

**CHOLERA EPIDEMICS IN BUSIA DISTRICT: RISK FACTORS IN THE
INTER-EPIDEMIC PERIOD**

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ABSTRACT

Background: Busia district experiences frequent cholera outbreaks. Of its 6 divisions, Funyula, Matayos and Budalangi are more frequently affected compared to Butula, Nambale and Township.

Objective: To determine the main risk factors for cholera during the inter-epidemic period in the high risk and low risk divisions of Busia District.

Methodology: This was a cross-sectional study conducted in Matayos and Funyula divisions (High risk) and Butula and Nambale divisions (Low risk) using multistage sampling technique. A sample size of 364 households was selected. 41 health providers were purposively sampled while 40 water samples and 77 stool samples were randomly selected. Data was analysed using the SPSS computer package.

Results: A significantly higher percentage of households in the high risk population commonly used river and lake water sources as compared to the low risk one. 75% of the water samples from the high risk population were contaminated with coliform bacteria as compared to only 45% from the low risk one. In both populations, less than 30% treated drinking water at home. 30% of the high risk population washed clothes at the water sources as compared to 15% of the low risk population. A significantly higher percentage of the low risk population (93%) used latrines or toilets as compared to 74% of the high risk one. None of the water or stool samples tested positive for *vibrio cholerae*. Strengthening home water treatment and ensuring clean sources of water were weak preventive measures in both study populations.

Conclusions and Recommendations: The main risk factors identified were contaminated water sources, failure to treat drinking water, inadequate toilets or pit latrines and inadequate preventive measures. It is recommended that health workers and relevant stakeholders in the district should step up health education especially on home treatment of drinking water using sustainable methods. People should be encouraged to have toilets or latrines especially in the high risk population. The DHMT should foster collaboration with other sectors to strengthen preventive measures in place, especially provision of tap water to the community.