

HEALTH COMMUNICATION
MESSAGE GUIDE

Hygiene & Environmental
Health (HEH) and
Neglected Tropical Diseases (NTDs)

October, 2018



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ACKNOWLEDGEMENTS

The development of this guide is made possible with the active participation and engagement of partners working on HEH as well as NTD issues in Ethiopia. The Federal Ministry of Health acknowledges the following organizations that contributed for this guide.

Amref Health Africa

CARE Ethiopia

Carter Center

Christian Blindness Mission (CBM)

CRS Ethiopia

Fred Hollows Foundation (FHF)

GTM - Girarbet Trachoma Mahiber

International Trachoma Initiative (ITI) Water aid

JHUCCP

JSI L10K

JSI/SUHEP

KalaCORE

Light for the World

Menschen fur Menschen Foundation

NALA Foundation

National Podoconiosis Network (NAPAN)

Orbis International Ethiopia

Plan International Ethiopia

RTI

Sight Savers

Splash International

Synergy Habesha Films

UNICEF Ethiopia

USAID

WHO

World Vision Ethiopia


This guide is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and RTI. The contents are the responsibility of Federal Democratic Republic of Ethiopia Ministry of Health and do not necessarily reflect the views of USAID or the United States Government.

FORWARD

For maximum impact in improving the health of the community, health communication requires the intensive effort of different stakeholders—including government agencies, donors, development and humanitarian partners, media houses, and health workers—at various levels. For impactful health communication interventions, it is crucial that the efforts of the stakeholders are coordinated and that the messages/content shared are accurate, consistent, and transmitted via different channels of communication in a timely manner.

This national hygiene and environmental health (HEH) and neglected tropical diseases (NTD) message guide has been developed to support the Ethiopian government's and its partners' efforts to improve HEH and NTD issues across the country. It is a step forward to ensure that messages on HEH and NTDs are technically accurate and consistent across all communication channels. We encourage health providers, program implementers, media professionals, and other stakeholders to use this guide to ensure that accurate, timely, and reinforcing messages are transmitted to communities and households.

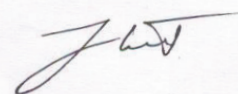
The content in this guide has been generated through the participation of technical experts from the Federal Ministry of Health and its partners in line with the intervention priorities of the HEH and NTD case teams in their respective directorates. We would like to thank all partner organizations as well as the experts from the Ministry and partners who have contributed in making this guide possible.



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ACRONYMS

FMOH	Federal Ministry of Health
GWD	Guinea Worm Disease
HEH	Hygiene and Environmental Health
HEP	Health Education and Promotion
HEWs	Health Extension Workers
HH	House Hold
MDA	Mass Drug Administration
MHM	Menstrual Hygiene Management
NTD	Neglected Tropical Disease
PHCU	Primary Health Care Unit
TTS	Trachomatous Trichiasis Surgery
USAID	United States Agency for International Development
WASH	Water, Hygiene, and Sanitation

BACKGROUND

Health promotion and communication are important components of disease prevention and control programs. However, promotion alone does not necessarily result in improved healthy practices. Although people may learn about and understand why diseases spread, new hygiene practices may be too unfamiliar, too difficult, or take too much time, especially for rural communities. To ensure health-focused activities and messages are appropriate for their intended audiences, communities should be fully engaged throughout the development process. Special attention should be given to building on local knowledge and promoting existing positive traditional practices. The participatory process helps to highlight that changing behaviors and social norms is necessary not only at the community level but also among key decision makers.

All stakeholders, including local government officials, health workers, and families should be encouraged to recognize the importance of harmonized health messaging. Effective health communication takes place when the harmonized messages are delivered through different channels to similar audiences. To that end, the Federal Ministry of Health (FMOH) recognized the importance of developing a standard set of core messages that can be used by health communicators and coordinating health communication efforts with regional health bureaus, and other stakeholders and partners to ensure that messages delivered to communities across different health areas are consistent. This document provides standard core messages for hygiene and environmental health (HEH) and neglected tropical disease (NTD).

The core messages in this guide can be adapted as key messages for intended audiences by taking into consideration the communication channels they prefer and their sociocultural context. Depending on the psychographic, cultural, and demographic context of their audiences, key benefits may also be incorporated into the core messages.

The development of the core messages was done through a consultative process that began with a workshop involving the FMOH NTD, HEH, and Health Education and Promotion case teams as well as partners working in these relevant health areas.

The core messages included in these documents relate to the major strategic components of HEH, specifically

- Personal Hygiene,
- Water And Food Hygiene,
- Sanitation,
- Housing And Institutional Health And Pollution,
- HEH Response During Emergencies, and
- Occupational Health And Safety

The core messages included in these documents relate to the four major NTD intervention strategies put forward by the World Health Organization and adopted by FMOH. The strategies include:

- Mass Drug Administration
- Intensified Case Management And Disability Prevention;
- Vector Control; and
- Integrated Water, hygiene, and sanitation, and Neglected Tropical Disease
- Messages Peculiar to Specific Neglected Tropical Diseases

To note, core messages specific to each NTD or cannot be categorized under all four strategies are listed under each NTD.

PURPOSE OF THE GUIDE

The purpose of this HEH and NTD message guide is to provide health communication practitioners working on HEH interventions in Ethiopia with Ministry-approved messages so audiences will not receive confusing or conflicting messages from different sources. All health communication practitioners working on HEH & NTD interventions in Ethiopia are expected to adhere to the core messages provided in this guide.

METHODOLOGY

The process of developing the core messages began by setting a shared vision. We want to see a healthy Ethiopian community that enjoys living in a clean and safe environment. Based on the current situation and evidence, we identified and prioritized the most crucial HEH and NTD health problems and then recommended healthy behaviors to best address those issues. The identification of the root causes of those health problems was done through engaging and rigorous group work. The groups then focused on those problems that could potentially be solved with a communication intervention, identified the target audiences for each health issue, and, finally, developed the core messages for each of the identified audiences. The result was a list of generic core messages that could be used as key messages after the specific sociocultural and demographic profiles of the intended audiences are identified and a quick formative assessment is made.

WORKING DEFINITIONS

Core Messages are generic messages that help advance recommended behaviors for health problems. Core messages relate to actions by a specific group/audience that would help address root causes of a health problem.

Key Messages are essentially core messages that include key benefits for the intended audiences. The key messages address why the audience should practice the recommended behaviors.

Barriers or Communication Problems are root causes that a health communication intervention can and should address a prioritized health problem can have more than one root cause that can be a barrier that can be addressed by communication.

Basic latrine: the lowest-cost option for securing sustainable access to safe, hygienic and convenient facilities and services for excreta and sillage disposal that provide privacy.

Environmental Health: all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors and it encompasses the assessment and control of those environmental factors that can potentially affect health.

Improved latrine: a sanitation option (Flush/pour flush to piped sewer system, Flush/pour flush to septic tank, Flush/pour flush to pit latrine, soak pit or cesspool, Ventilated improved pit (VIP) latrine, Pit latrine with cleanable slab, Composting toilet) plus a Handwashing facility with soap and water for securing sustainable access to safe, hygienic, sealed and convenient service for excreta disposal providing adequate and secured privacy, protected from rain, built either on site or connected to sewer or septic tank while at the same time ensuring a clean and healthful living environment.

USING THE CORE MESSAGES

The core messages provided in this guide are generic but adaptable to the specified audiences. These core messages must be presented in a manner that appeals to and resonate with the intended audiences. To do so, it is important that health communication practitioners conduct a quick formative assessment to identify the demographic, cultural, and psychosocial characteristics of the specific audiences they want to reach. The key messages should then be developed, using the core messages, based on the findings of the assessment.

The key messages can be used to reach the intended audiences through different channels, including mass media and interpersonal communication. Creative communication concepts should be developed with the relevant communication professionals.

NOTE: Refer to the National Health Communication Material Development Guideline for detailed information on developing health communication materials.

SECTION I

Hygiene and Environmental Health

PRIORITY ISSUE I

PROPER HANDWASHING

When hands are contaminated with disease-causing bacteria and viruses, these pathogens can either directly enter an individual's body or pass from person-to-person. Washing hands with soap can improve health and save lives by preventing bacteria or viruses from entering the body and causing infections. Contamination can occur using the toilet, changing a child's diaper, coughing, sneezing, touching other people's hands, and touching other contaminated surfaces. The health risks of not washing hands with soap and water at these critical times are often not taken seriously and, even when people know the benefits of washing hands, they often do not make the extra effort to routinely practice the behavior. Handwashing with soap significantly reduces the incidence of diarrhea-related diseases like acute watery diarrhea and dysentery—which can result in child malnutrition and even death—and reduces the incidence of other diseases, notably, pneumonia, trachoma, scabies, and skin and eye infections.

Recommended Behavior for Prioritized Issues

Practice proper handwashing with clean water and soap at critical times.

Barriers

- Lack of knowledge about the importance of proper handwashing
- Lack of knowledge about the critical times for handwashing
- Lack of skills for proper handwashing
- Misconceptions about sources of contamination—such as child feces are harmless—and germ conception

- Lack of knowledge about the importance of having handwashing facilities
- Lack of knowledge about the importance of handwashing with soap or ash

CORE MESSAGES

For Parents and Guardians

- Proper handwashing prevents diarrheal disease, respiratory disease, intestinal worms, and eye disease.
- Handwashing is a cost-effective way to prevent disease. Proper handwashing is the best way to minimize cost and time loss.
- Wash hands properly at least during the five critical times:
 - After using the toilet
 - Before food preparation
 - Before eating food
 - Before feeding a child/breastfeeding
 - After cleaning a child's bottom
 - Follow proper handwashing steps:
 - o Wet your hands with clean water
 - o Lather your hands by rubbing them together with the soap or ash. Be sure to lather the backs of your hands, between your fingers, and under your nails.
 - o After lathering, rub your hands together for at least 20 seconds, making sure to
 - interlace your fingers,
 - wash the backs of your hands and fingers,
 - wash your thumbs,
 - clean your nails, and then
 - Rinse your hands well with clean water.

Proper handwashing should last for at least 20 seconds while rubbing your hands.

Child feces are harmful, so you need to wash hands after touching them.

- Setting handwashing facilities near toilets, food preparation, and serving places improves handwashing practice.
- Washing hands with only water does not prevent the spread of infectious diseases.
- Soap, and substitutes like ash, remove germs from hands by rubbing.

For School-Aged Children

- Proper handwashing prevents diarrheal disease, respiratory disease, intestinal worms, and eye disease.
- Handwashing is a cost-effective way of preventing disease. Proper handwashing is the best way to minimize cost and time loss.
- Wash your hands during these critical times:
 - Before, during, and after preparing food
 - Before eating food or feeding a child
 - Before and after caring for someone who is sick
 - After using the toilet
 - After finishing playing
- You should wash your hands after blowing your nose, coughing, or sneezing; after touching an animal, animal feed, or animal waste; after handling pet, pet food or pet treats; and after touching garbage.
- Follow proper handwashing steps:
 - Wet your hands with clean water
 - Lather your hands by rubbing them together with the soap or ash. Be sure to lather the backs of your hands, between your fingers, and under your nails.
 - After lathering, rub your hands together for at least 20 seconds, making sure to:
 - interlace your fingers,
 - wash the backs of your hands and fingers,

- wash your thumbs,
- clean your nails, and then
- rinse your hands well with clean water.

- Proper handwashing should last for at least 20 seconds while rubbing your hands.

For Food and Drinking Establishments

- Setting handwashing facilities near toilets, food preparation, and serving places improves handwashing practice.
- Make sure food handlers wash their hands properly and keep their cooking and serving surfaces and equipment/utensils clean.
- Washing hands with only water does not prevent the spread of infectious diseases.
- Soap, or substitutes like ash, removes germs from hands by rubbing.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Practice proper handwashing with soap at critical times	Lack of knowledge about the importance of proper handwashing	Mother, father, and school-aged children	<ul style="list-style-type: none"> • Proper handwashing prevents diarrheal disease, respiratory disease, intestinal worms, and eye disease. • Handwashing is a cost-effective way to prevent disease. Proper handwashing is the best way to minimize cost and time loss.
	Lack of knowledge about the critical times for handwashing	Mother, father, and school-aged children	<ul style="list-style-type: none"> • Wash hands properly at least during the five critical times: after using the toilet, before food preparation, before eating food, before feeding a child/ breastfeeding, and after cleaning a child's bottom.
	Lack of skill for proper handwashing	Mother, father, and school-aged children	<ul style="list-style-type: none"> • Follow the proper handwashing steps for at least 20 seconds: <ul style="list-style-type: none"> • Wet your hands with clean water • Lather with soap and rub your palms together Interlace your fingers • Wash the backs of your hands and fingers • Wash your thumbs • Clean your nails • Rinse your hands well with clean water
	Misconceptions about sources of contamination—such as child feces are harmless—and germ conception	mother	<ul style="list-style-type: none"> • Child feces is harmful, so you need to wash hands after touching them
	Lack of knowledge about the importance of having handwashing facilities	Mother, father, and food and drinking establishments, institutions	<ul style="list-style-type: none"> • Setting handwashing facilities near toilets, food preparation, and serving places improves handwashing practice. • Schools should always have soap available at handwashing stations.
	Lack of knowledge about the importance of washing hands with soap or ash	Mother, father, school-aged children, and food and drinking establishments	<ul style="list-style-type: none"> • Washing hands with only water does not prevent the spread of infectious diseases. • Soap, or substitutes like ash, remove germs from hands by rubbing.

PRIORITY ISSUE II

Menstrual Hygiene Management

Women's and girls' capacity to manage their periods is affected by a number of factors. Limited access to affordable hygienic sanitary materials leaves many to manage their periods in ineffective, uncomfortable, and unhygienic ways. These problems are made more difficult by insufficient access to safe and private toilets, a lack of clean water and soap for personal hygiene, and insufficient or no hygienic disposal options. As a result, menstruating girls and women often feel ashamed and embarrassed. Additionally, long-standing social stigmas attached to menstruating bodies, cause many women and girls to many become isolated from family, friends, and their communities. This often results in missed school or unproductive workdays, which causes them to fall or remain behind their male counterparts.

