COMMUNICATING WITH COMMUNITIES IN EPIDEMICS AND PANDEMICS:

Risk Communication and Community Engagement (RCCE) Readiness Kit

Strengthening Preparedness to Respond to Outbreaks in Humanitarian Settings

USAID
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READY
GLOBAL READINESS FOR
MAJOR DISEASE OUTBREAK RESPONSE

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This Communicating with Communities in Epidemics and Pandemics: Risk Communication and Community Engagement (RCCE) Readiness Kit was made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of READY and do not necessarily reflect the views of USAID or the United States Government. Led by Save the Children, the READY initiative is implemented in partnership with the Johns Hopkins Center for Humanitarian Health, the Johns Hopkins Center for Communication Programs, UK-Med, and the Humanitarian Leadership Academy. READY is augmenting global capacity for non-governmental organizations to respond to large-scale infectious disease outbreaks. For more information, visit our website at http://www.ready-initiative.org.

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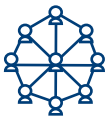
WHAT IS THE RCCE READINESS KIT?

The Communicating with Communities in Epidemics and Pandemics: Risk Communication and Community Engagement (RCCE) Readiness Kit (referred to as the RCCE Readiness Kit) is designed to guide non-governmental organizations (NGO) through a series of **readiness actions** to help them prepare and plan effective communication and community engagement in emerging epidemics and pandemics. Recommended readiness actions link to practical tools that support their implementation.

These recommended actions are not prescriptive, but instead serve to prompt further thinking on local contexts, organizational capacity, coordination, and capabilities to respond to infectious disease outbreaks. While the kit is suitable for any NGO that responds to public health emergencies, most of the content and tools include special considerations for humanitarian actors working in complex settings.

Specifically, the RCCE Readiness Kit helps organizations to:

Integrate RCCE into **emergency/ outbreak preparedness and response plans.**



Operationalize community engagement across relevant response areas.

Plan **human resources/ staffing.**

Strengthen RCCE program quality through access to RCCE-related **assessments, guidelines, and tools.**

Coordinate RCCE activities.

Monitor and evaluate RCCE interventions.

WHO SHOULD USE THE RCCE READINESS KIT?

This kit is intended for national and international NGOs (NNGOs/INGOs) that respond to public health emergencies, including those working in humanitarian settings. Within NNGOs/INNGOs this includes the following roles: staff with communication and community engagement roles (e.g., health promotion and community engagement specialists, RCCE focal points); technical or sector advisers; emergency preparedness focal points; program, project, and operations leaders and managers; and humanitarian directors.

Image Credit: John Hopkins CCP

WHAT IS RCCE?

Image Credit: USAID/Andri Ginting/INVEST-DM

In the simplest terms, RCCE means involving communities to make outbreak communication as effective as possible. Risk communication and community engagement uses social science methods, two-way communication, rumor control, and participatory engagement to support communities in mitigating outbreaks and reducing their impact. The World Health Organization (WHO) recognizes RCCE as a key response pillar for public health emergencies.

When disease outbreaks happen, people need immediate, practical, and accurate information about the disease, infection prevention, and outbreak control. The public health messages we provide often ask people to change their behavior or adopt new norms, which may be difficult to do or contrary to certain beliefs they hold. **Mistrust in governments and health systems, low perceptions of risk, the spread of rumors and misinformation, and stigma of certain people and groups are also common barriers to effective outbreak responses.**

For example, during the 2014-16 Ebola outbreak in West Africa, recommended burial practices initially disregarded culturally important beliefs and rituals. This drove people to hide Ebola cases and bury their loved ones in secret—which increased the spread of the disease. Effective two-way communication and engagement with communities created socially and culturally acceptable, safe, and dignified burial practices that more families supported, which contributed to reducing transmission.

