Webinar #1
Surge Training: Emergency WASH

27 September 2022

Good webinar behaviour

- Please keep your microphone on mute and your video switched off
- If in need of technical assistance, please send a message to Jessie at +6019 779 9374
- This webinar will be covering two topics (total 1 hour) followed by 15-minute Q&A session
- If you have any question, please raise it during the Q&A session at the end or post them in the conversation box
- Unanswered questions will be compiled and answered through the web forum page that we have set up for this webinar series (link will be shared)

Resource persons

Wendy Neoh is the Senior Officer, Emergency WASH based at the IFRC Asia Pacific Regional Office. In her current position, she works closely with WASH and Health counterparts in Asia Pacific National Societies and IFRC delegations in the Asia Pacific region. Her main responsibilities are to strengthen emergency WASH preparedness and response through technical and programme management support.

Before joining the IFRC in 2014, she was managing and implementing developmental WASH programmes in various Southeast Asia and South Asian countries, at a Malaysian-based NGO.

Wendy is joining us from Kuala Lumpur, Malaysia.

Jessie Lucien is the Health Programme Officer, tasked with providing technical support for the web platform and the webinar series. She is also tasked with managing administrative and financial matters, in relation to the surge training in Indonesia.

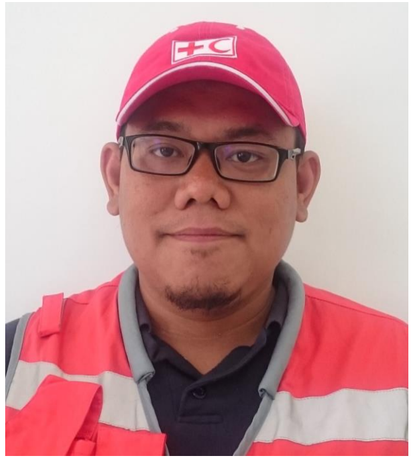
She has been providing support to the Health and WASH team in the IFRC Asia Pacific Regional Office since 2013.

She is also joining us from Kuala Lumpur, Malaysia.

Resource speakers

Agung Lestyawan has 16-year experience working in WASH sector in Red Cross Movement and other humanitarian organizations in emergency operations and WASH development programs. Agung joined the IFRC Country Cluster Delegation for Indonesia and Timor-Leste in 2011 and currently holds the position of Senior WASH Specialist.

He is a member of the Technical Advisory Group for Indonesia's National WASH Cluster, an assessor and contributor in the development of The ASEAN Standards and Certification for Experts in Disaster Management (ASCEND). Agung is joining us from Jakarta, Indonesia.



Akbar Eka Prasetya joined the Indonesian Red Cross (PMI) as a volunteer in 1999 at the PMI North Jakarta branch. In 2013, he joined as a staff at the PMI Emergency Water and Sanitation Centre located in Jatinangor, West Java. In 2015, he was then transferred to PMI NHQ in Jakarta under the Water and Sanitation Subdivision.

His key responsibilities are to deliver emergency WASH services nationwide and managing community WASH projects. He is also responsible in developing and strengthening the capacity of PMI WASH members. Akbar is joining us from Bali, Indonesia.

Introduction to WASH in Emergencies and Sphere Standards

Surge training: Emergency WASH

Content

- A bit of context – looking at disaster risk
- 2021 disaster outlook: Asia Pacific region
- IFRC support in emergency response and in WASH
- Consequences of disasters and objective of a WASH response
- Water-related diseases and how WASH interventions play a part

A bit of context

Since 1970, Asia and the Pacific has accounted for 57% of global fatalities from disasters and 87% of the global population that has been affected by natural hazards

Almost all of those affected were victims of water-related disasters such as floods, droughts and storms

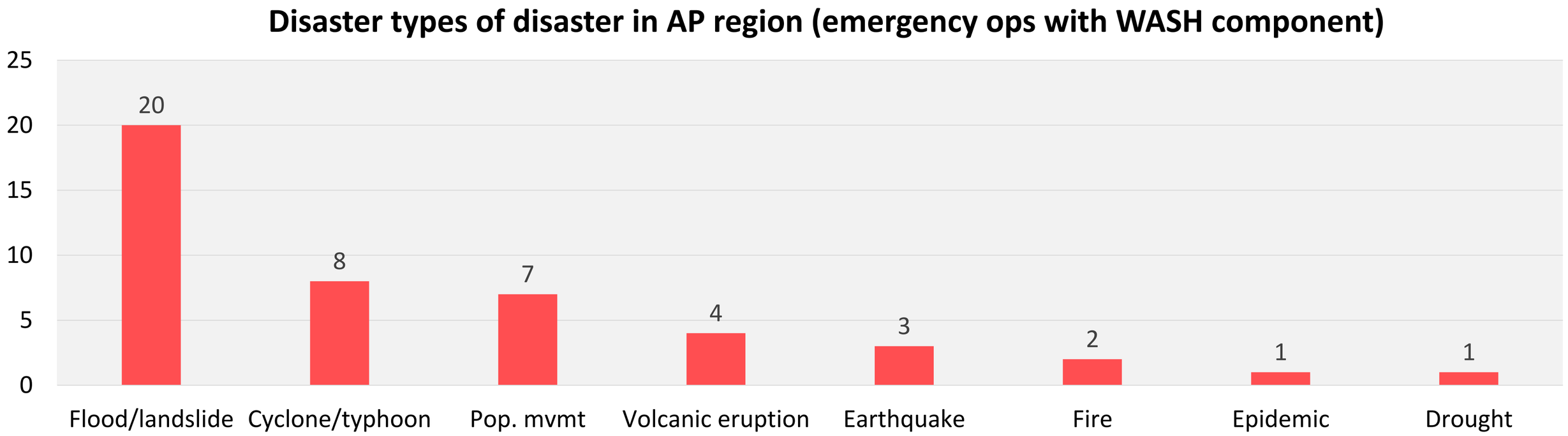
Between 1970 and 2020, natural hazards in Asia and the Pacific affected 6.9 billion people and killed more than 2 million