Recommended behaviors for prioritized issues

- Use clean sanitary pads
- Keep personal hygiene during menses
- Change sanitary pads frequently
- Properly dispose of used pads
- Access menstrual hygiene management (MHM) facilities at schools

Barriers

- Lack of knowledge about locally prepared sanitary pads
- Lack of awareness about MHM and the importance of sanitary pads among fathers and male guardians
- Lack of open communication between parents and their daughters about MHM
- Low awareness about how poor MHM affects girls' education among the school community
- Low awareness about the need for separate girls' latrines and spaces for changing pads
- Cultural taboos or stigma that consider menstruation as a curse or disease

CORE MESSAGES

For Reproductive Age Girls and Women

- Use sanitary pads to properly manage your periods.
- Keep good hygiene when you have your period.
- Sanitary pads can be easily prepared with locally available materials.
- Feel free to openly discuss your period and how to manage it with your parents and elders.

For Parents and Guardians

- It is important to support your daughter and her menstrual hygiene because it boosts her confidence and school achievement.
- Encourage your daughter to openly discuss any reproductive health issues, including menstrual hygiene management, with you.

For Teachers

- One of the reasons for girls' absenteeism and drop out is that not enough attention is given to menstrual hygiene management at school.
- It is important to support female students and their menstrual hygiene because it boosts their confidence and school achievement.

For School Administration, Parent-Teacher Association, and Education Bureau at All Levels

- Schools should create enabling environment for menstrual hygiene management—making sanitary pads available in case of emergency and providing girls with an adequate number of separate private latrines, menstrual hygiene corner rooms, adequate water supply, and a safe waste management system.

For General Population

- Menstruation is a natural gift for girls. It is not a curse or sin.
- Menstruation is not related to starting sexual intercourse.
- Menstruation is a normal biological process, not a disease.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Use of clean sanitary pads	Lack of knowledge about locally prepared sanitary pads	Reproductive-age girls	Sanitary pads can be easily prepared with locally available materials.
Keep good personal hygiene during menses	Lack of awareness about MHM and the importance of sanitary pads among fathers and male guardians	Fathers	It is important to support your daughter and her menstrual hygiene because it boosts her confidence and school achievement.
Change sanitary pads frequently	Lack of open communication between parents and their daughters about MHM	Mother, father, and reproductive-age girls	Encourage your daughter to openly discuss any reproductive issues, including menstrual hygiene management, with you. Peer discussion on menstrual hygiene management should be encouraged.
Properly dispose of used pads	Low awareness about how poor MHM affects girls' education among the school community	Teachers Parent-Teacher Association (PTA), Girl Clubs	The main reason for school girls' absenteeism and drop out is directly related to less attention to menstrual hygiene management at school.
Access MHM facilities at schools	Low awareness about the need for separate girls' latrines and spaces for changing pads	School administration and education bureaus at all levels PTA	Schools should create enabling environment for menstrual hygiene management—providing girls with an adequate number of separate private latrines, menstrual hygiene corner rooms, adequate water supply, and a safe waste management system.
	Cultural taboos or stigma that consider menstruation as a curse or disease	General population, religious leaders, community institutions Health Development Army	Menstruation is a natural gift for girls. It is not a curse or sin. Menstruation is not related to starting sexual intercourse. Menstruation is a normal biological process, not a disease.

PRIORITY ISSUE I

Safe Water Handling

Many households lack the proper knowledge of and have little practice handling safe drinking water. Because of this, they end up using unsafe drinking water. Having a water source or supply point near one's home does not necessarily mean that the water is safe to drink. This may be because the source is not clean or safe due to groundwater contamination and that the water is either not treated at all or not adequately treated to remove harmful substances or organisms. Even if the water is safe at the source, it may be re-contaminated when it is transported, stored, or drawn at home. The safe handling of drinking water at the household level can make a great difference in family and community health.

Recommended behaviors for prioritized issues

- Use water from improved sources
- Use narrow-necked containers with proper covers for storing water
- Keep water containers clean
- Place water containers above the ground

Barriers

- Lack of knowledge about the health-related risks of unclean/unsafe water
- Lack of knowledge about the importance of using appropriate containers
- Lack of awareness about the importance of washing containers regularly
- Lack of knowledge about the possible contamination of water sources

CORE MESSAGES

For Parents/Guardians

- Unsafe/unclean water causes different communicable diseases.
- Use narrow-necked washable water containers with covers for water storage.
- Washing water containers regularly prevents communicable diseases.
- Before fetching water, wash water containers regularly using locally available cleaning materials such as detergents, sand, and ash.

For Older Children

- Before fetching water, wash water containers regularly using locally available cleaning materials such as detergents, sand, and ash.

For General Population

- Water can be contaminated at any point from source to consumption—during fetching, transportation, handling, storage, and use.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Use water from improved sources	Lack of knowledge about the risks of unclean/unsafe water	Mother and father School-aged children	<ul style="list-style-type: none"> Unsafe/unclean water causes different communicable diseases.
Use narrow-necked containers with proper covers for storing water	Lack of knowledge about the importance of using appropriate containers	Mother and father	<ul style="list-style-type: none"> Use narrow-necked washable water containers with covers for water storage.
Keep water containers clean	Lack of awareness about the importance of washing containers regularly	Mother Older children	<ul style="list-style-type: none"> Washing water containers regularly prevents communicable diseases. Before fetching water, wash water containers regularly using locally available cleaning materials, such as detergents, sand, and ash.
Place water containers above the ground	Lack of knowledge about the possible contamination of water sources	General population, WASH committee, local government leaders	<ul style="list-style-type: none"> Water can be contaminated at any point from source to consumption—during fetching, transportation, handling, storage, and use.

PRIORITY ISSUE II

Household Water Treatment

Household water treatment is an essential health intervention that improves the quality of drinking water and reduces diarrheal disease, particularly for those who rely on water from unimproved sources or unsafe or unreliable piped water supplies. Even if water is obtained from an improved source, it may be contaminated during transportation or storage if the source is not immediately accessible to the household or the storage containers are not cleaned properly. In addition to hygiene concerns, poor accessibility to water sources can place a disproportionate burden on female members of the household, since fetching water often falls to them. Thus, household water treatment can be effective for improving the quality of household drinking water and be a more efficient use of time.

Recommended behavior for prioritized issues

- Regular treatment of water at the household level

Barriers

- Lack of knowledge on the importance of household water treatment
- The taste of treated water is not preferred
- Misconceptions about piped water being safe and, therefore, not needing household water treatment (urban)

CORE MESSAGES

For General Population

- Even if the taste of treated water is different, its benefit outweighs the discomfort.
- Over time, you will easily adapt to the taste of treated water.
- Improved water, including pipe water, could be contaminated.
- Water from all sources, including pipe water, should be treated at home.

For Family Members

- It is always important to treat water at home.
- Use different home-based water treatment methods: boiling, filtration equipment, and chemicals.

For Health-Care Providers

- Improved water, including pipe water, could be contaminated.
- Water from all sources, including pipe water, should be treated.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Regular treatment of water at the household level	Lack of knowledge about the importance of household water treatment	Family members	<ul style="list-style-type: none"> • It is always important to treat water at home. • Use different home-based water treatment methods: boiling, filtration equipment, and chemicals.
	The taste of treated water is not preferred	General population	<ul style="list-style-type: none"> • Even if the taste of treated water is different, its benefit outweighs the discomfort. • Over time, you will easily adapt to the taste of treated water.
	Misconceptions about piped water being safe and, therefore, not needing household water treatment (urban)	General population, health-care providers	<ul style="list-style-type: none"> • Improved water, including pipe water, could be contaminated. • Water from all sources, including pipe water, should be treated at home.

PRIORITY ISSUE III

Proper Food Hygiene Practices

Handling food properly and safely is essential to preventing food-borne illnesses. Proper handling of food should happen during cooking, cooling, hot holding, preparation, purchase, delivery, reheating, serving, and storage.

Recommended behaviors for prioritized issues

- Wash hands properly before preparing food.
- Wash raw vegetables properly.
- Keep cooking utensils and areas clean at all times.
- Use clean containers with covers to store cooked food.

Barriers

- Lack of awareness about hygienic measures—including personal hygiene, clean utensils and preparation area, and waste disposal—that should be used during food preparation
- Lack of awareness that unwashed raw vegetables are a possible source of infection
- Lack of awareness about the risks associated with poor food hygiene
- Poor knowledge about the need for proper and clean cooking areas
- Lack of knowledge about proper food storage

CORE MESSAGES

For Food Handlers (Everyone Who Prepares Food in Home or Establishments)

- Always wash hands with soap before starting food preparation, after touching raw foods, before serving food, after touching body parts, and during the five critical times.
- Keep food preparation utensils and surfaces meticulously clean. Keep your personal hygiene—body, nails, hair, clothes, and shoes—at a high level.
- Properly management solid and liquid waste during the food preparation process.
- Anyone with suspected/active disease should be diagnosed and get treated before he/she prepares or serves food.

- Sinks with three compartments are highly recommended for dish washing.
- Always separate raw and cooked food to avoid cross contamination. Since raw vegetables can be possible sources of infection, wash them thoroughly with clean water.
- The shelf life of various foods differs; always make sure the food you are using is not expired.
- Cooked foods should be covered.
- Cook foods thoroughly; reheat the food well if it is to be consumed after some time.

For Mothers, Fathers, and Anyone Who Cooks and Serves Food at Home

- Pay attention, different foods have different shelf lives.
- Cooked foods should be covered.
- Cook foods thoroughly; reheat the food well if it is to be consumed after some time.

For School-Age Children, General Population

- Poor food hygiene causes food-borne disease transmission and food poisoning.
- Eating unsafe street foods may cause communicable disease or other health problems. Therefore, it is not advisable to eat street food or food purchased from street vendors.

For Fathers and Food and Drinking Establishments

- All households and food and drinking establishments should have a clean, separate kitchen for food preparation.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Wash hands properly before preparing food	Lack of awareness about hygienic measures—including personal hygiene, clean cooking utensils and preparation area, and waste disposal—that should be used during food preparation.	Food handlers (everyone who prepares food in homes or at eating establishments)	<ul style="list-style-type: none"> • Always wash hands with soap before starting food preparation, after touching raw foods, before serving food, after touching body parts, and during the five critical times. • Keep food preparation utensils and surfaces meticulously clean. Keep your personal hygiene—body, nails, hair, clothes, and shoes—at a high level. • Properly management solid and liquid waste during the food preparation process. • Anyone with suspected/active disease should be diagnosed and get treated before he/she prepares or serves food. • Sinks with three compartments are highly recommended for dish washing.
Wash raw vegetables properly	Lack of awareness that unwashed raw vegetables are a possible source of infection.	Food handlers (everyone who prepares food in homes or at eating establishments)	<ul style="list-style-type: none"> • Always separate raw and cooked food to avoid cross contamination. Since raw vegetables can be possible sources of infection, wash them thoroughly with clean water.
Keep cooking utensils and areas clean at all times	Lack of awareness about the risks associated with poor food hygiene	School-age children, general population	<ul style="list-style-type: none"> • Poor food hygiene causes food-borne disease transmission and food poisoning. • Anybody, especially children should not buy street foods.
	Poor knowledge about the need for proper cooking areas	Fathers, food and drinking establishments	<ul style="list-style-type: none"> • All households and food and drinking establishments should have a clean, separate kitchen for food preparation.
Use clean containers with covers to store cooked food	Lack of knowledge about proper food storage	Mothers, handlers (everyone who prepares food in homes or at eating establishments)	<ul style="list-style-type: none"> • The shelf life of foods differs; always make sure the food you are using is not expired. • Cooked foods should be covered. • Cook foods thoroughly; reheat the food well if it is to be consumed after some time.

PRIORITY ISSUE I

Open Defecation

Open defecation is a practice whereby people defecate in fields bushes, forests, open bodies of water, or other open spaces rather than using the toilet. This practice leads to outbreaks of communicable diseases like acute watery diarrhea, diarrhea, intestinal infections, typhoid, respiratory diseases, and tuberculosis. This occurs because human feces contain bacteria and germs, which contaminate the water sources people use for drinking. When open defecation is widespread, the highest number of deaths occur in children aged under five years. Open defecation perpetuates a vicious cycle of disease and poverty.

Recommended behaviors for prioritized issues

- All community members properly use improved latrines
- Proper use of latrines at all times by all community members and proper child feces management
- Sustaining/maintaining open defecation-free status in a community in order to make it a social norm

Barriers

- Lack of community awareness about the importance of latrines
- Heads of household not realizing the health, social, economic, and image benefits of latrine use or ownership
- Free riders who do not clean or take care of communal latrines
- Limited understanding of the importance and proper use of public and roadside latrines
- Lack of awareness about how to keep latrines clean
- Fear of latrine collapse due to poor-quality construction
- Lack of proper latrine use
- Limited understanding about the effects of open defecation on individual and community health

CORE MESSAGES

For Heads of Household

- Construct a good-quality latrine and make sure you and your family members properly use it at all times. By building a latrine and using it at all times, you will make your family healthy and proud.
- As the head of your household, construct improved latrines and educate your family members to properly use it at all times.

For Households/Families

- Consider the latrine as part of your house. Construct and use it, without waiting for a subsidy, to protect you and your family from communicable diseases.
- Properly construct latrines using locally available materials, in consultation with health extension workers, so as to prevent latrine collapse.

For Health Professionals

- Implementing community-led activities, with continuous follow up, will help people adapt positive and healthy behavior.

For Government Officials, Private Sector

- Through the coordination of concerned sectors, strengthen the implementation of sanitation marketing to make quality sanitation facilities affordable.

For Families Using Communal Latrines

- You have a responsibility to properly use and clean the communal latrine. This will help protect you, your family, and your community from communicable diseases.

For Families with Children

- Child feces are infectious. By properly managing child feces (diaper), you and your family can be protected from communicable diseases.