The promise of RCCE is to communicate and engage with communities on their terms, to help people protect themselves, their families, and their neighbors; slow the spread of disease; and reduce an outbreak's impact on livelihoods and well-being. **Risk communication and community engagement puts communities at the center of a response**

Humanitarian settings demand effective communication and community engagement because they often present complex challenges that complicate compliance with public health measures. As such, it is important to systematically listen to communities about their lived realities and perceptions of the outbreak and response. Effective RCCE tracks and integrates epidemiological data (such as the severity and transmissibility of disease, outbreak locations, populations at risk and their whereabouts) with survey data that point to factors that drive behaviors related to the outbreak.

These data provide information about people's knowledge of the disease and prevention measures, attitudes, beliefs, norms and perceptions, including perceptions of risk (e.g., perceived likelihood of getting infected or a family member getting infected) and self-efficacy (confidence in one's ability to take actions to stay safe and belief that those actions will work). **Community feedback data** that includes rumors, misinformation and disinformation further reveal people's needs, questions and concerns in relation to the outbreak and response.

Equipped with this information, NGOs and communities can plan communication and response interventions that are **tailored to specific affected populations** to increase acceptance. **Community champions and trusted influencers** – such as community and religious leaders and community health workers – can be effectively mobilized to engage in two-way conversations with other community members to develop solutions that control the outbreak and contribute to resilience.

When messages are tailored to specific audiences, interventions are adapted to the local context, communities are involved in decision-making and community capacities are leveraged, then trust can be built and messages and interventions are more likely to be effective. When that happens, we can more ably control the outbreak and meet people's complex needs.

Image Credit: Save the Children

COMMUNITY ENGAGEMENT PRINCIPLES

The following are community engagement principles that were designed during the response to the COVID-19 pandemic to improve response effectiveness. They can be applied to almost any outbreak context.

1. Understand the community context.

2. Build trust.

3. Ensure and maintain community buy-in.

4. Facilitate community-based solutions.

5. Leverage community capacities and resources; generate a community workforce.

Image Credit: USAID via CC/Flickr

6. Commit to honest and inclusive two-way communication.

7. Listen, analyze, and respond to social science data and feedback.

8. Consider the use of technology in terms of inclusion, trust and privacy.

9. Discourage and address stigma, discrimination, and rumors.

10. Coordinate with all response actors.

WHAT OPERATIONAL CHALLENGES MAY BE FACED WHEN IMPLEMENTING RCCE DURING DISEASE OUTBREAKS?

During infectious disease outbreaks, safety risks or movement restrictions can make it difficult to engage communities and build trust in a response. In some cases, implementers may have to adopt protocols for conducting safe in-person engagement or switch to remote options, such as interactive digital platforms. Special considerations will be needed to engage marginalized populations, hard-to-reach populations in areas with limited media exposure, or populations within conflict settings. There are many challenges to effectively carry out communication and community engagement in such contexts, which include (but are not limited to):

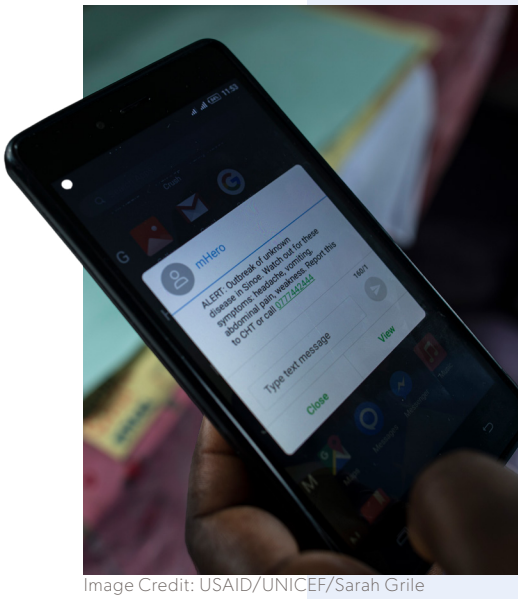


Image Credit: USAID/UNICEF/Sarah Grile

- Increasing humanitarian needs as people experience the impacts of the disease and restrictive public health and social measures (e.g. food insecurity, escalating violence, declining mental health).
- Shifting public health measures and the use of new tools, such as vaccines and treatments, that require ongoing updates to messages and activities.
- Information gaps on the disease and prevention measures, especially early in the response, which may lead to more rumors and misinformation as people try to fill these gaps.
- Public perceptions in the response, which may be affected by or exacerbate rumors, misinformation, fear, or denial.

