



Colorado Department  
of Public Health  
and Environment

## Colorado State Public Health Laboratory

# Shiga Toxigenic Escherichia Coli (STEC) Quik Chek™ Rapid Test

## Appendix C: Job Aid

### 1. Prep sample by specimen type

- Direct Fecal and samples in transport media: mix thoroughly, begin test
- Broth: Mix thoroughly, culture 25µL (~2 mm diameter) of specimen in 5mL MacConkey or 8mL GN broth. Incubate 16-24 hours at 35-39°
- Fecal specimens in Cary Blair or C&S transport media: culture 100µL of specimen in 5mL of MacConkey or 8mL of GN broth. Incubate 16-24 hours at 35-39°

### 2. Bring reagents to room temperature

### 3. Label 2mL tubes

### 4. Add Diluent

- Add 750µL diluent, 2<sup>nd</sup> graduation, for Unpreserved Fecal Specimens, Plate Cultures, and External Controls
- Add 650µL diluent, 1<sup>st</sup> graduation, for Broth Cultures and Transport Media Specimens

### 5. Add 1 drop of Conjugate

### 6. Add specimen

- Direct Fecal- Add 25µL of specimen (~2mm diameter portion). Emulsify with stick or transfer pipette
- Broth Cultures/Fecal Specimens in transport media- Transfer 100µL of specimen with transfer pipette
- Plate cultures: Sweep swab through confluent area several times, rotating against side of tube to release sample. Incubate at room temp for 30 min

### 7. Vortex thoroughly

- Once samples are in the Diluent/Conjugate mix, they may incubate for up to 2 hours before adding to Membrane Device

### 8. Transfer 500µL to Sample Well

### 9. Incubate for 15 minutes

### 10. Add 300µL Wash Buffer to Reaction Window

### 11. Add 2 drops of Substrate to Reaction Window

### 12. Incubate for 10 minutes

### 13. Read results immediately.



Figure 1a  
Positive Stx1 Result



Figure 1b  
Positive Stx2 Result



Figure 1c  
Positive Stx1 and  
Stx2 Result



Figure 1d  
Negative Result



Figure 1e  
Invalid Result



Figure 1f  
Invalid Result



Figure 1g  
Invalid Result



Figure 1h  
Invalid Result