Q & A relating to Tearfund’s webinars on WASH & Covid-19 response

Webinar, 25 March 2020

1. Is cleaning hands with sanitiser a good recommendation? Should we distribute sanitiser? What about the use of cooking ash and other non-soap alternatives?

Experts are clear that washing hands properly with soap is more effective than using sanitiser and other alternatives to soap, such as ash. However,

- **An alcohol-based sanitiser, containing at least 60% alcohol can be used if water and soap are not available.** Alcohol-based sanitisers can effectively inactivate many types of microbes, including coronavirus when used correctly. When using an alcohol-based handrub, apply the product to the palm of one hand (read the label to learn the correct amount) and rub the product all over your hand surface until your hands are dry (Global Handwashing Partnership, 09/03/2020);

- The Centers for Disease Control (CDC) recommends washing hands with soap and water whenever possible because it reduces the amounts of all types of germs and chemicals on hands. But if soap and water are not available, using a hand sanitiser with at least 60% alcohol can help you avoid getting sick and spreading germs to others. The guidance for effective handwashing and use of hand sanitiser in community settings was developed based on data from a number of studies.

- Alcohol-based hand sanitisers can quickly reduce the number of microbes on hands in some situations, but sanitisers do not eliminate all types of germs. Soap and water are more effective than hand sanitisers at removing certain kinds of germ. Although alcohol-based hand sanitisers can inactivate many types of microbes very effectively when used correctly, people may not use a large enough volume of the sanitisers or may wipe it off before it has dried (CDC, 03/03/2020)

- Many people in low-income communities cannot afford soap and use ash or soil instead. Ash or soil may be more effective than water alone, but may be less effective than soap. One concern is that if the soil or ash is contaminated with microorganisms it may increase the spread of disease rather than decrease it. Like soap, ash is also a disinfecting agent because in contact with water, it forms an alkaline solution. WHO recommended ash or sand as an alternative to soap when soap is not available (WHO, 2014)

Therefore, the WASH Unit recommends that the use of soap in handwashing is the key, single most effective action to protect against infection with the coronavirus. Distribution of sanitiser is more applicable for institutions (health centres, schools, places of worship, places of work), to be used by people visiting (and leaving) those centres (with clear instructions of use available, and monitored by a trained volunteer (if available).
2. We have seen crowding and pushing as people queue to use community water points. How can we respond to this, and help prevent infection as well as reduce the risk of conflict?

This question was asked by our Team in Nepal, where lock-down is in force, and even our partners and team cannot visit their beneficiary communities.

The risk of Covid-19 infection at shared water points is possible through not maintaining sufficient social distancing, and by handling of surfaces at the water point (pump handles, taps and valves, buckets, ropes, etc.). In both cases, we recommend that wherever possible well-protected staff (wearing Personal Protective Equipment, PPE) oversee the fetching of water, by maintaining minimal social distancing rules at the water point, and by using a disinfectant spray on surfaces evidenced to be handled by users. Maintaining social distancing (2m apart minimum), and an orderliness in access (e.g. one person at a time, filling one vessel of no more than 20 litres), will go some way to maintaining calm and reducing conflict at the water site.

Of course, if Tearfund or partner staff cannot access the community due to lock-down restrictions, this poses a problem. Ideally, the Water Management Structure of the community should be conducting these tasks (and be suitably provided with PPE before doing so), but the very fact that overcrowding is happening suggests that their governance is no longer respected or is ineffective.

In this case we suggest immediate and urgent advocacy to the local / District Health / WASH Ministry, suggesting that either well-protected team or partner staff, and ideally working (rotating with) government staff too, can be present at these shared water points during normal times of daily operation. If necessary, ask contact persons within the community to (surreptitiously) take photos of the overcrowding, and to send them to the team, who can then use these images to portray the urgency of intervention.

Other (or additional) approaches to this problem may be to extend the opening hours of the water point. (However, please check this with the team who installed the project, since some groundwater sources may require a minimum recovery time so as not to become depleted.)

Ideally, the community would be best to come up with their own ideas as to how to handle this issue if they're aware of the risks – for example, they might introduce fines. Another idea is for the Water Management Structure to issue people with specific time slots for when they can come to collect their water.