In 2019 alone, over 19 million people were displaced by natural hazards in Asia and the Pacific, which accounted for three-quarters of the global total

Disasters cause large-scale economic damage. Between 1970 and 2018, the region lost $1.5 trillion

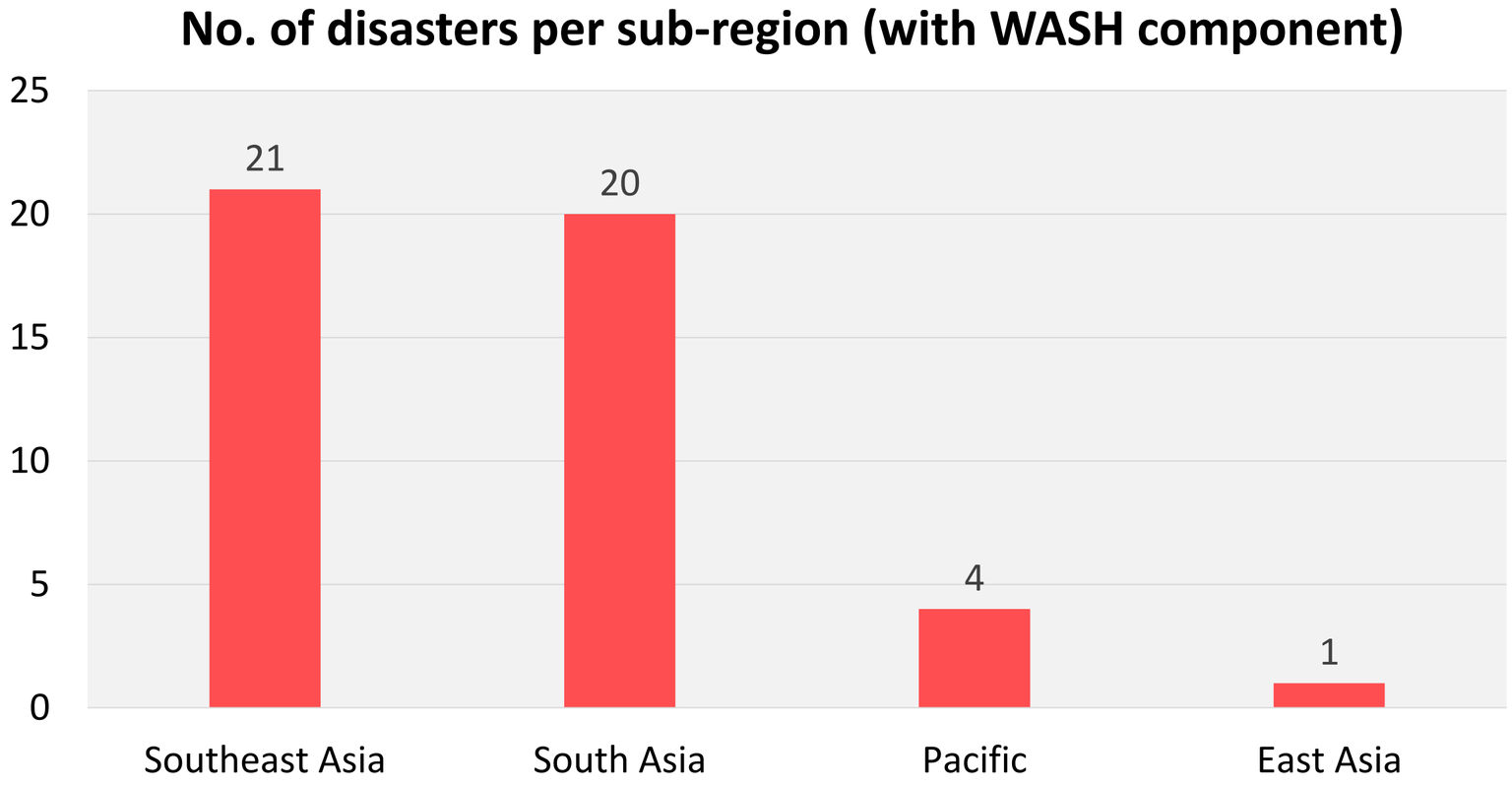
Source: *UN Economic and Social Commission for Asia and the Pacific (ESCAP), The Asia-Pacific Disaster Report 2021*

