

## Key Performance Indicators for response interventions to vector borne diseases

This is a set of suggested key performance indicators (KPIs) for responding to disease outbreaks caused by vectors (e.g., mosquitos, flies, rodents, lice, fleas, mites). Diseases include, malaria, dengue, yellow fever, typhus, Lassa fever, leptospirosis, hantavirus pulmonary syndrome, and plague, among others. 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 pillar that is supported in a given outbreak response; specific-context needs; and available capacity to conduct the corresponding monitoring activities.

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

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information
Understand the evolution of the epidemic	Incidence	Age and sex	<b>Numerator:</b> Number of new cases of the vector-borne disease <b>Denominator:</b> Population at risk	Incidence will vary from one disease to another	Epi info
	Attack Rate (age-specific where population data is available)	Age and Sex	<b>Numerator:</b> Number of new cases since the beginning of the epidemic <b>Denominator:</b> Population at risk	Attack rates will vary from one disease to another	Epi info
	Case Fatality Rate	Age and Sex	<b>Numerator:</b> Number of cases who died of the vector-borne disease <b>Denominator:</b> Total number of cases of the vector-borne disease	CFR will vary from one disease to another	Epi info



## Social mobilization and demand creation for vaccination campaigns

Vaccination against certain vector-borne diseases (e.g. yellow fever) may be reinforced/organized by health authorities in the context of an outbreak. National Societies should liaise with the Ministry of Health to determine where, when and how communities can access vaccines.

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
<u>IF there is a vaccination activity run by the MoH/another organization (but not the NS):</u>						
To measure the operational efficacy of social mobilization for vaccination campaigns	Percentage of reasons for non-vaccination related to lack of information	Sex and age	<b>Numerator:</b> Total number of unvaccinated people who said they did not have information about the campaign  <b>Denominator:</b> Total number of unvaccinated people	< 10%	Vaccination coverage survey with study of reasons for non-vaccination	IFRC Social mobilization guide for vaccination campaign and routine immunization
To measure the number of people reached by volunteers with information on why, where, when, and how to <b>access vaccination</b>	# of people reached by volunteers with information to access vaccination	Sex	<b>Numerator:</b> Number of individual persons in the target population reached with information to access vaccination  <b>Denominator:</b> Total number of persons in the target population	80%	Volunteer activity reports	
To measure number of volunteers participating in the vaccination activity	# of volunteers participating in the vaccination activity	Sex	<b>Numerator:</b> Number of volunteers participating in the vaccination activity		Vaccination activity reports	
<u>Additional indicator IF it is the NS clinical teams (as opposed to MoH/other organization) who administer vaccines:</u>						
To measure the number of vaccinations administered during the campaign/ vaccination activity	# of people vaccinated during the campaign vaccination activity among the target population	Sex and Age	<b>Numerator:</b> Number of people who were administered a vaccine during the campaign vaccination activity among the target population  <b>Denominator:</b> Total number of persons in the target population	90%	Vaccination activity reports	IFRC Social mobilization guide for vaccination campaign and routine immunization

## Other vector control activities

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
To monitor whether all arrivals to a displacement site receive a LLITN	Percentage of new arrivals (in displacement settings) that receive a LLITN	Sex and age	<b>Numerator:</b> Number of households that received a LLITN upon arrival in a given period <b>Denominator:</b> Number of arrivals in the same given period	100%	Distribution lists	MSF Medical guidelines
To monitor whether health facilities provide protection for inpatients	Number of LLITN available per beds in a health facility	N/A	<b>Numerator:</b> Number a LLITN distributed, per total number of beds in a health facility with observation beds or inpatient capacity	1 per bed	Distribution lists	MSF Medical guidelines
To ensure adherence to WHO minimum standards for LLITN distribution during mass campaigns	Number of LLITN distributed per household	Sex	<b>Numerator:</b> Number of LLITN distributed per household	1 LLITN for every 2 household members	Distribution lists	WHO recommendations for achieving universal coverage with long lasting insecticidal nets in malaria control
To prevent resistance to substances used when National Societies conduct Internal Residual Spraying (IRS) systematically	Number of years after when the insecticide used needs to be changed	N/A	<b>Numerator:</b> Number of years after when the insecticide used is changed to prevent resistance	2 years	Registrars of IRS activities	IFRC
To measure the approximate coverage of community clean up campaigns	Approximate area cleaned	N/A	<b>Numerator:</b> Area extension cleaned by volunteers and community members (e.g., blocs, neighborhoods, etc)	TBD (depending on area extension and number of campaign participants)	Clean up campaign report	IFRC

