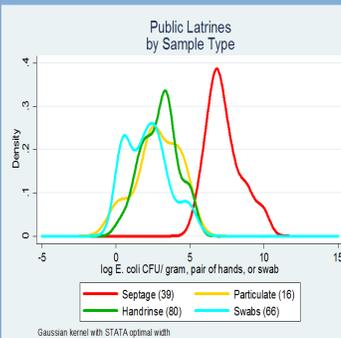


Findings

- 93.8% (80) hand rinses of public latrine users tested positive for E. coli.



- Out of 39 septage samples from public latrines, 97.4% (38) of them tested positive for E. coli and 94.6% (35) tested positive for adenovirus.
- 72.7% (48) of the public latrine walls and handles of anal cleansing containers tested positive for E. coli and 15% (9) tested positive for Adenovirus.
- 87.5% (14) soil samples (particulates) from public latrines tested positive for E. coli and 13.3 (2%) tested positive for Adenovirus.

Glossary

E. coli is a common bacterial indicator for human and animal fecal contamination

Adenovirus is a pathogenic virus that indicates human fecal contamination and a common cause of gastroenteritis.

Background

The goal of the SaniPath study is to address the scarcity of data available to WASH policy makers and implementers in low income urban communities. This was done by identifying the sources and movement of human fecal contamination and describing the behavior of adults and children that lead to exposure to various fecal exposure pathways. Toilets (private and public) is one of the fecal exposure pathways that the study examined.

The study took place in four low income urban communities in Accra from September 2011 to December, 2012.

Methods

The study used a first of its kind multi-disciplinary approach for its data collection and analysis by employing simultaneously microbiological and behavioral techniques. Toilets were examined in households, primary and nursery schools, and public places of convenience. Patrons of public toilets' hands were rinsed after visiting the toilet for microbial testing (E.coli) of the presence of fecal contamination in the laboratory. Public toilet walls and floors, handles of anal cleansing containers, soil around the public toilets, and septage from the public toi-

Methods

lets were tested for fecal contamination. In addition, a survey was conducted in 800 households to ascertain latrine conditions. A similar survey was carried out in nurseries, primary schools and public toilets.



A public toilet wall being swabbed for laboratory testing.

Results

Out of the 313 public latrine stalls observed, about 30% had visible feces on the walls or slabs, about 45% did not have secure stance, about 10% had a chance of falling through and about 74% had no doors. In addition, about 64% had flies in them and there was a "terrible" odor in about 40% of the stalls. Of a sample of 20 public toilets surveyed, 9% had a handwashing station, 95% provided newspaper for anal cleansing, 40% provided toilet tissue paper for anal cleansing and 25% provided water for anal cleansing.

About 73% of the households surveyed spent an average of 81 pesewas daily (295 cedis annually) on the use of public toilets. Most of the schools had a toilet and employed someone to clean the toilets but the conditions in them were not clean.

Results

27% of respondents of the household survey conducted had access to a private latrine and 45% reported to have a handwashing station for use after defecation. There was visible feces in the compounds of only 3% of the households. 7% of households reported to observe both adults and children openly defecating in the drains everyday.

Recommendations

The general conditions in all public toilets need to improve dramatically to avoid an impending epidemic. Public toilet operators should be educated and monitored to clean and maintain stalls regularly and provide handwashing stations with soap. The general public should be encouraged to build private latrines that are sustainable and practice handwashing with soap. Feces of babies should be handled well and safely disposed.