



# SNV

## Policy Brief

### Improving Sanitation in Kericho County: Recommendations from Research



**In Kenya, diarrhoeal diseases are among the leading causes of illness and death in children under five, and is caused by inadequate safe water, sanitation and hygiene. Poor sanitation may be associated with a number of infectious and nutritional outcomes, which also cause a heavy burden of disease.**

In Kericho County, many families have poor access to improved water and sanitation facilities, particularly in some of the rural areas which are not linked to the formal sewerage systems and piped water. This poses a serious risk as families have to make do with water that may be contaminated as they tap into unprotected sources, especially if they consume the water without any treatment at home.

This brief highlights the key findings from a recent 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. The programme advocates for county governments to address water, sanitation and hygiene (WASH) issues affecting their communities. This brief presents recommendations that the county government and partners can take to improve the sanitation and health outcomes for the population in Kericho County.

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).

#### Key recommendations for Kericho County government and partners

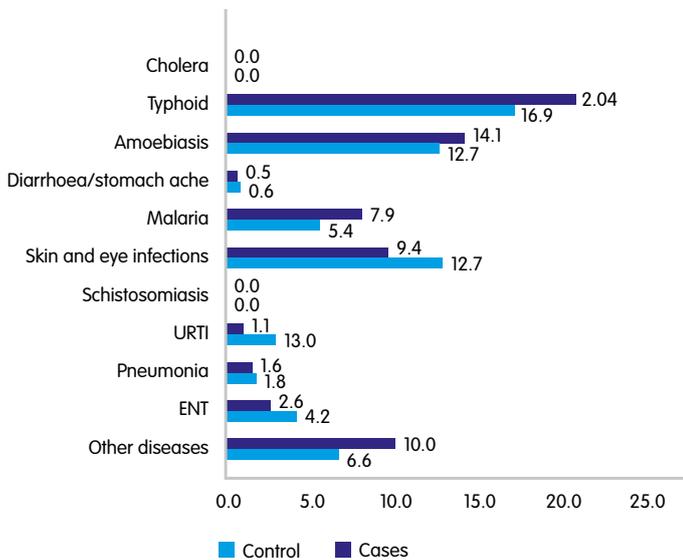
- Provide access to safe drinking water to all areas in the county
- Expand sewerage services, to reduce community dependence on on-site sanitation facilities
- Conduct public education campaigns to address sanitation and hygiene and to discourage open defecation

## Key Finding 1: Sanitation-related diseases are common in Kericho County

The findings show that typhoid and amoebiasis are the most common ailments in the community and that more case families were affected than control, suggesting more exposure to unclean water (Figure 1).

Data from health facility records also show there was a considerable amount of diarrhoea reported among children, which would be related to poor sanitation. Recurrent diarrhoea appears to be common among the children in the case group.

**Figure 1: Illness household members sought treatment for in the past six months (%)**



## Key Finding 2: Many households are exposed to sanitation-related diseases

Some families also use open defecation, adding to the contamination of the environment and, potentially, of water sources. In 5 of the 357 homesteads surveyed, the respondent said the family did not have a toilet, but instead used the bush or field for defecation. Disposal of children's stools was also poor in some households: 5.2% of the respondents in the case households and 2.4% of the control group said the stool was rinsed off into a ditch or drain.

