

Environmental surveillance for cholera

Why, when, and for what

- Influence of primary environmental reservoir paradigm on testing strategies to date and their interpretation
 - Tendency to prioritize detecting *Vibrio cholerae* in environmental samples during outbreaks and for control planning.
 - Interpreting presence of *Vibrio cholerae* in water as indicative of outbreak origin
- Need for guidance from GTFCC for simple concrete environmental testing guidance that can be used for direct control action in common contexts

Environmental Testing II

Why, When and for What

Contextual Framework

- **High risk settings** (refugee camps, natural disasters, etc): outbreak prevention
 - Fecal contamination assumed
 - Immediate chlorination vs initial/regular fecal proxy testing
- **Active cholera outbreaks**: outbreak mitigation
 - Fecal contamination and/or Free Residual Chlorine
 - Testing at source, point of distribution, or at point of use (?)
- **Between outbreaks and long-term control interventions**:
 - Fecal contamination, free residual chlorine
 - Monitoring & Evaluation of installed/repaired systems
- **Specific testing for *Vibrio cholerae*** likely only needed for:
 - academic research in persistence of aquatic reservoir *Vibrio* and research of cholera strain extinction or elimination