DOH Completes the 2019 Cistern Study

ST. CROIX, USVI (October 4, 2019) — In the U.S. Virgin Islands, 90% of houses rely on rainwater collected in catchment systems such as cisterns as the main residential water supply. During July and August 2019, the Virgin Islands Department of Health (VIDOH), supported by the Centers for Disease Control and Prevention (CDC) and local partners, visited ~400 households across all three islands to study the water quality of household cisterns to better understand potential risks of waterborne illnesses.

Findings from the study will help develop improved recommendations on how to safely manage the quality of water from cisterns and help protect the health of the community.

The study identified that 80% of cistern water (taken directly from the cistern hatch) tested positive for E. coli contamination while 58% of tap water (taken from kitchen tap) sourced from cisterns tested positive for E. coli contamination. In previous studies (19 total, globally) the prevalence of cisterns that have tested positive for E. coli contamination ranged from 24% to 92%, with an average of 54%.

Previous Department of Health studies found that ~18% of households drink their cistern water directly.

The VIDOH would like to remind residents that water contaminated with E. coli should not be used for consumption; which includes drinking, cooking, and brushing teeth. Furthermore,
properly maintained water treatment systems, like those with multi-stage filters and/or ultraviolet (UV) light, can provide water that is safe for consumption.

During and after emergencies, cistern water may not be safe to drink. When safe water is not available, use bottled water for drinking, cooking, and brushing teeth. If you do not have bottled water in an emergency situation, boil (for >1 minute) or disinfect your cistern water a gallon or less at a time (1/8 teaspoon bleach for 1 gallon of water).

The VIDOH is working alongside the CDC to identify additional recommendations for households in improving cistern water quality based on data from the study.

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