To effectively implement RCCE, organizations will need to be agile and equipped with various options to communicate and engage effectively in different outbreak scenarios. The purpose of this kit is to provide responding NGOs with guidance and tools to help them best prepare for these scenarios.

WHAT ARE THE KEY RCCE CONSIDERATIONS FOR HUMANITARIAN CONTEXTS?

RCCE supports an understanding of the psychological, social, and environmental factors that underpin behavior and allow response agencies to respond more effectively. This is particularly important in humanitarian contexts because of, for example:

Historic mistrust of governments and health systems, particularly among the most marginalized.

Fragile health systems.

Required documentation to access health care facilities or treatment and immunization options.

Fear of stigma, violence, or legal consequences among migrants, refugees and other people of concern.

Language and literacy barriers.

A lack of access to many communication channels, including digital platforms, or unreliable electricity or Internet services.

Image Credit: USAID via CC/Flickr

RCCE ROLES AND RESPONSIBILITIES

The following provides an example of typical RCCE roles and responsibilities that can be assigned within an organization and recruited locally. These roles may be interrelated and should be adapted by organizations based on their resources and needs. For more information on RCCE roles and responsibilities, see the Human Resources tools in this kit (page 16).

RCCE FOCAL PERSON

Oversees a range of communication and community engagement approaches, including media engagement, social and behavior change, health promotion, community feedback, and rumor control. This includes ensuring that RCCE is financed and incorporated into emergency preparedness and response plans and within relevant response teams. This role is responsible for defining communication and community engagement strategies, building staff capacity, engaging with partners, and participating in national and/or subnational coordination mechanisms. It may also include adapting operational and safety protocols and deciding on in-person/remote engagement approaches.

COMMUNITY ENGAGEMENT SPECIALIST (OR COMMUNITY ENGAGEMENT AND ACCOUNTABILITY TO AFFECTED POPULATIONS SPECIALIST)

This person may be assigned to the role of RCCE focal person or may work with an RCCE focal person with broader skills. The role oversees the design, training, and implementation of participatory community engagement and organizes its logistics. It identifies vulnerable and marginalized populations and maintains contacts and partnerships with community leaders and groups. It may include setting up complaint and feedback mechanisms, planning assessments and other activities to increase understanding of communities' priorities, raising awareness about local culture and dynamics, working with communities to identify community influencers and special groups that can help with community engagement, and supporting communities or partnering with them to develop a community response plan. This role also liaises with partners or social and behavioral professionals to ensure the community engagement plans are based on social science data.

Image Credit: USAID/Internews

SOCIAL AND BEHAVIORAL SCIENTIST

Responsibilities for this role may include planning and designing social science research that reveals risk perceptions and drivers of behaviors related to the disease outbreak. Research should be collaborative, draw on local expertise, and respond to communities' knowledge, capacities, and needs.

SOCIAL/COMMUNITY MOBILIZERS

Mobilizers should be recruited from affected communities and play an important role in identifying and reaching community members and hard-to-reach community groups. They also ensure that communities are engaged in local languages and with an understanding of the context. They help build buy-in and trust. Trained mobilizers can conduct assessments, make door-to-door home visits to engage in two-way conversations about disease prevention, or engage groups in community dialogues. Some also use digital platforms such as social media to share key messages. Mobilizers include local volunteers or incentivized or paid front-line workers, and often include community health workers or community groups (such as youth groups).

Image Credit: USAID/Handicap International/Benoit Almeras

Various external partners also conduct RCCE, such as:

FORMAL/INFORMAL COMMUNITY LEADERS AND LOCAL AUTHORITIES

Community leaders are from a specific geographical area or belong to specific groups with a shared interest (e.g. internally displaced persons). They can be traditional leaders such as village chiefs, or non-traditional leaders such as heads of women's groups or religious leaders. Involving trusted community leaders in the design and implementation of response efforts is key to gaining communities' trust, identifying and addressing barriers and ways to increase the acceptance of interventions and/or the uptake of behaviors, identifying local resources and actions to control an outbreak and its impacts, and influencing people to adopt practices.

