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WASH & HIV/AIDS INTEGRATION: THE EVIDENCE BASE PRIORITY WASH ACTIONS

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FOREWORD

Water, sanitation, and hygiene (WASH) practices are essential to maintaining healthy lives, yet most countries and donors have not included WASH when developing national HIV policies and programs.

The World Health Organization and the United States Agency for International Development began to explore how to integrate WASH into HIV programming and the U.S. Centers for Disease Control and Prevention, in particular, developed and studied approaches to providing safe drinking water for people living with HIV.

Since 2006, WHO and USAID have supported three pioneering country applications that integrated WASH into HIV programs: in Ethiopia, Malawi, and Uganda. In addition, USAID has promoted WASH-HIV integration within different US Government programs through various working groups of the President's Emergency Plan for AIDS Response. Many different donors, organizations, and programs are now considering WASH when developing HIV programs and are seeking more guidance for how to do it.

This practical document is a response to requests from countries and programs for concrete guidance on how to integrate water, sanitation, and hygiene practices into HIV policies and programs. Our colleagues around the world who have reviewed this document think this is a valuable publication and we hope that you will find it useful in your work to improve the health and lives of people living with HIV.

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NATIONAL HIV/AIDS POLICIES, GUIDELINES, STANDARDS, OTHER MATERIALS

Many countries have written various documents to assist health professionals develop HIV programs including strategies, guidelines, standards, action plans, handbooks, and training manuals. Further, some countries have specific guidance for different aspects of HIV prevention, care, and support: that include guidelines for home-based care, orphans and vulnerable children, counseling and testing, food and nutrition, prevention of mother-to-child transmission of HIV, etc.

The USAID/HIP team conducted a systematic review of HIV and AIDS policies and guidelines from 14 countries—eliciting the documents directly from country programs or from national AIDS program web sites. Special attention was given to obtaining available materials from several countries with high HIV/AIDS prevalence. Every country had very different types of materials. Thirty HIV policy-related documents from 14 countries (Cambodia, Ethiopia, Guyana, Haiti, India, Kenya, Malawi, Namibia, Rwanda, South Africa, Tanzania, Vietnam, Zambia, and Zimbabwe) were reviewed. The WASH areas addressed most often were safe drinking water and safe food consumption. A few documents mentioned hand washing, feces disposal, and personal hygiene, and this was frequently located in the background information. No document mentioned anything about water quantity, water storage, menstrual blood management, or adapting sanitation and water supply systems for people with mobility restrictions. And these documents provided almost no information on *how* to practice WASH actions. Countries often have very comprehensive WASH action information in more general health or environmental health documents. If so, special efforts should be made to link these health documents more comprehensively with HIV policy documents.

The two standards reviewed (Zimbabwe 2004 and Namibia 2008) were the most explicit in listing specific WASH behaviors and Zambia's nutrition guidelines covered many WASH behaviors in some detail. A review of home-based care guidelines for a 2007 WASH-HIV integration meeting in Malawi found that Zimbabwe's policy most comprehensively integrated WASH and HIV and Zimbabwe's guidelines have some good material and graphics that can be adapted for use in other countries. Malawi's home-based care guidelines provided greater detail than most on using safe water and keeping the environment clean. Malawi's sanitation policy suggested that programs be HIV and AIDS aware. Kenya has several levels of HIV policy and guidance. The HIV Care and Support Handbook for home-based care workers provides useful and specific information, actions, and standards for WASH. In documents from other countries, language was very general for example, suggesting providers and HIV affected families maintain personal hygiene and perhaps drink boiled or "clean" water, but most documents did not give any specifics.

Clearly, enhanced guidance and recommendations are needed regarding water, sanitation, and hygiene in national HIV guidelines from home-based care, OVC, food and nutrition, PMTCT, etc. In fact, as observed, most documents provide very general guidelines that need to be made more specific and actionable. The sections below highlight where to include greater WASH emphasis and suggest specific language to include, especially for country policies and guidance.

