



## Key Performance Indicators for public health interventions in response to Acute Watery Diarrhea / Cholera

This is a set of suggested key performance indicators (KPIs) for community-based public health operations in response to cholera or AWD outbreaks. KPIs for WASH interventions (e.g., for household level water treatment or water supply interventions) are not included. This document may be best used when drafting DREF requests or Emergency Plans of Action. KPIs are aimed at supporting a more structured approach to monitoring, quality assurance and evaluation. Indicators should be selected depending on: the area that is supported in a given outbreak response; specific-context needs; and available capacity to conduct the corresponding monitoring activities.

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### Overall (these are not related to RCRC operations, but are the minimum epidemiological indicators to monitor throughout the cholera operation)

Indicator	Rationale	Disaggregated by	Indicator Calculation/ Data Elements	Target	Data source	Reference
Attack rate (AR) is the cumulative incidence of cholera over a defined time period (usually the duration of an epidemic) in	AR indicates the impact of the epidemic in the population.	N/A	<b>Numerator:</b> Total number of cases reported since the beginning of the outbreak  <b>Denominator:</b> Population  <b>Multiplied by 100</b>	In rural communities with low population density, the AR might vary (0.1–2%) In crowded places (such as urban settings, refugee camps), the AR tends to be higher (1–5%). In settings with no immunity and poor water and	MoH	Global Task Force on Cholera Control

a defined area and population			sanitation conditions, AR can exceed 5%		
<p>Case Fatality Rate (CFR) is the proportion of cholera deaths among total number of cases within a specific time period, expressed as a percentage</p>	<p>High CFR may indicate: poor access to treatment; patients arrive late in the progression of the disease (with severe dehydration) due to factors including long distances from care centres with no means of transport; cultural barriers, beliefs or misinformation on when and where to go for treatment; or costs of care; inadequate case management due to factors including lack of properly trained health professionals, lack of supplies and overwhelmed facilities; and/or bias of surveillance where deaths are more accurately recorded than numbers of cases (for example, outpatient cases are not recorded).</p> <p>Calculate CFR at health facilities and in the community.</p>	<p><b>Numerator:</b> Number of cholera deaths</p> <p><b>Denominator:</b> Number of cholera cases</p> <p><b>Multiplied by 100</b></p>	<p>Cholera CFR can reach 50% if adequate treatment is not provided for patients with severe dehydration. A treatment centre with a CFR of less than 1% is considered to be well run.</p>	<p>MoH; health facility records</p>	<p>Global Task Force on Cholera Control</p>

## Oral cholera vaccine (OCV) campaigns

Rationale	Indicator	Disaggregated by	Indicator Calculation / Data Elements	Target	Source of information	Reference
This is to measure the <b>output</b> of the OCV activity in terms of training volunteers working on OCV campaigns	Volunteers trained	Age and sex	<b>Numerator:</b> Number of volunteers trained	Based on context	Volunteer training attendance sheets	IFRC
To monitor information sharing efforts for communities to know <b>where</b> (location and if fixed/mobile/door-to-door), <b>when</b> (time), <b>how</b> (single- or double-dose strategy) and <b>who</b> (target groups) can benefit from OCV campaigns	Awareness raising activities conducted	Age and sex	<b>Numerator:</b> Number of awareness raising sessions within a given time period indicating where, when, how and who can benefit from the OCV campaign	N/A	Volunteer records	International Coordinating Group (ICG) on Vaccine Provision
To support efforts to achieve an <b>equitable distribution of OCV</b> by identifying whether the groups targeted by OCV campaigns were those who in fact received the vaccine. This should be shared with IFRC which in turn informs the International Coordinating Group (ICG) on Vaccine Provision which manages the global OCV stockpile. Those targeted can be (verify with local authorities): <ul style="list-style-type: none"> <li><i>In response to an outbreak:</i> Population currently affected by cholera and population highly</li> </ul>	Reasons stated by people belonging to target group but who confirmed not having had received the vaccine	Age and sex	<b>Qualitative indicator:</b> Reasons stated by individuals belonging to groups targeted by the OCV campaign and who in a post-vaccination survey indicated that they did not receive the vaccine	100%	Post vaccination survey	International Coordinating Group (ICG) on Vaccine Provision