COMMUNITY MEMBERS

Community members must be active in the community engagement process. They have the potential to further define barriers in or facilitate the acceptance and uptake of different behaviors, and to identify and act on locally acceptable solutions. Community members and "positive deviants" (individuals who practice optimal behaviors even if they are not the norm, or despite other hardships and challenges) can serve as champions to share their experiences and promote certain behaviors and their benefits, thus potentially increasing adoption by others.

COMMUNITY GROUPS AND INFLUENCERS

Community groups and influencers who are trusted, particularly to provide health information, can conduct outreach, engage communities in dialogues, demonstrate positive behaviors and norms, and address barriers. Examples include community health committees, religious groups, scientists and health workers, women's groups, youth groups, various trade associations (e.g. taxi drivers, hairdressers), traditional healers, sports figures, celebrities and more.

MEDIA PARTNERS

Media partners may include radio, TV, and print outlets, journalists, and social media influencers. In addition to providing information, media can be used to engage communities with local experts and influencers in local languages. Journalists should be trained to provide accurate information about the outbreak to reduce the spread of rumors misinformation. Radio programming, for example, can include interactive elements that allow listeners to engage with hosts and guests via phone calls or SMS to answer questions or concerns. Radio and TV dramas can engage and influence individuals with compelling storytelling that demonstrates the benefits and consequences of certain actions and inaction. Social media influencers can also spread messages and engage in two-way dialogues.

CIVIL SOCIETY AND NGO PARTNERS

Agreements with civil society and NGO partners can be made to support outreach to and engagement with communities, and to fill gaps in expertise and services. They can also be made to address additional community-level needs, such as water, sanitation and hygiene (WASH), protection, or livelihoods, among others.

Image Credit: John Hopkins CCP

WHAT IS INCLUDED IN THE RCCE READINESS KIT?

In the wake of modern epidemics and pandemics, many lessons have been learned and tools and guidance developed that can inform preparedness efforts and humanitarian organizations' ability to respond to public health emergencies (either within an existing humanitarian response or for a new outbreak that becomes a humanitarian crisis). The RCCE Readiness Kit (www.ready-initiative.org/rcce-readiness-kit) is based on such lessons learned and focuses on the following categories of readiness.

Integrating RCCE into emergency/ outbreak preparedness and response plans, which includes how to plan and budget for RCCE related actions.

Tools include:

- Tips for Strengthening RCCE in Emergency Preparedness and Response Plans (EPRPs) & RCCE Scenario for EPRPs
- EPRP Planning Spreadsheet
- RCCE Budget Template
- Public Health Emergency Response Briefing Note
- Guidance for Business Continuity and Program Adaptation Planning

Image Credit: John Hopkins CCP

Image Credit: Save the Children

Planning human resources/staffing for community engagement and related risk communication. Tools include:

Tools include:

- RCCE Competencies: Individual Assessments
- Terms of Reference/Job Descriptions for RCCE Roles
- Compendium of Capacity Building Resources for RCCE Competencies
- Safer Access Saving Lives Toolkit (International Committee of the Red Cross)
- Staff Safeguarding Operational Checklist
- Staff Health Essentials in a Pandemic (slide deck)

Coordinating RCCE activities with partners and through public health and humanitarian coordination mechanisms.

Tools include:

- Example NGO Mapping Tools for RCCE Activities
- Key Knowledge Management Hubs for RCCE

Image Credit: Save the Children

Strengthening RCCE program quality through access to RCCE-related assessments, guidelines and tools, approaches and messages linked to behavior change.