To monitor whether community members have identified and emptied containers where Aedes and other container-breeding mosquitoes are breeding	Percentage of areas where community members identified and emptied containers where Aedes and other container-breeding mosquitoes are breeding	N/A	<b>Numerator:</b> Number of target areas visited where community members identified and emptied containers mosquitoes could be otherwise breeding  <b>Denominator:</b> All target areas	80%	Community observation reports	IFRC
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### Community Engagement and Accountability (CEA) and health promotion

Rationale	Indicator	Disaggregated by	Indicator Calculation/Data Elements	Target	Source of information	Reference
To measure feedback and suggestions	% 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
To measure retention of messages	% of target population who can recall 3 or more protective measures	Sex, age	<b>Numerator:</b> Number of persons in the target population who correctly identify 3 or more protective measures at the time of the survey.	80%	KAP survey	OFDA PHE Indicator

			<b>Denominator:</b> Total number of persons in the target population at the time the survey was conducted.			
	% of caregivers who can recall 3 or more symptoms that would require access to a health provider	Sex, age	<b>Numerator:</b> Number of persons in the target population who correctly identify 3 or more symptoms that would require access to a health provider  <b>Denominator:</b> Total number of persons in the target population at the time the survey was conducted.	80%	KAP survey	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 communities affected by the outbreak	% of individuals of communities affected by the outbreak receiving basic mental health and psychosocial support (including awareness raising and psychological first aid)	Age, Sex and Disability	<b>Numerator:</b> Number of individuals engaged on basic mental health and psychosocial support activities.  <b>Denominator:</b> Number of individuals in affected communities.	TBD	MHPSS activity reports	
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 match the MHPSS intervention strategy for the response	# of staff and volunteers trained in quality, targeted MHPSS skills and interventions	Age, Sex and Disability	<b>Numerator:</b> Number of staff and volunteers trained in quality, targeted MHPSS skills and interventions	TBD	Volunteer and staff training attendance records	IFRC PS Centre Indicator Guide for MHPSS Programmes

<p>This is to measure the MHPSS intervention outputs. When selecting this indicator, it is important to delineate what the MHPSS services will concretely entail</p>	<p># of men, women, girls and boys who receive focused psychosocial and psychological care</p>	<p>Age, Sex and Disability</p>	<p><b>Numerator:</b> Number of individuals affected by the outbreak, 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)</p>	<p>TBD</p>	<p>MHPSS activity reports</p>	<p>IASC RG Common M&amp;E Framework for MHPSS Programmes in Emergency Settings</p>
<p>This is to measure clear efforts to enhance staff and volunteer care (Help the Helpers)</p>	<p># of peer support initiatives</p>	<p>Age, Sex and Disability</p>	<p><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)</p>	<p>TBD</p>	<p>MHPSS Activity reports  HR and Volunteer management department reports</p>	<p>Belgian Red Cross-Flanders; IFRC PS Centre M&amp;E for MHPSS in COVID-19.</p>
<p>This is to measure the level of support received, as perceived by staff and volunteers</p>	<p>% of staff and volunteers who feel supported to do their work.</p>	<p>Age, Sex and Disability</p>	<p><b>Numerator:</b> Number of staff and volunteers who answer “Yes” to the following 3 survey questions:</p> <ol style="list-style-type: none"> <li>1. During the last two weeks, how often did you feel upset about 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)</li> <li>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,</li> </ol>	<p>100%</p>	<p>Survey</p>	<p>Belgian Red Cross-Flanders; IFRC PS Centre M&amp;E Toolbox for COVID-19 pandemic; WHO; UNHCR</p>

			<p>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 outbreak response who answered to the survey</p>			
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### 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>		CBS database	

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