<p>vulnerable to an expansion of the outbreak.</p> <ul style="list-style-type: none"> <li><i>Preventive vaccination in endemic settings:</i> If vaccine availability is limited, only specific sub-populations at highest risk of symptomatic disease and poor outcome (e.g. pre-school or school children, pregnant women, those with HIV-infection and the elderly) can be targeted</li> </ul>						
<p>To understand levels of <b>vaccine acceptance</b> prior to and during the campaign</p>	<p>Proportion of people willing to receive the vaccine</p>	<p>Age and Sex</p>	<p><b>Numerator:</b> Individuals who confirm they are willing to receive the vaccine <b>Denominator:</b> Total individuals surveyed</p>	<p>90%</p>	<p>Pre-vaccination acceptance survey</p>	<p>IFRC</p>
<p>To measure the <b>number of people vaccinated</b> in the campaigns that the RCRC supports (NB. Verify with health authorities what data collection criteria is expected for the campaign)</p>	<p>Proportion of people vaccinated</p>	<p>Age and Sex</p>	<p><b>Numerator:</b> Individuals who were vaccinated (depending on the context, in a single-dose strategy or who received 2 doses at least 2 weeks apart) <b>Denominator:</b> Individuals targeted (the target population corresponds to all</p>	<p>Depending on context</p>	<p>Vaccination campaign tally sheets/records</p>	<p>GTCC</p>

			persons except children < 1 year (3% when local population data are not available)			
To monitor <b>rumours and misinformation</b> about the vaccine and adjust messaging accordingly	Percentage of community rumours or misinformation about OCV addressed or otherwise acted upon	Age and sex	<p><b>Numerator:</b> Number of instances where rumours or misinformation were actioned (positively or negatively), with communication back to the community, including adaptations to messaging to address hesitancy.</p> <p><b>Denominator:</b> Total number of community rumours or misinformation received through community engagement and feedback mechanisms.</p>	N/A	Volunteer records from feedback mechanism	IFRC

## Health & Hygiene Promotion

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
To measure understanding of handwashing practices	Percentage of target population who correctly cite two critical times for handwashing	Sex and Age	<b>Numerator:</b> Number of persons in the target population who correctly cite two critical times for handwashing <b>Denominator:</b> Total number of persons in the target population at the time the survey was conducted.	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
	Percentage of affected households where soap and water are available for handwashing	N/A	<b>Numerator:</b> Number of affected households where soap and water are available for handwashing <b>Denominator:</b> Total number of households surveyed	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
To measure understanding of safe water consumption	Percentage of affected population who collect water from improved water sources	Sex and Age	<b>Numerator:</b> Number of households that collect water from improved water sources <b>Denominator:</b> Total number of households surveyed	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
	Percentage of households that store drinking water in clean and covered containers	N/A	<b>Numerator:</b> Number of households that store drinking water in clean and covered containers <b>Denominator:</b> Total number of households surveyed	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies

To measure understanding of sanitation practices	Percentage of carers who report that they dispose of children's excreta safely	Sex	<b>Numerator:</b> Number of carers who report that they dispose of children's excreta safely <b>Denominator:</b> Total number of carers surveyed	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
	Percentage of households using incontinence products (pads, urinal bottles, bed pans, commode chairs) who report that they dispose of excreta from adult incontinence safely	N/A	<b>Numerator:</b> Number of households using incontinence products (pads, urinal bottles, bed pans, commode chairs) who report that they dispose of excreta from adult incontinence safely <b>Denominator:</b> Total number of households that received hygiene promotion messaging on incontinence	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
	Percentage of affected households who dispose of solid waste appropriately	N/A	<b>Numerator:</b> Number of households who dispose of solid waste appropriately <b>Denominator:</b> Total number of households surveyed	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies
To monitor environmental hygiene practices	Local environment is free of human and animal faeces	N/A	<b>Numerator:</b> Community sites visited free of human and animal faeces <b>Denominator:</b> Community sites visited during a given period	80%	Hygiene promotion activity reports	Compendium for hygiene promotion in emergencies



To measure understanding of prevention measures	Percentage of people that know at least three ways to avoid diarrhoea	Sex and Age	<b>Numerator:</b> Number of people that know at least three measures to prevent diarrheal diseases <b>Denominator:</b> Total number of people surveyed	80%	Hygiene promotion activity reports	Swiss RC Community Case Management of Cholera Handbook
To monitor understanding of control measures	Percentage of people who know how to prepare ORS and / or homemade ORS	Sex and Age	<b>Numerator:</b> Number of people that know how to prepare ORS and / or homemade ORS <b>Denominator:</b> Total number of people surveyed	80%	Hygiene promotion activity reports	Swiss RC Community Case Management of Cholera Handbook
	Percentage of people that know at least three danger signs of dehydration	Sex and Age	<b>Numerator:</b> Number of people that know at least three danger signs of dehydration <b>Denominator:</b> Total number of people surveyed	80%	Hygiene promotion activity reports	Swiss RC Community Case Management of Cholera Handbook
To monitor the number of volunteers trained	Number of volunteers trained in hygiene promotion	Sex and Age	<b>Numerator:</b> Number of volunteers trained	Based on context	Volunteer training records	Swiss RC Community Case Management of Cholera Handbook