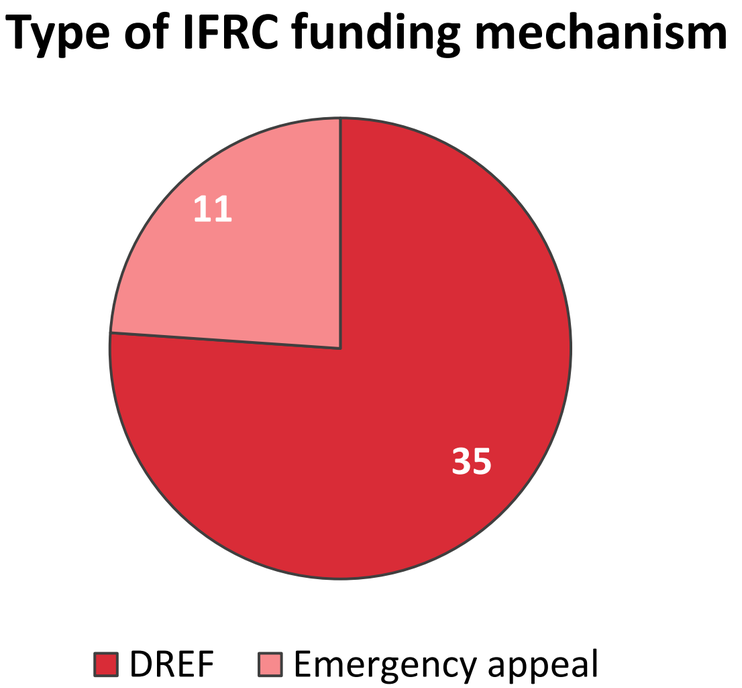
2021 disaster outlook: Asia Pacific region



- 46 active emergency operations
- Floods/landslides are the most common types of disaster affecting the Asia Pacific region

2021 disaster outlook: Asia Pacific region





- Southeast Asia remains the most disaster-struck sub-region, followed closely by South Asia
- Out of the 46 active emergency operations, 35 of them were funded through the Disaster Response Emergency Fund (DREF)

Key figures

- Southeast Asia is the most disaster-struck sub-region (46%), followed closely by South Asia (43%)
- Floods/landslides are by far the most common type of disaster affecting the Asia Pacific region (44%), followed by cyclones/typhoons (17%) and population movement operations (15%)
- 89% of all operations has WASH sector (46 out of total 52 operations)
- 80.7 million people were affected by these disasters, where 3.7 million people were targeted to be reached through these operations
- Out of this 3.7 million, almost half of them were targeted to be reached with WASH services (1.6 million people)
- Out of this targeted 1.6 million people, 1.5 million have been reached with WASH services, with water supply reaching the greatest number of people (more than 1 million people)

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Go to www.menti.com and use the code 8437 5627

Factors contributing to disaster severity

- Human vulnerability due to poverty and social inequality
- Climate change
- Environmental degradation
- Rapid population growth especially among the poor
- Increasing population density
- Increased settlement in high-risks areas
- Increased technological hazards and dependency
- Etc.

Consequences of disasters

- Severe injuries, deaths
- Loss of properties, loss of livelihoods
- Damaged infrastructures and facilities
- Disease outbreaks
- Food shortages

- Large population movement
- Overload/burden on health services
- Disruption of daily routines
- Loss of privacy/dignity
- Increased level of anxiety/stress