1. HOW to INTEGRATE WASH into GLOBAL HIV/AIDS POLICY and GUIDANCE

Key agencies such as UNAIDS, USAID, and WHO have developed key reference documents that are used by national AIDS programs and NGOs to set local policy and guidance. To assist countries in integrating WASH into HIV policies, these agencies also need to integrate WASH into these reference documents. The following list identifies the types of actions that should be taken at this global level.

- ◆ Modify reference documents used to develop country policies and guidelines.
 - Include necessary WASH behaviors in the minimum package and counseling sheet and supplies in the kits. Be specific, e.g. list key WASH practices, any equipment, supplies needed and how to do each practice.
 - Include WASH in monitoring and recording forms.
- ◆ Revise “Minimum Packages”, “Home-based Care Kits”, school-based HIV education kits, indicator lists, and monitoring forms to include WASH.
 - For policies, provide a general description of any WASH package contents.
 - For guidelines, provide more specific descriptions of WASH topics.
 - For standards, explain each WASH practice in detail so providers know what to do and how to instruct householders in WASH practices.
- ◆ Ensure policies and guidelines suggest environmental health collaboration at all levels, as part of the multisectoral focus. This could include water, sanitation, and education program managers and others as appropriate.
- ◆ Learn from other multisectoral interventions. For example, food/nutrition security guidelines may already have highlighted important WASH behaviors.
 - Ensure WASH elements, indicators, etc. are integrated into food/nutritional security activities
 - Promote a WASH minimum package for home-based care and support services that emphasizes key hygiene behaviors and related enabling products and infrastructure such as latrines, hand washing stations, soap, chlorine solution.
- ◆ Develop list of key WASH behaviors for PLHIV
 - Develop generic assessment and counseling tools on the WASH behaviors.

2. HOW to INTEGRATE WASH into **COUNTRY HIV/AIDS POLICY** and **GUIDANCE**

This section aims to help countries identify where and how to include specific language on water, sanitation, and hygiene in guidance documents to minimize the spread of diarrhea throughout HIV affected communities and beyond.

It is not necessary to develop a free-standing WASH and HIV Policy, but preferable to integrate WASH policies and guidance into overall HIV policies, whether general HIV or area specific (such as OVC, HBC, PMTCT, etc.). Provide a framework for integrating evidence-based WASH approaches into HIV/AIDS policies and guidelines. To support PLHIV, OVC, and their families further, foster linkages with other health and non-health programs that address water and sanitation insecurity and needs in targeted populations, etc. The table below provides criteria to assess the extent of WASH considerations in current country policy documents.

HOW to ASSESS COUNTRY POLICIES, GUIDELINES, & HANDBOOKS for SAFE WATER, SANITATION, and HYGIENE CONSIDERATIONS

Your overall objective is to assess the current level of WASH considerations in existing national policies, guidelines, and handbooks, and add or improve key sections as appropriate.

The following definitions are provided to clarify the general content of policies and guidelines, to guide the evaluation and/or modification of documents.

Policy: As a general rule, national or regional HIV/AIDS policies state a set of basic principles and [associated guidelines](#), formulated and enforced by the governing body, intended to influence and determine decisions, actions, and other matters.

Guidelines aim to streamline particular processes according to a set routine. By definition, following a guideline is not always mandatory ([protocol](#) would be a better term for a mandatory procedure). Guidelines are issued or adopted by an organization (governmental or private) to make the actions of its employees more predictable, and presumably of higher quality.

Standards are technical specifications or procedures that lay out characteristics of a product or procedure such as levels of quality, performance, safety, or dimensions.

Handbooks further elaborate guidelines to specify processes further, and often include job aids and/or counseling tools to support the quality implementation of processes.

