

Exclusion testing for Shiga-toxin producing *E. coli* (STEC) and *Shigella* case-patients

- Inform the patient (or their guardian) of the exclusion and need for lab testing
 - 1 negative lab result is needed for *Shigella* and 2 consecutive negative lab results are needed for STEC
 - KDHE strongly recommends stool cultures, but multiplex PCR results are also acceptable
 - It may take longer for a patient to test negative by PCR compared to culture.
 - KDHE strongly recommends testing through KHEL
 - Testing is free for the patient
 - The correct culture tests will be performed (and a toxin test for STEC patients)
 - Positive and negative results are reported to the submitter quickly

- Inform patient's supervisor or daycare of the exclusion
 - See "Isolation, Work and Daycare Restrictions" within the STEC Disease Investigation Guideline
 - The patient should expect to miss at least a week of work or daycare because of the time required to collect, ship, and test specimens
 - Test results are usually available 4 business days after the specimen is received

- Provide stool kits and instructions for specimen collection
 - If you do not have supplies on hand, order supplies using following order form:
<https://www.kdhe.ks.gov/DocumentCenter/View/8092/Specimen-Kit-Request-Form-PDF>
 - Under "Health Specimen Submission Forms, select "Universal Laboratory Specimen Submission"
 - Under "Health Specimen Kits", select "Enteric with Cary Blair (Category B) ambient"
 - Specimens should be collected at least 48 hours after discontinuation of antibiotics and at least 24 hours after diarrhea has stopped
 - For STEC, the second specimen should be collected at least 24 hours after the first
 - Patient should refer to the "Instructions for the Collection of Stool Specimens for Gastrointestinal Illness Testing" handout that comes with the specimen kit
 - Available online at:
<https://www.kdhe.ks.gov/DocumentCenter/View/8470/Instructions-for-the-Collection-of-Stool-Specimens-for-Gastrointestinal-Illness-Testing-PDF>
 - A Universal Laboratory Specimen Submission Form must be completed for each specimen
 - Patient should fill out the specimen date and time of collection on the Universal Laboratory Specimen Submission Form, and put a barcode sticker from the form on the specimen
 - Patient should keep specimens refrigerated until submission to LHD

- Package and ship the specimens to the lab
 - Ensure the specimens each have a unique barcode sticker
 - Ensure the specimens are properly packaged
 - <https://www.kdhe.ks.gov/DocumentCenter/View/8454/Feces-Bacterial-Culture-Packaging-Guide-PDF>
 - Ensure the Universal Laboratory Specimen Submission forms are filled out completely
 - <https://ks-kdhe2.civicplus.com/DocumentCenter/View/8438/Universal-Form-Instructional-Guide--PDF>
 - Ensure the timing between specimen collection and shipping receipt at KHEL will meet KHEL testing requirements
 - *Shigella* specimens must be received at KHEL within 7 days of collection
 - STEC specimens must be received at KHEL within **72 hours** of collection
 - Acceptable STEC scenario:
 - Specimen 1 collected on Saturday at 1 p.m.
 - Specimen 2 collected on Sunday at 5 p.m.
 - Specimens sent from LHD to KHEL on Monday via overnight shipping
 - Specimens received at KHEL Tuesday before 1 p.m., within 72 hours of specimen 1's collection time.
 - Unacceptable STEC scenario:
 - Specimen 1 collected on Thursday at 1 p.m.
 - Specimen 2 collected on Friday at 5 p.m.
 - Specimens sent from LHD to KHEL on Friday via overnight shipping
 - Specimens received at KHEL Saturday, and are not processed until the lab opens on Monday morning, more than 72 hours of specimen 1's collection time. Specimen 1 is rejected and not tested. Specimen 2 is still valid and tested.
- Post-submission steps
 - Email kdhe.epihotline@ks.gov or call the Epidemiology Hotline (877-427-7317) to let KDHE know specimens are coming
 - Ensure you have an adequate supply of stool specimen kits, should additional testing be needed
 - If a specimen tests positive, work with the patient to collect and ship additional specimens
 - If the required number of negative lab results are met, let the patient and the daycare/workplace know that the exclusion has been lifted
 - Document test results in EpiTrax and the date the exclusion was lifted