World Vision

BEHAVIOR CHANGE:

Practical implementation guidance for programs

MARCH 2021

ACKNOWLEDGEMENTS

Our desire is for this document to serve as a valuable tool to support the World Vision Partnership and other development professionals to implement effective and impactful behavior-change programming to improve the lives of the most vulnerable around the world. If you have any feedback on the guidance included, please email mherrick@worldvision.org.

World Vision

Behavior Change: Practical Implementation Guidance for Programs

Version 1.0

Published March 2021

World Vision is a Christian humanitarian organization dedicated to working with children, families, and their communities worldwide to reach their full potential by tackling the causes of poverty and injustice. We serve all people, regardless of religion, race, ethnicity, or gender.

TABLE OF CONTENTS

ACRONYMNS

BA	Barrier Analysis
BCD	Behavior-Centered Design
COVID-19	Coronavirus Disease 2019
DBC	Designing for Behavior Change
ECM	Early child marriage
HH	Household
IBM-WASH	Integrated Behavioral Model for Water, Sanitation, and Hygiene
IDEA	Ideate, design, experiment, and adopt
KAP	Knowledge, Attitude, and Practices
MHM	Menstrual hygiene management
NCG	Nurturing Care Group
UNC	University of North Carolina
RapidBCD	Rapid Behavior-Centered Design
SanMark	Sanitation Marketing
THRIVE	Transforming Household Resilience in Vulnerable Environments
TIPs	Trials of Improved Practices
TOPS	Technical and Operational Performance Support
TTC	Timed and Targeted Counseling
USAID	U.S. Agency for International Development
WASH	Water, sanitation, and hygiene
WHO	World Health Organization
WP	Water point

INTRODUCTION

Behavior-change principles and approaches are critical to reaching the desired impact of development work. Behavior change ensures the safe, effective, and sustainable use of services provided, helping change norms that can transform communities and enable achievement of health and well-being. Globally, the top 20 causes of disease all have a significant behavioral component.[1] This holds true across sectors and significantly contributes to poverty in both high- and low-income settings.[2] Infrastructure and trainings can enable people to practice healthy behaviors, but without the use of behavior-change approaches, long-term well-being is usually not achieved.

Behavior change has great potential to address issues of poverty and inequality. Though seemingly simple, behavior is often driven by subconscious motivations, making it difficult to change. World Vision has been implementing behavior change for many years. However, lower than anticipated results in sanitation and hygiene[3] as well as water quality[4] from our 14-country water, sanitation, and hygiene (WASH) evaluation with the Water Institute at the University of North Carolina (UNC)[5] led World Vision to place a greater emphasis on developing effective behavior-change approaches and investing in them to see greater impact.

1   Curtis V, Aunger R. Motivational mismatch: Evolved motives as the source of-and solution to-global public health problems. Applied evolutionary psychology. 2012:259-75. doi: https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780199586073.001.0001/acprof-9780199586073-chapter-0016

2   http://www.ideas42.org/wp-content/uploads/2015/05/I42_PovertyWhitePaper_Digital_FINAL-1.pdf

3   There was evidence in this study that the areas where World Vision works on average have higher hygiene and sanitation service levels than non-World Vision areas, providing encouragement about the impact of efforts to-date. However, enhanced approaches will be needed to reach high levels of sanitation and hygiene service.

4   Water quality at the water point was good but could be improved further in some areas. Water stored at the household level generally showed increased microbial contamination. This shows that the water is being contaminated as it is collected, transported, and stored in the home. See Figure 1.

5   Improving-WASH-Programming.pdf (worldvision.org)

To address areas for growth based on learnings, World Vision identified priority WASH behaviors in households, schools, and health facilities to help maintain health, cleanliness, and prevent the spread of disease. Dedicated approaches to behavior change are guided by locally contextualized programming to alter social perceptions and norms, and to drive the adaptation of physical environments required to see sustained WASH impact.

World Vision's eight essential WASH behaviors include:

1. Handwashing with soap and running/flowing water at critical times

2. Safe construction and proper/hygienic use of toilets

3. Safe disposal of infant/child feces in a toilet (linked with toilet use)

4. Separation of children from soil and animal feces

5. Households that treat, handle, and store their drinking water with appropriate methods

6. Safe use and disposal (or cleaning if reusable) of menstrual hygiene materials

7. Food hygiene (including eating utensils and eating area)

8. Paying for water use

These essential WASH behaviors can be targeted by delivering key messages through a variety of behavior-change approaches, engaging and mobilizing community leaders and influencers, including faith leaders, educators, mothers in leadership positions, and community health workers, along with improved infrastructure/products and associated operation

and maintenance to improve sustainability. Apart from established project models, behavior-change principles can be integrated into program design and implementation across models and sectors.

Purpose

This guide was developed to strengthen the process of designing behavior-change content to facilitate change for key behaviors such as the essential WASH behaviors mentioned. Furthermore, the concepts herein can be applied to prioritized behaviors across any sector. The purpose of this document is twofold: first, to equip World Vision staff members and development industry professionals with evidence-based knowledge and practical tools to carry out WASH behavior-change programming in communities. Second, this guide is meant to support World Vision staff across our global Partnership to communicate with knowledge and technical accuracy about behavior change in general, with a focus on WASH behavior change, and about World Vision's approaches and capacity.

The first part of the guide is focused on helping the reader understand behavior change, providing information on behavior-change principles, key considerations in designing behavior-change programming, along with descriptions of approaches and tools. Since these concepts are not sector specific, the first part of the guide is generally applicable to all sectors. The second part of the guide is focused on behavior change in the WASH sector in particular: key WASH behaviors promoted by World Vision's Global WASH Program in households, schools, and health facilities; WASH behavior-change approaches; and notable project applications of behavior change throughout World Vision's Global WASH Program.

BEHAVIOR-CHANGE BASICS

BACKGROUND

Traditional approaches to community development such as building infrastructure and educating communities on important behaviors (e.g., vaccination or safe water handling) often do not achieve desired impacts. In fact, many development interventions are unsuccessful because they are based on incorrect assumptions about why people behave a certain way (e.g., it may be a wrong assumption that pregnant mothers will seek prenatal care if they know the health benefits; their decision may be based on other unrelated motivations such as social norms). It is crucial to the success of development programs to understand the real reasons behind people's behavior. That is why using behavior-change principles and approaches is critical to the quality, sustainability, and impact of our programs.

Behavior-change interventions work to change knowledge, attitudes, and norms that affect human behavior. They are varied and based on formative research, which is used to learn the interests, motivations, and needs of the target audience. In this way, behavior-change interventions are more nuanced, contextualized, and effective than traditional knowledge-based approaches, like trainings. Behavior-change principles can be incorporated into various aspects of design and implementation of programs and can also be applied in our work to engage influencing groups, such as faith leaders, who are often stewards and leaders in local attitudes and social norms.

There are many different theories about human behavior. Some are very general, some apply only to specific situations, and some are sector-specific (e.g., Positive Deviance Hearth Plus for child nutrition or IBM-WASH for WASH). Some theories are focused on changing individual behavior, while others seek to change organizations or communities. Some theories only look at what causes behavior, while others provide an end-to-end process of designing and executing a behavior-change intervention (e.g., Designing for Behavior Change). This guide focuses on practical behavior-change basics for non-specialist staff. See Appendix 1 for behavior-change resource information and related trainings.

Household water quality findings from World Vision's multi-country WASH evaluation (see Figure 1) illustrate the importance of behavior change to improve outcomes and how lack of behavior-change approaches can negate the positive benefits of our interventions (e.g. improved water systems). In

most countries, the evaluation team found that water quality at the water point was relatively free from contamination, but levels of contamination in drinking water increased significantly at the household level. This evidence amplifies the need to focus on behavior change for safe water handling, household water treatment, and storage, instead of expecting these behaviors to change simply by educating communities.

❯ Why behavior change?

Behavior change is an important aspect of our development work because it ensures the safe, effective, and sustainable use of the services we provide, building positive norms that can transform communities, such as gender-role norms or government accountability norms, that enable achievement of World Vision's child well-being objectives. Infrastructure can provide the means for people to practice healthy behaviors, but infrastructure interventions alone often are not enough to ensure behavior change. To effectively design behavior-change interventions, we must ensure we understand:

1. The desired behavior(s) we want to change

2. The target group and influencing groups

3. The kind of behavior being influenced

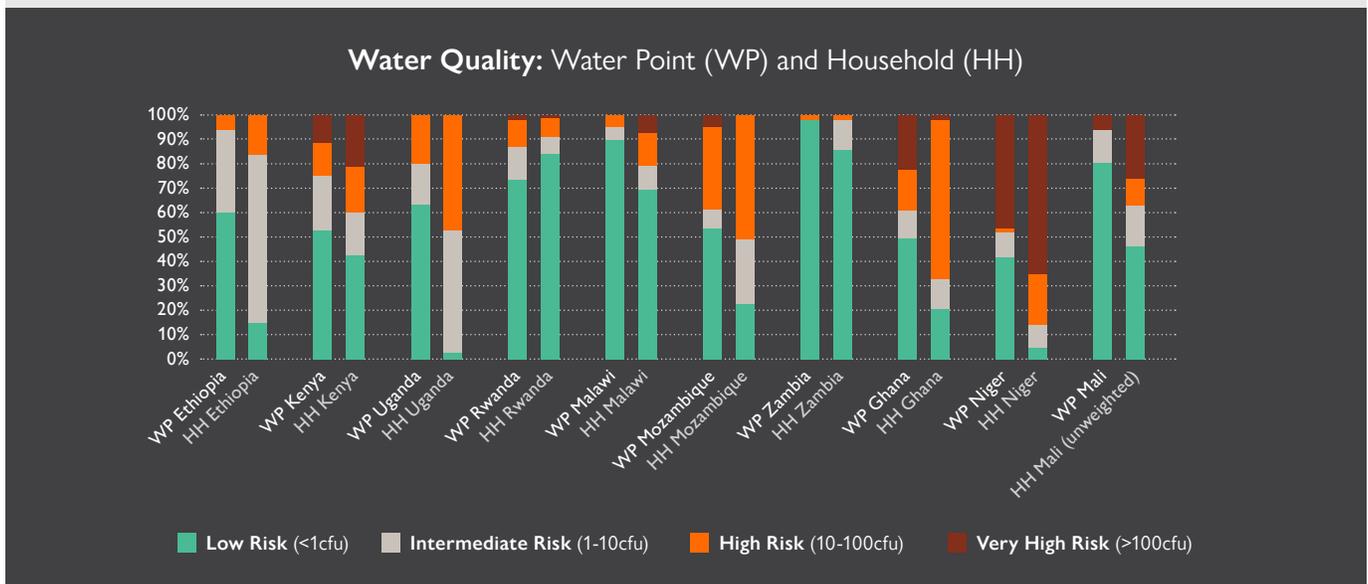4. The barriers and motivators that influence the practice of the behavior

5. The interventions that will remove barriers and enhance motivators

The impact of effective behavior-change interventions can be substantial. For example, an analysis of the Global Burden of Disease study showed that for the top 20 causes of disease globally, all had a significant behavioral component, ranging from malnutrition to reproductive health to WASH to the use of alcohol and tobacco.[6] This holds across sectors, with behavioral challenges also significantly contributing to poverty in both high- and low-income settings.[7] While some behaviors have rapidly spread across the globe, others have remained difficult to change. The rest of this guide describes some reasons for this difficulty, as well as processes to develop more effective behavior-change programs.

❯ Frequently used terms

In many circles, behavior change also is known as social and behavior change, an acknowledgement of the importance of social change and group norms. However, social change involves many components not addressed here, such as systems advocacy, so this guide will use the more general term, behavior change. Terms used by the behavior-change industry are defined on the following page for context and clarity.