## Oral Rehydration Points

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
Indicates whether the caseload allows volunteers to provide <b>quality services</b> and comprehensive health information to users in a timely manner. If too many users come to the point, more ORPs may need to be opened	Number of users per rehydration point	Sex and Age (below and above 5 years old)	<b>Numerator:</b> Number of users per oral rehydration point per day	25-30 max	Daily tally sheets	Swiss RC Community Case Management of Cholera Handbook
Indicates whether the number of ORPs provides an appropriate <b>coverage</b> for rural/urban areas	Number of ORPs (for urban or rural areas)	NA	<b>Numerator:</b> Number of ORPs per health facility or per 10,000 people	In <b>urban areas</b> , 8 ORPs per health facility, or one per 10,000 people. In <b>rural areas</b> , as a general rule there should be 1 ORP per village experiencing a cholera outbreak. For large villages establish one that is within 20 minutes walking distance for community members.	Project records	Swiss RC Community Case Management of Cholera Handbook

<p>Indicates levels of <b>access</b> to community-based care in terms of distance</p>	<p>Distance to ORPs</p>	<p>N/A</p>	<p><b>Numerator:</b> Distance from populated community areas to ORP</p>	<p>ORPs should be no more than 20 min walk for the community (it is best to calculate per time, rather than distance, as sometimes the same distance can take very different times based on the state of the road, security conditions, etc).</p>	<p>Project records</p>	<p>Swiss RC Community Case Management of Cholera Handbook</p>
<p>Provides an indication of the <b>severity of the outbreak</b> and whether volunteers refer cases as indicated</p>	<p>Number of people referred to next health facility</p>	<p>Sex and age (below and above 5 years old)</p>	<p><b>Numerator:</b> Number of cases referred</p>	<p>N/A</p>	<p>Referral sheets</p>	<p>Swiss RC Community Case Management of Cholera Handbook</p>

## Burials

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
This indicator is to monitor the <b>success rate for cholera burials</b> conducted	Percentage of deceased for which burials were successfully carried out	Sex, ethnic group, age	<p><b>Numerator:</b> Number of cases who died and were safely buried within a given time period.</p> <p><b>Denominator:</b> Number of suspect and probable cases who died within the same time period.</p>	100%	Burials logs, epi info	WHO EVD Performance Indicator
This is to measure the <b>output</b> of the burials activity in terms of training of volunteers working on burials	Number of volunteers trained on cholera burials	Sex, Age and ethnicity and religion (if working in communities with significant differences in cultural practices between ethnic groups or different common religions)	<b>Numerator:</b> Number of volunteers trained	Based on context	Volunteers' training attendance sheets	IFRC

## Mental Health and Psychosocial Support (MHPSS)

Rationale	Indicator	Disaggregated by	Indicator Calculation / Data Elements	Target	Source of information	Reference
This is to measure the coverage of MHPSS activities among affected families	% of families of individuals confirmed or suspected of having been affected by cholera receiving mental health and psychosocial support (may include a 'support kit')	Age, Sex and Disability	<p><b>Numerator:</b> Number of families of individuals confirmed or suspected of having been affected by cholera receiving MHPSS within a specific time period.</p> <p><b>Denominator:</b> Number of families of individuals confirmed or suspected of having been affected by cholera within the same specified time period.</p>	100%	MHPSS activity reports	IFRC PS Centre Indicator Guide for MHPSS Programmes
This is to measure the coverage of MHPSS activities among communities affected by cholera	% of individuals of communities affected by cholera receiving basic mental health and psychosocial support (including awareness raising and psychological first aid)	Age, Sex and Disability	<p><b>Numerator:</b> Number of individuals engaged on basic mental health and psychosocial support activities.</p> <p><b>Denominator:</b> Number of individuals in affected communities.</p>	TBD	MHPSS activity reports	IFRC PS Centre Indicator Guide for MHPSS Programmes
This is to measure the MHPSS intervention outputs. When selecting this indicator, it is important to specify which topics the training will cover, and ensure that they	Number of staff and volunteers trained in quality, targeted MHPSS skills and interventions	Age, Sex and Disability	<p><b>Numerator:</b> Number of staff and volunteers trained in quality, targeted MHPSS skills and interventions</p>	TBD	Volunteer and staff training attendance records	IFRC PS Centre Indicator Guide for MHPSS Programmes