For General Population

- Properly using and cleaning public latrines will make the environment free from open defecation, which will help protect you and your family from communicable diseases.
- Using locally available sanitation materials, keep your latrine clean at all times so that people will be encouraged to use it.
- It is possible to become an open defecation-free community.
- Make the construction and use of improved latrines normal in your culture.
- Open defecation contaminates our living areas with bacteria that cause communicable diseases such as acute watery diarrhea. Keep yourself and your family safe from such illnesses by correctly using latrines at all times.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
All community members properly use improved latrines	Lack of community awareness about the importance of latrines	Heads of household	<ul style="list-style-type: none"> Construct a good-quality latrine and make sure you and your family members properly use it at all times. By building a latrine and using it at all times, you will make your family healthy and proud.
	Heads of household not realizing the health, social, economic, and image benefits of latrine use or ownership	Primary: Heads of household Secondary: Other family members, health-care workers	<ul style="list-style-type: none"> As the head of your household, construct improved latrines and educate your family members to properly use it at all times; by doing so you will get social, economic, and health benefits.
	Lack of commitment by health professionals who think that "people of this area will never change."	Primary: Health professionals Secondary: Woreda health officials, town officials	<ul style="list-style-type: none"> Implementing community-led activities, with continuous follow up, will help people adapt positive and healthy behavior.
	Lack of commitment by concerned bodies to supply of affordable sanitation facilities	Primary: Government officials, private sector, households Secondary: University, TVET schools	<ul style="list-style-type: none"> Through the coordination of concerned sectors, strengthen the implementation of sanitation marketing to make quality sanitation facilities affordable. Consider the latrine as part of your house. Construct and use it, without waiting for a subsidy, to protect you and your family from communicable diseases.
Proper use of latrines at all times by all community members and proper child feces management	Lack of commitment by health professionals who think that the "people of this area will never change."	Health professionals, Woreda health officials	<ul style="list-style-type: none"> Implementing community-led activities, with continuous follow up, will help people adapt positive and healthy behavior.
	Lack of awareness about child feces/ diaper management	Families with children	<ul style="list-style-type: none"> Child feces is infectious. By properly managing child feces (diaper), you and your family can be protected from communicable diseases.
	Free riders who do not clean or take care of communal latrines	Families using communal latrines	<ul style="list-style-type: none"> You have a responsibility to properly use and clean the communal latrine. This will help protect you, your family, and your community from communicable diseases.
	Limited understanding of the importance and proper use of public and roadside latrines	General population	<ul style="list-style-type: none"> Properly using and cleaning public latrines will make the environment free from open defecation, which will help protect you and your family from communicable diseases.
	Lack of awareness on how to keep latrines clean	General population	<ul style="list-style-type: none"> Using locally available sanitation materials, keep your latrine clean at all times so that people will be encouraged to use it.
	Fear of latrine collapse due to poor-quality construction	Families	<ul style="list-style-type: none"> Properly construct latrines using locally available materials, in consultation with health extension workers, so as to prevent latrine collapse.
Sustaining/ maintaining open defecation-free status in a community in order to make it a social norm	Lack of proper latrine use	Open defecation-free community	<ul style="list-style-type: none"> Make the construction and use of improved latrines normal in your culture.
	Limited understanding about the effects of open defecation on health	Open defecation-free Kebele community	<ul style="list-style-type: none"> Open defecation contaminates our living areas with bacteria that cause communicable diseases such as acute watery diarrhea. Keep yourself and your family safe from such illnesses by correctly using latrines at all times.

PRIORITY ISSUE II

Proper Management of Solid and Liquid Waste

Solid and liquid waste generated from both animal and domestic sources can significantly spoil drinking, irrigation, recreational, and other water sources in both rural and urban areas. Domestic waste is either solid or liquid waste generated in residential areas, commercial settings, and institutions. In general terms, waste is defined as material that is unwanted. It is an inevitable and inherent product of social, economic, and cultural life.

Recommended behaviors for prioritized issues

- Proper handling of waste on site
- Improve waste collection and transportation
- Improve attention given to waste recycling at all levels
- Prepare proper waste disposal site

Barriers

- Lack of awareness about waste minimization, recycling, and reuse
- Lack of awareness about how waste can affect health, social, and economic aspects of life
- Lack awareness about proper waste segregation
- Limited awareness about the frequency of waste collection
- Lack of awareness about resource-oriented waste management
- Lack of awareness about proper waste disposal methods
- Lack of commitment to using proper waste disposal sites

CORE MESSAGES

For General Population

- Minimizing waste sources and recycling or reusing waste will protect you and your family from waste-related communicable diseases. This will help you and your family create a clean and safe environment.
- You can protect yourself, your family, and your community from social, economic, and health problems by practicing proper waste disposal methods.
- Segregating waste appropriately at home makes waste management efficient and helps reduce risks associated with hazardous waste.
- Implementing a resource-oriented waste management system will make the final waste disposal site management easy, solve time loss, generate income, and minimize health risks.

For Government Officials

- Providing a proper waste disposal site will make the community healthy and productive by creating a clean and safe living environment.

For Households

- Implementing/using proper waste disposal facilities/services will help you and your family avoid contracting contagious diseases.

For Waste or Garbage Collectors

- You can prevent bad odors and the breeding of flies, which transmit diseases, by collecting solid waste frequently, following the procedures, and properly taking the necessary precautions.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Proper handling of waste on site	Lack of awareness about waste minimization, recycling, and reuse	General population	<ul style="list-style-type: none"> Minimizing waste sources and recycling or reusing waste will protect you and your family from waste-related communicable diseases. This will help you and your family create a clean and safe environment.
	Lack of awareness about how waste can affect health, social, and economic aspects of life	General population	<ul style="list-style-type: none"> You can protect yourself, your family, and your community from social, economic, and health problems by practicing proper waste disposal methods.
	Lack awareness about proper waste segregation	General population	<ul style="list-style-type: none"> Segregating waste appropriately at home makes waste management efficient and helps reduce risks associated with hazardous waste.
Improve waste collection and transportation	Limited awareness about the frequency of waste collection	Primary: Waste/garbage collectors Secondary: Community	<ul style="list-style-type: none"> You can prevent bad odors and the breeding of flies, which transmit diseases, by collecting solid waste frequently, following the procedures, and properly taking the necessary precautions.
Improve attention given to waste recycling at all levels	Lack of awareness about resource-oriented waste management	General population	<ul style="list-style-type: none"> Implementing a resource-oriented waste management system will make the final waste disposal site management easy, solve time loss, generate income, and minimizes health risks.
Prepare proper waste disposal site	Lack of awareness about proper waste disposal methods	Households	<ul style="list-style-type: none"> Implementing/using proper waste disposal facilities/services will help you and your family avoid contracting contagious diseases.
	Lack of commitment to using proper waste disposal sites	Government officials	<ul style="list-style-type: none"> Providing a proper waste disposal site will make the community healthy and productive by creating a clean and safe living environment.

PRIORITY ISSUE I

Healthy Housing Conditions

A healthy home needs to have sound structure be free of hazards; have adequate facilities for sleeping, personal hygiene, and the preparation and storage of food; be an environment for comfortable relaxation, privacy, and quiet; and provide a space for social exchange with friends, family, and others. Where a health home is located is also important. The local environment can influence individual and community health and safety by, for example, reducing fear of fear of crime, increasing access to local services and facilities, and promoting social interaction.

Recommended behavior for prioritized issues

- Provide separate rooms for livestock, people, and cooking

Barriers

- Lack of awareness about the harms of sharing living space with livestock
- Low awareness of the adverse effects of indoor air pollution on health
- Lack of awareness about the health effects of poor ventilation or light and inadequate space per person.

CORE MESSAGES

For Households

- Sharing living space with livestock will expose you and your family to communicable diseases that are transmitted from livestock to people.
- By ventilating and cleaning your house and by separating the kitchen from the living area, you can protect your and your family from illnesses caused by indoor air pollution.
- You can protect your family and yourself from air- and vector-borne diseases by having enough space per person and by properly ventilating and lighting the space.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Provide separate rooms for livestock, people, and cooking	Lack of awareness about the harms of sharing living space with livestock	Households	<ul style="list-style-type: none"> Sharing living space with livestock will expose you and your family to communicable diseases that are transmitted from livestock to people.
	Low awareness of the adverse effects of indoor air pollution on health	Households	<ul style="list-style-type: none"> By ventilating and cleaning your house and by separating the kitchen from the living area, you can protect your and your family from illnesses caused by indoor air pollution.
	Lack of awareness about the health effects of poor ventilation or light and inadequate space per person	Households	<ul style="list-style-type: none"> You can protect your family and yourself from air- and vector-borne diseases by having enough space per person and by properly ventilating and lighting the space.

PRIORITY ISSUE II

Indoor Air Pollution

One of the major sources of household air pollution is the biomass fuel used for cooking and heating. When this fuel is used without sufficient ventilation, it can produce high levels of household (indoor) air pollution, which includes a range of health-damaging pollutants such as fine particles and carbon monoxide. In poorly ventilated dwellings, the smoke in and around the home can exceed acceptable levels for fine particles. Exposure is particularly high among women and young children, who spend the most time near the domestic hearth.

Recommended behaviors for prioritized issues

- Clean and ventilate kitchen regularly
- Use appropriate local technologies for cooking (improved cooking stove and chimney)
- Use fuel/energy source that has low smoke emission

Barriers

- Lack of information about the health risk of indoor air pollution
- Priority is not given for indoor air pollution in the health education and promotion packages implemented, resulting in weak follow up by health extension workers
- Heads of household do not know how to improve stoves and chimneys because they have never seen them
- Men, as household decision makers, do not prioritize using non-carbon emitting energy sources
- Government officials do not understand the damage caused by indoor pollution and, therefore, have not allowed the expansion of Kebele homes to have separate kitchens (urban problem)

CORE MESSAGES

For Men and Women (Fathers and Mothers)

- Smoke emitted from solid fuels, such as biomass and coal, can cause respiratory and eye disorders. Separate your cooking area from your living area, and make sure your kitchens/cooking room has windows and is well ventilated. Try to use alternative safe energy sources, such as biogas, electricity, solar power, producer gas, and liquid petroleum gas, as much as possible.

For Woreda Health Offices, Primary Health Care Units, and Health Extension Workers

- Indoor air pollution reduction should be a core activity in Woreda planning, and communities should be mobilized and educated about the hazards of indoor air pollution.

For Health Extension Workers

- Educate communities about indoor air pollution—how to reduce it and the associated risks—and promote safe energy technologies like improved stoves and chimneys.

For Heads of Household

- Save money and other resources to build safe energy technologies in your house, like improved stoves and chimneys.
- Seek information about reducing indoor air pollution from health extension workers, including how to construct improved stoves and chimneys using locally available and cost-effective materials.

For City and Sub-City Administration Officials

- Indoor air pollution is a serious risk to the health of individuals and communities. Encourage all households, including those living in Kebele houses, to separate their cooking areas from living areas.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Clean and ventilate kitchen regularly	Lack of information about the health risk of indoor air pollution	Men and women (fathers and mothers)	<ul style="list-style-type: none"> Smoke emitted from solid fuels, such as biomass and coal, can cause respiratory and eye disorders. Separate your cooking area from your living area, and make sure your kitchen/cooking room has windows and is well-ventilated. Try to use alternative safe energy sources, such as biogas, electricity, solar power, producer gas, and liquid petroleum gas, as much as possible.
Use appropriate local technologies for cooking (improved cooking stove and chimney)	Priority is not given for indoor air pollution in the health education and promotion packages implemented, resulting in weak follow up by health extension workers	Woreda health offices, PHCUs, and health extension workers	<ul style="list-style-type: none"> Indoor air pollution reduction should be a core activity in Woreda planning, and communities should be mobilized and educated about the hazards of indoor air pollution.
Use fuel/energy source that has low smoke emission	Heads of household do not know how to improve stoves and chimneys because they have never seen them	Health extension workers	<ul style="list-style-type: none"> Educate communities about indoor air pollution—how to reduce it and the associated risks—and promote safe energy technologies like improved stoves and chimneys.
	Men, as household decision makers, do not prioritize using non-carbon emitting energy sources	Heads of household	<ul style="list-style-type: none"> Save money and other resources to build safe energy technologies in your house, like improved stoves and chimneys. Seek information about reducing indoor pollution from health extension workers, including how to construct improved stoves and chimneys using locally available and cost-effective materials.
	Government officials do not understand the damage caused by indoor pollution and, therefore, have not allowed the expansion of Kebele homes to have separate kitchens (urban problem)	City and sub-city administration officials	<ul style="list-style-type: none"> Indoor air pollution is a serious risk to the health of individuals and communities. Encourage all households, including those living in Kebele houses, to separate their cooking areas from their living areas.

PRIORITY ISSUE III

Urban Pollution

The situation in urban and semi-urban Ethiopia is characterized by an insufficient level of services, inadequate knowledge about how to treat waste, and, often, inappropriate hygiene practices. Waste from unplanned industrialization; polluted land, air, and surface and ground waters; and inadequate and unsustainable solid and liquid waste collection and disposal systems have resulted in serious environmental health issues.

Obstacles include limited garbage collection vehicles and vacuum trucks, in most of the towns; mismanagement of communal and public toilets; indiscriminate solid and liquid waste disposal, including untreated industrial liquid effluent to streams; unavailability of land to build public or private toilet facilities; and low participation of the private sector. Moreover, liquid waste from a large proportion of urban household and institutional water-flushed latrines are often discharged into nearby streams and open spaces due to lack of available sewer systems or services.

Recommended behavior for prioritized issues

- Setup proper waste management and disposal systems

Barriers

- Lack of knowledge about waste management, in both factories and households, and its associated health risks
- No standardized waste management system and limited enforcement practices
- Low priority given to health education on the risk of linking latrines to rivers, other water sources, or on other open areas.
- Poor understanding of the risk of land pollution in communities and factories
- Lack of knowledge about the benefits of using latrines and keeping latrines clean
- Low attention is given to setting up public latrines because communities and/or leaders do not fully appreciate their benefits
- The concept of environmental cleanliness is not generally understood or given high value

CORE MESSAGES

For Heads of Household

- Sort household waste based on the type of waste—plastic, decomposable waste, metals, or liquid—and safely dispose of it by giving it to waste collectors or dumping it at spaces designated for waste disposal.
- Linking latrines to rivers and other unsuitable areas causes environmental pollution that results in health problems like diarrheal diseases, skin diseases, eye diseases, allergies, and respiratory problems for you and your community.