FIGURE 1: **Water quality results by country at the water point versus at the household level**

Water Quality: Water Point (WP) and Household (HH)

Legend: Low Risk (<1cfu), Intermediate Risk (1-10cfu), High Risk (10-100cfu), Very High Risk (>100cfu)

6 Curtis V, Aunger R. Motivational mismatch: Evolved motives as the source of-and solution to-global public health problems. Applied evolutionary psychology. 2012:259-75. doi: 10.1093/acprof:oso/9780199586073.003.0016.

7 http://www.ideas42.org/wp-content/uploads/2015/05/I42_PovertyWhitePaper_Digital_FINAL-1.pdf

BEHAVIOR CHANGE is any transformation or modification of human behavior. Smoking cessation, changing eating habits, and starting to exercise are all examples of individual behavior change. For development practitioners, behavior change is a way of working based on understanding the behavior of target audiences that results in learning and change. For instance, we want to encourage parents to replace corporal punishment with positive discipline, or we want to encourage people to stay in-doors to curb a virus contagion.

BEHAVIOR CHANGE COMMUNICATION arose as a strategic use of communication that goes beyond the delivery of information and awareness raising to influence the change of individual behaviors. Traditional communication tools (e.g., media campaigns, posters, etc.) are combined with behavior science insights to produce tangible changes in what people do, not only in what people think and believe. Key messages are built on the results of formative research that identifies the key barriers to practicing the desired behaviors. Communication tools are used to clearly state the desired behaviors and the people who should practice them.

SOCIAL AND BEHAVIOR CHANGE COMMUNICATION acknowledges that an individual's behavior is influenced by broader social factors. Behavior change communication has largely focused on individual behavior change. However, in recent years there has been a growing understanding that behavior change is hindered or facilitated by a multitude of factors, such as the opinions and aspirations of other people, the socio-economic context, access to resources, existing (or lack of) legislation, and so on. Social and behavior change communication is used by organizations such as USAID, UNICEF, and World Bank.

SOCIAL AND BEHAVIOR CHANGE recognizes that communication is important, but not sufficient for behavior change to happen. This recognition led professionals to progressively drop "communication" from social and behavior change communication. Social and behavior change is defined by international donors and other stakeholders as a process involving individuals, communities, or societies that enables them to adopt and sustain positive behaviors by identifying the various factors that influence people's behavior and addressing them.

❯ Three myths of behavior change

MYTH #1

Education will change behavior

We often assume that a problem is caused by lack of information, and that people will change their behavior if they know what they need to do. But, presenting information is not enough to change behavior. How you present information and other factors unrelated to information delivery (e.g. social norms) make a big difference. Information should be personalized to appeal to the target audience, tangible (using visual examples), and include social interaction.

MYTH #2

You need to change attitudes to change behavior

It is NOT necessary to change attitudes to change behavior. Social science has shown that in some cases attitudes follow behavior, they do not predict behavior. Instead of trying to change attitudes, set behavioral expectations. This works for changing all kinds of behavior. It is important to understand the underlying values of the target audience and connect behavioral expectations to their underlying values.

MYTH #3

People know what motivates them

People are bad at predicting what motivates them, and they will often say they don't care what others are doing. However, social norms are a significant motivator of behavior, and they are often underestimated. When certain people are doing something, others are more likely to follow. Understanding the importance of social norms can help create more effective campaigns.

—Three Myths of Behavior Change: What You Think You Know That You Don't, Jeni Cross at TEDx California State University

FIGURE 2: **Reinforcement Learning**

SENSATIONS

PERCEPTIONS

STIMULUS >>> ENVIRON-MENT

BEHAVIOR <<<<<<

BODY

ACTION SELECTION <<<<<<

BRAIN

RESOURCES

REWARDS
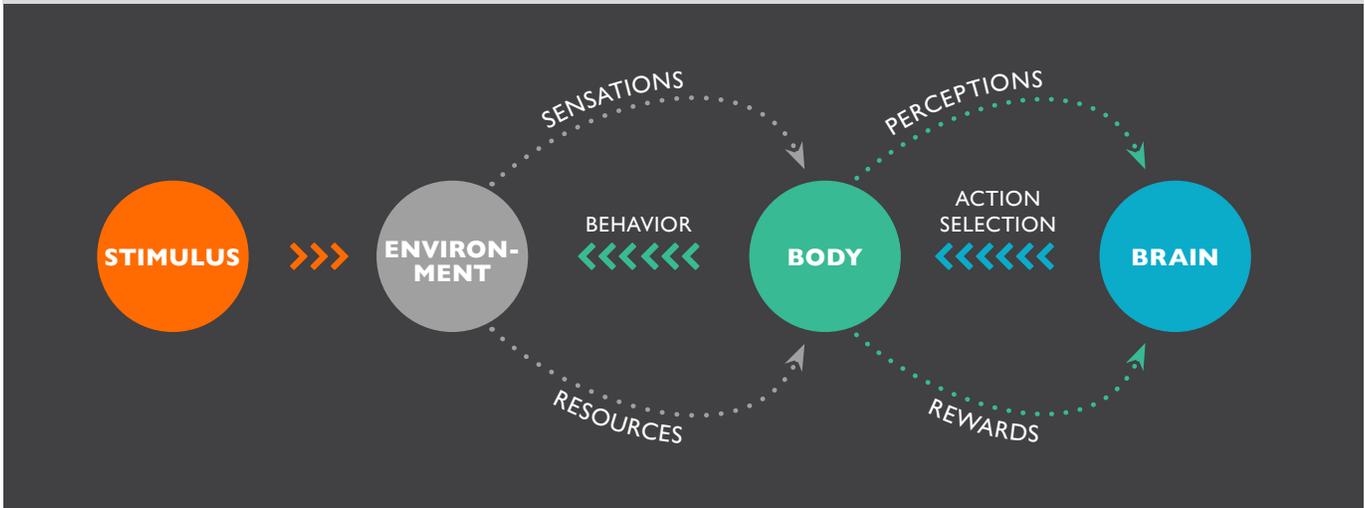
BEHAVIOR-CHANGE PRINCIPLES

All behavior-change theories are built on certain basic principles, including reinforcement learning and understanding different types of behavior.

❯ Reinforcement learning

Regardless of the behavior-change approach used, behavior is learned through a process called "reinforcement learning" (see Figure 2). Through reinforcement learning a stimulus changes something in the environment, which then affects a person's body through sensations or resources. The body relays this to the brain through perceptions or rewards. The brain then selects an action and the body does that action, which results in a changed environment.

For example, as a person is working in the field (stimuli), dirt might get on their hands (environment).

The person may see this (sensation) and understand that it is dirty (perception), leading them to decide (action selection) to wash their hands (behavior). After washing their hands, the person might go and eat some food (resources), which the body tells the brain is delicious and filling (rewards). The brain then continues to tell the body (action selection) to eat more of the food (behavior). Though this might seem difficult at first, this same repeated pattern of **stimulus, decision, action, and reward is the basis for how humans, organizations, and even computers learn.**

❯ Kinds of behavior

For a behavior-change intervention to be effective, it is important to understand exactly what kind of behavior you are trying to change. There are actions, beneficiaries, and benefits to consider (see Figure 3).

FIGURE 3: **Understanding Kinds of Behavior**

ACTION	❯ Individual vs. Collective Action ❯ Planned vs. Routine Control
BENEFICIARY	❯ Present vs. Future Self ❯ Private vs. Public Goods
BENEFIT	❯ Certain vs. Uncertain Benefits ❯ Personal vs. Reputational Rewards ❯ Gain vs. Loss Perceptions

ACTION: The type of action itself can vary in two ways. It can either be done by individuals or require collective action—which requires multiple individuals to work together. Actions can also be planned or routine (habitual) behaviors. For example, maintaining a shared resource through organized days of working together is a *planned, collective action*, while brushing one's teeth is a *routine, individual behavior*.

BENEFICIARY: The beneficiary of the action can be either the individual in the present or the future (which the brain thinks about in the same area that it thinks about other people), and either the doer of the action can benefit (personal benefit) or others can benefit, which is sometimes called a public good. Saving money to buy a toilet is a *benefit to your future self and produces a public good*, which benefits the community. Eating a piece of candy is of *immediate personal benefit* (and perhaps harms your future self if done too much!).

BENEFIT: The benefit itself can also be 1) certain or uncertain, 2) can benefit a person directly or through reputation, and 3) can be viewed as a gain or a loss. For example, experimenting with unknown fertilizer on your own land may be uncertain, personal benefits that are perceived as gains if successful. However, one would try to avoid being seen stealing by another person, as it would lead to certain reputational losses in how they are perceived by others.

Further strategies for addressing each of these aspects of behavior are provided in the Behavior-Change Tools section.

APPROACHES

Understanding the theoretical framework behind behavior change is important, but we must apply those behavior-change principles in real-life scenarios through behavior-change approaches. When addressing behavior change, we must consider two key aspects: 1) What motivates people to practice the desired behavior, and 2) What makes it easy for people to perform the behavior? This happens by ensuring behavior-change approaches both create demand and strengthen supply.

NURTURING CARE GROUPS

NCGs are a prime example of a demand-creation approach that promotes high coverage of a desired behavior. The NCGs model is used by World Vision to promote healthy behaviors in the sectors of WASH, health and nutrition, education, and child protection, with attention to cross-cutting themes like gender.

NCGs use facilitators to train community-based volunteers (called leader mothers), building their capacity to become change agents by meeting every two weeks with project staff and then cascading down behavior-change messages to 10-15 households in their communities. The volunteer leader mothers share messages with other mothers at their assigned households to promote desired behaviors.

As mothers share the messages more broadly, messages are rapidly cascaded throughout the community. NCGs serve as a way for individuals to interact and learn from others like them—resulting in peer-to-peer promotion—which in turn creates demand for the desired behavior. This model results in comprehensive coverage with behavior-change promotion, leading to catalytic change in social norms.

❯ Demand creation

When we motivate an individual to perform a specific behavior, we create demand. Demand-creation approaches use targeted messaging and interventions to introduce and encourage the performance of a desired behavior among a target group. For example, in the case of maternal health, targeted media campaigns can help motivate pregnant mothers to perform a desired behavior, like delivering in a health facility with an equipped, qualified provider. Nurturing Care Groups (NCGs) are one example of a behavior-change approach designed to motivate and create demand. NCGs are an adaptation to the Care Groups[8] model, which is built on several decades of experience, and has been shown to lead to an under-5 child mortality decline of 32% (compared to an 11% decline in non-Care Group programs).[9]

---

[8] For additional information on the Care Group Model, visit https://caregroupinfo.org/

[9] https://pubmed.ncbi.nlm.nih.gov/26374799

⦿ Supply strengthening

For demand to be sustained, people must have proper access to the things they need to carry out the desired behavior. For example, vaccine supply must be made available to carry out vaccination campaigns. For people to properly wash their hands, they need access to soap.

Social marketing employs the "Four Ps:" 1) Product, 2) Price, 3) Place, and 4) Promotion, to ensure people have access to the supplies they need to implement a behavior.[10] For supply strengthening, we mainly focus on product, price, and place. What product do individuals need to carry out the desired behavior? How much does the product cost? Where can they obtain it, or where is it distributed? Once these questions are answered, supplies can be obtained and made available or distributed to individuals to facilitate behavior change.

THE FOUR Ps

To ensure people have access to the supplies they need to practice a desired behavior, it's important to consider the Four Ps: Product, Price, Place, and Promotion. These are described briefly below. For more information, see the Introductory Guide to Sanitation Marketing.

⦿ **PRODUCT** refers to a good or service that a company offers consumers or program participants. They can be a physical product (e.g., a vaccine) or a service performed (e.g., vaccination campaign). The product should fulfill an existing need or consumer demand.

⦿ **PRICE** is the cost consumers pay for the product. This includes the monetary cost of the product, supporting services, and any nonmonetary costs, such as time, that individuals might incur. It should be considered whether discounting is appropriate (e.g., subsidized or free vaccinations) to draw in more customers/participants.

⦿ **PLACE** refers to where a product or service should be sold or obtained, as well as how it is distributed (e.g., vaccinations provided at the health clinic or through door-to-door campaigns). The goal is always to get products in front of consumers/participants who are most likely to need and use them.

