

Rectal and Peri-rectal Screening Protocol

Background:

Following isolation of a carbapenemase-producing *Enterobacteriaceae* (CRE), other multidrug-resistant organisms, or other organisms associated with an outbreak, rectal or peri-rectal screening cultures may be recommended in consultation with Oregon Health Authority (OHA). Other appendices provide additional information for informing staff and patients as well as specimen processing.

Steps to Prepare for Specimen Collection:

- (1) Work with administration and Infection Prevention & Control to clarify costs and payment of surveillance cultures.
- (2) Collaborate with the laboratory and OHA regarding supplies:
 - (a) OHA recommends culture swabs prepackaged in neutralizing buffer (e.g., liquid Stuarts or phosphate buffered saline).
- (3) Inform and educate staff about CRE. Train staff on specimen collection.
- (4) Inform and educate patients regarding CRE and the reason for screening cultures. Obtain written patient consent if needed.
- (5) Collaborate with the laboratory regarding:
 - (a) Timing of collection for optimal delivery and set-up (e.g., specimen collection on either Monday or Tuesday is typically preferred).
 - (b) Appropriate test order entry (e.g., screening or surveillance test).
- (6) Collaborate with the laboratory and Infection Prevention & Control to manage test results.
 - (a) Include pertinent clinician groups (e.g., Infectious Diseases, Critical Care, Pharmacy, etc).
 - (b) Determine manner of reporting in the patient's chart or "flagging" of positive results.

Specimen Collection Protocol:

This protocol is written using culture swabs for rectal or perirectal sites, but it is applicable to premoistened “sponge sticks” and other clinical sites, as well. If multiple sites are cultured, use one swab per site to prevent cross-contamination.

- (1) In consultation with OHA, identify high-risk contacts to undergo surveillance cultures.
- (2) Premoisten the sterile swab in liquid transport media in the accompanying culturette tube.
- (3) Insert moistened tip of swab into the anal canal and turn 2-3 times.
 - (a) Alternatively, sample stool for culture if visible on the perianal skin or in an ostomy bag.
 - (b) Do not perform rectal swabs on immunocompromised patients; collect peri-rectal swabs only.
- (4) Replace swab in culturette tube and secure top.
- (5) Label specimen with at least 2 patient identifiers, date, site and collector’s initials. Place in sealed specimen bag.
- (6) Make sure to note type of culture as “screening.”
- (7) Send specimen to the laboratory; again, ensure laboratory is aware of correct methodology to process specimen.
 - (a) Note: specimens should be plated ideally within 4 hours of collection. If significant delay on plating specimens occurs, store swabs at 4° Celsius for up to 3 days.

References:

CDC. Guidance for Control of Carbapenem-resistant *Enterobacteriaceae* (CRE). 2012.

APIC. Guide to the Elimination of Multidrug-resistant *Acinetobacter baumannii* Transmission in Healthcare Settings. 2010.

Prabaker K et al. Transfer from High-acuity long-term care facilities is associated with carriage of *Klebsiella pneumoniae* carbapenemase-producing *Enterobacteriaceae*: A multihospital study. ICHE 2012;33:1193–1198.