For Leaders of Factories

- Treat or safely dispose of both solid and liquid factory waste.

For Relevant Government Bodies in the Health, Environmental Protection, Industry, and Investment Sectors, Including Policymakers

- Standardize an industrial waste management system that will work across the country.
- Make sure safe waste management is a requirement for industry and business licenses, and follow up with/monitor factories so they do not pollute the environment with hazardous waste.
- Outdoor air pollution causes major health problems, such as respiratory problems and cancer, which costs money for treatment.

For Woreda Health Offices

- Provide coordinated and continuous education for households and communities on the risk of linking latrines to rivers and other areas and on alternative mechanisms for managing pollution.
- Rigorously monitor environmental conditions, enforce regulations, and apply punitive measures for those who violate regulations regarding linkage of latrines with rivers and other areas.

For Officials from the Health and Hygiene and Environmental Health Sectors and City Administrations

- A number of human waste-related diseases can be prevented if communities have access to latrines. Make sure that cities and towns have adequate public latrines, especially in areas where communities gather, such as market places and bus stations. Assign/employ cleaners for these latrines.

For General Population

- Land pollution causes major health problems such as cancer, brain and nerve damage, and kidney, liver, and heart diseases in communities.
- Using latrines properly and maintaining their cleanliness protects you and your family from major health problems including diarrheal diseases, helminthiasis, trachoma, and influenza.

For Urban Health Extension Workers

- Provide coordinated and continuous education for households and communities on the risk of linking latrines to rivers and other areas and on alternative mechanisms for managing pollution.
- Rigorously monitor environmental conditions, enforce regulations, and apply

corrective measures for those who violate regulations regarding linkage of latrines with rivers and other areas.

- Land pollution causes major health problems such as cancer, brain and nerve damage, and kidney, liver, and heart diseases in communities. Make sure your constituencies understand the risks associated with land pollution and take measures to appropriately manage waste.
- Follow up with your constituents regularly and encourage them to clean their houses and immediate environment.

For Religious Leaders

- A number of human waste-related diseases can be prevented if communities have access to latrines. Make sure that churches and mosques have adequate latrine facilities. Assign/employ cleaners for these latrines.

For Household Members

- Environmental sanitation is necessary for the prevention of several health problems. Make sure you clean your houses and immediate environment.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Set up proper waste management systems and disposal	Lack of knowledge about waste management, in both factories and households, and its associated health risks	Heads of household Leaders of factories	<ul style="list-style-type: none"> • Sort household waste based on the type of waste—plastic, decomposable waste, metals, or liquid—and safely dispose of it by giving it to waste collectors or dumping it at spaces designated for waste disposal. • Treat or safely dispose of both solid and liquid factory waste.
	No standardized waste management system and limited enforcement of practices	Relevant government bodies in the health, environmental protection, industry, and investment sectors	<ul style="list-style-type: none"> • Standardize an industrial waste management system that will work across the country. • Make sure safe waste management is a requirement for industry and business licenses, and follow up with/monitor factories so they do not pollute the environment with hazardous waste.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Set up proper waste management systems and disposal	Low priority given to health education on the risk of linking latrines to rivers, other water sources, or on other open areas.	Woreda health offices, Urban health extension workers	<ul style="list-style-type: none"> • Provide coordinated and continuous education for households and communities on the risk of linking latrines to rivers and other areas and on alternative mechanisms for managing pollution. • Rigorously monitor environmental conditions, enforce regulations, and apply punitive measures for those who violate regulations regarding linkage of latrines with rivers and other areas.
	Lack of awareness of the harm of linking latrines to rivers and other unsafe areas	Heads of household	<ul style="list-style-type: none"> • Linking latrines to rivers and other unsuitable areas causes environmental pollution that results in health problems like diarrheal diseases, skin diseases, eye diseases, allergies, and respiratory problems for you and your community.
	Government is not reducing tax for new cars because of the income it generates	Policymakers and relevant government officials	<ul style="list-style-type: none"> • Outdoor air pollution causes major health problems, such as respiratory problems and cancer, which costs money for treatment.
	Poor understanding of the risk of land pollution in communities and factories	General population, urban health extension workers	<ul style="list-style-type: none"> • Land pollution causes major health problems such as cancer, brain and nerve damage, and kidney, liver, and heart diseases in communities. • Make sure your constituencies understand the risks associated with land pollution and take measures to appropriately manage waste.
	Lack of knowledge about the benefits of using latrines and keeping latrines clean	General population	<ul style="list-style-type: none"> • Using latrines properly and maintaining their cleanliness protects you and your family from major health problems including diarrheal diseases, helminthiasis, trachoma, and Influenza.
	Low attention is given to setting up public latrines because communities and/or leaders do not fully appreciate their benefits	Officials from the health and WASH sectors, city administrations Religious leaders	<ul style="list-style-type: none"> • A number of human waste-related diseases can be prevented if communities have access to latrines. Make sure that cities and towns have adequate public latrines, especially in areas where communities gather, such as market places and bus stations. Assign/employ cleaners for these latrines. • A number of latrine related diseases can be prevented if communities have access to latrines. Make sure that churches and mosques have adequate latrine. Assign/employ cleaners for these latrines.
	The concept of environmental cleanliness is not generally understood or given high value	Household members Urban health extension workers	<ul style="list-style-type: none"> • Environmental sanitation is necessary for the prevention of several health problems. Make sure you clean your houses and immediate environment. • Follow up with your constituents regularly and encourage them to clean their houses and immediate environment.

PRIORITY ISSUE I

Hygiene and Environmental Health-Related Emergency Preparedness and Response

The three top priorities in emergency response are the provision of sufficient quantities of safe water, the arrangement of basic sanitation, and the promotion of good hygiene behaviors. Response programs range from rapid and limited interventions in acute emergencies to comprehensive long-term interventions in complex emergencies. Emergencies include flooding, drought, and other disasters that can cause disease outbreaks such as acute watery diarrhea.

People affected by emergencies often suffer from inadequate and unsanitary living conditions due to substandard sanitation, inadequate water supplies, and poor hygiene, making people vulnerable to disease. It is important to design interventions to show how to improve water, sanitation, and hygiene conditions in emergency settings.

Recommended behaviors for prioritized issues

- Maintain personal, environmental, and food hygiene
- Make use of hygiene facilities during emergencies

Barriers

- Lack of knowledge about emergency disease outbreaks within communities
- The government and communities do not appreciate the severity and impact of emergencies
- Lack of a full understanding of the benefits of disease prevention by governmental officials; more focus is on curative and other humanitarian interventions during emergencies, resulting in poor construction of HEH facilities during emergencies
- Overall lack of awareness about the importance of using HEH facilities by communities

CORE MESSAGES

For Community Leaders

- Drought, floods, and other disasters often cause disease outbreaks such as acute watery diarrhea, scabies, typhoid, typhus, and measles. These diseases can be prevented mostly by washing hands with soap at critical times, properly and consistently using latrines, keeping food clean, treating or boiling drinking water, and practicing other hygienic behaviors.
- Make sure people in your community understand the risks associated with disasters and mobilize them during emergencies so that they can protect themselves through proper hygiene and environmental health practices.

For General Population

- Drought, floods, and other disasters can cause disease outbreaks such as acute watery diarrhea, scabies, typhoid, typhus, and measles. These diseases can be prevented mostly by washing hands with soap at critical times, properly and consistently using latrines, keeping food clean, treating or boiling drinking water, and practicing other hygienic behaviors.

For Health Sector Officials

- Emergencies do not provide much time for response preparation. Make sure that you plan and coordinate with other stakeholders to prepare ahead of time to ensure that you will be able to use hygiene and environmental health facilities during emergencies.

For Sectoral Policymakers

- Emergencies do not provide much time for response preparation. Work with the health sector and other stakeholders to prepare ahead of time to ensure that you will be able to use hygiene and environmental health facilities during emergencies.

For Government Officials

- Prevention of diseases is more cost effective than treatment during emergencies. Make sure that hygiene and environmental health facilities are used during emergencies.

For Household Members

- Using hygiene and environmental health facilities properly during emergencies can protect you and your family from emergency-related diseases.

For Health Extension Workers

- Do not stop health education activities on hygiene and environmental health practices during emergencies. It is more important to prevent diseases than to treat patients.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Maintain personal, environmental, and food hygiene	Lack of knowledge about emergency disease outbreaks within communities	Community leaders, general population	<ul style="list-style-type: none"> • Drought, floods, and other disasters most often cause disease outbreaks such as acute watery diarrhea, scabies, typhoid, typhus, and measles. These diseases can be prevented mostly by washing hands with soap at critical times, properly and consistently using latrines, keeping food clean, treating or boiling drinking water, and practicing other hygienic behaviors. • Make sure people in your community understand the risks associated with disasters and mobilize them during emergencies so that they can protect themselves through proper hygiene and environmental health practices.
	The government and communities do not appreciate the severity and impact of emergencies	Health sector officials Sectoral policymakers	<ul style="list-style-type: none"> • Emergencies do not provide much time for response preparation. Make sure that you plan and coordinate with other stakeholders to prepare ahead of time to ensure that you will be able to use hygiene and environmental health facilities during emergencies.
	Lack of a full understanding of the benefits of disease prevention by government officials; more focus is on curative and other humanitarian interventions during emergencies, resulting in poor construction of HEH facilities during emergencies	Relevant government officials	<ul style="list-style-type: none"> • Prevention of diseases is more cost effective than treatment during emergencies. Make sure that hygiene and environmental health facilities are used during emergencies.
Make use of HEH facilities during emergencies	Overall lack of awareness about the importance of using HEH facilities by communities	Household members	<ul style="list-style-type: none"> • Using hygiene and environmental health facilities properly during emergencies can protect you and your family from emergency-related diseases.
		Health extension workers	<ul style="list-style-type: none"> • Do not stop health education activities regarding hygiene and environmental health practices during emergencies. It is more important prevent diseases than to treat patients.

PRIORITY ISSUE

Work Place Health and Safety

Occupational health refers to all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. Poor working conditions affect the environment workers live in, since the working and living environments are the same for many workers. Occupational hazards can have harmful effects on workers, their families, and other people in the community as well as on the physical environment around the workplace.

Occupational health should aim to promote and maintain the highest degree of physical, mental, and social well-being of workers in all occupations; to prevent workers from poor health caused by their working conditions; to protect workers from risks associated with factors adverse to health; and to place and maintain workers in an occupational environment adapted to their physiological and psychological capabilities. To summarize, the aim of occupational health is to adapt work to the person and each person to their job.

Recommended behaviors for prioritized issues

- Wear personal protective equipment
- Make work environments safe

Barriers

- Lack of awareness about risk factors in the workplace
- Lack of understanding about the benefit of personal protective equipment in the workplace
- Provision of personal protective equipment for employees is seen as an unnecessary cost
- Employees do not fully understand their rights to organize into unions and demand protective gear
- Employers see labor unions as threats and often try to weaken them

- Government officials feel that labor unions do not create a conducive environment for industrial development; they do not support workers to organize unions and demand for protective gear

CORE MESSAGES

For Employees

- Many workplaces have health risk factors—such as high levels of noise that can damage your ears and radiation and chemicals that can cause cancer and skin and eye disorders—that can cause physical harm to you. If you work in hazardous working conditions, make sure you wear proper personal protective equipment.
- Using person protective equipment can protect you from hazardous risk factors.
- You have the right to organize into labor unions. Organizing into a labor union can give you more power to negotiate with other stakeholders.

For Employers

- Without proper personal protective equipment in the workplace, your employees are highly likely to contract diseases or get into life-threatening and debilitating accidents. Make sure you provide proper personal protective equipment for your employees.

For Officials from Labor and Social Affairs

- Enforce workplace safety regulations by regularly monitoring and taking corrective measures when necessary.
- Standardize protective measures and personal protective equipment are necessary to prevent workplace accidents and health problems.
- Educate employees and employers about the importance of these standards; monitor and ensure that these standards are met.

Recommended Behavior	Behavioral Problem	Priority Audience	Core Message
Wear personal protective equipment	Lack of awareness about risk factors in the workplace	Employees	<ul style="list-style-type: none"> Many workplaces have health risk factors—such as high levels of noise that can damage your ears and radiation and chemicals that can cause cancer and skin and eye disorders—that can cause physical harm to you. If you work in hazardous working conditions, make sure you wear proper personal protective equipment.
Make work environments safe	Provision of personal protective equipment for employees is seen as an unnecessary cost	Employers Officials from labor and social affairs	<ul style="list-style-type: none"> Without proper personal protective equipment in the workplace, your employees are highly likely to contract diseases or get into life-threatening and debilitating accidents. Make sure you provide proper personal protective equipment for your employees. Enforce workplace safety regulations by regularly monitoring and taking punitive measures when necessary.
	Lack of understanding about the benefit of personal protective equipment in the workplace	Employees Officials from labor and social affairs	<ul style="list-style-type: none"> Many workplaces have health risk factors—such as high levels of noise that can damage your ears and radiation and chemicals that can cause cancer and skin and eye disorders—that can cause physical harm to you. Personal protective equipment protects you from these risk factors. Standardize protective measures and personal protective equipment are necessary to prevent workplace accidents and health problems. Educate employees and employers about the importance of these standards; monitor and ensure that these standards are met.
	Employees do not fully understand their rights to organize into unions and demand protective gear	Employees Employers Officials from labor and social affairs	<ul style="list-style-type: none"> You have the right to organize into labor unions. Organizing into a labor union can give you more power to negotiate with other stakeholders. Support your employees to organize into labor unions. This is advantageous not only for your employees but also for you since it makes negotiations with your staff easier, increases employee satisfaction, and reduces turnover. Encourage workers to organize into labor unions and support existing labor unions to be strong enough so that they can ensure workers' rights.
	Employers see labor unions as threats and often try to weaken them	Employers	<ul style="list-style-type: none"> Support your employees to organize into labor unions. This is advantageous not only for your employees but also for you since it makes negotiations with your staff easier, increases employee satisfaction, and reduces turnover.
	Government officials feel that labor unions do not create a conducive environment for industrial development; they do not support workers to organize unions and demand for protective gear	Officials from relevant public sectors such as health, labor and social affairs, industry development	<ul style="list-style-type: none"> Labor unions are important for the growth of industries as they ensure a productive workforce and support the investors themselves, when fully functional.