Tools include:

- RCCE Planning Tool
- RCCE Surveys and Feedback Tools Bank
- Messaging Guide: Prevention and Response of Epidemics and Pandemics
- Messaging Pretest Checklist & How to Conduct a Pretest
- Humanitarian Data Exchange, Language by Country (United Nations Office for the Coordination of Humanitarian Affairs [OCHA])
- Tip Sheet: Interpretation and Sensitive Topics (Translators Without Borders [TWB])
- Gender Checklist for Content Creators (UN) & Gender in Emergencies Tools (CARE)

Image Credit: USAID/IFRC/Rama

Engaging communities in public health emergencies, with standard operating procedures and related community-level resources.

Tools include:

- Standard Operating Procedures for Conducting Community Engagement During Public Health Emergencies
- Resources Bank for Remote and Safe In-Person Engagement Option

Image Credit: Save the Children

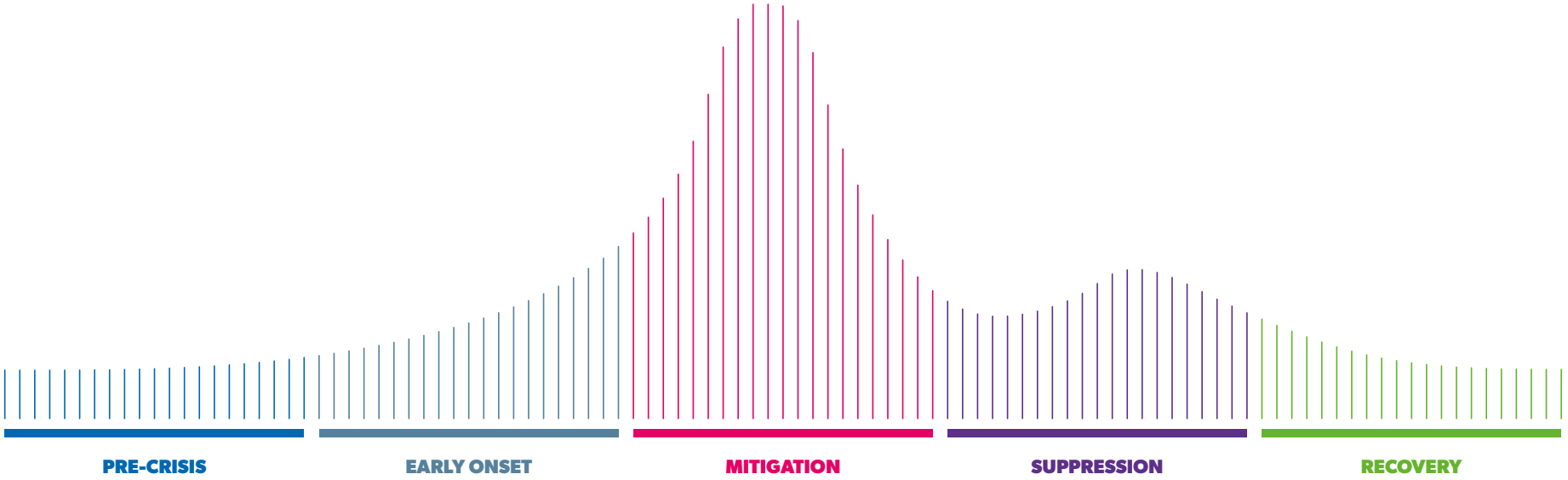
Monitoring and evaluating RCCE.

Tools include:

- M&E Planning Tool for RCCE (with example indicators)
- IndiKit (humanitarian sector indicators) (People in Need)
- Gender in Emergencies, Key Tools (CARE) (See indicators section)
- Case Study Template

Image Credit: USAID/UNICEF/Arimacs

HOW TO USE THE RCCE READINESS KIT?



The RCCE Readiness Kit takes users through **outbreak preparedness and response phases** to improve preparations and plans for community engagement and related risk communication responses. The phases – **pre-crisis, early onset, mitigation, suppression, and recovery** – are plotted on an illustrative epidemic curve to show what communication and community engagement responses may be needed as an outbreak peaks and then slows down[1]. Although the trajectory of a disease will vary among outbreaks, the phases used in this kit are based on patterns that have been established in public health responses, from recognizing the need for preparedness in the pre-crisis phase to containing the spread in the early onset phase, mitigating the progression of the outbreak through mobilization in the mitigation phase, adapting and maintaining momentum as the outbreak slows down in the suppression phase, and keeping the situation under control and building resilience in the recovery phase[2].