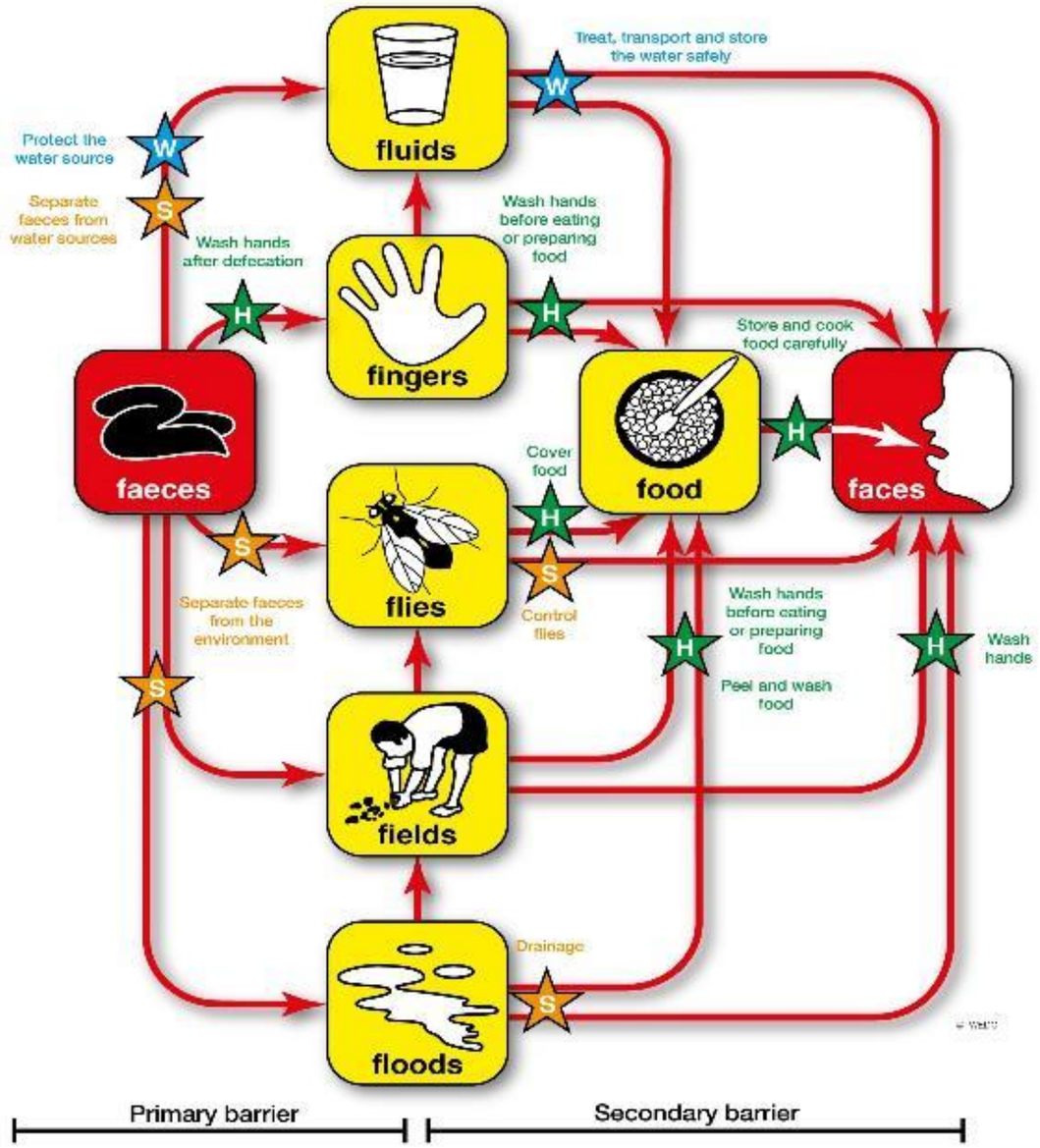
Objective of a WASH response

- Achieve better health
- Restore dignity

Water-related diseases

Water-borne	- Infections spread through contaminated drinking water - Diarrhea, typhoid, dysentery, cholera	Improve water quality
Water-washed	- Diseases due to lack of water and domestic cleanliness - Skin infections like scabies; eye infection like conjunctivitis	Increase water supply; improve hygiene practices
Water-based	- Infections transmitted via an intermediate host which lives in water - Schistosomiasis (Bilharzia)	Reduce surface water contamination
Water-related vector-borne	- Diseases transmitted by insects that depend on water for their propagation - Malaria, yellow fever, dengue	Destroy breeding grounds; use mosquito nets & repellents

Transmission of diarrheal diseases



- Movement of pathogens from faeces of a sick person to where they are ingested by somebody else can take many pathways.
- Main pathways:
  → fluids (drinking water)
  → fingers
  → flies
  → fields (crops and soil)
  → floods (and surface water generally)
- Barriers can stop transmission of disease:
  → primary
  → secondary

W WATER
S SANITATION
H HYGIENE

Emergency WASH interventions

Emergency response	*Early recovery/recovery*	*Recovery/development*
- Rapid WASH assessment - Emergency WASH interventions	Transition	- Detailed needs assessment - Sustainable access to WASH services
- Distribution of water by setting up water purification unit - Installation of rapid latrines - Distribution of hygiene kits	- Repair wells, ponds or other infra. (alongside provision of emergency water supply) - Assistance to repair latrines, through CVA	- Construction of water infrastructures e.g. tube well, gravity feed system, rainwater harvesting systems - Construction of HH latrines - PHAST, CHAST

Which is the most important?

Water

Sanitation

Hygiene

MENTIMETER TIME!