SECTION II

NEGLECTED TROPICAL DISEASES (NTDs)

PRIORITY ISSUE

Mass Drug Administration Mass drug administration (MDA) is a package of activities for the mass distribution of drugs to a target population. MDA is used to address five of the nine priority neglected tropical diseases (NTDs) in the country, namely trachoma, soil-transmitted helminths, schistosomiasis, lymphatic filariasis, and Onchocerciasis. The type and number of drugs or drug combinations distributed at particular time varies depending on the disease(s) targeted; their co-endemicity in a given Woreda, if relevant; and the national goals and strategies related to the disease(s).

In order for drugs to be taken by the target audience and reduce disease incidence, an MDA should achieve the intended geographic and therapeutic coverage. For this to happen, the target audience needs to receive adequate knowledge about the drug being given. They also need to understand that the drug is meant only to treat the disease and reduce the burden in the target area and that to sustainably remain free of the disease; certain healthy behaviors should be practiced.

Recommended behaviors for prioritized issue

- Know why the drugs are given and take the drugs according to the given instructions
- Know that the drugs have minor side effects
- Know what to do before taking drugs, and communicate with the nearest health facility if they have minor or severe side effects after taking the drugs
- Know that the drugs treat active infection and they should practice healthy behavior to avoid reinfection.

Barriers

- Inadequate information about side effects
- Limited awareness about MDA benefits
- Misconceptions or rumors about the drugs, such as the drug making men infertile
- Severe side effects in individuals with a high infection rate
- Occasional occurrence of adverse reactions to drugs
- Perceived risk and severity of the disease
- Influence of family, peers, and community leaders

CORE MESSAGES

For Health Workers; Community, Political leaders, and Religious leaders; General Population; School-Aged Children

- Medicines used during mass drug administration are free, safe, and effective.
- In order to minimize side effects, it is important to eat a meal before taking the drug.
- Side effects are typically seen in individuals with higher levels of infection. This is because the drug is reacting to the bacteria or parasites in the body.
- People who are not eligible should not take the drug.
- Pregnant mothers, children under five, sick people, and mothers who have delivered within one week are not eligible for drugs administered orally.
- The purpose of the drug is only to prevent and treat neglected tropical diseases, namely, trachoma, schistosomiasis, intestinal worms, lymphatic filariasis, and Onchocerciasis.
- Behavior change is needed in order to have sustainable prevention for each disease. (See core messages under other categories for prevention behavior.)

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Inadequate awareness about mass drug administration (MDA) drugs and benefits	General population, health extension workers (HEW)	<ul style="list-style-type: none"> Medicines used during mass drug administration are free, safe, and effective. 	Lymphatic filariasis, Onchocerciasis, schistosomiasis, soil-transmitted helminths, trachoma
Inadequate awareness about MDA drugs and benefits	Community leaders, HEWs, general population	<ul style="list-style-type: none"> The purpose of the drug is only to prevent and treat neglected tropical diseases, namely, trachoma, schistosomiasis, intestinal worms, lymphatic filariasis, and Onchocerciasis. Behavior change is needed in order to have sustainable prevention for each disease. Behavior change includes washing face at least once a day and when dirty; washing hands with soap and water always before meal and after defecation; always using latrines; and always wearing shoes. We can prevent schistosomiasis by avoiding contact with pond, lake, or river water. Promote wearing long clothes that cover the whole body within your community, especially for people working in the fields (Onchocerciasis). Make sure your whole family sleeps under insecticide-treated bed nets to prevent diseases transmitted by mosquito bites (lymphatic filariasis). 	Trachoma, schistosomiasis, soil-transmitted helminths, Onchocerciasis, lymphatic filariasis
Individuals or households do not access treatment during the MDA week due to lack of awareness and information regarding the MDA and a lack of knowledge of potential side-effects and contraindications	General population, HEWs	<ul style="list-style-type: none"> It is important for all eligible people to participate in the mass drug administration. Those that are not eligible and should not take the drug are: pregnant mothers, children under five, sick people and mothers who have just delivered (within one week). Ask your local health facility or health extension worker for treatment or dates of next mass drug administration. 	Trachoma, schistosomiasis, soil-transmitted helminths, Onchocerciasis, lymphatic filariasis
Lack of information before MDA about side-effects	General population, HEWs	<ul style="list-style-type: none"> The medicine can have minor side effects, which are short lived and normal (option to tailor the side effect to each drug: albendazole/mebendazole for soil-transmitted helminths, Zithromax for trachoma, Praziquantel for schistosomiasis, Ivermectin/albendazole for Onchocerciasis and lymphatic filariasis). If the side effects are severe or continue, contact your health-care worker or go to the nearest health facility. 	Trachoma, schistosomiasis, soil-transmitted helminths, Onchocerciasis, lymphatic filariasis
Individuals or households do not access treatment during the MDA week due to lack of awareness and information regarding the MDA and the lack of knowledge of potential side-effects and benefits of treatment	School-aged children, parents, adults in targeted districts, teachers, HEWs, Health Development Army Community leaders, political leaders, religious leaders, local health-facility staff	<ul style="list-style-type: none"> Side effects are typically seen in individuals with higher levels of infection, as the drug is reacting to the parasites in the body. In order to minimize side effects, it is important to eat a meal before taking the drug. 	Schistosomiasis and soil-transmitted helminths

PRIORITY ISSUE I

Trachomatous Trichiasis

Intensified case management and disability prevention interventions include active and passive case identification and management of patients for a specific NTDs, particularly lymphatic filariasis, podoconiosis, leishmaniasis, and trachoma. These interventions include advocacy, health promotion, capacity building, case mapping, medical treatment and surgery provision, disability prevention, passive and active surveillance, and inter sectoral collaboration and partnership strengthening.

Trachomatous Trichiasis is a bacterial condition in which at least one eyelash rubs an eyeball or there is evidence of the recent removal of in-turned eyelashes. This is usually seen in adults who had been repeatedly been infected by trachoma during their childhood. It can be treated with simple surgical procedure by a trained health-care worker in a health facility or an outreach space. It is important that patients suffering from Trichiasis understand that they need to seek service from a health facility not traditional healer, which is a common trend in most parts of the country.

Recommended behaviors for prioritized issues

- Individuals who have an inverted eyelash that rubs their eyeball and causes pain and feel like they have a foreign body in their eye should visit a health facility early.
- Clients who undergo surgical removal of Trachomatous Trichiasis need to go to their follow-up appointment in order to get a better outcome.
- Authorities should support mobilization of community for Trachomatous Trichiasis surgery.

Barriers

- Inadequate counseling about the appropriate use of tetracycline eye ointment

- People think traditional treatment for Trichiasis is better
- Trachomatous Trichiasis surgeons do not prioritize counseling
- Many potential patients fear surgery
- Limited support from authorities on community mobilization for identification of Trachomatous Trichiasis cases

CORE MESSAGES

For Trachomatous Trichiasis Patients and Caregivers and the Community

- Trachomatous Trichiasis can be corrected by a simple and effective procedure on the same day as the health facility visit and has quick recovery time.
- Health facilities, not traditional healers, are the best option for treating eye diseases, including trachoma.

For Health Extension Workers, Health-Care Workers, and Trachomatous Trichiasis Surgeons

- Counseling improves adherence to treatment.
- Counseling patients to follow up after surgery is as important as the surgery to ensure better outcomes.

For Authorities/Decision Makers at All Levels

- The Trachomatous Trichiasis burden in a district or a region has an impact on health and social services.
- A simple surgery can reduce the social and economic impact on individual, family, institution, and the country.
- Mobilize and support the community during mass drug administration and take ownership of the program in your community or region.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Poor counseling on appropriate use of tetracycline eye ointment	Health-care workers (local authorities)	<ul style="list-style-type: none"> • Good counseling on how to use drugs avoids frequent visit by the patient. Good counseling improves adherence to treatment. 	Trachoma
People think traditional treatment for Trichiasis is better	Patients/caregivers (community leaders and some health-care workers)	<ul style="list-style-type: none"> • Health facilities are the best options for treating eye diseases, including trachoma. Please visit the nearest health facility if you have pain in your eye. 	Trachoma
Counseling not prioritized by Trachomatous Trichiasis surgeon	Trachomatous Trichiasis surgeon (local authorities)	<ul style="list-style-type: none"> • Counseling patients to follow up after surgery is as important as the surgery to ensure better outcomes. 	Trachoma
Fear of surgery	Trachomatous Trichiasis patient (health-care workers, Trachomatous Trichiasis beneficiaries)	<ul style="list-style-type: none"> • Trichiasis—the inversion of eyelashes that rubs the eyeball and causes pain/feeling of foreign body in the eye—is a result of repeated trachoma infection. This can be corrected by a simple and effective procedure on the same day as the health facility visit and has quick recovery time. 	Trachoma

PRIORITY ISSUE II

Intensified Case Management for Lymphedema resulting from Lymphatic Filariasis and Podoconiosis

About 40 million people in the world are impaired and disfigured by lymphatic filariasis-related lymphedema, elephantiasis, and hydrocele. In Ethiopia, about one million people suffer from lymphedema resulting from podoconiosis. The devastating social, psychological, sexual, and economic issues and burdens caused by these diseases have been illustrated in many studies. The massive swelling of the limbs in elephantiasis interferes with the routine activities, resulting in severe functional impairment and disability. Genitourinary disease, especially scrotal elephantiasis/lymphedema and hydrocele, can result in strong feelings of shame, fear, and embarrassment associated with sexual dysfunction. This disease hampers the marriage prospects of young people. Appropriate management of lymphedema has had significant impact on improving the life of those affected, therefore, encouraging them to seek treatment is important. In addition to raising awareness among communities to reduce stigma, advocating decision makers for the social and economic inclusion of patients is also important.

Recommended behaviors for prioritized issues

- Patients have information about the presence of treatment and care for lymphedema/swelling of limbs in health facilities.
- Patients know that treatment and self-care can result in an improved quality of life.
- Health workers educate community members about lymphatic filariasis and podoconiosis treatment and morbidity management.
- Community members understand that limb swelling, as a result of lymphatic filariasis or podoconiosis, is not a curse or personality trait.
- Community members know that there is no danger in caring for lymphedema/swelling of limbs as a result of lymphatic filariasis or podoconiosis.
- Community members understand that the disease is not transmitted by physical contact.
- Communities avoid stigmatizing and discriminating patients suffering from lymphoedemas as a result of lymphatic filariasis or podoconiosis.

Barriers

- Misconceptions about lymphedema as a result of lymphatic filariasis or podoconiosis, including considering it as a curse
- Stigma against lymphedema patients

- Lack of knowledge about self-management
- Lack of knowledge about transmission and prevention methods
- Lack of knowledge about disease symptoms
- Familiarity with the problem because of recurring instances

CORE MESSAGES

For Patients with Lymphedema

- If you have lymphedema/swelling of limbs as a result of lymphatic Filariasis or Podoconiosis, you can reduce pain and suffering by
 - Washing your legs,
 - Rubbing your skin with Vaseline,
 - Elevating affected limbs,
 - Exercising
 - Wearing shoes, and
 - Caring for your wounds.
- Consult a health professional if you have swelling of the limbs or scrotum.
- Consult a health professional if you have lymphedema and you experience swelling and redness of the limbs, fever, and pain. (Indicating an acute attack.)
- If the disease is not treated early, it can cause the limbs to swell so much that it causes difficulty of movement and, eventually, disability.

For Relatives/Caregivers, Health Workers, Health Extension Workers, Health Development Army, Community and Religious leaders

- Lymphedema is caused by mosquito bites (lymphatic filariasis) or walking barefoot for a long time on clay soil (podoconiosis). It is not hereditary or transmitted by physical contact. It is neither a curse nor is it related to individual traits or personality.
- Support and encourage people with lymphedema to take part in community and social events.
- Lymphedema management gives patients new hope for a better life.
- Encourage and support patients to visit a health facility to manage lymphedema.
- Management of lymphedema/swelling of limbs and surgery for scrotal swelling can give patients new hope for a better life.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Low promotion of podoconiosis treatment and morbidity management	Health professionals Health officials	<ul style="list-style-type: none"> • Podoconiosis treatment and patient care is important to improve the quality of life of patients; therefore, health-care workers need to educate community members about podoconiosis treatment and morbidity management. • Health officials need to advocate for podoconiosis health education. 	Podoconiosis
Misconceptions or stigma about lymphedema as a result of podoconiosis or lymphatic filariasis	Religious leaders, community leaders, adults within the community Health-care workers, health extension workers (HEWs), Health Development Army (HDA), local administration	<ul style="list-style-type: none"> • There is no danger in caring for lymphedema/swelling of limbs as a result of lymphatic filariasis or podoconiosis. The disease is not transmitted by physical contact. Treatment and care of lymphedema/swelling of limbs as a result would improve the quality of life of patients. 	Lymphatic filariasis, podoconiosis
Low awareness for self-management; Lack of awareness about transmission and prevention methods	Individuals with lymphedema Relatives, health-care workers, HEWs, HAD, community leaders, religious leaders	<ul style="list-style-type: none"> • If you have lymphedema/swelling of limbs as a result of lymphatic filariasis or podoconiosis, you can reduce pain and suffering by <ul style="list-style-type: none"> o Washing your legs, o Rubbing your skin with Vaseline, o Elevating affected limbs, o Exercising, o Wearing shoes, and o Caring for your wounds. • Consult a health professional if you have swelling of the limbs or scrotum. • Consult a health professional if you have lymphedema and you experience swelling and redness of the limbs, fever, and pain. (Indicating an acute attack.) • If the disease is not treated early, it can cause the limbs to swell so much that it causes difficulty of movement and, eventually, disability. • Lymphedema is caused by mosquito bites (lymphatic filariasis) or walking barefoot for a long time on clay soil (podoconiosis). It is not hereditary or transmitted by physical contact. It is neither a curse nor is it related to individual traits or personality. • Support and encourage people with lymphedema to integrate and take part in community and social events. • Lymphedema management gives patients new hope for a better life. • Encourage and support patients to visit a health facility to manage lymphedema. 	Lymphatic filariasis, podoconiosis

