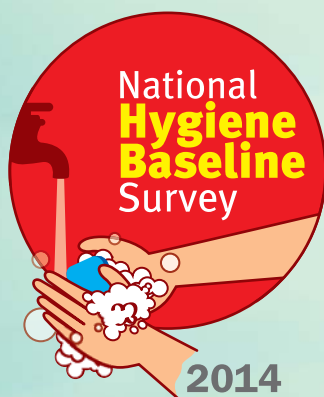


# Bangladesh National Hygiene Baseline Survey

The government of Bangladesh has a commitment to ensure safe environment through promoting personal hygiene practices as mentioned in the strategy document. However, there is a lack of baseline information on hygiene practices among different segments of the population and regions. The overall objective of this national hygiene survey was to establish a nationally representative baseline status of hygiene situations related to knowledge, facilities and practices in the area of Water, Sanitation and Hygiene (WASH) to be used for programming and resourcing.



## Background and context

There is a considerable disease burden attributed to inadequate water, sanitation and hygiene facilities and practices, particularly in low income countries. Improved handwashing has been shown to reduce diarrheal disease and respiratory disease when conducted in research settings and on a scale including up to a few thousand households.

In 2012, the National Hygiene Promotion Strategy for Water Supply and Sanitation in Bangladesh was launched, which incorporates five behavioral domains including sanitation hygiene, water hygiene, personal hygiene, food hygiene and environmental hygiene promotion. The Government of Bangladesh has committed to the national strategy but there is a paucity of information on the practices and facilities for washing hands with soap for a nationally representative population, which is important to assist in planning appropriately targeted interventions. Representative data can in turn be used as a baseline by the government to aid priority setting, and to monitor program progress.

## The study design

The national baseline has been designed in modular ways so that it can be used and implemented periodically in future by the relevant stakeholders especially by the sector actors in WASH, health, maternal and reproductive health, education and information dissemination. Data has been collected on several self-reported and spot check indicators of handwashing that are simple to collect, may reflect actual hygiene behavior. For two population groups, restaurants/food vendors and hospitals, structured observations have been conducted.

The report includes data intended to form a baseline and to describe the current state of handwashing practices and facilities, and water, sanitation and hygiene practices and facilities among five population groups across Bangladesh, collected between January and October 2013. To obtain

data from a representative population, the study included sufficient numbers of randomly selected households. Schools, hospitals, restaurants, street food vendors and Traditional Birth Attendants (TBA) that were serving the same communities have also been surveyed.

## Study findings

The report includes findings on a range of handwashing indicators from a nationally representative population along with WASH indicators to provide baseline information for use in advocacy, planning and program monitoring.

### Household

Ninety-five percent of the main respondents were mother of the youngest child with significantly fewer caregivers among our urban population (rural: 97%, urban: 94%,  $p < 0.05$ ).

Among households, a location near the toilet for post-defecation handwashing was detected for more than two-thirds of the households; however, only 40% had water and soap available. During handwashing demonstration, 13% of children 3 to 5 years of age and 57% of mothers/female caregivers washed both hands with soap. However, these figures are likely to be an over-estimate of usual practice. Among other WASH facilities approximately half of the households had an improved toilet, 34% had clean improved toilets, 99% had an improved water sources and <25% of the water points were clean. Only 2% had no access to a toilet.

### Schools

Preventing disease transmission in schools can have an impact on school attendance, school grades, and child cognitive development, with longer term consequences. Around three-quarters of the schools included in the survey were primary schools. In 35% of schools a handwashing location with both water and soap was found, around one-third of students' hands appeared to be clean and 28% washed both hands with soap during handwashing demonstration.

A critical issue for schools was limited toilet access for students. Overall there were 187 students per toilet; the majority of schools (84%) had a functional improved toilet for students however, in only 45% of schools were these unlocked. Approximately one-third of all schools had water and soap available inside or near (<30 feet) the improved toilet accessed by students and a quarter of toilets were clean. An improved functional drinking water source was found in 80% of schools, and 41% appeared clean.