⦿ **PROMOTION** links consumers with suppliers, letting potential customers know about a product's benefits and availability (e.g., radio ads to promote the vaccination campaign). It includes marketing through a promotional strategy. The goal of promotion is to demonstrate to consumers why they need the product or service.

---

[10] https://www.wsp.org/sites/wsp/files/publications/WSP-Introductory-Guide-Sanitation-Marketing.pdf

TEN DO'S AND DON'TS OF BEHAVIOR CHANGE

DO	DON'T

1. **DO make sure you've identified the right behavior to change:** Some behaviors may have more impact on health or well-being than others.

2. **DO consider who should be targeted beyond the person doing the behavior:** Other people may influence those doing the behavior either to make it easier or harder.

3. **DO ensure you're using the right formative research tool for the job:** Don't start at the beginning if you don't have to, and don't put a lot of effort into behavior change without ensuring you understand the key determinants.

4. **DO measure your target behavior well:** If you only use self-reported outcomes, or look simply at knowledge change, you may never know you have a problem with changing behavior.

5. **DO measure more than just the target behavior:** Measure exposure, understanding, and other aspects of the theory of change to understand if challenges are due to people not hearing or understanding your messages or due to them not being the right messages.

6. **DON'T assume that you know what is driving the behavior:** Just because someone says what they think is the reason they do a behavior, there might be other determinants of which they aren't aware.

7. **DON'T ignore what is already known about the behavior:** Cultures vary greatly, but some human motivations are common across settings, so that small tweaks to existing programs may be all that is needed.

8. **DON'T equate behavior change with only messaging:** Changing the objects people use or the setting in which they do the behavior (e.g., the enabling environment) can be even more effective.

9. **DON'T be afraid to get creative:** Programs that are unexpected and engaging are more likely to grab our attention and have a chance to change behavior.

10. **DON'T stick with your first approach if it seems like it's not working:** Plan to pause and assess any new behavior-change program and assume that some changes will need to be made to make it more effective.

STEPS TO DEVELOP A BEHAVIOR-CHANGE INTERVENTION[11]

This section breaks down how to design a behavior-change intervention into three steps, each of which is described in detail below.

STEP 1: Identify the desired behavior

STEP 2: Conduct formative[12] research

STEP 3: Design and test the intervention

Step 1: Identify the desired behavior

Define the problem. The first step in designing a behavior-change intervention is to define the public health problem the intervention seeks to address, including its causes, considering that social, cultural, and economic factors will vary between communities. As an example, the public health problem is child marriage and the root cause is perceived risk of pregnancy leading to public shame for the family. To better understand a problem and its causes, it may be helpful to:

> Review existing research on the problem and its main causes

> Consider past experience of World Vision and other implementers trying to address the problem

> Read relevant government policies

> Reflect on lessons learned from ongoing efforts, past experience, and studies

Identify an effective behavior. It is crucially important to be clear about the desired behavior. Once the problem and its main causes are understood, then

---

behaviors can be identified that are likely to be effective in addressing the problem. To determine the potential effectiveness of a behavior, it is important to consider:

> **IMPACT:** The level of impact the behavior has on the problem

> **FEASIBILITY:** How feasible, or easy it would be to change the behavior of the priority group

The goal is to select a desired behavior with the highest impact and feasibility—these behaviors will fall into the top right corner of Figure 4 (see green star).

For example, to lose weight someone may consider various actions: registering at a gym, exercising daily, tracking their food/calorie intake, or eating whole foods. Of these behaviors, some have a greater impact on weight loss (i.e., exercising daily and eating whole foods), while others may be more feasible (i.e. registering at a gym and eating whole foods). Though all these behaviors may help with weight loss in the end, when designing a behavior-change intervention, the goal is to pick the behavior with the highest impact that is the most feasible (eating whole foods, in this example).

Describe the priority groups. Once the desired behavior is identified, each priority group (those doing the behavior or those influencing those doing the behavior) needs to be described for the desired behavior. This

FIGURE 4: **Impact and Feasibility Matrix**
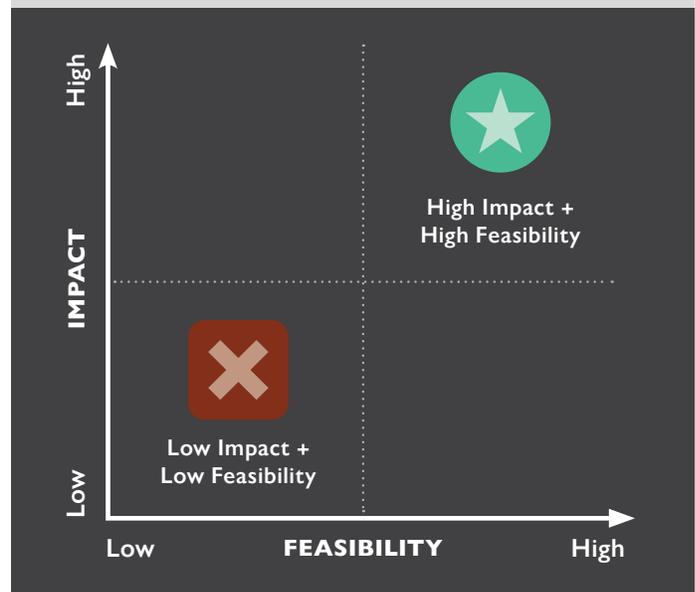
should include both the people who are expected to practice a given behavior and/or those who are supposed to ensure that someone else practices the behavior. A behavior-change intervention can include many different priority groups. The more specific the definition of each priority group you have, the more likely it is that your behavior-change activities can be designed effectively.

EMPOWERED WORLDVIEW

The Empowered Worldview methodology is the foundation for World Vision's **THRIVE** (Transforming Household Resilience in Vulnerable Environments) economic empowerment model. The methodology relies on influencers to help change behavior by identifying and training faith leaders and other community influencers, including women and youth, whose involvement is essential for community acceptance of the focus on personal initiative, rather than waiting for support from government or aid agencies. These leaders then mentor community members as they start their own new projects, such as diversifying crop and livestock production or building reservoirs to conserve rainwater for irrigation during drought. World Vision's faith identity and focus on community empowerment enables it to establish trusted relationships with influential local faith-based organizations and faith leaders.

So far, the Empowered Worldview model has been implemented in 23 countries, and it's beginning to move beyond a focus on livelihoods to also encourage peacebuilding efforts and inspire communities to develop their own solutions to community issues such as child neglect and education, which are often influenced by traditional views. A 2017 study by TANGO International in Tanzania showed that **THRIVE** participants:

> Earned $58.04 more per month than if they had not participated

> Were better able to provide for their children's household and educational needs

> Increased their productive assets more than if they had not participated in **THRIVE**.

Further, World Vision partnered with the Chronic Poverty Advisory Network, a network of researchers, policy makers, and practitioners hosted by the Overseas Development Institute, to evaluate the efficacy of the Empowered Worldview approach in Zambia in 2020. They looked at the role of behavior-change programming on mindsets and livelihoods and found a positive association between the faith-based behavior-change program and increases in material and subjective well-being.

BARRIER ANALYSIS FOR FOOD SECURITY

World Vision International and Winrock International, as part of the Nobo Jatra Project in Bangladesh funded by USAID, used the Barrier Analysis methodology to design a behavior change communication strategy to improve agricultural behaviors. They targeted improving agriculture practices, including mulching and composting, to contribute to food security. Working with a local consultant, the team designed and executed a Barrier Analysis, which included interviews with 45 doers and 45 non-doers of the target behaviors of mulching and composting. Additional formative research was conducted using a knowledge, attitude, and practices survey.

The research revealed that some key reasons why people were not practicing the desired behavior were a lack of understanding the methodology, lack of access to necessary materials and space to practice the behavior, and a perception that the behavior does not achieve desired results. The team developed messaging and learning materials to address these core behaviors. The project is still ongoing (as of March 2021), but recent monitoring information revealed that, thus far 78% of land is now cultivated using mulching and composting, and 50% of producers have adopted mulching and composting.

PROJECT SPOTLIGHT:
Bangladesh

Describe specifically the desired behavior. It is important to ensure that everyone has the same understanding of the desired behavior you plan to promote. For this reason, it is recommended to write out the desired behavior in this format: priority group + desired action + details (frequency, time, kind of behavior).[13] For example, mothers of children under 5 + wash their hands with soap and flowing water + at the four critical times.

⏩ Step 2: Conduct formative research

The next step is to carry out formative research, to learn about the target audience, their behavior, and the factors that influence it. Formative research explores the barriers preventing priority group members from practicing the desired behavior, as well as what could motivate them to practice the desired behavior (also called enablers and determinants).

Select formative research tool(s). The project will need to select the appropriate formative research tool(s). There are many different methods that can be used to conduct formative research that are commonly used, such as:

- Focus group discussions
- Key informant interviews
- Barrier Analysis
- Trials of Improved Practices

Formative research tools are described further in the Behavior-Change Tools section. Regardless of the method used to collect information, it is critical that the project provide an opportunity for the priority group members to share their opinions about the desired behavior and that their opinions are used to design the behavior-change intervention.

Identify and understand barriers and motivators. The formative research results will help identify behavior-specific barriers and motivators (or determinants) for the priority groups to practice the desired behavior.

Identifying behavior influencers. During formative research, the people who encourage or discourage the priority group members from practicing the desired behavior should be identified. Influencers may include parents, grandparents, peers, authorities, faith leaders, and others who influence the priority group's ability and willingness to adopt a new behavior. They can influence a person's decision-making power, availability of time to practice a behavior, and access to and control over the required resources. Behavior-change activities must address these influencers through specific actions they can take to support the behavior of the priority group.

---

[13] Adapted from The Technical and Operational Performance Support (TOPS) Technical and Operational Performance Support Program. 2017. *Designing for Behavior Change: A Practical Field Guide.* Washington, DC: The Technical and Operational Performance Support Program.

FOUR SIGNIFICANT BEHAVIOR DETERMINANTS

There isn't necessarily one right approach to looking at behavior determinants—the barriers and motivators for behavior. Different behavior-change approaches use different determinants based on their underpinning theories. Here are four of the most significant behavioral determinants.

❱ **PERCEIVED SELF-EFFICACY**
A primary determinant of motivation and behavior change, perceived self-efficacy is a person's belief that she/he can do a specific behavior, given her/his knowledge and skills. It is the set of knowledge, skills, abilities, and confidence necessary to perform a specific behavior to achieve desired outcomes. For example, a person growing food for their family may not feel confident with improved agricultural practices like mulching.

❱ **PERCEIVED SOCIAL NORMS**
Perceived social norms are what a person believes to be the social norm for their group. It is the perception that people important to the priority group think that they should do or not do a specific behavior. For example, if a pregnant woman believes that all her friends are delivering their babies at home and not in a health facility, she may be less likely to deliver in the health facility herself.

❱ **PERCEIVED POSITIVE CONSEQUENCES**
Perceived positive consequences are the positive results a person expects to happen after performing a specific behavior. These can include perceived positive outcomes or simply feeling good about oneself. For example, a new mother may think that exclusive breastfeeding will help their child grow strong, and it may give her positive feelings of comfort.

❱ **PERCEIVED NEGATIVE CONSEQUENCES**
These are the negative results a person expects to happen after performing a specific behavior. These can include perceived negative outcomes or negative feelings such as disgust, fear, or uncertainty. For example, parents may be concerned that vaccinating their child will give the child a disease and thus choose not to vaccinate their child due to negative feelings of fear.

