

# **Essential WASH Actions** DRAFT

JULY 2016



### **ABOUT WASHPLUS**

The WASHplus project supports healthy households and communities by creating and delivering interventions that lead to improvements in WASH and household air pollution (HAP). This five-year project (2010-2015), funded through USAID's Bureau for Global Health and led by FHI 360 in partnership with CARE and Winrock International, uses at-scale programming approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under age 5 globally.

### **RECOMMENDED CITATION**

WASHplus, 2016. Essential WASH Actions. Washington D.C., USA. USAID/WASHplus Project.

### **CONTACT INFORMATION**

WASHplus 1825 Connecticut Ave NW, Washington DC 20009 www.washplus.org 202.884.8000

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) Bureau for Global Health under terms of Cooperative Agreement No. AID-OAA-A-10-00040. The contents are the responsibility of the WASHplus Project, implemented by FHI 360 with CARE and Winrock International as core partners. The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.

### **INTRODUCTION**

Essential WASH Actions (EWAs) are practices that contribute significantly to disease reduction and improved health outcomes. For households with children under 5, performing Essential WASH Actions contributes significantly to their children realizing optimum growth and development. For people with HIV, performing Essential WASH Actions means less diarrhea, better nutritive absorption, more dignity and quality of life, and more resilient households overall. For girls and women, Essential WASH Actions, including menstrual hygiene mean increased school attendance and participation, and for grown women, improved reproductive health, more time, and greater quality of life.

We call them essential because based on research these have the greatest potential to break the cycle of undernutrition and diarrhea. Consistent and correct practice of key water, sanitation, and hygiene (WASH) actions are necessary for child growth and development, as well as for health and resiliency of communities. These basic, yet Essential WASH Actions serve to separate feces from the environment, which has in turn been proven to reduce diarrhea. Open defecation and lack of hygiene are directly linked to diarrhea and child stunting.

This toolkit defines the optimal actions that should be the ultimate goal for communities to achieve in each area. Below the actions are a subset of related practices that consider what is feasible yet effective in resource constrained settings. We acknowledge that each project team may need to define practices that are more immediately "doable" in their context, yet effective at reducing diarrhea and other related morbidity, and work in stages toward optimal practices.

### **Existing Evidence Justifies Integration of WASH Actions**

A significant proportion of diarrheal diseases could be prevented by integrating WASH approaches (e.g., sanitation promotion, treatment and safe storage of drinking water, and hand washing with soap) into existing HIV and AIDS programs. "Diarrhea" is many things, and some diarrheagenic pathogens may cause other serious outcomes (e.g., campylobacteriosis can lead to Guillian Barré syndrome). In addition to diarrhea, countless other diseases and opportunistic infections, including toxoplasmosis, parasites, non-TB mycobacterial infection, trachoma, Rotavirus, etc.) can be prevented or minimized with safe water, sanitation, and hygiene promotion. Links provided at the end of this brief elaborate the evidence base. In short:

**Safe feces handling and disposal** has been shown to reduce the risk of diarrheal disease by 30 percent or more (Fewtrell et al. 2005). Research in Uganda indicated that the presence of a latrine in the family compound was associated with fewer episodes of

diarrhea, fewer days with diarrhea, and fewer days of work or school lost due to diarrhea in PLHIV (Lule et al. 2005).

**Open defecation** (or uncontained feces) is strongly linked to child growth, explaining 54% of the variation in child height (contrasting with GDP, that explains only 29% of the variation in height, Spears 2013<sup>i</sup>.

**Optimal hand washing** prevents diarrhea effectively when done properly and at critical times. A meta-analysis of hand washing studies conducted in developing countries concluded that hand washing can reduce the risk of diarrhea in the general population by 42 percent to 44 percent (Curtis et al. 2003). Hands should be washed before preparing food, before feeding a child or eating, after defecating, after cleaning a baby or changing a diaper, and after cleaning up the feces of a person who is chronically ill.