<p>Lack of knowledge about disease symptoms;</p> <p>Being familiar with the problem because of recurring instances</p>	<p>Community members (individuals)</p> <p>Relatives, community leaders, religious leaders, HEWs, HDA, teachers, development agents, and other sector offices</p>	<ul style="list-style-type: none"> • Scrotal swelling and lymphedema are the most common clinical manifestations of lymphatic filariasis. The disease is treatable. • Surgery reduces most cases of scrotal swelling (hydrocele). The service is available at zonal hospitals and you can get treated today. • If the disease is not treated early, it can cause the limbs to swell so much that it causes difficulty of movement and, eventually, disability. • Good hygiene, treatment of lesions on the limbs, and managing acute inflammatory episodes are important measures for managing lymphedema. • Clinical severity of lymphedema and acute inflammatory episodes can be improved by self-care at home simply with good hygiene, skin care, light exercise, and elevation of affected parts of the limbs. • Consult a health-care worker if you have lymphedema and experience acute inflammatory episodes (intense pain on the swollen limb, red and painful skin, and fever). • If you are having lymphedema/swelling of limbs and acute attack (intense pain on the swollen limb, red and painful skin, and fever), immediately soak the limb in a bucket or apply a cold compress, continue to cool the limb until the pain stops, drink plenty of water, get bed rest, and avoid physical exercise; take medicine to bring down the fever. If no improvement, consult a health-care worker at closest health center or health post. • People get lymphedema/swelling of limbs through mosquito bites. It is neither a curse nor is it related to individual traits or personality. • Support and encourage people with lymphedema to integrate and take part in community and social events. • Lymphedema/swelling of limbs management and scrotal swelling surgery give patients new hope for a better life. 	<p>Lymphatic filariasis</p>
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PRIORITY ISSUE III

Initiation of Early Treatment for Onchocerciasis

Onchocerciasis is a disease caused *Onchocerca volvulus*; a parasite is transmitted through the bites of black flies. The symptoms—severe itching, bumps under the skin, and blindness—can occur one to two years after infection. Efforts are currently underway to eliminate the disease in the country. It is important for the communities living in endemic Woredas to know the signs and symptoms of the disease so that they seek treatment from the nearby health facility.

Recommended behavior for prioritized issues

- Community members living in disease endemic areas have knowledge of the signs and symptoms of the disease and seek early treatment from nearby health facility.

Barriers

- Lack of knowledge on disease symptoms
- Low risk perception of the community (being familiar with the problem because of recurring instances)

CORE MESSAGES

For People Living in Endemic Woredas

- Consult a health professional if you have severe itching, nodules on the skin, or a change in your skin color.
- If the disease is not treated early, it can lead to severe pain and limited functionality, including blindness.

For Health Extension Workers, Health Development Army, and Community and Religious Leaders

- Advise your community to consult health professionals if they experience severe itching, nodules on the skin, or change skin color.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Lack of knowledge about disease symptoms; Being familiar with the problem because of recurring instances	Community members (individuals) Community leaders, religious leaders, HEWs, HAD	<ul style="list-style-type: none"> • Consult a health professional if you have severe itching, nodules on the skin, or a change in your skin color. • If the disease is not treated early, it can lead to severe pain and limited functionality, including blindness. • Advise your community to consult health professionals if they experience severe itching, nodules on the skin, or changes in skin color occur on them. 	Onchocerciasis

PRIORITY ISSUE IV

Initiation of Early Treatment and Compliance to Treatment for Leishmaniasis

Leishmaniasis is a collection of diseases caused by leishmania parasites transmitted through bites by the female sand fly. Based on the symptoms, leishmaniasis has three forms. Cutaneous leishmaniasis, the most common, causes erythema in the skin (nose, mouth, hand, and feet), nodular lesions, and swelling. The lesions turn into ulcers/open sores that can scar and deform the face and body and can lead to social discrimination. Mucocutaneous leishmaniasis is known for the partial or total destruction of the mucous membranes of the nose, ear, mouth, and throat. Without medical treatment, this type of leishmaniasis is not curable. In some cases, it may recur or remain incurable. Visceral leishmaniasis affects internal organs of the body, mainly the pancreas, liver, and spleen. The signs and symptoms occur three to six months after infection. People with this disease might suffer from severe and prolonged fever, loss of weight, enlarged liver and spleen, and anemia. Nose bleeding, cough, vomiting, diarrhea, weakness of the body, and loss of appetite are the minor symptoms of the disease. Leishmaniasis co-infection with other diseases, such as tuberculosis and HIV, makes diagnosis and treatment more challenging.

Someone is suspected of having leishmaniasis disease if he/she lives or travels to the areas affected by the disease, has a fever for more than two weeks, and their pancreas or liver is enlarged. They must go to a medical facility to get the necessary advice, follow up, and treatment. In some cases, leishmaniasis can recur or be incurable. Nevertheless, the person needs to undergo the proper follow up and treatment for other alternatives.

Recommended behaviors for prioritized issues

- Community members living in disease-endemic areas or people who travel to endemic areas have knowledge of the signs and symptoms of the disease and seek early treatment from nearby health facility.
- Leishmaniasis patients comply to treatment, once started.

Barriers

- Limited knowledge about the disease, including the signs and symptoms
- Long-term treatment of the disease
- Peer and family influence on early seeking of treatment

CORE MESSAGES

For Patients Diagnosed with and On Treatment for the Disease

- Discontinuing treatment will build resistance to the medicine and the disease will get more severe.
- Even if you get better while taking the drug, you need to complete treatment or the disease will relapse and become severe.

For Individuals Living in or Have a History of Traveling to endemic areas

- Consult a health professional or visit a health facility if you have:
 - Lesion(s) on face, forehead, nose, ear, arm, and/or leg and have lost weight or are emaciated (cutaneous leishmaniasis)
 - Abdominal swelling, fever, weight loss, loss of appetite, and/or face or leg edema (visceral leishmaniasis)

For Community Leaders, Health Workers at Health Centers and Hospitals

- Educate community members and migrant workers about the signs and symptoms of leishmaniasis if they have a lesion on their face, nose, ear, leg, and/or arms and abdominal swelling, fever, weight loss, loss of appetite, and/or face or leg edema.
- Encourage community members and migrant workers with signs and symptoms to go to the nearest health facility, if they have one, to seek treatment.
- Educate community members and migrant workers on the dangers (relapse, drug resistance, and severity of disease) if they discontinue treatment.

For Commercial Farm Owners

- You have a responsibility to provide proper medical care for migrant workers or farm workers when they are ill.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Low early treatment-seeking behavior	Men and women Community leaders, health-care workers at health centers and hospitals	<ul style="list-style-type: none"> • Consult a health professional or visit a health facility if you have: <ul style="list-style-type: none"> o Lesion(s) on face, forehead, nose, ear, arm, and/or leg and have lost weight or are emaciated (cutaneous leishmaniasis) o Abdominal swelling, fever, weight loss, loss of appetite, and/or face or leg edema (visceral leishmaniasis) • Educate community members and migrant workers about the signs and symptoms of leishmaniasis (if they have a lesion on their face, nose, ear, leg, and/or arms and abdominal swelling, fever, weight loss, loss of appetite, and/or face or leg edema) and encourage them to go to the nearest health facility, if they have one, to seek treatment. 	Leishmaniasis
Default of treatment	Patients with the disease Health professionals in health centers	<ul style="list-style-type: none"> • If you discontinue treatment you will build resistance to the medicine and the disease will become severe. Even if you feel better while taking the drug, you have to take all of the prescribed drugs otherwise the disease will relapse and become severe. • Educate community members and migrant workers on the dangers of discontinuing treatment (relapse, drug resistance, severity of disease). 	Leishmaniasis

PRIORITY ISSUE I

Keeping Houseflies away to Prevent Transmission of Trachoma

Vector management and control is crucial for reducing the number of vectors and intermediate hosts that are capable of spreading infections, reducing the transmission potential between vectors and hosts, preventing new infections and re-infections. Vector management and control is an important complement to preventative chemotherapy, and encouraging environmental improvement is crucial to control neglected tropical diseases transmitted by vectors. Five of the priority, neglected tropical diseases (NTDs) in Ethiopia have either biological mechanical vectors or intermediate hosts. Blackflies, sandflies and mosquitoes are, respectively, the biological vectors of Onchocerciasis leishmaniasis and lymphatic filariasis; while houseflies are mechanical vectors that transmit trachoma. Freshwater snail is intermediate host of schistosomiasis.

Recommended behavior for prioritized issues

- Community members are aware that houseflies are the main transmitters of trachoma and they regularly take measures to keep flies away.

Barriers

- Flies are not considered risk factors for the transmission of trachoma
- Limited knowledge that facial cleanliness keeps flies away
- Limited knowledge that the breeding of flies is related to poor waste management, open defecation, and sewage disposal

CORE MESSAGES

For Mothers, Fathers, Older Children, and Teachers

- Flies are responsible for transmitting trachoma from sick to healthy individuals.
- Washing children's faces daily and removing discharge from their eyes and noses will keep flies away.
- Faces should be kept clean throughout the day so flies will not be attracted to them.

For Community and Religious Leaders and the General Community

- Flies are responsible for transmission of trachoma. They transmit trachoma while feeding on the eye and nose discharges of infected people.
- Flies breed in waste, human excreta, dung, and sewage; destroying fly breeding sites will wipe out flies near your surroundings.
- Fly breeding sites can be reduced or eliminated by improving the disposal of human excreta, animal dung, and sewage disposal; keeping domestic animal dung away from house environment and neighborhood; improving food handling; and ensuring that waste is properly managed.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Flies are not considered risks to trachoma transmission	Community leaders, religious leaders	<ul style="list-style-type: none"> Flies are responsible for transmission of trachoma. They transmit trachoma while feeding on the eye and nose discharges of infected people. 	Trachoma
Knowledge about benefit of facial cleanliness	Mothers, older children, fathers, and teachers	<ul style="list-style-type: none"> Flies are responsible for transmitting trachoma from sick to healthy individuals. Washing children's faces daily and removing discharge from their eyes and noses will keep flies away. Faces should be kept clean throughout the day, so flies will not be attracted to them. 	Trachoma
Breeding of flies is not related to poor waste management, open defecation, and sewage disposal	Community leaders, religious leaders	<ul style="list-style-type: none"> Flies breed in waste, human excreta, dung, and sewage. The number of flies increases in the presence of unclean environment with waste, human excreta, and open sewage. 	Trachoma
		<ul style="list-style-type: none"> Fly breeding sites can be reduced or eliminated by improving the disposal of human excreta, animal dung, and sewage disposal; keeping domestic animal dung away from house environment and neighborhood; improving food handling; and ensuring that waste is properly managed. 	

PRIORITY ISSUE II

Prevention and Control of Black flies to Prevent Onchocerciasis in Endemic Areas

Recommended behaviors for prioritized issues

- Community members are aware that blackflies are the main transmitters of Onchocerciasis and that they should regularly take measures to keep blackflies away.
- Blackfly breeding sites are identified and vector control measures are taken by authorities.

Barriers

- Low awareness about transmission and prevention methods
- Lack of vector control activities due to poor engagement of the community and lack of ownership by health-care workers

CORE MESSAGES

- For Farmers and Their Families
- Onchocerciasis is transmitted by bites of blackflies.
- Cover your body with clothes to minimize the chance of infection.

For Health Extension Workers, Health Development Army, Community and Religious leaders, Agricultural Development Agents, and Teachers

- Within your community, promote wearing long clothes that cover the whole body, especially for people working in the fields.
- Ensure all potential breeding sites are identified for vector control.
- Explain to the community about your vector control activities, their potential impact, and the specific behaviors necessary to avoid the adverse effects of chemical sprays.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Low awareness about transmission and prevention methods	Farmers and their families Health extension workers, Health Development Army, teachers, community leaders, religious leaders, rural development agents	<ul style="list-style-type: none"> • Onchocerciasis is transmitted by bites of blackflies. • Cover your body parts with clothes to minimize the chance of infection. • Within your community, promote wearing long clothes that cover the whole body, especially for people working in the fields. 	Onchocerciasis
Lack of vector control activities	Government, development partners Community leaders, religious leaders, health extension workers, chemical suppliers	<ul style="list-style-type: none"> • Ensure all potential breeding sites are identified for vector control. • Explain to the community about your vector control activities, their potential impact, and the specific behaviors necessary to avoid the adverse effects of chemical sprays. 	Onchocerciasis

PRIORITY ISSUE III

Prevention and Control of *Anopheles*, *Culex*, and *Aedes* Mosquitoes to Prevent Lymphatic Filariasis in Endemic Areas

Recommended behaviors for prioritized issues

- Community members are aware that mosquitoes are the main transmitters of lymphatic filariasis and that they can regularly take measures to prevent bites by mosquitoes.
- Mosquito breeding sites are identified and vector control measures are taken by authorities.

Barriers

- Lack of knowledge of the benefits of using bed nets
- Lack of vector control activities due to poor engagement of the community and lack of ownership by health-care workers

CORE MESSAGES

For Adults, Mothers and Fathers, and School-Aged Children

- Make sure your whole family sleeps under insecticide-treated bed nets to prevent diseases transmitted by mosquito bites.
- Use of bed nets will prevent lymphatic filariasis and other mosquito-borne diseases, like malaria.
- Ensuring the availability of bed nets will promote health and reduce financial and social costs spent on treatment.