❱ Step 3: Design and test the intervention

Describe the desired change exactly. Before designing the behavior-change intervention, first start by defining exactly what needs to change to address each barrier or motivator identified by the formative research. Describing the desired changes without specific activities in mind will enable consideration of different pathways to achieve the required changes. For example, according to the Designing for Behavior Change (DBC) framework,[14] the desired changes should be defined in one of these ways:

INCREASE …		the perception that …
DECREASE …		
IMPROVE …	✚	the availability of …
REDUCE …		access to …
REINFORCE …		the ability to …

E.g., Increase the percetion that hens will have as good or better laying if penned up

Desired changes are defined this way because changing people's perceptions, abilities, and the availability of or access to resources are the three main ways to address the barriers/motivators. All behavior-change activities should be designed in a way that directly contributes to achieving the desired changes.

Design activities to address barriers and strengthen motivators. Behavior-change activities should enable the priority group to adopt the desired behavior by lowering the barriers and maximizing the motivators identified through formative research. Each behavior-change activity selected should directly address at least one identified barrier or motivator for the priority group. Interventions can be message-based or environment-based. Some examples of behavior-change activities commonly used to reduce barriers and strengthen motivators follow.

MESSAGE-BASED INTERVENTIONS

Targeted messaging can be delivered through:

❱ Peer-to-peer education
❱ Counseling

[14] Adapted from The Technical and Operational Performance Support (TOPS) Technical and Operational Performance Support Program. 2017. _Designing for Behavior Change: A Practical Field Guide_. Washington, DC: The Technical and Operational Performance Support Program.

BEHAVIOR CHANGE THROUGH ENABLING ENVIRONMENT

In the absence of a piped-water system, families often rely on sources distant from the home and spend much of their day collecting water, a burden that overwhelmingly falls on women and girls and can lead to injuries, increased stress, and gender-based violence. A key goal in constructing piped-water systems is to decrease the distance to the water source and time spent collecting water, as well as increasing the amount of water that households use for handwashing, drinking, and livelihood generation such as gardening.

In this project, World Vision Zambia installed piped-water systems in 14 communities, allowing for high-quality source water to be delivered close to households. This reduced the distance from the source to households by 90%. As a result, water consumption nearly doubled. It was observed that hand contamination fell 68%, indicating that increased water consumption allowed for more water to be allocated for handwashing. Providing a reliable source of water closer to the home enabled handwashing behavior change.

PROJECT SPOTLIGHT:
Zambia

> Participatory demonstrations
> Trainings (when knowledge is a barrier)
> Entertainment education
> Mass media
> Social media
> Mobile-based communication

NUDGING

Nudges are interventions that alter behavior by changing how choices are presented, rather than persuading with information. Placing visual nudges on infrastructure to encourage desired behaviors, such as painting bright footprints from a toilet to handwashing station to encourage handwashing with soap, can be very effective. This example of a visual nudge is featured in a 2016 study by Robert Dreibelbis, et al., entitled _Behavior Change without Behavior Change Communication: Nudging Handwashing among Primary School Students in Bangladesh_. Focused on testing the impact of nudges like the ones in the photo above, the study resulted in an increase in handwashing behavior among schoolchildren from 4% to 68%.

ENVIRONMENT-BASED INTERVENTIONS

Some activities that enable the desired behavior are:

> Infrastructure improvements
> Better products
> Nudging
> Advocacy
> Incentives (competitions, awards, recognition)

When developing activities, the project should specify:

> Who will be leading the activity
> Who else needs to be present
> When/where should the activity take place
> What messages will be communicated and how
> What approaches other than messaging will be used
> What materials are needed for the activity
> What learning and feedback mechanisms will be employed
> How will we measure whether the activity took place and if it was implemented consistently

Prepare behavior-change messages, materials, and products. As described above, behavior change can consist of messaging as well as changing the environment. It is important to ensure adequate supplies of proven products are available and that infrastructure is in place where necessary to carry out the desired behavior (e.g., water systems with flowing water and soap for handwashing). Behavior-change

messages are communicated to the priority groups through text/print, audio/verbal, and video/visual materials. They should be simple, easy to understand, and address the barriers/motivators discovered by the formative research. In contexts where many people are illiterate, it's important to ensure that messages in your print/visual materials can be understood even without reading the text.

Test, adapt, and scale up. If possible, before launching full-scale implementation, first test out your approach and materials. There are a range of options to do this. It could be a pilot in a small part of the target area. If a pilot isn't feasible, consider using Trials of Improved Practices as a systematic way to test the intervention with the target audience. At a minimum, communication messages and materials should be tested with some members of the priority groups (e.g., do people understand and remember the messaging). Then rapidly review the intervention/messaging strengths and weaknesses, and adapt the activities based on lessons learned.

Scale up only after the project team is satisfied with the feedback received. Testing and adapting the behavior-change intervention should be built into the timeline.

To review the intervention strengths and weaknesses, the project can:

> Organize focus groups with the priority groups, assessing their perceptions about the extent to which the activities were useful in addressing the identified barriers and motivators.

> Consult the frontline workers on what they see as the main strengths and weaknesses of the intervention, what could be done better, and how.

> If resources allow, conduct a quantitative survey focusing on the key behavior-change indicators, perceived usefulness of the activities, and any changes in people's knowledge, beliefs, and attitudes toward the behavior, self-efficacy, and perception of social norms.

Evaluate and share. Evaluation of the behavior-change intervention will help to determine whether the barriers have been addressed, if the priority group is adopting the desired behavior, and to what extent the changes are likely to last. World Vision is committed to a culture of learning and promotes sharing learnings widely with local stakeholders, among its global Partnership, and as relevant across each sector. For more information on evaluating behavior change, see the Evidence Building section.

TIMED AND TARGETED COUNSELING

One example of a behavior-change approach that uses peer education and counseling is the Timed and Targeted Counseling (TTC) model. Since 1990, global child mortality has dropped by 59%, but 5.4 million children still die each year. The vast majority, 80%, of these child deaths are preventable and could be avoided by practices such as prompt care-seeking for childhood illness, appropriate breast-feeding, and child nutrition. Behavior change communication initiatives led by community health workers are a cost-effective way to fight preventable deaths.[15]

In the TTC model, behavior-change communication effectiveness is further enhanced by: 1. Timing the messages for the right moment, rather than giving them too early or too late, 2. Instead of targeting only women, including both women and other family members in recognition of the influence of individuals and groups; 3. Instead of giving general information, using a barrier assessment interview technique to identify barriers and negotiate change based on circumstance. Moreover, in TTC, the following stages of change are recognized and addressed specifically: unaware, thinking about it, trying, maintaining, and advocating for it.

[15] https://www.astho.org/Programs/Clinical-to-Community-Connections/Documents/CHW-Evidence-of-Effectiveness

BEHAVIOR-CHANGE TOOLS

This section presents several common behavior-change tools and approaches that are recommended as effective and can be applied to a variety of situations across different sectors.

TOOL	DESCRIPTION	WHEN TO USE
Barrier Analysis	Barrier Analysis (BA) is a formative research tool used to assess the differences between doers and non-doers of a behavior based on a set of key determinants, including self-efficacy, perceived positive and negative consequences, and perceived social norms. The most significant differences between doers and non-doers are considered priorities for intervention design.	Barrier Analysis can be used when there are enough funds available to collect 90 surveys (per behavior), when the target behavior is well-defined, and it is especially useful for planned behaviors where people may be aware of the barriers/motivators to doing the behavior. Learn more.
Behavior-Centered Design	Behavior-Centered Design (BCD) is a comprehensive approach to designing solutions to behavioral challenges, including a rigorous analysis of the setting of the behavior, and a process for monitoring and evaluation. BCD includes dozens of potential formative research tools based on the particular kind of behavior being assessed and a design process starting from diagnosis and continuing through to evaluation.	BCD takes expertise and time to deploy. It should be used when previous efforts have been ineffective and for behaviors for which very little is known, or when it's unclear exactly what behavior to target. Learn more.
World Vision's Rapid Behavior-Centered Design (RapidBCD) Tool	Based on the in-depth BCD approach, World Vision's RapidBCD tool includes a breakdown of the target audience and type of behavior based on the categories described earlier in this guide, and then includes prompts for how to grab attention, cause people to reevaluate the behavior, and how to make the behavior easier. This tool is designed to be filled out by a small group of people with knowledge of the area and a few interviews with local leaders and community members in as little as one day.	The RapidBCD tool should be used where limited resources exist to develop a behavior-change program and for behaviors where there is existing evidence about how to change the behavior. See the Appendix to learn more and use the tool.

TOOL	DESCRIPTION	WHEN TO USE
Designing for Behavior Change	Designing for Behavior Change (DBC) is a comprehensive framework, starting with a problem, identifying target behaviors and key influencing groups, diagnosing the root causes of poor uptake of the target behaviors, and designing key activities to address those root causes. Barrier Analysis, mentioned above, is often associated with DBC, but any appropriate formative research process can be used.	DBC is an intensive process and should be used when there are sufficient resources (e.g., grant programs) or when a behavior has been hard to change using other approaches. See the Appendix to use the Adapted DBC Framework template. Or learn more here.
Knowledge, Attitude and Practices Survey	A Knowledge, Attitude and Practices (KAP) survey is a representative study of a target group to collect information on what is known, believed, and done on a specific topic. Predefined questions in standardized questionnaires provide quantitative and qualitative information. It is important to note that KAP surveys provide self-reported opinions, and it is recommended to use additional tools such as the BA or Trials of Improved Practices if possible to more fully understand what drives the behavior.	The KAP survey is useful as a first step or rapid assessment to understand the prevalence and general attitudes about the behavior. Learn more.
Trials of Improved Practices	Trials of Improved Practices (TIPs) is another formative research tool that is more qualitative in nature—a series of visits are made to individuals trying the behavior, often with a new product, change of the behavior setting, or change in routine. Sometimes several different practices are tried, and there is an opportunity to rapidly learn from failures or challenges experienced.	TIPs is useful when understanding the challenges faced in a specific setting (i.e., in the home, with children being active and playing) and where the product or behavior to promote might need to be iteratively tested. Learn more.

SPECIAL TOPIC 1: SOCIAL NORMS[16]

Social norms are a type of behavioral determinant that need particular attention for two reasons. First, they drive many important public health behaviors, given that diseases spread through communities and the health of individuals affects the health and well-being of societies. Second, diagnosing and changing social norms requires a special set of tools and techniques to do it effectively.
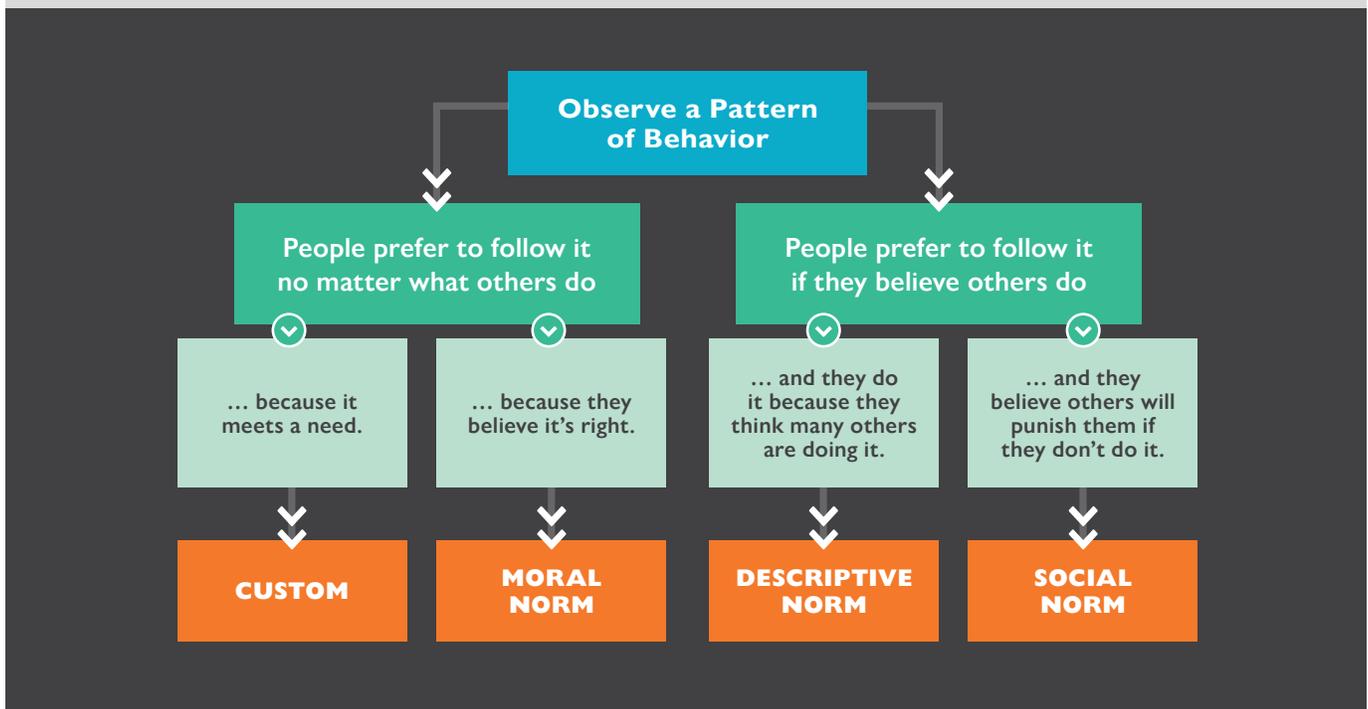
We can have several kinds of beliefs:

> Factual beliefs – what we think about the state of the world

> Normative beliefs – how we think the world should be

> Expectations about what others do

> Expectations about what others think we should do

The beliefs and expectations of others can influence our behavior in several ways (Figure 5). As an example, we will use Early Child Marriage (ECM) to understand how a behavior might be driven by different kinds of social expectations. ECM could be performed for any of the following reasons:

1. A person may want to marry off a child because of economic pressures **(custom)**

2. A person may think that ECM is the "right thing to do" **(moral norm)**

3. A person may think that ECM is the only way to find a partner for their child **(descriptive norm)**

4. A person may think that their community will ostracize them if they don't practice ECM **(social norm)**

FIGURE 5: **Breakdown of socially influenced beliefs**

Observe a Pattern of Behavior

People prefer to follow it no matter what others do

People prefer to follow it if they believe others do

… because it meets a need.

… because they believe it's right.

… and they do it because they think many others are doing it.

… and they believe others will punish them if they don't do it.

CUSTOM

MORAL NORM

DESCRIPTIVE NORM

SOCIAL NORM

---

[16] The content in this section heavily draws from Christina Bicchieri's helpful manual on social norms, as well as the work of Erez Yoeli: https://www.unicef-irc.org/research/pdf/429-Social-Norms-Manual-ESARO.pdf.

NURTURING CARE GROUPS

In June 2019, World Vision began piloting the Nurturing Care Groups (NCGs) approach in Ghana. In Savelugu-Nanton district, 72 NCGs were established that reach 60,959 people, while 36 groups reaching 13,921 people were launched in Sekyere East district. The behaviors targeted through the leader mothers include ending open defecation and handwashing with soap at critical times.

NCGs are an example of how generating demand through collective action and networking can lead to overall changes in communities at large. These groups have been able to maintain activities during COVID-19, even serving as a conduit for important information about the pandemic.

An evaluation was conducted on the pilot in January 2021, and NCGs had a significant impact on routine behaviors such as reducing detectible E. coli in drinking water from 32% to 8% and increasing the availability of soap from 34% to 84%. While access to basic sanitation only increased slightly (7 percentage points more than in the control group), there was evidence of community-level improvements in animal penning and the stigma toward menstrual hygiene management.

PROJECT SPOTLIGHT:
Ghana

A social norm is specifically referring to a situation where a behavior is not just based on what others are doing, but when you might be punished by your social connections for failing to comply.

To change a behavior through the use of a social norm, three things must occur:

1. The behavior must be observable by those influencing the behavior

2. Expectations must be clearly communicated to all who have influence on the behavior

3. Excuses for failing to do the behavior must be eliminated

For example, handwashing can be made more observable when done in a public place (i.e., outside a toilet) rather than in private. Expectations can be communicated by community leaders or through mass media campaigns. Excuses can be eliminated by removing barriers such as establishing a set timeframe to construct a toilet, rather than allowing a household to say they are planning to do it but have not yet achieved the task.

It is important to realize that social norms can also be harmful, and the three principles can be used to weaken harmful norms. For example, where practicing menstrual hygiene management (MHM) is stigmatized, having soap and water accessible outside of public view can allow individuals to practice MHM without others knowing it. However, this may make handwashing less

influenceable by social norms, so pros and cons must be carefully weighed in all interventions.

SPECIAL TOPIC 2: ORGANIZATIONAL BEHAVIOR CHANGE[17]

Often World Vision is interested in doing more than changing the behavior of individuals—we are trying to influence how organizations function or deliver services. While we can think about changing the behavior of individuals in organizational settings, much of their behavior is determined by the setting itself. For example, almost all classrooms in primary schools are set up with a teacher standing at the head of a room and students sitting at desk or tables facing the front so that the teacher talks and asks questions and the students listen and respond to the teacher. If the desks were arranged in small groups, students are much more likely to talk to one another, which may support or go against the teacher's goals depending on the lesson.

In organizations, the setting goes beyond the physical environment to include organizational structures (employee-supervisor relationships, departmental arrangements, etc.) and processes (monitoring and accountability, procurement, incentives, etc.). However, the general idea of reinforcement learning still applies to organizational settings, so any interventions should try to alter the rewards and/or costs of any behavior, with consideration of how this can be done in specific settings.

---

[17] The content in this section draws heavily on the work of Robert Aunger: https://www.sciencedirect.com/science/article/abs/pii/S0277953619303843

CONTINUOUS QUALITY IMPROVEMENT

World Vision's Ghana WASH Program applied the continuous quality improvement approach, seeking to improve the quality of household drinking water and the functionality of water sources. Continuous quality improvement is a systematic process to improve services or products by identifying and analyzing strengths and problems, then testing incremental changes, learning, and revising solutions. An impact evaluation was conducted by the University of North Carolina in four rural districts in Ghana to analyze World Vision's application of continuous quality improvement.

The final improvement package (the solution) consisted of household use of safe water storage containers, refresher training for community WASH committees, and replacement of missing maintenance tools. This package significantly increased household water quality (conformity to World Health Organization [WHO] safe drinking water standards increased from 17% to 40%) for two years post-implementation.

PROJECT SPOTLIGHT:
Ghana

Some potential areas to consider in changing organizations are:

1. Allocating proper budget and staff to the task
2. Ensuring material availability
3. Adequate staff training and capacity building
4. Understanding staff motivation
5. Strengthening monitoring and accountability systems
6. Considering the need for organizational restructuring
7. Insuring against catastrophic failures beyond the capacity of the organization itself

Key aspects of any setting include:

❯ Person

› **Roles** – the functions that person carries out

› **Competencies** – the skills and abilities the person has

❯ Physical environment

› **Stage** – the physical setting where the behavior takes place

› **Infrastructure** – the supporting environment for the setting

› **Props** – the materials used to do the desired behavior

❯ Social environment

› **Norms** – the rules and expectations placed upon the person

› **Routines** – the patterns of behavior performed by the person

Behaviors can be changed within settings primarily by changing rewards (strengthening norms or altering roles) or by changing costs (improving behavioral facilitation/increasing hindrance through the stage, infrastructure, or props, or altering routines or competencies).

As a concrete example, a person cleaning a healthcare facility may be a dedicated staff member or have other responsibilities (roles), may have inadequate training (competencies), may have a well-arranged cleaning supplies storage closet (stage), may not have running water to the facility (infrastructure), may lack adequate cleaning supplies (props), may not be expected to regularly do their duties by their manager (norms), and may clean sporadically during the day instead of on a fixed schedule (routines). Changing any of these may be effective in improving cleaning behavior outcomes.

Part 2

WASH BEHAVIOR CHANGE

ESSENTIAL WASH BEHAVIORS

Behavior change is an important aspect of our WASH work because it ensures the safe, effective, and sustainable use of the services we provide, and supports positive attitudes and norms that enable overall well-being. While World Vision WASH has been implementing behavior change for many years, low results in sanitation and hygiene from World Vision's 14-country evaluation with UNC led us to put a greater emphasis on developing these approaches and investing in them to see greater impact. Healthy WASH behaviors ensure that community members experience the full benefits of WASH access through improved health and overall well-being.

Based on program learnings from the evaluation, World Vision's global WASH leadership team recommends promotion of the following WASH behaviors in households, schools, and health facilities to help maintain health, environmental and personal cleanliness, and prevent the spread of disease. These behaviors were selected as priority behaviors to promote in all World Vision WASH programs to address areas for growth identified in the findings of its evaluation. For instance, the behavior around treatment and safe handling of clean water was selected because the evaluation revealed that household water quality reduced significantly between the water point and storage location in the home.

USAID Accelerator Behaviors, identified for their potential to reduce child and maternal deaths, are noted where they overlap with World Vision's Essential WASH Behaviors.

❯ Household behaviors

World Vision promotes the following eight household-level WASH behaviors:

1. Handwashing with soap and running/flowing water at critical times

    ❯ *Proper handwashing after defecation, after changing diapers, before food preparation, and before eating, while especially in the context of COVID-19, after blowing one's nose, coughing, or sneezing*

TARGETED TRAININGS ON SAFE WATER HANDLING

The Zambia WASH Program recently learned the importance of identifying and targeting the right priority group for behavior change. Water quality at nearly 60% of households in the Mbeza, Twachiyanda, and Muchila area programs in Zambia was contaminated, even though water quality was high at the source. While water treatment trainings were originally conducted with adult community members, it was found that adolescent girls (aged 10-17) were the ones primarily responsible for water collection.

World Vision identified, targeted, and engaged 918 adolescent girls in safe water handling during collection, transport, and storage through new trainings. This strategy contributed to significant reduction in water contamination; after the targeted trainings, water contamination at the household level fell from 60% to just 3%. From this experience, the team learned that it is important to identify and target the right priority group before implementing any behavior-change interventions so that specific messages are developed and disseminated to the correct audience.

PROJECT SPOTLIGHT:

Zambia

Proper handwashing is one of the most cost-effective methods to reduce the spread of disease. Family members handwashing at critical times is a USAID Accelerator Behavior.

2. Safe construction and proper/hygienic use of toilets

    > *Construction and hygienic use of toilets for safe disposal of human waste, preventing human contact with feces and the spread of disease*

    The specific sanitation technology used is not as important as the existence of a household toilet the family routinely uses. Elimination of open defecation through use of toilets is a top priority for improving health, nutrition, and productivity of developing country populations.[18] Family members safely disposing of human feces is a USAID Accelerator Behavior.

3. Safe disposal of infant/child feces in a toilet (linked with toilet use)

    > *Proper and safe disposal of feces for children who are too young to use the toilet*

    Infant/child feces is as harmful in spreading disease as adult feces, and it should be disposed of safely in a toilet. Since small children and infants often do not go directly into a toilet, there may be additional steps involved to dispose of their feces in the proper location.

4. Separation of children from soil and animal feces

    > *Reduced environmental exposure to fecal matter in the first 1,000 days of life*

    In communities that practice open defecation and live with unpenned animals, fecal matter in soil can be a source of infection for small children. A growing body of evidence suggests that reducing environmental exposure to fecal matter in the first 1,000 days can vastly reduce stunting, and consequently chronic undernutrition, as well as improve cognitive development.

5. Households treat, handle, and store their drinking water with appropriate methods

    > *Proper treatment, handling, and storage of drinking water in a safe manner that prevents contamination*

    Beyond providing clean drinking water from an improved source, World Vision is committed to strengthening household water quality by supporting families to change the way they treat, handle, and store water to prevent contamination. This behavior enables family members to drink safe water, which is a USAID Accelerator Behavior.