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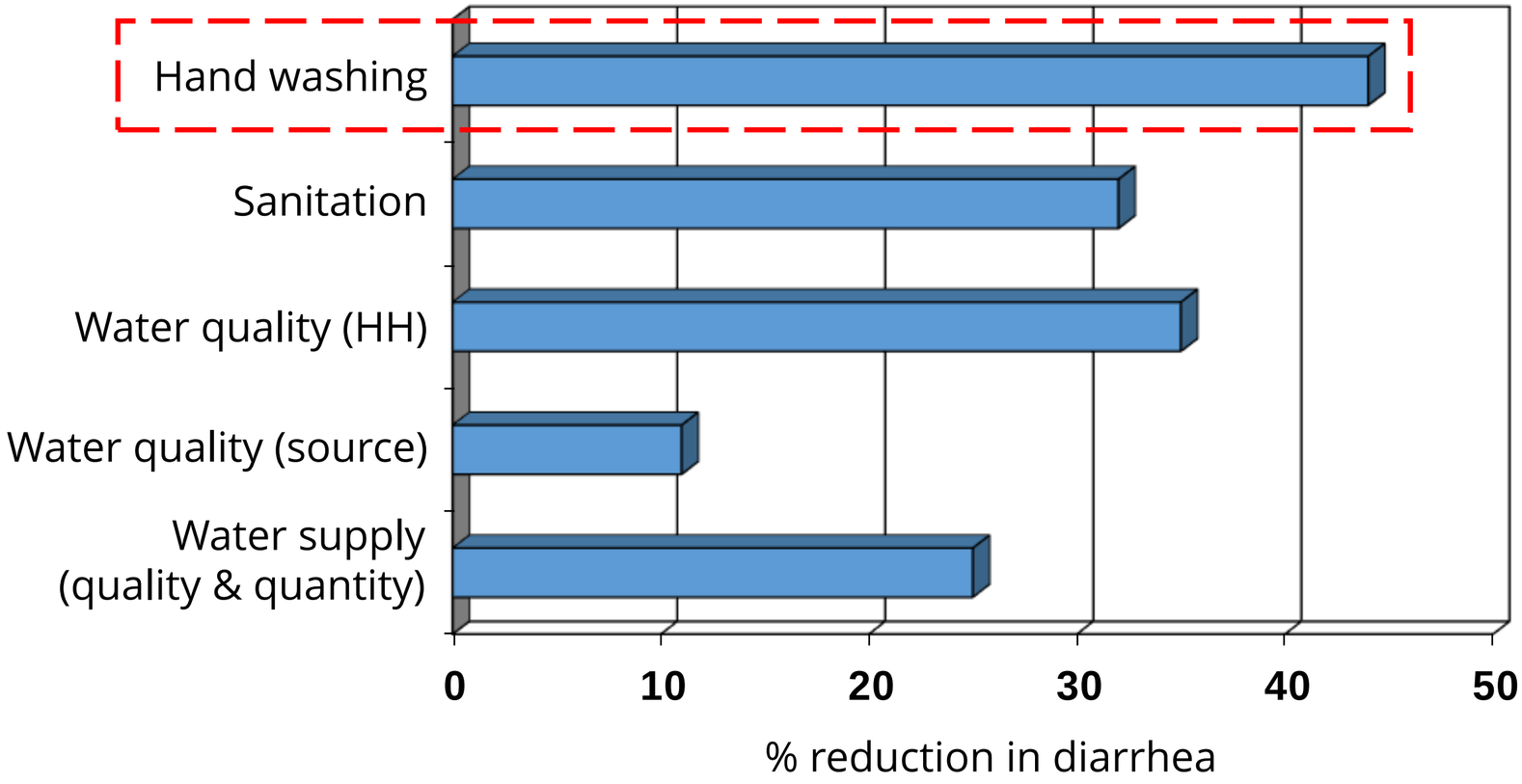
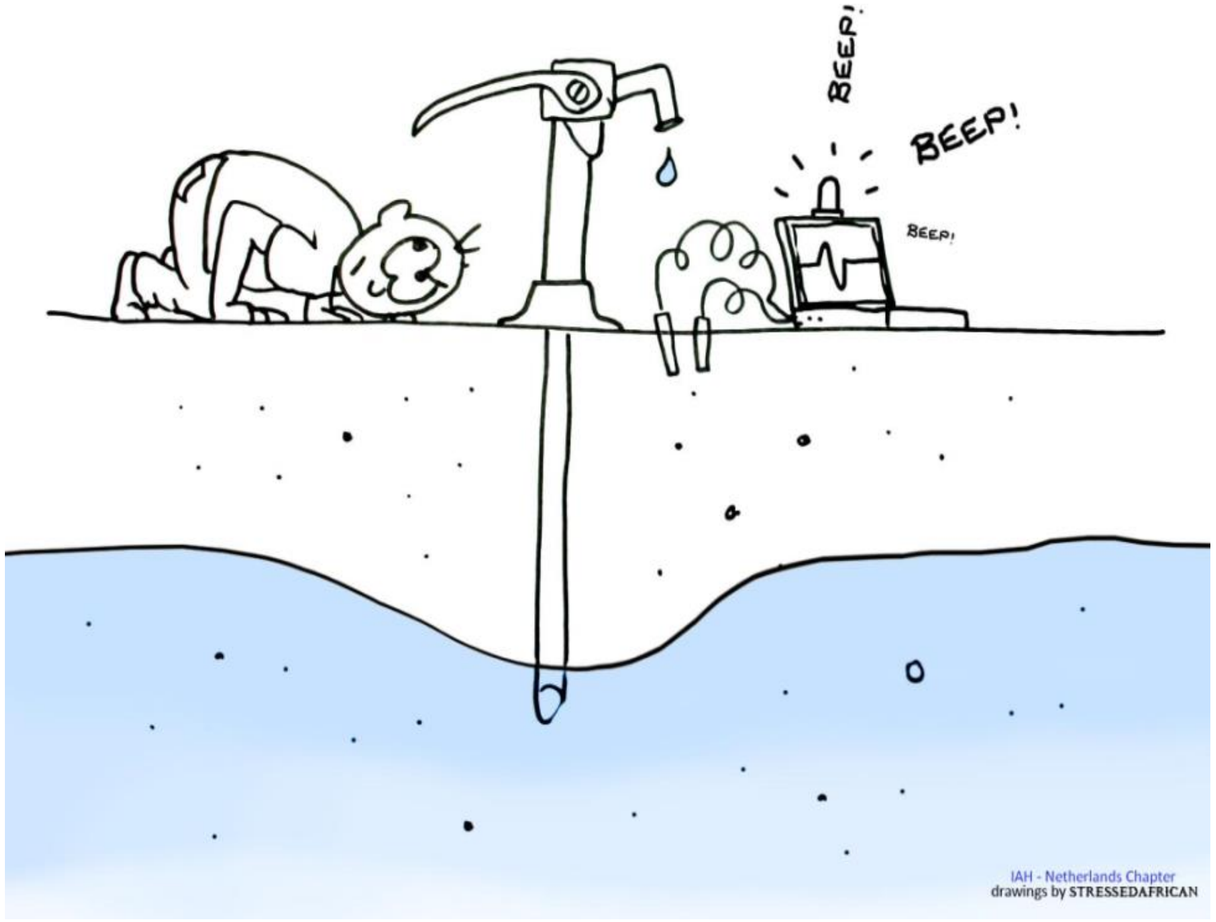
Which is the most important?