Steps for Assessing and Strengthening Country Policies, Guidelines, and Handbooks:

1. If possible, obtain both printed AND electronic versions of any documents. If not available, it is possible to work with just print documents.
2. Start with the table of contents and chapter headings.
 - If the electronic version is available, literally do a word search (the “find” function under edit). Otherwise, visually scan the table of contents (TOC) and headings for the following key words:

Water, drinking, sanitation, toilet, latrine, hand washing, hygiene, feces (faeces for British English) and diarrhea (diarrhoea for British English).
3. Highlight these words in the TOC and headings.
4. Refer to the sections corresponding to the sections containing the key words.
5. Evaluate existing descriptions/statements associated with the key words.
 - Assess if the description or entry is adequate to precisely describe policy or guide a practitioner to implement the policy or practice.
 - Is it specific enough to serve as a recipe or formula?
 - Will it guide choices, when decisions are required or several options available?
6. Scan the document again, and note where entries should be added.
 - Appropriate places include any mentions of nutrition, feeding, supplementary feeding, home hygiene, personal hygiene, and sections pertaining to care and support, home-based care, prevention of mother-to-child-transmission of HIV, counseling and testing, etc.

Text from this document, particularly from the PRIORITY WASH PRACTICES for NATIONAL PROGRAMS can be added in appropriate sections.

The following sections provide suggestions for how countries can improve WASH guidance when they write or revise their HIV-related policies, guidelines and handbooks.

Water Access

- ◆ Care and support guidelines should identify technologies to gather water more easily such as lengthening pump handles or installing cement platforms for children to stand on to pump water. Further, guidelines should identify water-saving techniques and describe how to install them. For example, instructions on rain water catchment systems and how

to construct a “tippy-tap” should be included in all care and support guidelines in resource-poor areas. Often made from a plastic jug, gourd, or other local material, a tippy-tap regulates water flow to allow for hand washing with a very small quantity of water. See Annex 3 for possible material to include in handbooks.

Water Quantity

- ◆ National HIV/AIDS guidelines should include estimates of water needed by HIV-affected households, which are greater than the “basic access” estimate of 20 liters per person per day for the general population. Evidence suggests that an additional 20 to 80 liters of water per day is required to support bedridden PLHIV (Ngwenya 2006). Home-based care guidelines should include a section on the amount of water needed to keep PLHIV and their environment clean. This should include an estimate of water quantity needed specific to the area as well as information on what to clean and how to clean. Care and support guidelines should provide specifications for water collection technologies such as water conservation and rain water catchment. See chart on page 11 that specifies quantities of water by activity.

Water Quality

- ◆ Guidelines and training of care providers should include detailed instructions on water treatment techniques such as disinfection with sodium hypochlorite solution (chlorine), boiling, SODIS, and filtration, as well as information on proper storage and handling to reduce the potential for recontamination. See Annex 3 for possible material to include.
- ◆ Include sodium hypochlorite solution and information on other water treatment options as part of all ARV distribution to ensure medicines are taken with clean water.
- ◆ Include covered water vessel with taps (if commonly available) in a preventive care package distributed to PLHIV along with oral rehydration salts, soap, or other evidence-based interventions; use the most typical locally manufactured vessels available to avoid stigmatization. For the community at large, promote the same container and water treatment product that is included in ARV distribution or broader social marketing of water disinfection products.

Sanitation Access

- ◆ Identify and promote sanitary options for defecation.
- ◆ Promote construction of improved pit-latrines at the household level where space exists. In urban areas where space is limited, promote a feasible option such as “condominial” latrines/toilets connected to shared septic tank/system, privately managed pay-for-use public toilets, and above ground latrines, based on contextual and environmental factors.
- ◆ Promote client-friendly latrines in household that incorporate the following suggestions:
 - Ensure that the toilets or latrines and the entrance are wide enough to accommodate more than one person to assist unstable users.
 - Recommend/provide alternative technologies such as installing poles or strengthening venting poles to serve as support; installing ropes, bars, or handrails; providing seats/stools and other devices; constructing a ramp for easy access.
 - Design latrines that use natural light and have adequate ventilation.
 - Identify and promote appropriate options for sanitation when mobility is limited, such as bedside commodes or bedpans (made of plastic or locally available materials) and squat pots.
 - Provide a hand washing facility with soap or soap substitute (ash) near the latrine.
 - Provide detailed instructions on keeping the person, house, and surrounding environment clean.