---

[18] https://washdata.org/monitoring/inequalities/open-defecation

6. Safe use and disposal (or cleaning if reusable) of menstrual hygiene materials

    › *Promotion of practical knowledge and healthy attitudes on menstruation along with safe use and disposal/cleaning of menstrual hygiene management materials*

    In many communities where World Vision works, menstrual hygiene is taboo and confounded by common myths that marginalize women and girls. World Vision equips adolescent girls and women with practical knowledge on menstruation and menstrual cycles and promotes safe use and disposal/cleaning of menstrual hygiene management materials.

7. Food hygiene (including eating utensils and eating area)

    › *Proper handling, storage, preparation, and serving of food in a manner that prevents contamination and spread of germs; including keeping the preparation/eating area, utensils, and hands clean*

    Food hygiene is the action taken to ensure food is handled, stored, prepared, and served in a way that prevents the contamination of food and spread of germs. It involves keeping the preparation/eating area, utensils, and hands clean and handling and storing food safely.

8. Paying for water use

    › *Increasing sustainability of rural water systems by incorporating fee payment and non-monetary assets into a resource mobilization system for water collection*

    Community payments for water service are vital to the sustainability of water systems, since ongoing resources are required for maintenance and repair. However, willingness to pay can be a barrier for communities accustomed to collecting water for free. Evidence suggests incorporation of non-monetary assets (e.g. crops/animals or savings groups) into resource mobilization may help increase the sustainability of rural water systems.[19]

PROJECT SPOTLIGHT:

Honduras

WASH UP!

In partnership with Sesame Workshop, World Vision is implementing WASH UP! in schools and child-friendly spaces in 16 countries. WASH UP! uses easy-to-remember messages to help children learn, practice, and share safe sanitation and hygiene behaviors. World Vision also ensures that schools have adequate infrastructure to enable consistent practice of behaviors promoted through WASH UP!. The WASH UP! program specifically ensures that children not only have access to what they need to perform healthy behaviors, but they also are equipped with knowledge, self-confidence, and easy reminders to empower them to practice healthy behaviors and share them with others.

We launched WASH UP! in Honduras in 2019, which was the first country in Latin America. The program was designed to complement national curriculum, promoting the behaviors of drinking clean water, safe and consistent use of the latrine, and water conservation. In the first year of implementation, teachers reported a decrease in school absenteeism, and parents reported that children promoted healthy behaviors at home. In the second year of the project, during an implementation of WASH UP! in schools for the children of coffee plantation workers, a survey showed nearly 100% retention of healthy WASH practices among participating children.

[19] Behnke, N.L., et al., 2017. Resource mobilization for community-managed rural water systems: Evidence from Ghana, Kenya, and Zambia. Journal of Cleaner Production. 156, 437-444. https://www.sciencedirect.com/science/article/abs/pii/S0959652617307151?via%3Dihub

❯ School behaviors

Healthy and hygienic behaviors at school are best supported by WASH service levels that go beyond the basic level, including access to facilities for menstrual hygiene management, which are critical to the health and education of girls. World Vision promotes these three WASH behaviors at educational institutions:

1. Handwashing with soap and running/flowing water at critical times

   ❯ *Proper handwashing after defecation and before eating, and especially in the context of COVID-19, after blowing one's nose, coughing, or sneezing*

   Proper handwashing is one of the most cost-effective methods to reduce the spread of disease.

2. Proper/hygienic use of toilets

   ❯ *Proper and hygienic use of toilets for safe disposal of human waste, preventing human contact with feces and the spread of disease*

   Elimination of open defecation through use of toilets is a top priority for improving health, nutrition, and productivity of developing country populations.[20]

3. Safe use and disposal (cleaning or storage if reusable) of menstrual hygiene materials

   ❯ *Adolescent girls safely use hygienic products to manage their menstruation, cleaning and storing products after use or properly disposing of used materials*

   This behavior supports the reproductive health of adolescent girls, particularly the prevention of infections that could have lifelong consequences.[21]

❯ Healthcare facility behaviors

At healthcare facilities, World Vision also promotes safe disposal of medical waste and cleaning of toilets. Mechanisms to ensure proper staffing, training, material provision, and monitoring should be embedded into existing healthcare facility systems to support an enabling environment for behavior change.

World Vision promotes the following four WASH behaviors at healthcare facilities:

1. Proper hand hygiene by health staff worker (water and soap, alcohol-based rub)

   ❯ *Additional key moments for handwashing by health workers are before touching a patient, before aseptic procedures, after body fluid exposure/risk, after touching a patient, and after touching patient surroundings.*

2. Proper and hygienic use of toilet (by staff, patients, and visitors)

   ❯ *Proper and hygienic use of toilets at health facilities requires not only staff but also patients and their visitors to consistently use toilets.*

3. Safe handling and disposal of hospital waste

   ❯ *Proper waste disposal at points of patient care or treatment of reusable materials after use in an exam room.*

4. Regular toilet maintenance

   ❯ *Toilets at healthcare facilities require daily disinfecting/cleaning of surfaces, and timely emptying of pits.*

   Providing tools and simple checklists can help improve efficiency for cleaning/disinfecting. Checklists have been demonstrated as effective for everything from cleaning hotel rooms to reducing healthcare-associated infections.

These behaviors are all prompted, routine behaviors—that is, they occur regularly and are performed at specific times. There are four main ways these routine behaviors can be increased: 1) Training and building health worker skills, 2) Using tools/visuals to make the behavior easy, 3) Ensuring accountability, and 4) Increasing personal motivation.

---

[20] https://washdata.org/monitoring/inequalities/open-defecation

[21] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6150969/

PROJECT SPOTLIGHT:

Afghanistan

WASH BEHAVIOR-CHANGE APPROACHES

This section provides a brief summary of common WASH approaches, with short descriptions of their strengths and limitations through World Vision's behavior change lens.

Community-Led Total Sanitation

Community-Led Total Sanitation (CLTS) is a demand-side intervention commonly used at World Vision, which mobilizes communities to eliminate open defecation by doing their own assessment and determining their own actions to improve toilet coverage and use. The primary focuses are on disgust at the presence of fecal materials in the area and the need for collective action, given that only a small number of community members practicing open defecation may put the entire community at risk.

The approach may be sufficient to eliminate open defecation in some areas, but where sanitation solutions are costly, the poor may be left behind. Also, where existing coverage levels are low, focusing on a sanctioning approach to social influence may be less effective than encouraging people to work together to begin to construct and use toilets. CLTS has been ineffective in moving people beyond the most basic toilets, as enforcing norms is easier in an open defecation vs. toilet use setting than to what kind of toilet quality you should aspire to.

Sanitation Marketing

Sanitation Marketing (SanMark) is used to create demand and to improve the supply of products and services. It can be used to complement CLTS since latrine quality is usually addressed in product design under SanMark. This approach seeks to increase the value of products and services to people while decreasing the costs, but in contrast to other approaches, generally it seeks to work at the individual, rather than the group or community level.

World Vision's WASH Business Centers are an example of SanMark, where local entrepreneurs promote the benefits of sanitation and hygiene products, while also introducing new and innovative sanitation solutions. One limitation is that there are few products and services affordable to the lowest income groups, therefore SanMark alone may leave this group behind.

Faith and Development

The engagement of faith actors and/or leaders can also contribute to achieving desired behavior change outcomes. Religious leaders have the opportunity to influence social norms in their congregations, to encourage individuals to practice healthy WASH behaviors that are integral to a healthy and thriving community, and to support other development initiatives within communities. Further work is needed to evaluate the most effective ways to integrate WASH and faith approaches to improve WASH outcomes. At the same time, consideration should also be given to how desired faith and development outcomes can be achieved through World Vision's regular WASH work.

⦿ Nurturing Care Groups

NCGs are a World Vision adaptation of the Care Group approach, which replaces household visits from a "health promotor" in the community (like a community health worker) with regular group meetings between a health promoter and 8-12 "leader mothers" chosen from groups of 10-15 households in an area. This means that the health promoter can spend more time working with a group of higher capacity people more open to change, who can learn from each other and then relay messages directly to their neighbors. NCGs aim for comprehensive, area-wide coverage, and thus allow collective action to take place in smaller groups of 10-15 households. This allows for "communicating expectations" for norms, as one group of leader mothers can directly influence 500 people or more, and one health promoter can influence 5,000 people or more. However, it is still only a demand-side intervention.

⦿ WASH in Institutions

WASH UP! AND GIRL TALK

While school WASH clubs and School-Led Total Sanitation are two approaches often used for influencing WASH behavior at schools, World Vision is expanding use of WASH UP!—a school-based hygiene behavior-change program originally developed by Sesame Workshop. Since 2015, World Vision has been partnering with Sesame Workshop to contextualize and implement the WASH UP! program in rural and hard-to-reach areas. Sesame Workshop and World Vision work with local stakeholders and school administrators to develop messages in local languages that are relevant and relatable to children in the local context. The WASH UP! program delivers easy-to-remember behavior-change messages through songs, games, videos, and activities to help children learn, practice, and share safe sanitation and hygiene behaviors. The Girl Talk

program is a follow-up curriculum to WASH UP! that teaches girls' empowerment and MHM.

CLEAN CLINIC APPROACH

USAID's Clean Clinic Approach is an incentive-based approach that encourages healthcare facilities to establish WASH goals and make incremental improvements toward the end goal of achieving "Clean Clinic" status, as defined with the national Ministry of Health. This approach is used after target healthcare facilities have undergone assessment and national minimum WASH standards have been established or refined. This approach seeks to actively engage government in healthcare facility upkeep and budgeting. It empowers community members to hold government accountable for improved WASH services.

EVIDENCE BUILDING

To ensure that World Vision is implementing evidence-based programming, it uses the IDEA process—Ideate, Design, Experiment, and Adopt. This includes brainstorming for root causes of the problem to be addressed (Ideate), developing a solution (Design), testing it (Experiment), and then implementing and adapting to other contexts (Adopt).

This same process can be used for designing behavior-change interventions, where the stage you begin at depends on existing evidence. For behaviors where the WASH sector has a lot of experience, World Vision is developing behavior-specific evidence guides designed to give an overview of the evidence and best practices, allowing you to start at the Adopt stage. Another helpful resource in this regard is the USAID Sample Behavior Profiles on the Think Big website.

When you begin at the Adopt stage, and there is clear evidence of impact from other contexts, carefully monitoring the program delivery and outputs may be sufficient. However, for new behaviors where less is

| Ideate | Design | Experiment | Adopt |
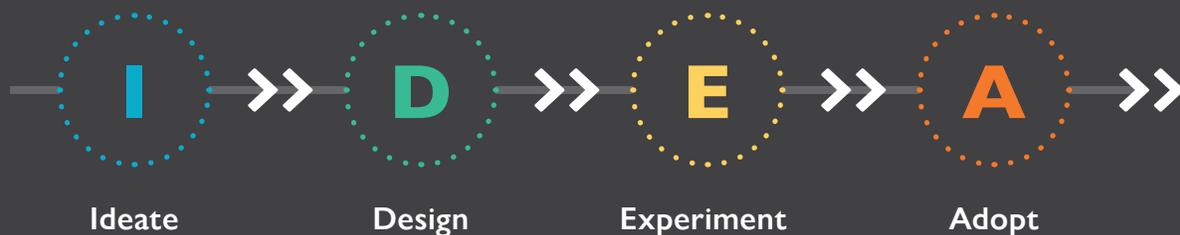
known (e.g., child feces disposal), or where behavior-change efforts have not been successful in the past, you may need to design and test an intervention more thoroughly. To determine the correct approach in your situation, consider the following questions:

1. Is the behavior you are trying to change one for which there is little existing evidence?

    OR

2. Is the behavior one that you have tried to change unsuccessfully in the past?

If the answer to questions 1 or 2 are "No," then using the World Vision Rapid Behavior-Centered Design tool will facilitate developing an effective behavior-change program where resources are limited or effective approaches are already known. However, if the answer to questions 1 and 2 are both "Yes," then adopting an approach from the Behavior-Change Tools section is ideal. Where there is little existing evidence, or where there is an opportunity to dedicate significant resources to an evaluation of an innovative program, more rigorous formative research along with more rigorous evaluation may be necessary and/or beneficial.[22]

❯ Monitoring and Evaluation[23]

One of the challenges with behavior change is translating formative research results into actionable activities that effectively change behavior. For this reason, it is important that projects remain flexible enough to adjust activities as needed if the target behaviors are not changing, based on regular monitoring of data for impact. Monitoring results will help practitioners identify what activities or aspects of interventions are working as planned or not to enable course corrections that improve impact as part of an iterative process of behavior-change implementation.