3. What measures can we employ to help reduce the risk of Violence Against Women & Girls (VAWG) by those using WASH facilities?

There is an increased risk of VAWG during pandemics like this one in which women and girls bear an exaggerated burden of exploitation, abuse and violence. They also carry the bulk of care while being left without choice to exercise self-care (e.g. they may want to self-isolate if they perceive
themselves having symptoms of the virus, but are not able to avoid continuing to make journeys to shared water points since their family looks to them to bring home the water they need).

In reducing the risk of VAWG, our core WASH practices around WASH & Gender sensitivity most certainly still apply. For example,

- Ensuring the location of any shared WASH facilities are considered and planned with full consultation of women and girls in the community.
- Ensuring women are fully and equally represented on all WASH Management Structures within the community.
- Ensure access to and provision for menstrual hygiene and sanitary materials for women and girls. See the following core MHM programming considerations for MHM in emergency response:

**Basic Components of a Menstrual Hygiene Management (MHM) response:**

**MHM MATERIALS & SUPPLIES**
- Appropriate menstrual materials (pads, cloths, underwear)
- Additional supportive materials (e.g. soap, bucket) for storage, washing and drying
- Demonstration on how to use MHM materials.

**MHM SUPPORTIVE FACILITIES**
- Safe and private toilet and bathing facilities with water for changing, washing and drying menstrual materials.
- Convenient and private disposal options for menstrual waste.
- Waste management systems in place for menstrual waste.

**MHM INFORMATION**
- Basic menstrual hygiene promotion and education.
- Basic menstrual health education (especially for pubescent girls).
- Address harmful cultural or social norms related to menstruation.

*Taken from “A TOOLKIT FOR INTEGRATING MENSTRUAL HYGIENE MANAGEMENT (MHM) INTO HUMANITARIAN RESPONSE: The mini guide”, (2017, Columbia University and International Rescue Committee)*

However, key areas within gender-sensitive WASH programming need amplification and adaptation. For example,

- Ensure vigilance in safety mechanisms for the movement of women. If the community / country is in a lock-down situation, then there will be fewer people out-and-about their daily business. With fewer people around generally, women and girls are likely to feel more isolated and more vulnerable as they go to fetch water, particularly from distant water

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1 See Tearfund’s own [WASH & Gender Guidance Notes](#)
points. (Of course, the same is true for women and girls walking some distance to reach toilets.) In this case, one idea to offer more protection is to place community monitors on a volunteer rota duty near to water points, or on key vantage points over water point access. Options around appropriately timed regimes which can ideally be monitored, would be good to encourage the community to consider

- Establish feedback mechanisms to detect new, Covid-19-related risks for women and girls or children when using WASH facilities.

It is crucial that we encourage the community members themselves to discuss and agree on ways forward to protect women and girls, particularly at this time of the Covid-19 outbreak.

Webinar, 2nd April 2020

Answers to the questions below will be provided by 17.00 on Monday 6th April. Until then, please do not consider the questions as being complete.

WASH Webinar for Covid-19 response: Achieving engagement and cooperation with our target communities

1. Is frequent handwashing required for those who are quarantined or having to stay indoors?

The answer to this is yes - hand hygiene is crucial for those who are quarantined, in order to reduce the risk of infection. If a household is quarantined, this either signifies that:

i) it is possible that a member of the household has contracted Covid-19, but no-one is currently showing symptoms, or
ii) someone in the household is showing symptoms of Covid-19

The coronavirus can be passed on either through respiratory droplets (e.g. sneezing, coughing), or through touching a surface on which the virus is present, such as door knobs, kitchenware, arms of chairs, or any surface in the house). The latter is often termed ‘contact transmission’, because when people touch their faces they can transfer the virus to a point where it can enter the body through the nose, mouth, and even the eyes. Hence all household members must rigorously practice frequent handwashing with soap (or using a sanitiser if soap is not available).

Practising frequent handwashing with soap is is the single most impacting activity we can do to stop the spread of the virus, but it is crucial if a vulnerable person (e.g. an elderly person, or a person with an underlying health issue) is living within the household:

The following guidelines support this:
GUIDELINES FOR HOME QUARANTINE, WHO, Sri Lanka: ‘Frequent hand washing with soap and water for at least 20 seconds at a time, and maintaining alcohol-based hand hygiene in instances where handwashing facilities are inadequate.’

