

→ **WASH and Health Working Together - a 'how to' guide
for NTD programmes**

Understanding behaviour to develop behaviour change interventions

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Human behaviour at the individual, household, community and society level underpin the transmission and treatment of NTDs. Promoting healthy behaviours and preventing behaviours that undermine health and associated services is an ongoing challenge of WASH, NTD, education and health programmes. A basic principle for the development of behaviour change initiatives is that changing behaviours requires an understanding of

- What the target behaviours are
- Who practices these behaviours
- Why these behaviours occur, and
- What are the effective ways to change them

The potential behaviours of interest for NTDs are listed in the [👁️ NTD-related behaviours \(#2\)](#) resource. See also the [👁️ WASH in Behaviour](#) section of the toolkit for further information.

How can information about the behaviours of interest be collected?

The process for answering the above questions is sometimes referred to as **Formative Research**, a process with the objective of providing detail on specific behaviours in the context in which they happen (through field observation rather than literature review or expert consultation). This type of research generally applies qualitative methods, although some quantitative data may also be gathered. It is designed to provide enough information to understand what drives the target behaviours, and on the specific context in which they take place. The findings are therefore helpful for the design and eventual delivery of the intervention. Given that many NTDs are associated with very specific behaviours taking place in specific geographic and cultural settings, formative research can be a powerful tool for designing an effective intervention.

Is research essential?

The term ‘research’ may be off-putting, as this may seem to imply significant complexity and cost implications. It is possible that relevant information about the specific behaviour and context has already been collected and can be used as a starting point for intervention design. While new information may be needed, it may not be essential to undertake research at a very large scale – having some information to guide intervention design is better than having none. The following steps will guide you in deciding what kind of information you may need and how it may be found. In cases where relevant information is lacking and large scale behaviour change interventions are being planned, full formative research using an academic team may be an essential and justifiable investment to ensure programme effectiveness.

Process for deciding the purpose and scope of formative research

- 1. Is research needed?** Start off by asking: why is new information needed? What kind of programme is being developed, and where will it be implemented? How will the findings be used to inform programme design? These questions will help you understand whether or not research is needed, the scale and scope, and the potential cost. Remember: formative research is only necessary for the development of behaviour change interventions. If the question you are seeking to answer is about other aspects of the programmes such as improving integration, or improving governance and coordination, the process set out in the  [Situation analysis protocol \(#6\)](#) should be sufficient.
- 2. What information is needed, based on the situation analysis?** What is the behavioural problem you are seeking to address? Several health promotion and behaviour change initiatives are likely to already be taking place in your country. The situation analysis may have brought up a few potential opportunities and entry points relating to these activities. How do you know which one is most useful for addressing the behaviours that are most relevant to your programme?
 - a. Integrating a NTD-specific behaviour into an existing WASH campaign:** can you assume which behaviour change message will be the most effective, and how it should be delivered? For example, an easy option may be to introduce a message around facial cleanliness for trachoma prevention into a handwashing campaign; however, the motivation for face washing may not be the same as the motivation for handwashing in

the particular setting (the former may be driven by social respect, while the latter may be driven by disgust).

- b. **Incorporating behaviour change messages into social mobilisation for mass drug administration (MDA):** This may be an obvious entry point, but MDA is an infrequent activity (once or twice a year). What might be the most effective message that can deliver impact when communicated at such low frequency?
- c. **Utilising mass media for behaviour change messages:** the situation analysis may have shown that TV and radio are popular communication channels in your country. However, do they reach endemic communities (who may have less access to these channels)? If they do, are they trusted channels for communicating information on health and wellbeing?
- d. **Using health outreach programmes:** outreach programmes have the potential to reach endemic populations and to be a trusted source of information and influence. What is the reach and quality of the health services in endemic areas? If their reach is good, do frontline health workers have the skills, capacity and resources to undertake effective behaviour change activities? Do health workers have a trusting relationship with the target group (especially in situations where NTDs affect particular ethnic, cultural and socio-economic groups, and in relation to NTDs associated with social stigma and exclusion)? Are the target behaviours already being addressed? Are they being addressed effectively?
- e. **Delivering in schools:** Children are often seen as potential change agents for communities. Consider: is there a school health programme through which behaviour change messages can be delivered effectively? Do teachers have sufficient skills, resources and motivation to deliver messages? Are the target behaviours already being addressed? Are they being addressed effectively?