Sanitation, Hygiene and Hand Washing Knowledge and Practice

- ◆ Develop a comprehensive water, sanitation, and hygiene component to include in all care and support guidelines and training, including:

- guidance and technologies on hand washing in water-scarce settings;
 - critical times for hand washing and proper technique;
 - soap substitutes;
 - proper disposal of waste water; proper use and maintenance of water and sanitation facilities;
 - household water treatment and safe storage; and
 - clear communication of risks associated with and protective measures required for feces handling (e.g., when bathing clients and laundering soiled bedding/clothing).
- ◆ Develop hygiene promotion materials for care and support programs that use visuals and are suitable for low-literacy audiences; distribute them to caregivers and others who interact with HIV-affected households.
 - ◆ Include water, sanitation, and hygiene in all nutrition guidelines for care and support programs as diarrhea prevents PLHIV from absorbing ARV medicines and essential nutrients.

3. ASSURING HIV/AIDS POLICIES and GUIDELINES SUPPORT WASH

Review current policies and guidelines and modify texts appropriately. The section above provided suggestions for topic areas to include when revising HIV policies, guidelines, and handbooks. This section provides examples of specific language that can be used to do this using safe drinking water as an example.

In a **national policy**, existing text might read:

All HIV-infected persons should drink safe water or all households without safe water should boil water for PLHIV to consume.

An improvement to this text would be to add:

All HIV-affected households should treat all drinking water and store in a narrow mouthed, covered container.

The text in **national guidelines** would include the text above from the policy, but include more details about safe hygiene practices.

Any containers provided at no cost should only be those that are commonly used and readily available in the marketplace. A container with a spigot is ideal but not always feasible for households. Items only available to PLHIV should be avoided because they identify recipients as HIV-positive and may be stigmatizing.

Sodium hypochlorite solution or tablets is the ideal water treatment method because the residual chlorine will protect the water from recontamination for 24 hours, but any of the four effective methods (hypochlorite solution/chlorination, solar, filtration, and boiling) are acceptable.

Develop and implement national **Standards of Practice** that delineate the essentials of delivering WASH in HIV/AIDS settings at various practice levels and settings. This may include performance expectations for individuals responsible for WASH or HIV programming (e.g. nurses, volunteers, teachers), professional standards, etc. National standards should repeat the guidelines but also include language on 'how-to' treat water, using each method. This language can be adapted from the WASH priority actions section at the beginning of this document.

Handbooks that are developed would repeat the language from the standards, but also include counseling tools and job aids for treating and safely storing drinking water.

National program managers are encouraged to understand the essential WASH actions for diarrheal disease prevention; to use this information to determine what types of water, sanitation, and hygiene approaches already exist in country programs (HIV or otherwise); to examine the types of potential WASH approaches, the cost of these approaches, and which programs might fit best into HIV/AIDS programming in your country; and to prioritize these activities for integration into country plans.

The following language could be included in its entirety or adapted and inserted into different documents such as guidelines, standards, handbooks, etc.

SAMPLE TEXT

Integrating WASH into HIV Care and Support Settings

Many life-threatening opportunistic infections are caused by exposure to unsafe water, inadequate sanitation, and poor hygiene. Diarrhea, a very common symptom that can occur throughout the course of HIV/AIDS, affects 90 percent of PLHIV and results in significant morbidity and mortality, especially in HIV-positive children. At least 30 percent of diarrheal diseases could be prevented through integrated programs involving the provision of water treatment and safe storage, safe feces disposal, and promotion of key hygiene practices. HIV and AIDS programs should consider building linkages among the health, water, and sanitation sectors to improve the number of safe water supply points and latrines that are accessible and close to where they are needed.

Hand Washing: Washing hands at critical times, with soap and with proper technique is the most important hygiene measure to be integrated across all HIV and AIDS programs. Although hand washing studies are limited in HIV-positive clients, data support the benefits of hand washing in the general population, sometimes showing a reduction in diarrhea in Bangladeshi adults by 62 percent (Shahid 1996) and by 53 percent in a randomized controlled trial of children in Pakistan (Luby 2004). Programs can provide guidance and training on washing hands and proper technique, at a minimum. Programs should place hand washing stations with soap (or soap-substitute, such as ash) in facilities, community care points, and in the household. Some programs in water scarce situations should consider using a “tippy-tap,” a simple plastic jug, gourd, or local material that regulates the flow of water to allow for hand washing with a very small quantity of water.