Adapted from Public Health England:

If you have a vulnerable person living with you:

Minimise as much as possible the time any vulnerable family members spend in shared spaces in the home, and keep shared spaces well ventilated.

Aim to keep 2 metres (3 steps) away from vulnerable people you live with and encourage them to sleep in a different bed where possible. If they can, they should use a separate toilet from the rest of the household. Make sure they use separate towels from the other people in your house, both for drying themselves after bathing or showering and for hand-hygiene purposes.

If you do share a toilet and bathroom with a vulnerable person, it is important that you clean them every time you use them (for example, wiping surfaces you have come into contact with). Another tip is to consider drawing up a rota for bathing, with the vulnerable person using the facilities first.

Wash crockery and cutlery using your usual washing up liquid and warm water and dry them thoroughly. If the vulnerable person is using their own utensils, remember to use a separate tea towel for drying these.

We understand that it will be difficult for some people to separate themselves from others at home. You should do your very best to follow this guidance and everyone in your household should regularly wash their hands, avoid touching their face, and clean frequently touched surfaces.

Perhaps most of us are now in some form of isolation, even lockdown. We may rarely be seeing anyone outside of our homes. So, it may seem odd to have to wash hands frequently. However, the coronavirus may be present on surfaces that were infected before the isolation began, or we may be picking up the virus from such places as food or other items brought into the home, or from touching surfaces as we move outside for essential reasons, such as to buy food, or to collect medicine. We must be particularly careful to wash our hands when returning from outside. Remember also that we are generally unsure if someone in our household is a carrier of the coronavirus, even though they are not displaying symptoms. The incubation period for Covid-19 can be up to 14 days (current estimates), so it is vital that we maintain a cautious approach even within the home.

2. Almost all of our communities are rural-based and surrounded with dirt and garbage. What is the best way to sanitise a rural home?

Understandably, it is relatively difficult to keep a house in a rural community clean if the village has no adequate services to manage solid waste, waste water, and drainage issues. In fact, even cleaning materials and disinfectant may be difficult to obtain.
It is important to keep in mind that personal (especially hand-hygiene) is the single most impacting defence to reducing the risk of infection with Covid 19 - that and maintaining social distancing (which, for many of us, now means staying at home).

Cleaning surfaces around the home with soap, water (or soapy water) and a clean hand towel is an effective way of removing contaminants from surfaces. The coronavirus can remain up to 24 hours on cardboard, and 2 - 3 days on stainless steel surfaces.

After this wipe-down, we should be aiming to disinfect surfaces, and especially toilets/latrines, bathing rooms, and kitchens. This is crucial if there is someone living in the household who is vulnerable, or who may be ill with the virus. Whilst disinfecting sprays or wipes will do this job well, these may not be available (or affordable) for most people in the context you describe. The Centres for Disease Control (CDC) in the US has a recommended recipe for a homemade cleaning solution using household bleach.

How to Make Homemade Bleach Disinfectant Spray:

- 4 teaspoons household bleach
- 0.95 litres water
- Pour both into a spray bottle, shake vigorously

Please be aware that household bleach is potentially a dangerous substance. The user must wear gloves, and when preparing or applying the spray, keep the home ventilated.

DO NOT USE HOUSEHOLD BLEACH TO TREAT DRINKING WATER SUPPLIES

Finally, key additional points to maintaining a clean home in this context also include:

i) Digging an on-site pit for solid waste disposal;
ii) Sweeping the rooms of the house, and the yard;
iii) Having a safe excreta disposal system (a latrine);
iv) Using a raised surface (dish-rack) on which to sun dry utensils and crockery. This will help to keep the utensils away from dust and animals.

3. Most of our Governments are investing in providing hand sanitisers to its citizens rather than heavily channelling the funds into provision of water and soap to vulnerable communities.