match the MHPSS intervention strategy for the response						
This is to measure the MHPSS intervention outputs. When selecting this indicator, it is important to delineate what the MHPSS services will concretely entail	# of men, women, girls and boys who receive focused psychosocial and psychological care	Age, Sex and Disability	<b>Numerator:</b> Number of individuals affected by cholera, who receive focused psychological and psychosocial care, which includes: psychological first aid, linking people with psychological problems or resources and services, case management, psychological counselling, psychotherapy or other psychological interventions)	TBD	MHPSS activity reports	IASC RG Common M&E Framework for MHPSS Programmes in Emergency Settings
This is to measure clear efforts to enhance staff and volunteer care (Help the Helpers)	# of peer support initiatives	Age, Sex and Disability	<b>Numerator:</b> Number of peer support initiatives, which include: self-care briefings, team well-being meetings, social media groups, shift rotations, team telephone support lines and buddy systems)	TBD	MHPSS Activity reports  HR and Volunteer management department reports	Belgian Red Cross-Flanders; IFRC PS Centre M&E for MHPSS in COVID-19.
This is to measure the level of support received, as perceived by staff and volunteers	% of staff and volunteers who feel supported to do their work.	Age, Sex and Disability	<b>Numerator:</b> Number of staff and volunteers who answer "Yes" to the following 3 survey questions:  1. During the last two weeks, how often did you feel upset about	100%	Survey	Belgian Red Cross-Flanders; IFRC PS Centre M&E Toolbox

			<p>the emergency that you tried to avoid places, people, conversations or activities that reminded you of it (response scale: all of the time, most of the time, some of the time, a little of the time, none of the time)</p> <p>2. During the last two weeks, how often were you unable to carry out essential activities for daily living because of these feelings? (response scale: all of the time, most of the time, some of the time, a little of the time, none of the time).</p> <p>3. During the past two weeks have you considered stopping being a Red Cross Red Crescent volunteer (response options: Yes/ No)</p> <p><b>Denominator:</b> Total number of staff and volunteers working in the response who answered to the survey</p>		<p>for COVID-19 pandemic; WHO; UNHCR</p>
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## Risk Communication and Community Engagement (RCCE), and Community Engagement and Accountability (CEA)

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
To measure activities organised	Number of community awareness raising sessions held on prevention, control methods and where to access care	Awareness raising modality	<b>Numerator:</b> Number of community awareness raising sessions within a given time period, inclusive of varied awareness raising platforms (mass community outreach, focus group discussions, radio broadcasts, door-to-door campaigns)	TBD	Project reports	IFRC
To measure feedback and suggestions	Percentage of community suggestions and feedback addressed or otherwise acted upon	NA	<b>Numerator:</b> Number of instances where suggestions or feedback were actioned (positively or negatively), with communication back to the community, including: adaptations to service delivery, referral of feedback to appropriate agency, explanation of IFRC action / lack of action, etc.  <b>Denominator:</b> Total number of community suggestions or feedback received through community engagement and feedback mechanisms.	80%	Community engagement activity reports, feedback mechanism databases	IFRC

## Community-based surveillance (CBS)

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
This is to record that a CBS assessment was completed	CBS Assessment completed			1	Assessment report	
This is to record that a CBS Protocol/SOP was developed	CBS Protocol/SOP developed			1	CBS Protocol/SOP	
To measure number of volunteers trained	# of volunteers trained in CBS	Sex			Training reports	
To measure coverage of the CBS system	% of communities with coverage of active CBS Volunteers (1 Vol: <50HHs)		<p><b>Numerator:</b> Number of communities with a CBS volunteer</p> <p><b>Denominator:</b> Total number of communities cover by the intervention</p>		Volunteer register	
To monitor volunteer understanding of CCDs	% of CBS 'true' alerts (match CCD)	Alert type (disease)	<p><b>Numerator:</b> Number alerts submitted that are confirmed to match the CCD by supervisors</p> <p><b>Denominator:</b> Total number of alerts submitted</p>		CBS database	
To measure effectiveness of the CBS system with regards to the overall outbreak	% of outbreak cases detected via CBS system (dependent on active outbreak event)		<p><b>Numerator:</b> Number confirmed cases identified via CBS system</p> <p><b>Denominator:</b> Total number of confirmed cases</p>		IDSR records; CBS database	





To monitor the timeliness of the CBS alert system	% of CBS alerts acted upon by authorities within 48 hours		<p><b>Numerator:</b> Number alerts investigated by MoH within 48 hours of detection</p> <p><b>Denominator:</b> Total number of alerts</p>		IDSR records; CBS database	
To monitor program reporting	% of CBS volunteers who are active ('zero' reporting, monthly average)	Health area	<p><b>Numerator:</b> Number volunteers who submitted a weekly 'zero' report</p> <p><b>Denominator:</b> Total number of CBS volunteers</p>		CBS database; volunteer register	