**Treatment and safe storage of drinking water** at the point of use (POU) has been shown to reduce the risk of diarrheal disease by 30 percent to 40 percent (USAID 2004). Safe water in combination with a locally available antibiotic prophylaxis (cotrimoxazole) reduced diarrhea episodes by 67 percent. Evidence is now conclusive that simple, lowcost strategies for treating and safely storing water at the household level can greatly improve the microbial quality of water and result in diarrheal disease morbidity reductions comparable to those achieved by hand washing and safe feces handling and disposal (Sobsey 2002).

Therefore, improved WASH practice should be part of the "hypothesis of change" that serves as the foundation for projects and programs.

Emerging evidence is linking fecal ingestion with linear growth faltering, impaired child development and oral vaccine failure<sup>ii iii</sup> (Prendergast 2014, Korpe 2012) independent (or without overt signs of) diarrhea, further The concept of Essential WASH Actions is not new, and some institutions have identified Essential Hygiene Actions as part of their programming. Essential WASH Actions take this concept and apply it more comprehensively to the full set of safe water, safe disposal of feces, handwashing, food and animal hygiene behaviors contributing to health and growth.

strengthening the argument to include Essential WASH Actions into many programmatic hypothesis of change.

To support integration of improved WASH practices through a range of programming platforms, this document sets out to clearly state essential actions to incorporate into program planning as behavioral / outcome objectives. They can be applied to WASH specific programs, or integrated into nutrition, education, or other sectoral areas.

Menstrual hygiene management (MHM) is not included in this set of Essential WASH Actions. Although MHM is clearly essential to a comprehensive WASH initiative, these EWAs are designed to complement the Essential Nutrition Actions (ENAs) and are linked to improved nutrition outcomes.

### Essential WASH Actions Are Not "Messages," They Are Behaviors

Messages are crafted communications for particular audiences to be appealing, convincing, and motivating. The Essential WASH Actions below can be customized as messages for particular audiences.

### Learning from WASH Behavior Change Programming Shows That Households Cannot Adopt and Practice All Ideal WASH Behaviors at Once

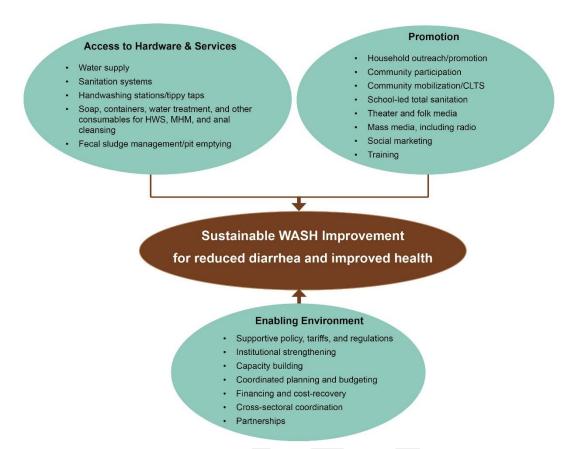
People will more readily adopt one or a few behaviors at a time, particularly if the behaviors are considered feasible from the point of view of the household. Programmers most often

prioritize resource-constrained target households, so the WASH action targeted for improvement must be considered feasible within constrained settings from both a behavioral and also a practical viewpoint: Does the target audience consider it feasible to carry out a proposed behavior change, considering their economic and social context, and considering their perception of resources available or potentially accessible to them? The behavior must also be effective, though it may not be ideal.

# CHANGING WASH BEHAVIORS ONE SMALL DOABLE ACTION AT A TIME

A small doable action is a behavior that, when practiced consistently and correctly, will lead to personal and public health improvement. It is considered feasible by the householder, from HIS/HER point of view, considering the current practice, the available resources, and the particular social context. Although the behavior may not be an "ideal practice," more households likely will adopt it because it is considered feasible within the local context. (Note that we use the terms "behavior" and "practice" interchangeably in this brief.)

Performance of the behavior must contribute to an improvement in a desired health outcome. WASHplus calls these **"small doable actions."** We suggest selecting a limited number of Essential WASH Actions to include in program strategies and plans.



