



# Shiga Toxin producing *Escherichia coli*

Information Provided by Tiffany Henderson & Katie Arends  
Hendersont1@michigan.gov & arendsk@michigan.gov

## Tip 1: Confirmatory Lab Results

- ALL confirmatory labs should be entered into MDSS.
- Case Classification Insights:
  - Cases without laboratory support and no other qualifying information should be marked **Not a Case**.
  - Cases without laboratory support but a proven epi-link to a Confirmed or Probable case are to be marked **Probable**.
  - Those with a positive EIA should be classified as **Suspect**.
- To keep track of the case in MDSS, it may be a good idea to mark the case as **Confirmed - Follow Up** until confirmatory results are received, and don't forget to complete the new serotype and toxinotype section.
- Laboratories are required to submit all positive STEC isolates, subcultures, or specimens to the MDCH BOL for confirmatory testing so there are two possible reasons for the absence of confirmatory results
  - Results were negative. MDCH BOL only reports negative test results to the submitter, not to the LHD (unless they were the submitter), MDCH or MDSS.
    - Check back with the submitter or your regional epidemiologist if test results do not appear in MDSS in a reasonable time frame.
  - The specimen was never sent to or received by MDCH
    - This presents a good opportunity to reinforce specimen submission to your health care providers and labs.

## Tip 2: Discordant laboratory results

- If there are discordant lab results (i.e., EIA positive at a private lab but EIA negative or confirmatory test negative at MDCH BOL), clinical compatibility should determine the status of the case.
  - If the case is clinically compatible, it can be closed as **Suspect**.
  - If the case is epi-linked to a Confirmed or Probable case and clinically compatible **Probable** is appropriate.
  - Otherwise **Not a Case** is the way to go.

## Tip 3: STEC and HUS in MDSS

- Post Diarrheal Hemolytic Uremic Syndrome (HUS) is diagnostic of STEC infection regardless of laboratory results.
- Cases that fit this description need to be entered into the MDSS **TWICE** once as an HUS and once as an STEC case.
- The patient should be merged upon dedupping, but the cases should be kept separate.
- If there is no laboratory confirmation of STEC, the HUS case should be closed as **Confirmed** but the STEC should be closed as **Suspect**.