The information in the situation analysis and your and your team's knowledge may provide you with most of the above questions, and it may be that the behaviour change intervention required is a simple change or adaptation to an existing intervention.

Go through the next two steps to figure out whether you have sufficient information already to deliver the intervention, or whether further investigation is needed.

3. What isn't known about the target behaviour?

There may be aspects that are completely unknown about the behaviour, in terms of who practices it, when and why. Alternatively, there may already be some information in the literature or from previous studies about the behaviour, but perhaps not in the specific programme context or location of interest. There may be information about the behaviour (for example, handwashing with soap after toilet use), but perhaps not in relation to the specific NTD-related risk factors (for example, handwashing before food preparation or eating, in relation to foodborne diseases or helminth infection). This should be an opportunity to question existing assumptions on what people do or don't do, why, and what may be the entry points for communication that are most influential and effective.

Use the table below (adapted from: Hygiene Behaviour Change Capacity Building and Technical Training Manual. WaterAid and London School of Hygiene and Tropical Medicine, 2016) to establish what is already known, and where further information is needed.

		Example Questions	Example for soil transmitted helminths soil transmitted helminths (STH) WASH behaviours	More data needed? (Y/N)
Behaviour	Target behaviour	Define the target behaviour (what is the action, who will do it, in the specific location (e.g. district))	<ul style="list-style-type: none"> ▶ Handwashing before eating ▶ Exclusive use of toilets for defecation and faeces disposal 	
Environment	Physical	What things in the physical environment trigger the targets behaviours? What is the physical setting like?	<ul style="list-style-type: none"> ▶ Lack of handwashing stations, water and soap near where people eat ▶ lack of toilets and poor child feces disposal practices 	
	Biological	What risk is there from pathogens/ feces? What diseases to people know about or worry about?	We have some data from healthcare facilities about type and burden of STH infections, and some survey data showing that there is high prevalence. XX% of the population in the district are still assumed to practice open defecation. Access to water is XX%. Child mortality is xxx. We don't know what people are worried about and how they believe diseases are transmitted.	
	Social	Who are the role models for the target behaviours? How does the social environment (relationships, networks and organisations) affect the target behaviour?	This is a rural setting and most people are farmers. Male household heads are decision makers, women are the primary carers of children. There are community women's groups and village heads are also influential. In some communities religious leaders are also influential.	

		Example Questions	Example for soil transmitted helminths soil transmitted helminths (STH) WASH behaviours	More data needed? (Y/N)
Brains	Executive	Do the audience understand the need for the target behaviour and when and how it should be done? Do they make plans related to the target behaviour?	<ul style="list-style-type: none"> ▶ Children are told to wash hands at school and are told about intestinal worms, but it is not clear whether this information is shared at home or in the community. ▶ A recent evaluation of the national sanitation programme showed people know the health imperative for stopping open defecation, but the practice persists in this district. 	
	Motivated	Is the target behaviour rewarding? What emotional drivers of behaviours are there?	<ul style="list-style-type: none"> ▶ Literature on handwashing shows that handwashing is often motivated by nurture, disgust and comfort, and that hands usually get washed if dirty, sticky or smelly. ▶ literature of sanitation show that privacy, comfort and social aspects (pressure, status) are stronger motives than health for constructing and using latrines. 	
	Reactive	What triggers the target behaviours? Is the behaviour habitual? If the behaviour is skill-based, do the target audience have the necessary skills?	<ul style="list-style-type: none"> ▶ Having a handwashing station where people eat may make handwashing easier to habituate. ▶ having a latrine that is private, safe, near, clean and pleasant to use is likely to increase use. 	

4. Identify potential methods: once you have established what further information is needed, there are several ways in which this information can be best obtained. Each of these has advantages and disadvantages, and the next step will help you decide which methods would be most appropriate to your needs.