EWA are intended for use in both programming planning and implementation. First, they guide articulating a hypothesis of change and program planning. The same EWAs can then be promoted at community and household levels. They are also relevant at the institutional level (health center, hospital, school), but may require reframing for relevance.

Improving WASH practices included in the list of EWAs often requires attention to the supply of enabling products and services, a supportive policy and conducive environment, and persuasive promotion. So to see improvements in EWAs requires comprehensive or at least coordinated programming that assures the interaction of all three domains—supply and services, enabling environment, and promotion.

At the household level, essential WASH practices require at least a minimal level of products or services and promotion that solves problems and delivers a set of benefits. For washing hands, a household needs adequate quantities of water, which may be facilitated by a watersaving tippy tap. They need soap, or another acceptable cleansing agent like ash. They need key knowledge and skills around how and when to wash hands, as well as a supportive social environment that supports hand washing at critical times.

# **ESSENTIAL WASH ACTIONS**

More detail found on corresponding references sheets

"\*" still require verification with evidence base to finalize these draft EWAs.

#### HAND WASHING WITH SOAP

- 1) Install a dedicated hand washing station with flowing water and soap within 10 paces of the cooking area and the toilet.
- 2) Wash hands with soap and flowing water before preparing food, before eating food, and before feeding young children.
- 3) Wash hands with soap and water after going to the latrine/toilet and after cleaning the child's feces; after handling animals or dung or working in the field.
- 4) Wash young child's hands regularly, especially before mealtime.

### **FOOD HYGIENE**

- 5) Wash cooking and serving containers and utensils "frequently" (need to specify) with flowing water and soap.
- 6) Dry dishes on a rack or dedicated shelf out of reach of children and animals.\*
- 7) Cook and reheat all hot food until boiling or steaming throughout.
- 8) Wash raw foods with treated water, and prepare on freshly washed surface with cleaned utensils.
- 9) Do not consume food that has been sitting at room temperature for more than TBD hours.
- 10) Store food in the coolest location, out of the sun and covered from flies and animals.

### SAFE STORAGE AND TREATMENT OF HOUSEHOLD DRINKING WATER

- 11) Collect drinking water from a safe, protected source.
- 12) Treat drinking water with an effective treatment method.
- 13) Store drinking water in a narrow neck container, covered and raised off the floor.\*
- 14) Extract water by pouring; use a dedicated ladle/dipper that hangs on the wall. \*

### SAFE DISPOSAL OF HUMAN FECES

- 15) Consistently use improved latrines\* (*See reference sheet for definition*), including childfriendly latrines and accessible latrines to encourage all household members to use them. Place any human feces directly into the household latrine.
- 16) Practice age-appropriate actions for safely disposing of child feces, with intermediary steps like diapers or potties, so feces ends up in the latrines and contaminated wash water is isolated from the well site.
- 17) Work toward open defecation free community.

### PROTECT CHILDREN FROM SOIL AND ANIMAL FECES

- 18) Separate children from animal feces. Separate livestock/domestic animals and their feces from cooking areas and areas where young children play on the ground, especially the laundry or kitchen area.\*
- 19) Clean household compound *daily*\* to keep animal feces out of the yard. Place any animal feces into a covered area away from the household or compound.\*



## ESSENTIAL WASH ACTIONS FOR CHILD HYGIENE, by age cohort (Example from Bangladesh) KEEPING YOUR HOUSEHOLD FECES-FREE TO HELP YOUR CHILD GROW