For Health Workers, Health Extension Workers, Health Development Army, Community and Religious Leaders, and Local Administration

- Promote availability and use of insecticide-treated bed nets on a regular basis.
- Collaborate with the malaria prevention and control program in lymphatic filariasis-endemic areas.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Lack of knowledge of the benefits of using bed nets	Adults, mothers and fathers, school-aged children Teachers, community leaders, religious leaders, health extension workers, Health Development Army, local administration, other sector civil servants	<ul style="list-style-type: none"> • Make sure your whole family sleeps under insecticide-treated bed nets to prevent diseases transmitted by mosquito bites. • Promote the availability and use of insecticide-treated bed nets on a regular basis. 	Lymphatic filariasis
Poor management of vector control; Avoidance from participating on the household level because of low awareness	Local administration (district health office), heads of household Teachers, community leaders, religious leaders, health extension workers, Health Development Army, local administration	<ul style="list-style-type: none"> • Use of bed nets will prevent lymphatic filariasis and other mosquito-borne diseases, like malaria. • Ensuring the availability of bed nets will promote health and reduce financial and social costs spent on treatment. 	Lymphatic filariasis

PRIORITY ISSUE IV

Prevention and Control of Sandflies to Prevent Leishmaniasis in Endemic Areas

Recommended behaviors for prioritized issues

- Community members are aware that sandflies are the main transmitters of leishmaniasis and that they should regularly take measures to prevent bite by sandflies.
- Know that sandflies bite mostly during nighttime and take protective measures to prevent bites.
- Sand fly breeding sites are identified and vector control measures are taken by authorities.

Barriers

- Lack of awareness about the proper use of bed nets
- Outdoor sleeping habits of farmers

CORE MESSAGES

For Adults, Mothers and Fathers, and School-Aged Children

- Make sure your whole family sleeps under insecticide-treated bed nets to prevent diseases transmitted by mosquito or sand fly bites.

For Health Workers, Health Extension Workers, Health Development Army, Community and Religious Leaders, Local Administration, and Other Sector Civil Servants

- Promote availability and use of insecticide-treated bed nets on a regular basis.
- Use of bed nets will prevent leishmaniasis and mosquito-borne diseases like malaria.
- Ensuring the availability of bed nets will promote health and reduce financial and social costs spent on treatment.
- For Migrant Workers
- Always use bed nets during the night to prevent sand fly bites.
- Do not sleep outdoors without bed nets.
- Wear long-sleeve shirts while in the field/outdoors to prevent sand fly bites.

For Commercial Farm Owners

- You have a responsibility to provide proper accommodation for farmers/migrant workers, including bed nets and access to medical care during illness.
- You should also provide health education about the disease.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Low use of bed nets	Men (migrant workers) Health extension workers	<ul style="list-style-type: none"> • Always use bed nets during the night to prevent sand fly bites. • Educate and encourage community member use of bed nets. 	Leishmaniasis Leishmaniasis
Improper use of bed nets	Men (migrant workers) Health extension workers	<ul style="list-style-type: none"> • If you use bed nets properly and consistently you can prevent leishmaniasis • Educate community members and migrant workers about the proper and consistent use of bed nets. 	Leishmaniasis Leishmaniasis
Outdoor sleeping habits of farmers	Men (migrant workers) Commercial farm owners	<ul style="list-style-type: none"> • Do not sleep outdoor without bed nets. You should wear long-sleeve shirts while in the field to prevent sand fly bites. • You have a responsibility to provide proper accommodation for farmers/migrant workers, including bed nets and access to medical care during illness 	Leishmaniasis Leishmaniasis

PRIORITY ISSUE V

Prevention and Control of Fresh water Snails to Prevent Schistosomiasis in Endemic Areas

Recommended behaviors for prioritized issues

- Community members are aware that fresh water snails are the intermediate host of schistosomiasis and that they should regularly take measures to prevent contact with water infested with snails.
- Water infested with snails are identified and vector control measures are taken by authorities.

Barriers

- Individuals, households, and communities access and have regular contact with schistosomiasis-infected water sources due to the unavailability of clean, safe, and protected water sources
- General lack of the knowledge about the disease and its effects
- Lack of knowledge about the mode of transmission and prevention
- Lack of safe water for bathing or recreation use

CORE MESSAGES

For School-Aged Children, Parents, Teachers, Local Health Facility Staff, Health Extension Workers, Health Development Army, and Community, Religious, and Political Leaders

- Water infested with snails is potential source of disease.
- The parasite lives in snails. When we have contact with snail-infested water, the parasites then penetrate our skin and we get infected.
- Avoid contact with water having snails.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
<p>Individuals, households, and communities access and have regular contact with schistosomiasis-infected water sources due to the unavailability of clean, safe, and protected water sources</p> <p>Lack of knowledge about the disease and its effects</p> <p>Lack of knowledge about the mode of transmission and prevention</p>	<p>School-aged children, parents, teachers, local health facility staff, health extension workers, Health Development Army</p> <p>Community, religious, and political leaders</p>	<ul style="list-style-type: none"> • Water infested with snails is potential source of disease. • The parasite lives in snails. When we have contact with snail-infested water, the parasites then penetrate our skin and we get infected. • Avoid contact with water having snail and use usually safe source of water. 	Schistosomiasis

PRIORITY ISSUE VI

Prevention and Control of Guinea Worm Disease in Endemic areas by Avoiding Fish Entrails

Recommended behavior for prioritized issues

- Community members are aware that fish in Guinea worm disease-endemic areas could be source of Guinea worm disease and that they should regularly take measures to properly use and dispose of fish entrails.

Barriers

- Lack of awareness that fish could be source of Guinea worm disease
- Community members do not dispose fish entrails properly, which may result in dog infections, and thereby humans, of Guinea worm disease

CORE MESSAGES

For Fishers, Health Extension Workers, Health Development Army, Community and Religious Leaders, Local Administration, and Teachers in Endemic Areas

- Bury fish entrails deep in the ground or hang them on a tree to dry before giving to dogs.
- Encourage community members to properly dispose of fish entrails.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Community members do not dispose of fish entrails properly, which may result in dog infections of Guinea worm disease	Fishers Health extension workers, Health Development Army, community and religious leaders, local administration, and teachers in endemic areas	<ul style="list-style-type: none">• Bury fish entrails deep in the ground or hang them on a tree to dry before giving to dogs.• Encourage community members to properly dispose of fish entrails.	Guinea worm disease

PRIORITY ISSUE I

Facial Cleanliness for Prevention of Trachoma Infection

Water, hygiene, and sanitation (WASH) interventions have broad public health benefits that reduce multiple diseases and contribute to non-disease outcomes, such as school attendance. Improving access to safe water, managing human waste, improving hygiene, and enhancing targeted environmental management can lead to improved health, poverty reduction, and socioeconomic development. Linking WASH and neglected tropical diseases (NTDs) therefore has potential to impact multiple NTDs through a single area of intervention. WASH contributes in varying degrees to NTD prevention as well as to treatment and care. To that end, ensuring the joint development and use of behavior change messages for disease prevention by WASH and NTD actors is important.

Face washing and personal hygiene is one of the strategies that contributes to the prevention and elimination of trachoma. Flies are the major transmitters of the bacteria. Face washing, to remove nasal and ocular discharge; improved access to clean water; and proper sanitation for the disposal of human waste prevents flies from transmitting the trachoma bacteria from an infected person to an uninfected one.

Recommended behavior for prioritized issues

- Children and adults keeping clean faces all day
- Creating an enabling environment to improve access to water and soap

Barriers

- Negligence
- Low priority for sanitation at all levels
- Lack of awareness about the importance of face washing for trachoma prevention
- Cultural norms in some areas—some people consider clean faces/bodies, in general, a characteristic of a lazy person who focused on beauty rather than hard work

CORE MESSAGES

For Mothers/Caregivers of School-Aged Children

- Children with unclean faces are at risk of getting infected with trachoma.
- Faces should be kept clean throughout the day. Face washing should be a regular practice, especially for children.

For General Population

- Keeping a clean face is keeping your eyes healthy.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Not keeping facial cleanliness	General population	<ul style="list-style-type: none"> • Children with unclean faces are at risk of getting infected with trachoma. • Faces should be kept clean throughout the day. Face washing should be a regular practice, especially for children. 	Trachoma
Cultural norm (accepting unclean faces)	Community	<ul style="list-style-type: none"> • Keeping a clean face is keeping your eyes healthy. 	Trachoma

PRIORITY ISSUE II

Sharing Clothes, Towels, and Blankets

Clothes, towels, and blankets that were in contact with the eye and nose secretions of a person infected with trachoma can transmit the disease from infected person to another. Similarly sharing bed sheets, blankets, and clothing within a family or friends can also transmit scabies from an infected person to other family members and individuals.

Recommended behavior for prioritized issues

- Use personal towel and clothing and avoid sharing them, especially if someone is infected with trachoma or scabies.

Barriers

- Sharing towels and clothes among family members is a cultural norm
- Lack of awareness about transmission of the disease

CORE MESSAGES

For Mothers/Caregivers of School-Aged Children

- Sharing towels for cleaning faces raises the risk of contracting infections by trachoma and scabies.
- Use separate towels for cleaning children's faces.

For general population

- Sharing clothing items raises the risk of contracting scabies.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Sharing clothes between people	General population	<ul style="list-style-type: none">• Sharing towels for cleaning faces raises the risk of contracting infections by trachoma and scabies.• Use separate towels for cleaning children's faces.• Sharing clothing items raises the risk of contracting scabies.	Trachoma, scabies

PRIORITY ISSUE III

Open Defecation

Open defecation puts the community at risk of contracting diseases such as trachoma, schistosomiasis, and soil-transmitted helminths. Open urination poses risk of contaminating water with schistosomiasis, thereby puts the community at risk of infection.

Recommended behaviors for prioritized issues

- All community members use improved latrines
- Proper use of latrines at all times by all community members and proper child feces management

Barriers

- Lack of awareness about the importance of latrines by the community
- Not realizing the health, social, economic, and image benefits of latrines by household heads
- Lack of awareness on child feces and diaper management
- Free riders who do not clean or take care of communal latrines
- Limited understanding about the importance of public and roadside latrines
- Lack of awareness about how to keep latrines clean
- Fear of latrine collapse due to poor-quality construction
- Lack of proper latrine use
- Limited understanding of the effects of open defecation on health
- Lack of awareness about disease transmission

CORE MESSAGES

For General Population

- Open defecation and urination puts the community at risk of contracting diseases such as trachoma, schistosomiasis, and soil-transmitted helminths.
- Constructing and using latrines properly is important for keeping the environment clean and preventing neglected tropical diseases.
- Proper use of latrines prevents diseases.
- Using a latrine is a modern way of life.
- Responsible and modern communities do not practice open defecation and urination.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Not using latrines (open defecation)	General population	<ul style="list-style-type: none"> • Open defecation puts the community at risk of contracting diseases such as trachoma, schistosomiasis, and soil-transmitted helminths. • Constructing and using latrines properly is important for keeping the environment clean and preventing neglected tropical diseases. • Using latrines prevents diseases. Using latrines is a modern way of life. • Responsible and modern communities do not practice open defecation. 	Trachoma, schistosomiasis, and soil-transmitted helminths

PRIORITY ISSUE IV

Maintaining a Clean Living Environment

Proper waste disposal is important to prevent contaminating the environment and prevent diseases like trachoma. An unclean environment with waste, human excreta (including children's feces), and sewage attracts flies that cause disease transmission and raises the risk of people contracting trachoma.

Recommended behaviors for prioritized issues

- Proper handling of solid and liquid waste on site
- Improve waste collection and transportation
- Improve attention given to waste recycling at all levels
- Prepare proper waste disposal site

Barriers

- Lack of awareness on waste minimization, recycling, and reuse
- Lack of awareness on how waste can affect health, social, and economic aspects of life
- Lack awareness on proper waste segregation
- Limited awareness on the frequency of waste collection
- Lack of awareness on resource-oriented waste management
- Lack of awareness on proper waste disposal methods
- Lack of commitment on using proper waste disposal sites

CORE MESSAGES

For General Population

- Implementing/using proper waste disposal facilities/services will help you and your families avoid the risks of contracting contagious diseases, like trachoma, which are transmitted by flies attracted by waste.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Not maintaining a clean environment	General population	<ul style="list-style-type: none"> • Proper waste disposal is important to prevent contaminating the environment and prevent diseases like trachoma. • An unclean environment with waste, human excreta, and sewage attracts disease transmission flies and raises the risk of contracting trachoma. • Collect waste in a designated pit and cover it with soil or burn it. 	Trachoma

PRIORITY ISSUE V

Safe and Adequate Water for Household Consumption

A substantial number of households in the country lack safe water for drinking, bathing, and washing clothes. Having a water source or supply point near the home does not necessarily mean that the water is safe to drink, as water from that source may not be treated at all or not treated well or that the source is not clean and safe.

Household water treatment is an essential health intervention to improve the quality of drinking water and reduce water-borne neglected tropical diseases such as Guinea worm disease, particularly for those who rely on water from unimproved sources. Similarly, using safe water for washing, bathing, and recreation use and avoiding contact with contaminated water for washing or recreation, such as swimming, will help prevent NTDs such as schistosomiasis. Having an adequate amount of safe water set aside for face washing would help prevention of trachoma and the management of secondary infections related to lymphedema as a result of lymphatic filariasis or podoconiosis.

Recommended behaviors for prioritized issues

- Ensure an adequate amount of safe water for household use (such as washing vegetables), face washing, bathing, clothing washing, and recreation use
- Use water from a protected source
- Treat household water from unprotected sources
- Avoid contact with contaminated water for activities such as washing clothes, bathing, and swimming

Barriers

- Lack of safe water
- Lack of knowledge about the transmission of water-borne and water-related NTDs
- General lack of resources

CORE MESSAGES

For School-Aged Children, Parents, and Teachers

- Do not enter contaminated or potentially contaminated water sources to, for example, swim, bathe, wash clothes, collect water, or fish.
- If there is no safe water source, minimize your time in the water.

For Local Health Facility Staff, Service Industry, General Community, and Community, Religious, and Political Leaders

- Choose to use borehole water whenever possible.