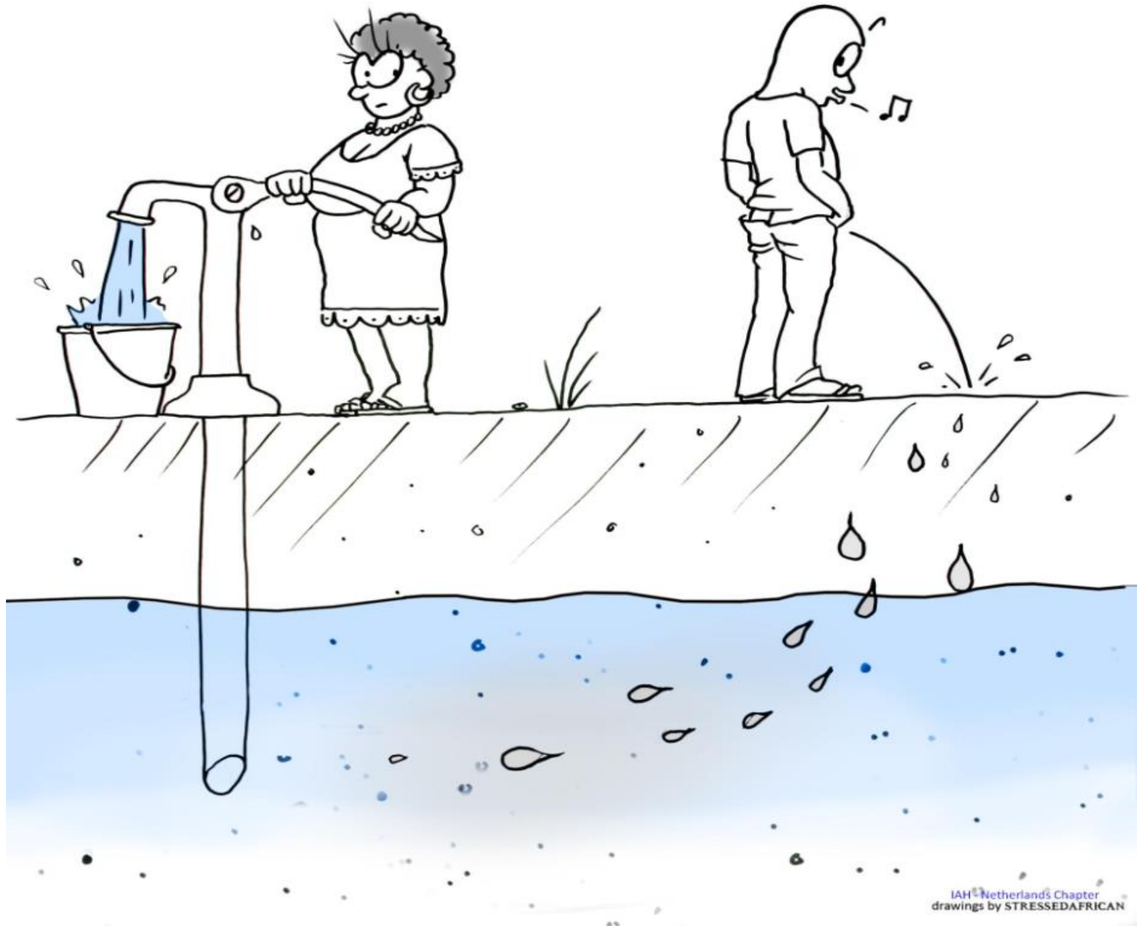
Water, sanitation and hygiene interventions to reduce diarrhea in less developed countries: a systematic review and meta-analysis, Fewtrell et al. (2005)



HARDWARE



SOFTWARE



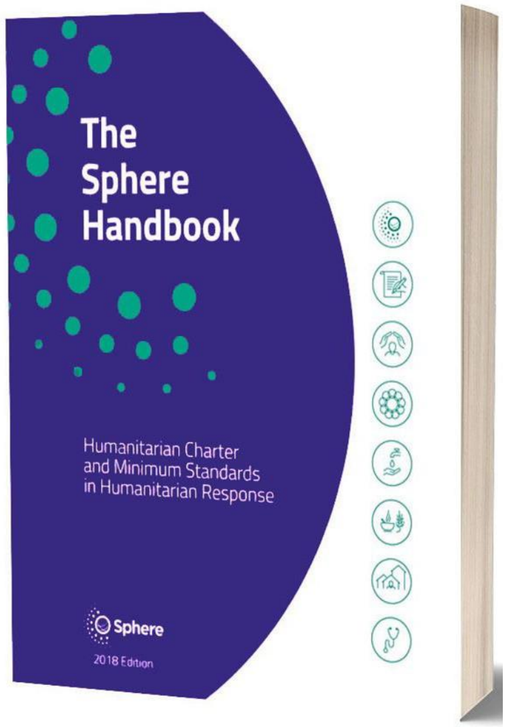
Key messages

- Objective of a WASH response is to **achieve better health and restore dignity**.
- WASH interventions during emergency response are for **life-saving**, which should slowly progress to more **sustainable solutions** in early recovery and recovery phases.
- Importance of working together – **hardware and software goes hand-in-hand**
- Be aware that WASH is only one sector in the sea of humanitarian response – **fill gaps, not overlap**.

Sphere Standards

Surge training: Emergency WASH

What is Sphere?



- Initiated in 1997 by a group of NGOs and the Red Cross and Red Crescent Movement
- Improve quality of humanitarian responses and to be accountable for their actions
- Current version is the 2018 edition – a few key differences:
  - Strengthened focus on community-based programming due to the importance of HP
  - Specific focus on community engagement
  - Inclusion of new standards – hygiene standard 1.3 and WASH standard 6
- Four foundation chapters and four technical chapters

Tools & Resources

The Sphere Handbook

What is Sphere?

What is Sphere?