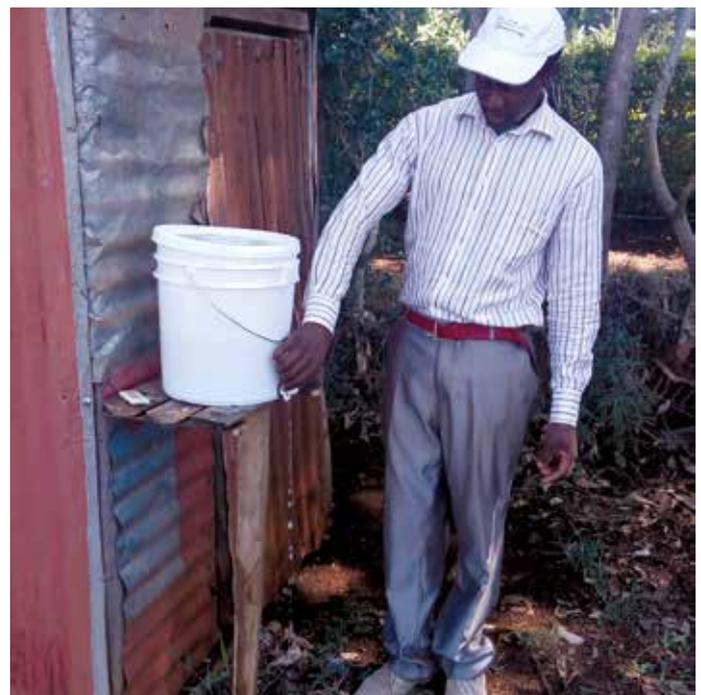
## Research Design and Approach

This research study was conducted in February and March 2018. It used a mixed methods design that comprised a case-control quantitative study, qualitative interviews in the community (key informant interviews and focus group discussions), observation, review of health facility data on under-five morbidity and mortality, and water sampling and testing.

Cases were children under five years of age who presented to the participating health facilities with diarrhoea (as defined by the health worker, with a minimum requirement of three or more loose or watery stools in the previous 24 hours). Controls were children in the same age range, who reported with any other infection or trauma but without diarrhoea.



Drawing water from a river in Londiani

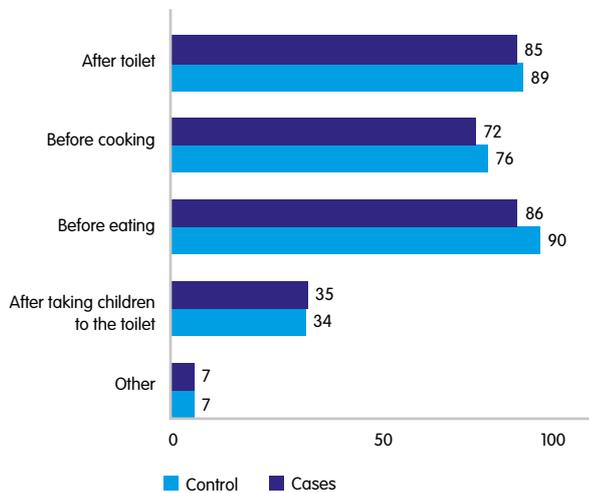


Improved handwashing facility

### Key Finding 3: Infant feeding practices and caregivers' personal hygiene habits are poor

The study found a high level of mixed feeding for infants under six months old, contrary to standard guidance of exclusive breastfeeding. In total, only 26% of the mothers reported exclusively breastfeeding their child aged less than six months and 70% of the children were on mixed feeding. More mothers with children suffering diarrhoea in the study reported mixed feeding than those in the control group. In addition, hand washing habits after toilet use were found to be equally poor, with fewer caregivers in the cases category reporting using soap with water to wash hands after toilet (Figure 2). This is likely linked to the incidence of the child having diarrhoea.