		Example Questions	FR Method
Behaviour	Target behaviour	What is the prevalence of the key risk behaviours? Who carries out the behaviours? When?	Structured observation, Participant observation, Video observation, Self-report when observation is not possible (e.g., anal cleansing)

		Example Questions	FR Method
Environment	Physical	How is water supplied? Are soap, potties etc. available in local shops/kiosks? What is the state of toilet provision?	Transect walk, Shopkeeper interview
	Biological	Are animals kept in kitchens? Is human and animal faecal material on the ground?	Participant observation, Structured observation, Video observation
	Social	Do the target communities have active institutions (e.g. leadership, committees, WASH volunteers, trade associations?)	Community map, Social network analysis
Brains	Executive	Does the audience understand the need for handwashing?	Questionnaire survey, Focus group discussion, Worry Box, Financial life, identity map
	Motivated	What could motivate handwashing, safe faeces disposal?	Motive mapping, Superpowers game, Forced choice games, Attribute ranking, Prioritisation game
	Reactive	What cues target the behaviour?	Scripting, Word association
Body	Traits, Physiology, Senses	Do elderly, infirm, young, pregnant, less able, etc have different needs?	Photovoice
Behaviour Setting	Stage	Where does the behaviour take place?	Participant observation, Video observation
	Roles	What is the role played by the target audience and how does this relate to roles played by others?	Participant observation, Video observation
	Routine	What are the daily routines?	Participant observation, Video observation
	Script	What is the sequence of behaviours involved in handwashing according to the target audience?	Scripting of normal day, Menstruation day
	Norms	What handwashing behaviour is expected and approved of?	Norms questions, 'Out of 100' people exercise
	Props	Is soap available in the house? What types? What implements are used for handwashing? Are there potties in the house?	Household inventory, Behaviour trial
	Infrastructure	Are there toilets? What state are they in? Is there a handwashing place? Where is water stored?	Household visits, Physical observation
Intervention	Touchpoints	What are the ways in which a programme can contact a target audience?	Social network analysis, Touchpoint map, Questionnaire
Context	Programmatic, political, economic, social	What programmes are active in region? (should be covered in Assess step)	Key informant interviews

5. Planning and delivering the research: Now that you have listed all the target behaviours and the potential methods to obtain information, you will need to decide which ones are not only relevant, but also feasible. Ask the following questions:

- a. Do you have sufficient staff to undertake the work (such as experienced data collectors or researchers)? If not, can an appropriate external agency be identified with experience in conducting formative research and/or social investigations?
- b. Is there sufficient expertise within your team to conduct and supervise the work? If not, is training needed and feasible?
- c. What are the likely costs of the work, and is there sufficient budget to undertake it? If not, can additional resources be mobilised, or can costs be reduced by choosing an alternative, appropriate method?
- d. What are the logistics associated with the work, such as timing (consider holidays, seasons, insecurity and other considerations)?
- e. What is the appropriate scale of the investigation in terms of number of people/ households/communities you will need to cover? (remember that this is not a baseline study, and therefore you may not need a large sample size in order to draw useful conclusions)

Once you have decided on the methods, it is advisable to develop a plan that covers the following aspects, with specific timelines:

- ▶ Research team composition
- ▶ Terms of reference for the research team
- ▶ Ethical approval process and forms (as required by the appropriate research council at national level, including additional requirements for any academic institutions involved and process and forms for obtaining informed consent from participants)
- ▶ Data storage procedure to maintain confidentiality
- ▶ Process for research tool development
- ▶ Training schedule and plan for data collectors

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- ▶ Schedule for data collection and analysis
 - ▶ Type and framework for analysis
 - ▶ Data analysis plan: this has to be aligned with the question you are seeking to answer (or the research question for the formative research). When analysing, keep in mind that the point of the analysis is to provide an intervention for intervention design. The way you will analyse the data will depend on the methods chosen.
 - ▶ Outline for final report
 - ▶ Detailed budget

6. Applying the findings for intervention development: keeping in mind that the investigation/formative research has been done to inform a behaviour change intervention, make sure that the analysis has answered all the necessary questions, and then design a new intervention (or adapt an existing one). Be prepared to question prior assumptions about what drives behaviour and what the intervention should look like; if well-designed and conducted, the process you have gone through will provide you with valuable insights for intervention design, and for convincing others of the validity of the intervention you are proposing. If more information is needed during the process, consider the possibility of finding out more, as well as undertaking small scale intervention trials and intervention pre-tests.

Refer to  **Step 4 of the toolkit** for more on intervention design.