<b>Prenatal</b> (suggested new cohort for all behaviors	Newborn to 1 month	1 to 6 months	7 months to 11 months	1 year to 3 years
<ul> <li>Set up tippy tap handwashing station near latrine and cooking area. Regularly maintain with soap and flowing water.</li> <li>Wash hands with soap and before preparing/ feeding/any touching of food, and after defecation.</li> </ul>	<ul> <li>Regularly maintain tippy tap with soap and flowing water.</li> <li>Birth attendant and any caretaker wash hands with soap before picking up child.</li> <li>Use nappies or soft cloth to catch feces.</li> <li>Throw feces from nappy into latrine if solid enough to do so.</li> <li>Put nappies in dedicated bowl for washing.</li> <li>Rinse out feces from collected nappies and wash with soap. Dump filthy water into the latrine or contained drainage. As last resort toss dirty water far away from standpipe/well.</li> <li>Wash hands with flowing water and soap after cleaning baby and disposing feces.</li> </ul>	<ul> <li>Regularly maintain tippy tap with soap and flowing water.</li> <li>Birth attendant and any caretaker wash hands with soap before picking up child for as long as possible.</li> <li>Use nappies or soft cloth to catch feces.</li> <li>Safely dispose of feces from nappy into latrine.</li> <li>Put nappies in dedicated bowl for washing.</li> <li>Wash a few collected nappies by rinsing out feces, dumping filthy water into the latrine, contained drainage, or as last resort tossing away from standpipe/well.</li> <li>Wash hands with flowing water and soap after cleaning baby and disposing feces.</li> </ul>	<ul> <li>Regularly maintain tippy tap with soap and flowing water.</li> <li>Wash hands before preparing food for baby</li> <li>Wash hands before feeding baby.</li> <li>Regularly wash child's hands with soap and water, particularly before feeding time.</li> <li>Treat water if giving to baby or mixing with food.</li> <li>Use nappies or soft cloth to catch feces.</li> <li>Safely dispose of feces from nappy into latrine.</li> <li>Put nappies in dedicated bowl for washing.</li> <li>Wash a few collected nappies by rinsing out feces, dumping filthy water into the latrine, contained drainage, or as last resort tossing away from standpipe/well.</li> <li>Begin "toilet training," starting with a potty/commode. Introduce it as "the child's place," and let child sit even when not defecating. In early months, support child to sit.</li> <li>Put water or ash in bottom of potty to avoid sticking.</li> <li>If child poos without nappy into latrine.</li> <li>Wash hands with flowing water and soap after cleaning baby and disposing feces.</li> <li>Heat baby's food completely so that it is boiling or steaming throughout before serving. Allow to cool in air to safe temperature. Test temperature by dabbing on wrist.</li> <li>Wash any vegetables or other foods to be consumed raw with treated water before serving.</li> <li>Keep compound free of chicken feces by sweeping daily to dispose of feces.</li> </ul>	<ul> <li>Regularly maintain tippy tap with soap and flowing water.</li> <li>Wash hands with soap before preparing food fo child.</li> <li>Wash hands with soap before feeding child.</li> <li>Regularly wash child's hands with soap and water, particularly before feeding time.</li> <li>Treat water if giving to child or mixing with food</li> <li>Continue toilet "etiquette"/potty training.</li> <li>Use nappies or potty to catch feces.</li> <li>Put water or ash in bottom of potty to avoid sticking.</li> <li>Safely dispose of feces in latrine.</li> <li>Wash hands with soap after cleaning baby and disposing feces.</li> <li>Toss water away from water source if rinsing potty near the source.</li> <li>When washing any laundry with feces (sheets, diapers, any), contain waste water in wash bucke and dispose of in latrine or toss away from immediate wash area when child accompanies mother.</li> <li>Keep compound free of chicken feces by sweeping daily to dispose of feces.</li> <li>Keep chicken/ducks/fowl and children apart (either corral chickens or use playpens for children).</li> <li>A final 3–5 year column will be created to include toilet training and handwashing/ socializing behaviors and making latrines child friendly.</li> </ul>

<sup>&</sup>lt;sup>i</sup> Spears, D., 2013. *How much international variation in child height can sanitation explain?* (Policy research working paper ; no. WPS 6351). Washington, DC, USA, World Bank. Available at: http://go.worldbank.org/SZE5WUJBI0

<sup>&</sup>lt;sup>ii</sup> Prendergast AJ, Humphrey JH The stunting syndrome in developing countries. Paediatr Int Child Health 2014; 34:250–65. [PMC free article] [PubMed]

<sup>&</sup>lt;sup>iii</sup> Korpe PS, Petri WA Jr Environmental enteropathy: critical implications of a poorly understood condition.Trends Mol Med 2012; 18:328–36. [PMC free article] [PubMed]