Principles + Foundations

Protection Principles	Humanitarian Charter	Core Humanitarian Standards

Technical Chapters

Water Supply, Sanitation and Hygiene Promotion	Food Security and Nutrition	Shelter and Settlement	Health

- **Minimum standards:** General and qualitative in nature, stating the minimum to be achieved; derived from the principle of the right to life with dignity
- **Key actions:** Outline practical steps to attain the Minimum Standard
- **Key indicators:** Signals to measure whether the standard is being attained
- **Guidance notes:** Additional information to support the key actions

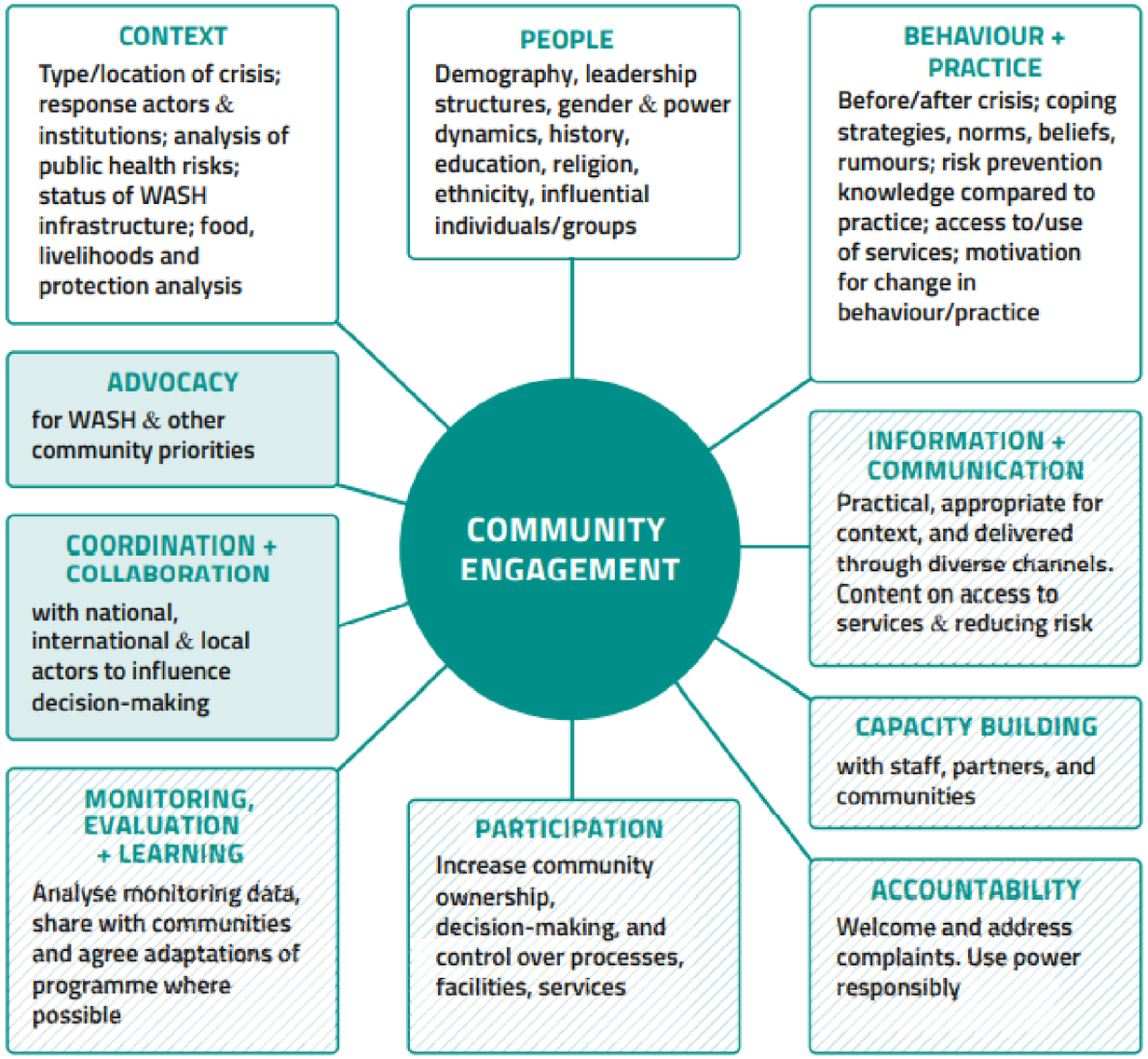
Sphere: Essential concepts in WASH

- People affected by crisis are more at risk to illness and death from disease, particularly diarrhoeal and infectious diseases → such diseases are strongly related to inadequate water and sanitation supplies and poor hygiene

- As per the F-diagram, the main pathways to infect humans are faeces, fluids, fingers, flies and food. Key activities in creating barriers along those pathways are:
  - promoting good hygiene practices
  - providing safe drinking water
  - providing appropriate sanitation facilities
  - reducing environmental health risks and
  - ensuring conditions that allow people to live with good health, dignity, comfort and safety

- In WASH programmes, it is important to:
  - Manage the entire water chain
  - Manage the entire sanitation chain in an integrated manner
  - Enable positive healthy behaviours and
  - Ensure access to hygiene items

Sphere: Community engagement in WASH



- A dynamic process in connecting with the community and other stakeholders
- Effective engagement to maximise community influence
- Explores the capacity and willingness of the community to manage and maintain WASH systems
- Community engagement creates an essential understanding of perceptions, needs, coping mechanisms, capacities, existing norms, leadership structures and priorities as well as the appropriate actions to take

Water Supply, Sanitation and Hygiene Promotion

1. Hygiene promotion	2. Water supply	3. Excreta management	4. Vector control	5. Solid waste management	6. WASH in disease outbreaks and healthcare settings
Standard 1.1 Hygiene promotion	**Standard 2.1** Access and water quantity	**Standard 3.1** Env. free from human excreta	**Standard 4.1** Vector control at settlement level	**Standard 5.1** Env. free from solid waste	**Standard 6** WASH in healthcare settings
Standard 1.2 Identification, access and use of hygiene items	**Standard 2.2** Water quality	**Standard 3.2** Access to and use of toilets	**Standard 4.2** HH and personal actions to control vectors	**Standard 5.2** HH and personal actions to safely manage solid waste	
Standard 1.3 Menstrual hygiene management and incontinence		**Standard 3.3** Mgmt. and maintenance of excreta collection, transport, disposal and treatment		**Standard 5.3** Solid waste management systems at community level	