Behavior-change monitoring and evaluation should measure whether the target populations are adopting the desired behaviors. Additional considerations include measuring whether:

> Activities are being implemented consistently and with quality

> Priority and influencing groups are being reached

> Barriers are being reduced and motivators strengthened

> Supplies and services required to perform the behaviors are accessible and functional

> Communication materials are field tested and used as intended

> Changes in the enabling environment are occurring as planned (e.g. social norms, local markets, support from community leaders, etc.)

Each project's overall monitoring and evaluation plan should be based on a theory of change that identifies how activities lead to outputs, outcomes, and impacts. The plan should define indicators, including indicators to measure progress on desired WASH behavior change. The use of standard indicators makes data more comparable across projects, and for this reason a table of recommended indicators for the essential WASH behaviors is included next. Finally, adequate consideration should be given for effective knowledge management, including the documentation and dissemination of results or findings, products, tools, challenges, successes, and lessons learned.

---

[22] Reach out to Ben Tidwell, Senior Technical Advisor for WASH Behavior Change Research (btidwell@worldvision.org) if you come upon any such opportunities.

[23] This section draws heavily from the following website: Effective At-Scale Nutrition Social and Behavior Change Communication: Technical Guidance Brief | U.S. Agency for International Development (usaid.gov)

ESSENTIAL WASH BEHAVIORS	MONITORING INDICATORS/ QUESTIONS	NOTES AND INSTRUCTIONS
Handwashing with soap and running/ flowing water at critical times	**[SURVEY QUESTION]** Can you please show me where members of your household most often wash their hands?	This behavior is best measured by direct observation. The surveyor observes availability of handwashing facility [Y/N], water at the place for handwashing [Y/N], soap or detergent at the place for handwashing [Y/N]. Per Joint Monitoring Programme (JMP) standards: > Availability of handwashing facility with soap and water is considered <u>basic</u> service. > Availability of handwashing facility without soap or water is considered <u>limited</u> service.
Safe <u>construction</u> and proper/ hygienic <u>use</u> of toilets	**[SURVEY QUESTION — CONSTRUCTION]** > What kind of toilets do people in your household usually use? **[SURVEY QUESTION — USE]** > How often do you personally use the toilet to defecate? > How often do adult males in your household use the toilet to defecate? > How often do adult females in your household use the toilet to defecate? > How often do those over 60 in your household use the toilet to defecate? > How often do children under 18 in your household use the toilet to defecate?	**[RESPONSES — CONSTRUCTION]** ☐ Flush/pour flush to: — Sewer, septic tank, or pit latrine (improved) — Open drain or don't know (unimproved) ☐ Dry pit latrines — Pit latrine with slab (improved) — Pit latrine without slab (unimproved) ☐ Composting toilets (improved) ☐ Bucket, container-based sanitation, or hanging toilet/latrine (unimproved) ☐ No facility/bush/field (unimproved) **[RESPONSES — USE]** *Never, Sometimes, Usually, Always* Based on JMP standards: > Use of improved facilities not shared with other households is <u>basic</u> service. > Use of improved facilities shared between two or more households is <u>limited</u> service. > Use of pit latrines without a slab or platform, hanging or bucket latrines, no facility, and flush to open drain are <u>unimproved</u> service.

ESSENTIAL WASH BEHAVIORS	MONITORING INDICATORS/ QUESTIONS	NOTES AND INSTRUCTIONS
Safe disposal of infant/child feces in a toilet hole (linked with toilet use)	**[SURVEY QUESTION]** The last time (name of child) passed stool, where were his/her feces disposed?	**[RESPONSES]** ☐ Dropped into household toilet/latrine ☐ Buried ☐ Solid waste/trash ☐ In yard ☐ Outside premises ☐ Public latrine
Separation of children from soil and animal feces	**[OBSERVE]** ❯ Are there any animals in the living space of the household? **[OBSERVE]** ❯ Are visible feces present on the household compound? **[SURVEY QUESTION]** ❯ Do you collect and dispose of animal feces?	
Households treat, handle, and store their drinking water with appropriate methods	**[SURVEY QUESTION]** ❯ Do you do anything to your water to make it safer for drinking? [Y/N] **[SURVEY QUESTION]** ❯ What do you do to the water to make it safer?	**[RESPONSES — Do not read choices aloud. Check all boxes that apply.]** ☐ Boil ☐ Add bleach/chlorine ☐ Strain with a cloth ☐ Ceramic filter ☐ Biosand filter ☐ Solar disinfection ☐ Reverse osmosis ☐ Other filter

ESSENTIAL WASH BEHAVIORS	MONITORING INDICATORS/ QUESTIONS	NOTES AND INSTRUCTIONS
Safe use and disposal (or cleaning if reusable) of menstrual hygiene materials	**[SURVEY QUESTION]** > During your last menstrual period were you able to use the hygiene materials of your choice? [Y/N] **[SURVEY QUESTION — WASTE]** > How did you dispose of the non-reusable menstrual hygiene waste?	**[RESPONSES — WASTE]** ☐ Throw away routinely to the waste bin ☐ Throw away in the open (open spaces, rivers, lakes, wells, roadside, etc.) ☐ Burning (open) ☐ Burying ☐ Flushing down the toilet ☐ Throwing in pit latrine
Food hygiene (including eating utensils and eating area)	**[SURVEY QUESTION]** > Can you tell me any clean food preparation practices that you know or do before and after you cook?	**[RESPONSES — Do not read choices aloud. Check all boxes that apply.]** ☐ Washing hands before and after touching food ☐ Wash and rinse dishes, cutting boards, and utensils before and after using ☐ Wash fruits and vegetables in running water before preparing, cooking, or eating ☐ Clean and sanitize your work area thoroughly before and after each use ☐ Serve hot food while hot, or put it in the fridge or freezer as soon as possible
Paying for water use	**[SURVEY QUESTION]** > Were you able to pay the agreed tariff for your water for the past month?	Responses should be verified with the person responsible for collection of water fees.

APPENDICES

> ## Appendix 1: Resources

> ### Behavior Change: A step by step guide for interventions

This guide from Action Against Hunger aims to support organizations designing a behavior-change strategy, step by step. Here you will find tools to choose the methodology that best suits your context and objective.

> ### Behavior Integration Guidance

This resource website by USAID provides information and tools on aligning your program with behavioral outcomes to maximize investments and accelerate impact. It includes information on priority behaviors that accelerate improved health outcomes, country data, and behavioral profiles.

> ### Designing for Behavior Change: A Practical Field Guide

Published by Technical and Operational Performance Support (TOPS), a USAID-funded program at Save the Children, this manual is a condensed reference guide. It is primarily intended for use by those who have been or are being trained in the Designing for Behavior-Change approach.

> ### Handwashing Handbook

The Handwashing Handbook aims to equip handwashing champions with resources for strengthening local systems and tools for planning and implementing handwashing behavior-change programs in a variety of contexts.

> ### Social Behavior Change Guide: Insights and Practice

Prepared primarily for those who participate in implementation of GIZ's food and nutrition security programs, this is a comprehensive guide to help practitioners understand human behavior and provide step-by-step information to integrate behavior change into various stages of interventions, starting from design to evaluation.

COURSES AND TRAININGS

World Vision offers the following behavior-change courses and workshops for its staff members.

> BEHAVE! is an eight-week (eight-hour) introductory online course for World Vision staff provided on eCampus by World Vision International covering the science of social and behavior change. Contact Mirela Oprea (Mirela_Oprea@wvi.org) for enrollment details.

> Behavior Change: Practical implementation guidance for programs training includes three trainings synchronized with this guide in webinar format to build on the knowledge and skills covered here. For more information, contact Ben Tidwell (btidwell@worldvision.org).

The following free courses are also offered for practitioners. A comprehensive list of courses can be found here.

> Academy of Change is a free capacity building program designed for future leaders to accelerate change toward sustainable behaviors that consists of six modules delivered over four months.

> BETA Behavioral Insights for Public Policy is a free course with six learning modules offered by the Australian government that covers behavioral insights, how these ideas can be applied in a government context, as well as an introduction to designing and evaluating behavioral insights interventions.

> Social Norms, Social Change Level 1 teaches how to measure social norms and the expectations that support them, and how to decide whether they cause specific behaviors. Level 2 teaches advanced concepts such as how to evaluate existing intervention strategies.

⦿ Appendix 2: World Vision's Rapid Behavior-Centered Design Tool

The RapidBCD tool is designed to be easily used to address World Vision's eight key WASH behaviors using information in this guide about kinds of behavior combined with the behavior-specific evidence guides. A group of World Vision staff should plan to spend one day to use this tool in the field. This should include people who as a group have some knowledge of the local setting, WASH, and behavior change.

The first page should be filled out based on the group's knowledge of the behavior itself. Information about the actor should be provided from local knowledge where possible. The target behavior, who needs to do the behavior, and the action/beneficiary/benefit are all described in the behavior-specific evidence guides. The implication of these different kinds of actions/ beneficiaries/benefits are shown on the RapidBCD theory of change page and are further discussed in the paper, Behavioral Kinds: Selecting Approaches for the Change of Behaviors Based on a Theoretical Typology.

Next, identify where there are gaps in the evidence that should be verified with the local population. In the evidence guides, there are three to five key determinants for each behavior, ranging from cultural challenges to product/infrastructure challenges. Select the six to eight most important questions and then plan to interview relevant people from the local community. Depending on the kind of behavior and the gap identified, this could include community leaders, government officials, private sector operators, men, women, boys, girls, or those with specific disability considerations. At a minimum, women should be included in equal numbers as men, and people with disabilities should be included to understand their challenges.

Finally, sit as a group with all of the information you've collected from your informants and the behavior-specific evidence guides and determine how you will "Grab Attention," "Cause Revaluation," and "Facilitate Performance" in your program. Don't forget to test your activities as described elsewhere and improve upon them if necessary!

What is the target behavior? ....

Who do we want to do the behavior? ....

WHO IS THE ACTOR? (MAKE NOTES)		
Personal and Psychological Characteristics:	What aspects of the actors make it harder or easier to do the behavior?	
Knowledge, Attitudes, and Beliefs:	What key knowledge, attitude, or belief gaps exist?	
Social Position:	What is the view of society about the person?	

WHAT KIND OF ACTION IS IT? (CHOOSE ONE)		
Individual vs. Collective:	Can an individual effectively do this behavior, or does it need to be a group?	
Planned vs. Routine:	Is the behavior rare (planned) or routine (habit)?	

WHO IS THE BENEFICIARY? (CHOOSE ONE)		
Present vs. Future Self:	Does the person benefit now or later?	
Private vs. Public Good:	Does the person doing the behavior benefit mostly, or does it benefit many other people?	

WHAT KIND OF BENEFIT IS THERE? (CHOOSE ONE)		
Certain vs. Uncertain Benefits:	Does the actor get a benefit every time?	
Personal vs. Reputational Rewards:	Does the person doing the behavior benefit mostly, or does it benefit many other people?	
Gain vs. Loss Perceptions:	Does doing the behavior gain the person something or have them lose something?	

Grab Attention

- Think through how to make sure people are exposed to the message. This is both:

  - A delivery mechanism:
    – Community meetings
    – Door-to-door visits
    – Text messages
    – Mass media campaigns

  - The message and its format:
    – Use creative approaches like stories, games, and songs to grab attention
    – Use surprising messages that aren't already known by most people

- If the action is **collective** or the beneficiary a **public good**, consider using group-based delivery methods and/or mass media

- If the action is **routine**, consider grabbing attention where the behavior happens

Cause Revaluation

- If the action is **planned** or the beneficiary **private**:

  - How can you make benefits felt more?

