualified health department staff if necessary. The Requesting State Health Department may need to coordinate providing assistance with performing the rectal swabs to long term care facilities or other lower-skilled care settings. While detailed instructions will accompany the swab kits, we have found that it is very useful to have someone on-site to observe and reinforce procedures to avoid overloading the swabs, as well as to ensure that all swabs are properly labelled with at least two patient identifiers and are accompanied by a matching requisition form. Local health department staff nurses or epidemiologists may be a good option for deployment to the facility on the day of swabbing.

7. Requesting State Health Department (or Requesting Healthcare Facility if authorized) uses the Lab Web Portal to request testing for all swabs collected.

8. The swabs are delivered back to the Requesting State Public Health Laboratory via regular courier or special arrangements. The Requesting State Public Health Laboratory packages the swabs appropriately for interstate shipping, and ships them overnight to the MD ARLN Lab via the ARLN FedEx account. If swabs are not able to be shipped on the same day, they need to be stored at room temperature and not refrigerated. Rectal swabs in the transport tube can be stored at room temperature (15-28 deg C) for up to 5 days. Specimens should not be shipped over a weekend (i.e. on a Friday or Saturday) without express permission from the ARLN Laboratory.

9. The MD ARLN Lab performs swab testing on the Cepheid instrument.

10. The MD ARLN Lab reports testing results using the Lab Web Portal. All stakeholders who have been authorized to use the Lab Web Portal will be able to view testing results. If the Requesting Healthcare Facility is not authorized for use of the Lab Web Portal, ARLN staff and/or Requesting State Health Department staff can securely fax results to them. [Consider having Requesting Healthcare Facility staff complete New User Access Request Forms for Lab Web Portal access in the future.]