Water Supply, Sanitation and Hygiene Promotion

1. Hygiene promotion

Standard 1.2 Hygiene promotion	Appropriate items to support hygiene, health, dignity and well-being are available and used by the affected people
Key actions	1. Identify the essential hygiene items that individuals, households and communities need 2. Provide timely access to essential items 3. Work with affected populations, local authorities and other actors to plan how people will collect or buy hygiene items 4. Seek feedback from affected people on the appropriateness of the hygiene items chosen and their satisfaction with the mechanism for accessing them
Key indicators	• All affected households have access to the minimum quantity of essential hygiene items: - 2 water containers per household (10-20 litres; 1 for collection, 1 for storage) - 250g of soap for bathing per person per month - 200g of soap for laundry per person per month - Soap and water at a handwashing station (1 station per shared toilet or 1 per household) - Potty, scoop or nappies to dispose of children's faeces • % of affected people who report/are observed using hygiene items regularly after distribution • % of household income used to purchase hygiene items for identified priority needs
Guidance notes	• Identify essential items…. • Water containers…. • At-risk groups… • Market-based programming for hygiene items… • Distribution… • …

Water Supply, Sanitation and Hygiene Promotion

2. Water supply

Standard 2.2 Water quality	Water is palatable and of sufficient quality for drinking and cooking, and for personal and domestic hygiene, without causing a risk to health
Key actions	1. Identify public health risks associated with the water available and the most appropriate way to reduce them 2. Determine the most appropriate method for ensuring safe drinking water at point of consumption or use 3. Minimise post-delivery water contamination at point of consumption or use
Key indicators	• % of water quality tests meeting minimum water quality standards: - <10 CFU/100ml at point of delivery (unchlorinated water) - ≥0.2 – 0.5mg/L free residual chlorine at point of delivery (chlorinated water) - Turbidity less than 5 NTU • % of affected people who collect drinking water from protected water sources • % of households observed to store water safely in clean and covered containers at all time
Guidance notes	• Maintaining a safe water chain… • Water quality… • Water disinfection… • Palatable water…
	• Quantity versus quality.. • Post-delivery contamination… • Household level water treatment and safe storage… • …

Water Supply, Sanitation and Hygiene Promotion

3. Excreta management

Standard 3.2 Access to and use of toilets	People have adequate, appropriate and acceptable toilets to allow rapid, safe and secure access at all time
Key actions	1. Determine the most appropriate technical options for toilets 2. Quantify the affected population's toilet requirements based on public health risks, cultural habits, water collection and storage 3. Consult representative stakeholders about siting, design and implementation of any shared or communal toilets 4. Provide appropriate facilities inside toilets for washing and drying or disposal of menstrual hygiene and incontinence materials 5. Ensure that the water supply needs of the technical options can be feasibly met
Key indicators	• Ratio of shared toilets: minimum of 1 per 20 people • Distance between dwelling and shared toilet: maximum of 50 metres • % of toilets that have internal locks and adequate lighting • % of toilets reported as safe by women and girls • % of women and girls satisfied with the MHM options at toilets they regularly use
Guidance notes	• What is adequate, appropriate and acceptable.. • Accessibility… • Household, shared or communal…
	• Water and anal cleansing material… • Handwashing… • MHM…

Appendices

- Appendix 1: Water supply, sanitation and hygiene promotion initial needs assessment checklist
- Appendix 2: The F diagram: faecal-oral transmission of diarrhoeal diseases
- Appendix 3: Minimum water quantities: survival figures and quantifying water needs
- Appendix 4: Minimum numbers of toilets: community, public places and institutions
- Appendix 5: Water- and sanitation-related diseases
- Appendix 6: Household water treatment and storage decision tree

Key messages

- The aim of the Sphere Handbook is **to improve the quality of humanitarian responses and to be accountable for their actions**.
- The Sphere philosophy is based on **2 core beliefs**: people affected by disaster and conflict have a right to life with dignity and therefore, the right to assistance; and all possible steps should be taken to alleviate human suffering
- **Minimum standards:** Qualitative and quantitative in nature, stating the minimum to be achieved; derived from the principle of the right to life with dignity
- **Key actions:** Outline practical steps to attain the Minimum Standard
- **Key indicators:** Signals to measure whether the standard is being attained
- **Guidance notes:** Additional information to support the key actions

Q&A session

What's next

- Please find the link to the dedicated **website** in the chat box.
- The **quiz** will cover key messages from the webinar presentation (we highly recommend referring to the Sphere Handbook).
- For webinar #1, there will be **15 questions** with a passing mark of **80%**. You will be allowed **2 attempts** for each quiz and for each attempt, you will be given **30 mins** to complete. You will need to pass all quizzes to be eligible to apply for the face-to-face training in November.
- This quiz will be valid from now until 4pm KL time, 29 Sep 2022.
- By participating in this webinar, you will be now added to our regular **Health and WASH newsletter mailing list**. If you prefer not to receive these newsletters, please unsubscribe at any time by clicking the link in the newsletter.

If you have any questions in relation to the webinar series or the surge training, please drop a line to wendy.neoh@ifrc.org

Next webinar

29 September 2022
4pm KL time

Webinar #2:
Water supply – mass water treatment
(site selection, water treatment and distribution)