  - How can you get the person to make a specific plan to do the behavior?

- If the action is **routine** or benefits the **future self** or is **uncertain**:

  - Can you add a natural WASH motive, such as:
    – Disgust
    – Comfort
    – Nurture
    – Affiliation
    – Status

- If the benefit is a **gain**, try to reframe the message in terms of a **loss** (i.e. avoid losing money instead of saving more money)

  If the benefit is a **public good** or the benefit could be **reputational**:

  - How can you make the behavior a social norm by making it more observable, communicating expectations, or eliminating excuses?

Facilitate Performance

- How can you make the behavior easier? This could include approaches like:

  - For **routine** actions, promoting a planned, one-time behavior (buying a toilet upgrade) to make routine actions easier (using the toilet)

  - Making products more accessible through business centers, microloans, and/or subsidies

  - For **individual** actions, consider setting up an environment to make behavior easier (e.g., food hygiene in kitchen areas) or building better infrastructure (piped water closer to the home or higher-quality toilets)

  - For a **collective action**, establish a fixed system for maintenance of shared resources (water systems/ school or healthcare facility infrastructure) or mobilize groups or the community together

Grab Attention

- Mechanism

- Message Content

Cause Revaluation

- What kind of behavior is it?

- How can you cause revaluation?

Facilitate Performance

- How can you make the behavior easier?

▶ Appendix 3: Adapted DBC Framework[24]

DESIRED BEHAVIOR[22]	PRIORITY AND INFLUENCING[23]	BARRIERS AND MOTIVATORS[24]	BRIDGES TO ACTIVITIES[25]	ACTIVITIES[26]
▶ To promote this behavior …	▶ … among this group … PRIORITY GROUP: INFLUENCING GROUPS:	▶ … we will address these barriers and motivators …	▶ … to promote these changes …	▶ … by implementing these activities.

OUTCOME INDICATORS:	PROCESS INDICATORS:

[24] Adapted from The Technical and Operational Performance Support (TOPS) Program. 2017. _Designing for Behavior Change: A Practical Field Guide_. Washington, DC: The Technical and Operational Performance Support Program.

[25] Write the specific and effective behavior to be promoted.

[26] Write the priority groups and influencing groups.

[27] List the barriers and motivators from the formative research that influence the group's practice of the desired behaviors (DBC determinants are: perceived self-efficacy/skills, perceived social norms, perceived positive consequences, perceived negative consequences, access, cues for action/reminders, perceived susceptibility, perceived severity, perceived divine will, policy, and culture.)

[28] Describe exactly what changes are needed.

[29] Describe the behavior-change activities that will be used to promote the desired change.

⊙ Appendix 4: Barrier Analysis Questionnaire (handwashing)[30]

<table>
<tr><td>BARRIER ANALYSIS QUESTIONNAIRE:

Handwashing among Mothers</td><td>GROUP:

☐ **Doer**
☐ **Non-Doer**</td></tr>
</table>

BEHAVIOR STATEMENT

Mothers of children age 0-59 months wash their hands with soap at the five critical times each day.

DEMOGRAPHIC DATA

Interviewer's Name ....   Questionnaire No. ....

Community ....   Date ....

Scripted Introduction

Hi, my name is .... and I am part of a study team looking into personal hygiene habits. The study includes a discussion of this issue and will take about 20 minutes. I would like to hear your views on this topic. You are not obliged to participate in the study and no services will be withheld if you decide not to. If you decide to talk with me you will not be remunerated or receive any gifts or services. Everything we discuss will be held in strict confidence and will not be shared with anyone else.

Would you like to participate in the study?
[If not, thank them for their time.]

Section A	Behavior Screening Questions

1. How old is your youngest child? .... months ≪ *[Write the age in months]*

   ☐ a. 0-59 months
   ☐ b. >59 months ≫ *[End interview and look for another respondent]*
   ☐ c. Don't know ≫ *[End interview and look for another respondent]*

2. Yesterday, did you wash your hands?

   ☐ a. Yes
   ☐ b. No ≫ *[Mark as Non-doer and continue to Section B]*
   ☐ c. Don't remember ≫ *[End interview and look for another respondent]*

3. I would like you to think about yesterday and tell me how many times you washed your hands yesterday.

   .... times ≪ *[This is just to help with memory]*

---

[30] https://www.fsnnetwork.org/resource/barrier-analysis-questionnaires

4. Yesterday, what are all the moments that you washed your hands? **«** *[Do not read the list – Mark all that are mentioned]*

   ☐ a. after defecation

   ☐ b. after cleaning a child's diaper/nappy

   ☐ c. before cooking / preparing food

   ☐ d. before eating

   ☐ e. before feeding a child

   ☐ f. Don't know or won't say **»** *[End interview and look for another respondent]*

5. In addition to water, did you use anything else to wash your hands yesterday?

   ☐ a. Yes

   ☐ b. No **»** *[Mark as Non-doer and continue to Section B]*

   ☐ c. Don't remember **»** *[End interview and look for another respondent]*

6. In addition to water, what else did you use to wash your hands?

   ☐ a. Soap

   ☐ b. Anything else **»** *[Mark as Non-doer and continue to Section B]*

   ☐ c. Don't remember **»** *[End interview and look for another respondent]*

7. May I see the soap that you use?

   ☐ a. Soap available and looks used

   ☐ b. Soap available but does not look used **»** *[Mark as Non-doer and continue to Section B]*

   ☐ c. No soap available **»** *[Mark as Non-doer and continue to Section B]*

DOER *(all of the following)*		NON-DOER *(any one of the following)*		DO NOT INTERVIEW *(any one of the following)*	
Question 1:	**A**			Question 1:	**C**
Question 2:	**A**	Question 2:	**B**	Question 2:	**C**
Question 4:	**A plus** any **two** from B, C, D, E[31]	Question 4:	No **A**; **or** A and **only one** other response between B, C, D, E	Question 4:	**C**
Question 5:	**A**	Question 5:	**B**	Question 5:	**C**
Question 6:	**A**	Question 6:	**B**	Question 6:	**C**
Question 7:	**A**	Question 7:	**B or C**		

[31] This is an example of how to relax a behavior when you don't think you'll be able to find enough 'Doers'.

BEHAVIOR EXPLANATION

In the following questions I am going to be talking about handwashing at **five critical times**. By this I mean:

1. *after defecation*
2. *after changing a baby's diaper/nappy*
3. *before cooking*
4. *before eating*
5. *before feeding a child*

Section B	Research Questions

>> *[Perceived Self-efficacy]*

1. With your current knowledge, skills and resources do you think you can wash your hands with soap at the five critical times?

   ☐ a. Yes
   ☐ b. No
   ☐ c. Maybe
   ☐ d. Don't know or won't say

2a. ***Doers:*** What makes it <u>easier</u> for you to wash your hands with soap at the five critical times each day?

2b. ***Non-Doers:*** What would make it <u>easier</u> for you to wash your hands with soap at the five critical times each day? *[Write all responses below. Probe with "What else?"]*

>> *[Perceived Self-efficacy]*

3a. ***Doers:*** What makes it <u>difficult</u> for you to wash your hands with soap at the five critical times each day?

3b. ***Non-Doers:*** What would make it <u>difficult</u> for you to wash your hands with soap at the five critical times each day? *[Write all responses below. Probe with "What else?"]*

>> *[Perceived Positive Consequences]*

4a. ***Doers:*** What are the <u>advantages</u> of washing your hands with soap at the five critical times each day?

4b. ***Non-Doers:*** What would be the <u>advantages</u> of washing your hands with soap at the five critical times each day? *[Write all responses below. Probe with "What else?"]*

>> *[Perceived Negative Consequences]*

5a. ***Doers:*** What are the <u>disadvantages</u> of washing your hands with soap at the five critical times each day?

5b. ***Non-Doers:*** What would be the <u>disadvantages</u> of washing your hands with soap at the five critical times each day? *[Write all responses below. Probe with "What else?"]*

>> *[Perceived Social Norms]*

6a. ***Doers:*** Who are the people that <u>approve</u> of you washing your hands with soap at the five critical times each day?

6b. ***Non-Doers:*** Who are the people that <u>would approve</u> of you washing your hands with soap at the five critical times each day? *[Write all responses below. Probe with "Who else?"]*

>> *[Perceived Social Norms]*

7a. ***Doers:*** Do most of the people that you know <u>approve</u> of you washing your hands with soap at the five critical times each day?

7b. ***Non-Doers:*** Would most of the people that you know approve of you washing your hands with soap at the five critical times each day?

- ☐ a. Yes
- ☐ b. No
- ☐ c. Maybe
- ☐ d. Don't know or won't say

>> *[Perceived Social Norms]*

8a. ***Doers:*** Who are the people that <u>disapprove</u> of you washing your hands with soap at the five critical times each day?

8b. ***Non-Doers:*** Who are the people that <u>would disapprove</u> of washing your hands with soap at the five critical times each day? *[Write all responses below. Probe with "Who else?"]*

>> *[Perceived Access]*

9a. ***Doers:*** How difficult <u>is</u> it to get the soap you need to wash your hands at the five critical times each day?

- ☐ a. Very difficult
- ☐ b. Somewhat difficult
- ☐ c. Not difficult at all
- ☐ d. Don't know or won't say

9b. ***Non-Doers:*** How difficult <u>would it be</u> to get the soap needed to wash your hands at the five critical times each day?

- ☐ a. Very difficult
- ☐ b. Somewhat difficult
- ☐ c. Not difficult at all
- ☐ d. Don't know or won't say

>> *[Perceived Cues for Action / Reminders]*

10a. ***Doers:*** How difficult is it to remember to wash your hands with soap at the five critical times each day?

    ☐ a. Very difficult
    ☐ b. Somewhat difficult
    ☐ c. Not difficult at all
    ☐ d. Don't know or won't say

10b. ***Non-Doers:*** How difficult do you think it would be to remember to wash your hands with soap at the five critical times each day?

    ☐ a. Very difficult
    ☐ b. Somewhat difficult
    ☐ c. Not difficult at all
    ☐ d. Don't know or won't say

>> *[Perceived Susceptibility / Perceived Risk]*

11. ***Doers and Non-doers:*** How likely is it that your child will get diarrhea in the coming three months?

    ☐ a. Very likely
    ☐ b. Somewhat likely
    ☐ c. Not likely at all
    ☐ d. Don't know or won't say

>> *[Perceived Severity]*

12. ***Doers and Non-doers:*** How serious would it be if your child got diarrhea?

    ☐ a. Very serious problem
    ☐ b. Somewhat serious problem
    ☐ c. Not serious at all
    ☐ d. Don't know or won't say

>> *[Action Efficacy]*

13. ***Doers and Non-doers:*** How likely is it that your child will suffer from diarrhea if you wash your hands with soap at the five critical times each day?

    ☐ a. Very likely
    ☐ b. Somewhat likely
    ☐ c. Not likely at all
    ☐ d. Don't know or won't say

>> *[Perception of Divine Will]*

14. ***Doers and Non-doers:*** Do you think that it's **God's will** that children get diarrhea?

    ☐ a. Yes
    ☐ b. No
    ☐ c. Don't know or won't say

›› [Culture]

15. ***Doers and Non-doers:*** Are there any cultural rules or taboos against washing your hands with soap at the five critical times each day?

☐ a. Yes
☐ b. No
☐ c. Don't know or won't say

›› [Policy]

16. ***Doers and Non-doers:*** Are there any community laws or rules in place that make it more likely that you wash your hands with soap at the five critical times each day?

☐ a. Yes
☐ b. No
☐ c. Don't know or won't say

[Now I am going to ask you a question unrelated to handwashing.]

›› [Universal Motivators]

17. ***Doers and Non-doers:*** What is the <u>**one**</u> thing that you desire most in life?