For Health Extension Workers, Health Development Army, Community and Religious Leaders, Local Administration, and Teachers in Guinea Worm Disease-Endemic Districts

- Advise on and encourage the use of water filters to prevent transmission of Guinea worm disease.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Using contaminated water	General population	<ul style="list-style-type: none"> • Do not enter potentially infected water sources. • If there is no safe water source, minimize time spent in contaminated water. • Boil or chlorinate all drinking water and water used for bathing. • Choose to use borehole water whenever possible. 	Schistosomiasis, soil-transmitted helminths, Guinea worm disease

PRIORITY ISSUE VI

Shoe Wearing

Shoe wearing helps prevent infection with hookworm, one of the soil-transmitted helminths, and prevent podoconiosis.

Recommended behavior for prioritized issues

- Regularly wear shoes when outside, especially in farm fields

Barriers

- Limited knowledge about the importance of wearing shoes to prevent disease
- In some areas, shoe wearing is seen as sign of weakness (cultural norm) because going barefoot hardens feet and communities perceive hardening as sign of strength

CORE MESSAGES

For Farmers and General Population

- Wearing shoes at all times protects from diseases such as hookworm and podoconiosis.
- If you wear shoes, you will protect yourself from podoconiosis and will be able to wear shoes for a long time. You cannot wear shoes if your feet are disabled or disfigured from podoconiosis.

For Patients with Podoconiosis or Lymphatic Filariasis with Lymphoedemas

- Consistently wear shoes. Wash your feet before you wear your shoes.
- If you do not wash your feet before you put on your shoes, you might get an infection. Putting on shoes before washing your feet can be harmful to your health.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Not wearing shoes	General population	<ul style="list-style-type: none">• Wearing shoes at all times protects from diseases.	Soil-transmitted helminths, podoconiosis

PRIORITY ISSUE VII

Proper Handwashing

Proper Handwashing with soap and water prevents infection with soil-transmitted helminths. Please refer to messages on Section I Hygiene and Environmental Health Message Summary, *page 35* for messages related to proper Handwashing.

PRIORITY ISSUE VIII

Food Hygiene

Proper food hygiene, specifically washing or peeling vegetables and fruit before eating and/or cooking foods thoroughly before eating, helps prevent soil-transmitted helminths.

Please refer to messages on Section I Hygiene and Environmental Health Message Summary, *page 19-20* for messages related to proper food hygiene.

5.1 TRACHOMA

Trachoma is an eye disease caused by Chlamydia Trachomatis—bacteria that primarily infects the inner part of the eyelid. Although the first encounter with trachoma may not cause severe consequences, if the person is repeatedly infected, the disease forms scar in the inner part of the eyelid that causes pain by turning the eyelashes inward and rubbing on the eyeball repeatedly. This stage of trachoma is called Trachomatous Trichiasis. Trichiasis scars the eyeball that leads to visual impairment and eventually blindness.

According to the trachoma survey conducted in our country in 2013, more than 600 Woredas of the country have high trachoma burden, indicating that a significant proportion of the population at risk of trachoma infection. It is important for people to know that although trachoma causes blindness, it can be prevented with simple measures such as face washing and early treatment.

PRIORITY ISSUE I

Trachoma Causes Blindness

Recommended behaviors for prioritized issue

- Community members should know that trachoma is a serious disease which causes blindness if not treated earlier
- Community members should know that repeated infection during childhood can cause blindness during adulthood
- Older children and parents and caregivers of young children know the signs and symptoms of trachoma and seek treatment early
- Community members at risk know that blindness due to trachoma is not hereditary or caused by sunlight or dust

Barriers

- Low perceived risk of trachoma
- Lack of knowledge about the signs and symptoms of active trachoma
- Misconception of the causes of trachoma (such as hereditary, sunlight, and dust)

CORE MESSAGES

For Patients/Caregivers

- Patients/caregivers of children should know the signs and symptoms of active trachoma—which includes eye discharge, eye sore, itching, redness, irritation, tearing, vision impairment, and severe pain by Trichiasis (inversion of the eyelid to rub the eyeball)—and seek treatment early.

For Community

- Trachoma causes blindness and everyone can be at risk.
- Trachoma is an infectious disease caused by lack of personal hygiene (not washing face) and poor environmental sanitation (open defecation and/or poor waste management). It is not hereditary or caused by sunlight or dust.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Low perceived risk of trachoma	Community members (HWs)	<ul style="list-style-type: none"> Trachoma cause blindness and everyone can be at risk 	Trachoma
Lack of knowledge on sign and symptom on active trachoma	Patients/Care givers (HWs)	<ul style="list-style-type: none"> Patients/care givers for children should know sign and symptoms of active trachoma 	
Misconception on cause of trachoma (hereditary, sunlight etc)	Community members (Community/ Religious Leaders, HWs)	<ul style="list-style-type: none"> Trachoma is an infectious disease caused by lack of personal hygiene (not washing face) and poor environmental sanitation (open defecation, poor waste management). It is not hereditary or caused by sunlight or dust. 	

5.2 LYMPHEDEMA AS A RESULT OF LYMPHATIC FILARIASIS OR PODOCONIOSIS

Lymphatic Filariasis is a disease caused by a parasite called *Wuchereria bancrofti* that is carried by *Anopheles*, *Culex*, and *Aedes* mosquitoes from a sick to a healthy person. The disease attacks people of all ages and genders. Six million people are at risk of the disease in our country. The disease is endemic in 70 woredas in Amhara, Oromia, Tigray, Gambella, Beneshangul Gumuz, and the Southern nations, Nationalities, and Peoples regions. The disease can cause severe swelling/lymphedema in different body parts (legs, arms/hands, breasts, and genital organs), leading to social stigma and isolation and massive social and economic problems.

Podoconiosis is caused by long-term exposure of bare feet to irritant red clay soil of volcanic origin in highland areas. Unlike lymphatic filariasis, this disease is not transmitted from person to person. According to the 2010 nationwide mapping survey in Ethiopia, podoconiosis is endemic in 345 districts. An estimated 34.9 million people (43.8% of the population) live in environments where they are at risk of contracting the disease.

People suffering from lymphedema caused by either or both of these diseases experience social and economic isolation because of misconceptions—that these diseases, for example, are hereditary or a curse—and stigma associated with the diseases. The patients themselves sometimes believe these misconceptions and, as a result, suffer self-discrimination. For those reasons, using appropriate methods to demystify the misconceptions and address disease-related stigma and discrimination is important. *Refer to page 42, 43, 44.*

Lymphatic filariasis is transmitted primarily by *Anopheles/culex* mosquitoes in Ethiopia. Patients with chronic disabilities resulting from lymphatic filariasis are advised to maintain rigorous hygiene and take necessary precautions to prevent secondary infection and aggravation of the condition; availability of water for limb washing important in reducing severity of secondary conditions related to lymphatic filariasis.

Recommended behaviors for prioritized issues

- Wash the affected parts twice daily with soap and clean, cool water and drying carefully
- Keep the nails and spaces between the toes clean

- Raise the affected limb at night, exercising the limb regularly (but not excessively)
- Wear comfortable shoes
- Use medicated creams (antibiotics or antifungal) to treat small wounds, abrasions, or fungal infections

Barriers

- Lack of knowledge about the causes and transmission of lymphedema
- Misconceptions about lymphedema
- Stigma and discrimination of people with lymphedema
- Perception of people—including health workers and the patients themselves—that lymphedema, once it occurs, cannot be treated

CORE MESSAGES

For Patients/Caregivers

- People get lymphedema/swelling of limbs through mosquito bites or long exposure to clay soil on bare feet. It is not a curse and is not related to individual traits or personality.
- Consult a health professional if you have lymphedema/swelling of limbs and you experience the following: swelling and redness of the limbs, fever, and pain (acute attack).
- If the disease is not treated early, it can make the limbs swell, causing difficulty with movement and eventually disability.

For Health Workers, Health Extension Workers, Health Development Army, Community and Religious Leaders, Local Administration, and Adults within the Community

- People get lymphedema/swelling of limbs through mosquito bites or long exposure to clay soil on bare feet. It is not a curse and is not related to individual traits or personality.
- People with lymphedema/swelling of limbs should be included in the community. They should be supported and encouraged to take part in community activities.
- Encourage patients to seek treatment. Treatment can significantly improve the quality of life of patients. Refer page 40-44.

5.3 SCABIES

Scabies is an infestation of the skin caused by the scabies mite *Sarcoptes scabiei*. Scabies is usually transmitted by direct skin-to-skin contact; from infected animals through contact with infected saliva, through bites or scratches; or rarely, by underwear or bedclothes that have been freshly contaminated by an infected person. Mites can survive for only a few days after leaving the human or animal body.

All close (skin-to-skin) contacts and other people in the same household should be treated at the same time, even if no symptoms are present. By the time scabies is diagnosed in one person, many other people may have been infested. If everyone is not treated at the same time, treatment is likely to be unsuccessful.

Underwear, clothing, towels, bed linens, and personal effects—such as slippers, bed jackets, dressing gowns, and knee rugs—used by an affected person in the 72 hours prior to treatment should be washed with hot water to kill the mites. If items are unable to be washed, place them in a sealed plastic bag and leave them for 72 hours before airing and reusing. Mattresses and upholstered furniture can be gently ironed.

PRIORITY ISSUE I

Prevention of Transmission of Scabies

Recommended behaviors for prioritized issues

- Know of the signs and symptoms of scabies
- Initiate early treatment to prevent spread and secondary bacterial infection

- Know that scabies is highly contagious and, therefore, avoid skin contact or sharing clothes with infect person
- Treat close family members/contacts, even if they have no signs and symptoms
- Exclude students from school until one day after commencement of treatment

Barriers

- Lack of awareness about proper personal hygiene
- Shortage of clean water
- Lack of knowledge about transmission methods

CORE MESSAGES

For School-Aged Children, Families, Caregivers, and Teachers

- Keeping personal hygiene, including bathing and washing clothes, is important to prevent scabies.
- Initiate early treatment of scabies to help prevent spread and secondary infection.
- Treatment of all contacts/family members is important even if they have no signs and symptoms.
- Exclude students/children from school/daycare at least for a day after initiation of treatment.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Inadequate health-seeking behavior	Men and women	<ul style="list-style-type: none"> • Visit the nearest health facility when your skin itches, especially at night, or you have lesions on your extremities, including palms and soles of your feet. 	Scabies
Individual drug in compliance	Targeted audience/patients	<ul style="list-style-type: none"> • If a health professional diagnoses you with scabies and provides you with medication, take the medication according to their directions. This will help to get rid of the disease. 	Scabies
Poor personal hygiene (households, individuals)	Primary: Men, women, and school-aged children	<ul style="list-style-type: none"> • You should maintain good personal hygiene—including washing clothes and bathing regularly—to protect yourself and your family from scabies. 	Scabies
Close contact with cases (household, individuals, community)	Men and women Community leaders, religious leaders, HEWs, HDAs, local administration, and teachers	<ul style="list-style-type: none"> • Avoiding direct (skin-to-skin) contact with patients will help prevent transmission until the patient is cured. • You should advise community members to avoid direct (skin-to-skin) contact with patients. 	Scabies

5.4 GUINEA WORM DISEASE

Guinea worm disease is caused by the parasitic filarial worm *Dracunculus medinensis* and transmitted by drinking pond water containing the Guinea worm larvae. Guinea worm is thread-like worm that can reach up to one meter long. The person infected by the worm can develop inflammation and a swelling lesion on the skin (mostly on feet). Guinea worm disease is common among communities with a low socioeconomic status and where drinking unclean water is a common practice. Currently, the disease exists only in four African countries—Ethiopia, South Sudan, Chad, and Mali. In our country, the disease is currently found in Gambella region in Gog Woreda. This disease was previously prevalent in all Woredas in Gambella region and in Nyangatom Woreda in South Omo (Southern nations, Nationalities, and Peoples region); it needs special attention and surveillance, as there is a very high likelihood of cases in these areas.

PRIORITY ISSUE I

Reporting Guinea Worm Disease Suspects Has Cash Reward

As the disease is targeted for eradication, every case must be reported. Hence Guinea worm suspects should be reported either in person or using hotline. It is important for health workers and the general population to know about the eradication and certification criteria.

Recommended behavior for prioritized issues

- Guinea worm disease is targeted for eradication and everyone, especially health workers, should report suspect cases.

Barriers

- Lack of knowledge about the disease transmission, signs and symptoms, and prevention
- Lack of knowledge about the presence of cash reward for voluntary reporting of Guinea worm disease

CORE MESSAGES

For Health Workers, Health Extension Workers, Health Development Army, Community and Religious Leaders, Local Administration, and Teachers

- A female Guinea worm emerges through a blister in the skin, usually on the foot or leg. This worm can grow up to one meter in length and can take many days to emerge.
- Everyone is responsible to report if they see someone with Guinea worm disease or a Guinea worm-like disease so that Ethiopia can get certified as being free of Guinea worm.
- Patients can also self-report if they have Guinea worm disease.
- One of the criteria for the country to get certified is that 80% of community and 100% of health-care workers should be aware of the presence and amount of the cash reward if they report Guinea worm disease.
- Someone who reports a Guinea worm suspect to a nearby health facility or by the free line 8335 will get a cash reward of 2000 birr.

Behavioral Problem	Priority Audience	Core Message	Disease(s)
Lack of knowledge on the presence of cash reward for voluntary reporting of Guinea worm disease	Community (Men, women, and children) Health-care workers; Community and religious leaders, HEWs, HDAs, local administration, and teachers	<ul style="list-style-type: none"> Everyone is responsible to report if they see someone with Guinea worm disease or Guinea worm-like disease so that Ethiopia can get certified as being free of Guinea worm. Patients can also self-report if they have Guinea worm disease. One of the criteria for the country to get certified is that 80% of community and 100% of health-care workers should be aware of the presence and amount of the cash reward if they report Guinea worm disease. Someone who reports a Guinea worm suspect to a nearby health facility or by the free hotline 8335 will get a cash reward of 2000 birr. Encourage community members to report early so they can make Guinea worm disease history. 	Guinea worm disease