Sarah Onduko

Of course, providing hand sanitisers requires no real infrastructure, and it is a quick and appropriate response activity at this stage. However, many sources are affirming that soap and water is the most effective means of eliminating the virus from our hands (and so reducing transmission through contact). If hands are physically dirty (e.g. after working in the fields, becoming soiled from using the toilet, or changing a baby’s diaper), then soap and water, and the action of lathering, rubbing, rinsing, and wiping, is the ONLY way to
properly clean hands: hand sanitiser is good for entering or leaving premises and the home, when hands are not necessarily physically dirty.

We should also question the issue that providing soap, and possibly additional water supplies, is expensive. In a water-stressed area, where people have only a limited amount of water for domestic purposes, and where additional supplies may, in some cases, involve water trucking, this will indeed be relatively expensive and logistically demanding. However, additional water for hand-washing can otherwise be obtained from rainwater, or by using grey water (i.e. water that has been used for washing and showering), or by extending a distribution pipeline from an existing community water supply scheme (even if this means also providing extra home storage capacity). Much of this work can be done at reasonable cost (we will discuss this in a webinar after Easter), and it is ultimately more sustainable than arranging regular, on-going distributions of sanitiser. Of course, washing hands with soap should also be done using water-saving devices and procedures.

WHO maintains that WASH is the first line of defence to combat the spread of Covid-19, and it should be clear in our COVID-19: WASH programme guidance for response that, wherever possible, we should be continuing to develop our holistic WASH programming.

4. I would like to know effective ways of water purification in rural areas. And also some people use masks prepared with clothes in Nepal – so are they effective and can they be re-used or not?

Saika Khada

The most effective means of water purification depends on various factors, such as the quality of the raw water (and especially how turbid it is – cloudy looking because of tiny particles), the water system itself (does the community have a centralised system with a water-storage tank, or is the main water supply taken from a free-flowing, protected spring, or do people use alternative sources, such as rainwater or surface water, which they then treat at home?) We will discuss this issue in a webinar on Thursday 16th April.

Until then, here is a very brief summary of methods:

**Boiling**

Heating water to boiling, and keeping it boiling (a ‘rolling boil’) for 5 minutes. Of course, boiling needs fuel, which can be responsibly sourced from, say, briquettes made using human or animal waste, but more often, our target communities are likely to use charcoal or wood.

**SODIS manual Guidance on solar water disinfection** (Use the link!)

Solar Disinfection (‘SODIS’) involves placing untreated (but clear) water in clean, clear plastic bottles (of ‘PET’ grade), and allowing the UV rays emitted by the sun to purify the water. It can work very well, and the link above is a simple, practical text to explain the procedure.
The three-pot water treatment system (Use the link!)
Most treatments are effective only if water is relatively clear. The three pot system is one way a household can settle out turbidity particles from their water supply. This is a good method to use alongside other methods, such as SODIS or home-based chlorination.

Chlorination
The use of chlorine as a disinfectant is extremely common and is very effective when the raw water is not turbid or too acidic. If the community water supply incorporates a storage tank (such as, for example, in a spring-fed gravity-fed system), the place to chlorinate the supply would be at the inlet to the storage tank. This is because it is important not only to get the dosage correct, but the chlorine will require a ‘contact time’ to work through the water volume before it enters the distribution system (the pipes which deliver the water to the tap-stands). However, where water flows freely from a ‘point source’, such as a protected spring, the correct chlorine dosage will need to be applied to each water container at the point of collection (by a trained monitor), or at home, using carefully prescribed quantities of chlorine in accordance with the size of the storage container. Chlorine dosed in this way is usually in the form of tablets (e.g. Aquatabs), or chlorine droplets.

The following two simple technical briefs explain more on chlorination, and how to ensure the correct dosage is being used.
Chlorination (WEDC)
Measuring chlorine levels in water supplies

Home-based water filters
These are usually very effective at purifying water, and can last for lengthy periods if the water is not too turbid, and the filter is cleaned (or, in some cases, ‘back-washed’). India produces many brands of cheap ceramic filter. However, a popular and effective filter on the market (and produced in various countries) is the Sawyer filter.

We may have conflicting answers around re-use of cloth face masks. If they can be washed in detergent, they would be free from the coronavirus. However, whilst they afford important protection for hospital staff who are in close contact with people ill with the virus, there is very little evidence of their widespread benefit for members of the public, and they may give a false sense of protection (Public Health England).