### Menstrual Hygiene Management

Menstrual hygiene management remains a challenge, especially in schools. The average age at first menstruation was 12 years. Among the students, only 36% knew about menstruation before menarche. Around a quarter of the female students did not go to school during menstruation and almost one-third thought that menstrual problems interfered with school performance.

Among menstruating girls and women, old cloth was the predominant menstruation management material (82-86%) among which 12% of school girls, 23% of girls at home and 27% of women washed cloth appropriately. Forty percent of surveyed girls reported that they miss school during menstruation for a median of 3 days a month. School facilities may contribute to absence during menstruation.

### Restaurants

Three-quarters of the restaurant managers were also the restaurant owners. Almost all of the food vendors and restaurant owners/ managers were male and 19% of the restaurant cooks were female. About a third (34%) of restaurants had soap and water present at a handwashing location for staff and soap was used in only a few instances during structured observations; ≤14% of handwashing events among restaurant cooks and ≤20% of events among food vendors included the use of soap.

Low soap and water availability in street food vending stalls impacts on practices, evident

from handwashing demonstrations, where only 16% washed hands with soap. Less than 25% of food sold by restaurants and <42% sold by vendors was kept in covered and clean pots or containers. Fifty-six percent of restaurants and 51% of food vendors stored water for cleaning utensils; 40% of restaurants and 44% of food vendors dipped utensils into the stored water for cleaning.

## Hospitals

Of the total 875 hospitals included in the survey, the majority were small non-government private hospitals, with an average of 25 beds per hospital and 12 admissions per day.

Among hospitals, there were differences between handwashing agents available for hospital staff versus for patients/caregivers; 93% of hospitals had available handwashing agents for doctors, 97% for nurses, and 87% for ward boys/ayas compared to just 23% for patients and caregivers. Most daily patient care in Bangladeshi hospitals is performed by family caregivers rather than hospital staff.

The most common handwashing agent for hospital staff was bar soap, followed by alcohol

hand sanitizer for doctors and nurses (33-52%). During structured observations, among all possible handwashing opportunities, only 46% resulted in any handwashing and only 2% resulted in recommended handwashing practice.

Nineteen percent of hospitals had no toilets designated for doctors, 27% had no toilets for nurses/other hospital staff, and 1% had no toilets for patient/attendant. Nearly all hospitals had at least one water source for general use, but many drinking water sources were not improved or protected.

Most hospitals have adequate general water infrastructure, but need to improve drinking water supply, sanitation, environmental hygiene, and waste disposal, to provide a clean, well maintained environment.

## Traditional Birth Attendants

Most selected TBAs were in their mid-50s to mid-60s, have no or low education, are commonly involved in occupations other than attending births, and have been attending births for approximately 20 years. One-third of TBAs had received training on attending birth/delivery.





Traditional Birth Attendants reported suboptimal handwashing, delivery preparation, cord care and neonatal care practices. For example 58% reported that they checked labor progress using bare hands, almost half (44%) did not clean the delivery surface and around 20% reported using a non-sterile blade to cut the cord.

This supports the government strategy to direct pregnant women and families to seek care at facilities that have emergency obstetric and neonatal care, and to increase connections between pregnant women and local skilled birth attendants.

### Rural-Urban variation

The study was powered to examine differences between urban and rural populations. Among almost all population groups there were

significantly poorer facilities and practices in rural areas compared to urban. Urban dwellers were generally better educated and a greater number of assets. Similarly, there were significant associations with increasing wealth and better facilities and practices.

### Ways forward

To address low soap availability, an important primary barrier to good handwashing practice, promoting the use of low cost bar soap alternatives such as soapy water among various settings may be considered.

A hygiene campaign to address handwashing, menstrual hygiene management and food safety could promote sensible convenient practices to reduce disease transmission, increase comfort and enhance educational attainments.



the preliminary report  
can be downloaded from:  
[www.psu-wss.org/bnhbs.html](http://www.psu-wss.org/bnhbs.html)

Published by **WaterAid Bangladesh** in **February 2015**

House 97/B, Road 25, Block A,  
Banani, Dhaka 1213, Bangladesh  
T: +880 2 8815757, 8818521; F: +880 2 9882577  
E: [wateraidbangladesh@wateraid.org](mailto:wateraidbangladesh@wateraid.org)