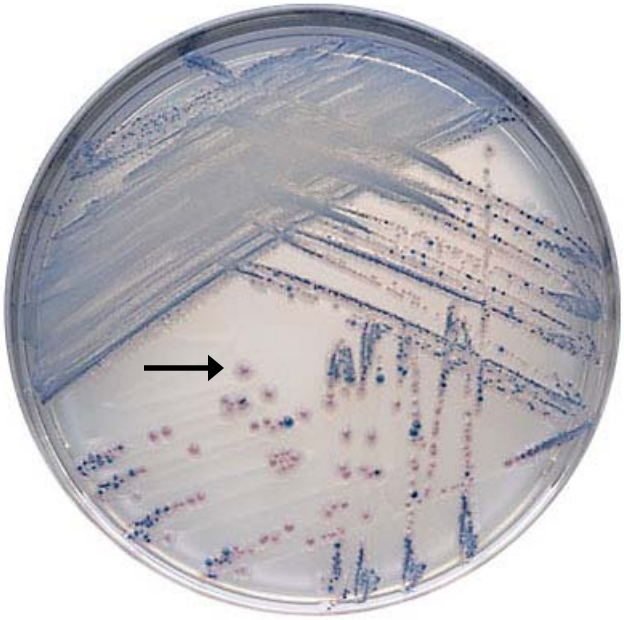
Stool Culture Procedure
E. coli O157 Identification

2. CHROMagar O157 Work-up
   a. Refer to the CHROMagar O157 Procedure for complete instructions for use.
   b. Examine medium for suspect “mauve” colonies at 18-24 h. Gram-negative organisms, other than *E. coli* O157, will either be inhibited or produce colorless, blue, green, blue-green or natural color colonies.
   c. Select several suspect colonies and test using the latex agglutination test for *E. coli* O157. It is important to test latex-positive colonies with the latex control reagent to rule out non-specific reactions. Refer to the *E. coli* O157 Latex Test Procedure for complete instructions.
   d. If the O157 latex is positive, perform biochemical identification by Phoenix™ NID.
   e. Do not perform antimicrobial susceptibility testing on *E. coli* O157 isolates.
   f. Subculture the isolate to two BHI slants. Send one slant to the public health laboratory for H7 typing and hold the other in the refrigerator with send out stocks.
   g. Notify director and/or supervisor during Rounds if *E. coli* O157 is isolated.



Note: The identification of *E. coli* O157 is <u>independent</u> of the Shiga toxin test results. There are limitations to the Shiga toxin test. Competing flora can mask *E. coli* O157 and subsequent Shiga toxin production, even with the GN broth enhancement. This is why we have the CHROMagar O157 as part of the stool culture set-up. Culture is more sensitive than the Shiga toxin test for the detection of E. coli O157.

Suspect colonies growing on the CHROMagar O157 medium should be tested with the O157 latex and the Phoenix NID panel as outlined above. *E. coli* O157 is confirmed by a positive latex and a Phoenix identification of *Escherichia coli.*