Safe Drinking Water: HIV/AIDS programs are encouraged to ensure PLHIV have access to safe drinking water in facility-based care settings and to support PLHIV with household water treatment and safe storage methods in communities where there is not a reliable source of safe water. Several technologies are viable for treating water in the home, including chlorination and storage in an appropriate vessel, various types of filters, proper boiling, solar disinfection (SODIS) using heat, and UV radiation and combined chemical coagulation, flocculation, and disinfection.

Sanitation generally includes the collection and disposal of human excreta (feces, urine, sputum, and sweat) and management of trash, wastewater, storm water, sewage, and hazardous wastes. Most countries have poor access to a range of basic sanitation systems; therefore it is important to focus on simple efforts, like feces handling and disposal, which have the biggest health implications. Disposing of feces safely, isolating feces from flies and other insects, and preventing fecal contamination of water supplies would greatly reduce the spread of diseases. Studies have shown that those without easy access to latrines will often resort to open defecation methods.

Although HIV programs have not traditionally funded the construction of simple, on-site waste disposal systems like latrines, many sanitation interventions that will benefit PLHIV and their families can be supported. For example, health workers, caregivers, family members, and PLHIV

need to learn how to build a latrine and be trained on how to use existing latrines safely. Further, installing poles or stools in a latrine will assist weak PLHIV to use the latrine. If a latrine is not available, feces must be collected in a bedpan and buried away from the facility, clinic, and home, and away from where animals can dig it up. If a client is weak, less mobile, or bedbound and cannot use a latrine, programs can ensure access to simple commodes or bedpans that can be used by PLHIV to defecate in the bed or house and that can be emptied by caregivers. Adult treatment care programs can ensure that PLHIV with diarrhea are supported to protect their skin, sheets, clothing, and mattress from becoming soiled with feces. Strategies such as placing a plastic sheet covered by paper or a cloth under the client's buttocks are very simple and cost-effective measures that can ease the care giving burden.

Ensuring **personal, nutritional, and environmental hygiene** is essential to reducing the infectious disease burden experienced by PLHIV. The combination of improved water treatment and handling, feces removal, personal hygiene (PLHIV & health worker hygiene and cleanliness), food hygiene (safe cooking, mixing, storing, and disposing of food), and ensuring a hygienic environment in clinics and in homes will effectively reduce water and sanitation related diseases. Hygiene education must particularly be targeted at caregivers and volunteers involved in home-based care and must be one element in home-based care training.

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LIST OF ACRONYMS

AFASS	Acceptable, feasible, affordable, sustainable and safe
ART	Antiretroviral therapy
ARV	Antiretroviral
BCP	Basic Preventive Care Package
CBO	Community-based organization
CDC	Centers for Disease Control and Prevention
COP	Community of Practice
CT	Counseling and testing
DALY	Disability-adjusted Life Years
EPI	Expanded program on immunization
HBC	Home-based care
HIP	Hygiene Improvement Project
HIV/AIDS	Human Immunodeficiency Virus/Acquired ImmunoDeficiency Syndrome
NaDCC	Sodium dichloroisocyanurate
NGO	Non-governmental organization
OI	Opportunistic infections
OSSA	Organization for Social Services for AIDS
OVC	Orphans and vulnerable children
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	Persons living with HIV
PMTCT	Prevention of mother to child transmission of HIV
PSI	Population Services International
SODIS	Solar disinfection
SWS	Safe water system
UN	United Nations
UNICEF	United Nations Children's Fund
US	United States
USAID	United States Agency for International Development
UV	Ultraviolet
WASH	Water, sanitation, and Hygiene
WHO	World Health Organization
WSP	Water and Sanitation Program, World Bank