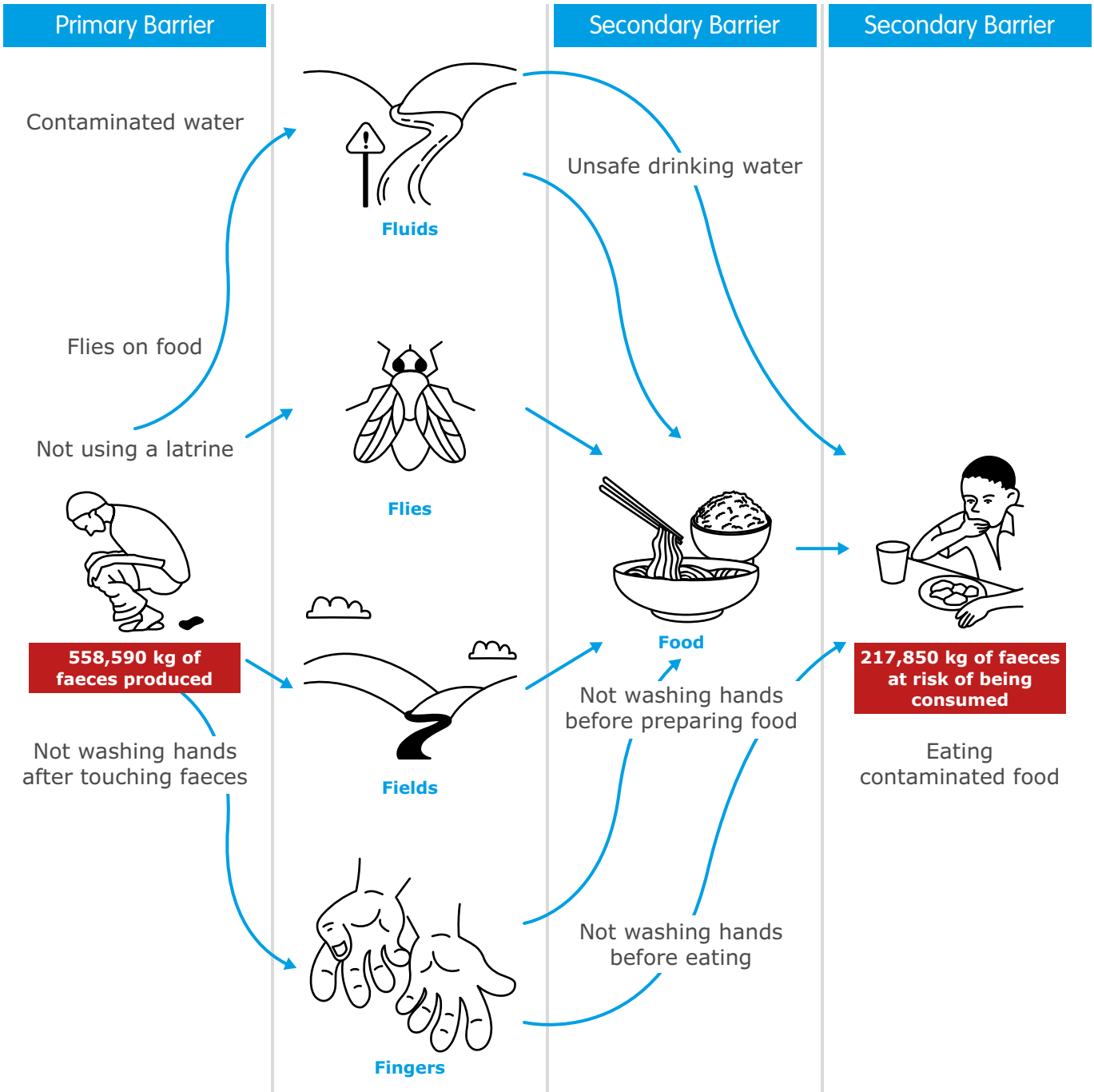
F-Diagram

Homa Bay County



Fluids - Drinking contaminated water
Fields - Contamination of soil, crops, fruits, etc. by human excreta
Fingers - Faecal contamination of fingers and hands
Food - Eating food contaminated with faecal matter
Flies - Spread diseases from faeces to water and food

Risk Factors

a. Contaminated Water

Faecal contamination of drinking water sources, including piped water sources. In the study, **52%** of the households in Homa Bay tested positive for presence of faecal contamination in drinking water. All the samples of the major water source contained faecal contamination where *E. coli* were detectable.

b. Hand Hygiene

In places where hand feeding is common, children may directly ingest high dosages of faecal pathogens through caregivers' hands.

The study showed that **22%** of caregivers in in the households with children with diarrhoea in Homa Bay washed their hands after taking the child to the toilet.

c. Food Hygiene

Consumption of contaminated food, compounded by its preparation with contaminated water, is a significant vehicle for bacteria transmission to children, particularly when foods and liquids are added to the diet. In the study, no drinking water source samples met the recommended guidelines for drinking water safety, and thus may have served as a source of contamination in the preparation of food.

d. Soil and Faeces Ingestion

Open defecation in Homa Bay stands at **38.8%**. This shows that faecal contamination is present in the environment. The exploratory mouthing of hands and objects in the early stages of child development exposes them to risk of ingestion of dirt and faeces.

Shit Calculation:

Average of 0.5 kg person / day ***** 1,117,181 population **=** 558,590 kg produced

County open defecation 39% ***** 558,590 kg produced **=** 217,850 kg at risk of being consumed

Barriers

Primary Barriers

a. Sanitation

Access to improved sanitation facilities.

Modifications to household latrines to make them more friendly to increased use by children, the elderly and disabled.

b. Faecal Sludge Management

Safe emptying, transportation and treatment of faecal sludge from toilet facilities.

Secondary Barriers

c. Water

Improved water supply and point-of-use water treatment to reduce the risk of diarrhoea among children under five years old.

d. Handwashing

Promote hand washing with soap before food preparation and child feeding.

e. Improved Food Hygiene

Food hygiene behaviours include:

- washing hands with safe water
- using safe water to wash utensils and prepare food
- cooking and reheating foods until boiling and covering food with a lid during storage.

This infographic is the result of the study entitled *Understanding the Effects of Poor Sanitation on Public Health, the Environment and Well-being* commissioned by SNV Netherlands Development Organisation (SNV) as part of the Voice for Change Partnership (V4CP) programme which advocates for county governments to address water, sanitation and hygiene (WASH) issues affecting their communities. The V4CP programme is implemented by SNV in collaboration with the Institute of Economic Affairs (IEA). The research was conducted by the Centre for Population Health Research & Management (CPHRM).

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