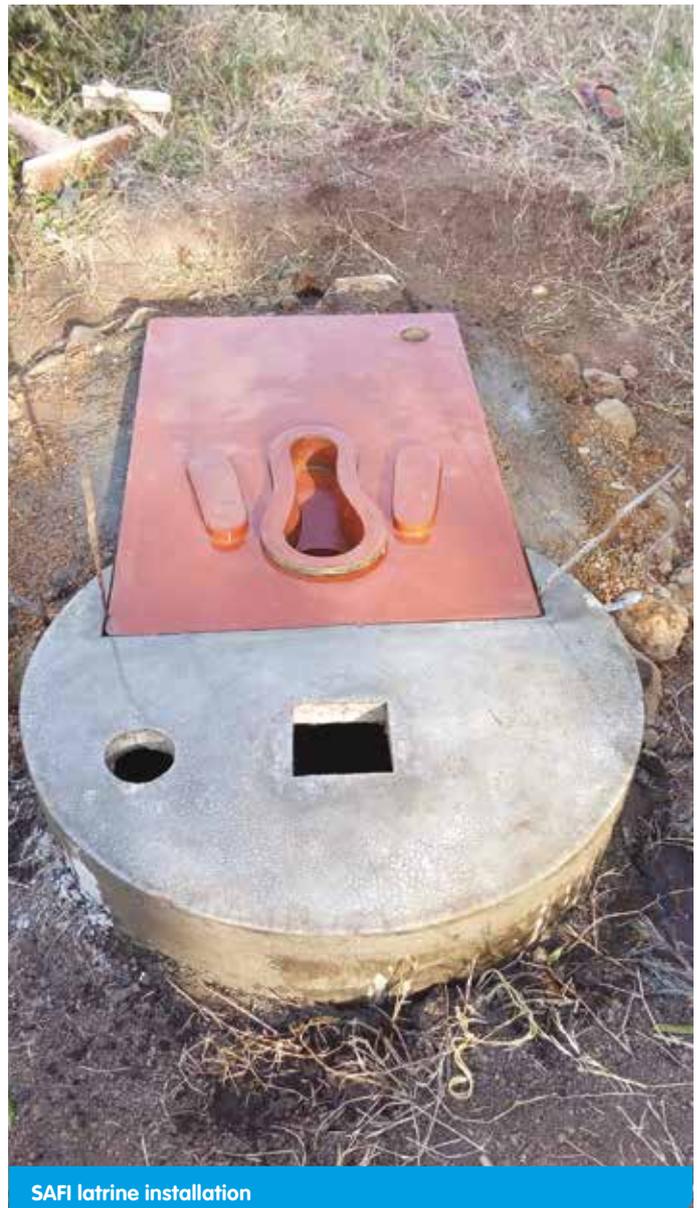
Figure 2: Instances caregiver washed hands in last 24 hours



### Key Finding 4: Local sources of drinking water appear to be contaminated

Although most households use water from improved sources, more case households in the study reported using water sources that may be exposed to contamination, which may explain the incidence of diarrhoea. This situation is worsened by the finding that over half of the households in both categories also said they do nothing to the water to ensure its safety before drinking (54.8% control, 53.9% case).

Tests conducted on the household water collected during this study showed most of the water was contaminated. Test results on the public water points used in the study areas also showed high levels of contamination with *E. coli*, suggesting presence of faecal matter. Analysis of the county sanitation status using GIS mapping also found a clear relationship between proximity of households to the water sources, open defecation sites and the diarrhoeal cases.



## Policy Options: What can the county government and partners do to address poor sanitation in Kericho County?

Kericho County government and partners can use these findings to improve the coverage of appropriate sanitation services to reduce the incidence of diarrhoea in children. The county should consider implementing the following actions:

- **Address the high level of contamination and improve access to safe water in the county.** The county should develop and implement an appropriate policy framework to address water and sanitation safety. This policy should guide actions to improve access to piped water, to protect springs and to reduce dependence on other unsafe water such as surface water and water delivered by vendors. The county should also step-up water treatment, to ensure the available water is safe to drink, and include the necessary inputs in the budget and procurement plans. In addition, the county should expand sewerage services to reduce dependence on on-site sanitation facilities that pose a significant threat of seeping into the ground water or overflowing.
- **Address infant feeding practices in the community.** Mixed feeding is common in both groups, with more mothers in the cases group (73%) reporting it than did those in the control group. The county should ensure mothers get the right nutrition education and use the network of community health workers to promote exclusive breastfeeding for six months to reduce the potential of diarrhoea. Community health workers should also make home visits to families with young children to educate caregivers on infant feeding practices.
- **Conduct public education campaigns that address sanitation and hygiene.** Exposure to sanitation messages was found to be related to the incidence of child diarrhoea, with the results suggesting that more of those in the cases group may be less aware of these messages than in the controls group. Such campaigns should address the need to wash hands with soap at all critical times and the need to treat water and store it hygienically. The county governments and partners can implement such a campaign using established proven behaviour change communication approaches.
- **Take action to discourage open defecation.** Interviews with community members revealed that open defecation is common and associated with lack of toilet facilities around working areas. The county government and partners should address this and provide appropriate facilities in working areas to discourage the practice.

For more information on these findings, see report: *Understanding the Effects of Poor Sanitation on Public Health, the Environment and Well-being. Kericho County - Report of research findings. 2018.* Published by the V4CP programme.

### Further information

**Contact:** SNV Kenya Country Office Ngong Lane, off Ngong Road Nairobi, Kenya

**Tel.:** +254 724 463355

**Email:** kenya@snv.org