Actions taken in the pre-crisis and early onset phases prepare organizations to adapt to an evolving situation. Through these phases, this kit will help organizations to frame their actions for internal readiness and community responses in accordance with an outbreak's typical epidemiological trends. Related tools are designed to be comprehensive and are referenced across different actions and phases.

1 An epidemic curve is a visual representation of the number of cases that occur over time. It typically has a classic bell shape and may show smaller waves of cases.

2 Phases are based on a review of several models, including the US Centers for Disease Control and Prevention's phases of a crisis and the communication rhythm in CERC: Introduction: https://emergency.cdc.gov/cerc/ppt/CERC_Introduction.pdf; Johns Hopkins Center for Communication Programs' SBCC Emergency Helix, https://healthcommcapacity.org/hc3resources/sbcc-emergency-helix, and Prevent Epidemics' COVID-19 Response Playbook, https://preventepidemics.org/covid19/resources/playbook/.

PRE-CRISIS

SCENARIO:

Prepare for inevitable outbreaks.

In the Pre-Crisis phase, there is no outbreak happening, but that doesn't mean there is no outbreak preparedness work. Outbreaks will happen; they are inevitable. Nevertheless, some activities can be prepared for in advance.

For RCCE, being ready to respond quickly to outbreaks means:

- Having plans, logistics, and information already in place
- Training staff in risk communication and community engagement
- Knowing who the necessary contacts are at the global, national, regional, and/or local levels, and building relationships with those contacts
- Having operational and technical tools that can be easily adapted to a specific outbreak

Image Credit: John Hopkins CCP/Breakthrough ACTION

RCCE In Emergency Preparedness & Response Plans (EPRP)

Include infectious disease outbreaks and RCCE in Emergency Preparedness and Response Plans (EPRPs). Assign an RCCE focal person on the emergency response team.

Invite the focal person, communication and community engagement partners and implementers to EPRP workshops, especially from marginalized and women's groups as they can inform on disparities and other considerations (e.g. input into the composition of response teams, considerations on safe isolation facilities).

Develop a plan for adapting community engagement in the face of movement restrictions and lockdowns, which may include greater reliance on remote engagement (social media, mobile, etc.), local resources (e.g. health facilities, essential workers), and partnerships with other response workers.

Identify and establish a list of vendors/ partners needed for communication and community engagement (e.g. printers, media, translators, etc.).

As part of the EPRP process, conduct a desk review and collect data from existing partners, government and other relevant sources to identify vulnerable and marginalized populations and risk factors.

Understand preferred, trusted and available communication channels (e.g. radio, TV, mobile).

Identify existing national risk communication strategies.

Budget for participatory community engagement and two-way communication activities and conduct resource mobilization for these activities.

Related Tools:

- Tips for Strengthening RCCE in EPRP
- RCCE Scenario for EPRPs
- Emergency Preparedness and Response Planning Spreadsheet
- Guidance for Business Continuity Planning and Program Adaptation
- RCCE Budget Template
- RCCE Surveys and Feedback Tools Bank
- RCCE Roles and Responsibilities
- Resources Bank for Remote and In-Person Engagement Options

Human Resources/Staffing

Map and assess internal staff and partner capacity in RCCE across all sectors and identify needs for training.

Ensure staff understand the organizational approach to RCCE and their individual and team roles and

Image Credit: Save the Children

responsibilities for RCCE in job descriptions/terms of reference.

Where feasible, have an RCCE or SBC expert on staff and in surge rosters to provide technical support to implementation teams and for ongoing capacity support. Especially if experts don't exist on certain response teams, train select staff members to be internal champions to ensure integration of community engagement and related risk communication across relevant response areas.

Include foundational information on operationalizing RCCE in the orientation package for staff. Provide all emergency response staff with a briefing note on the basics on RCCE.

Orient all program staff on referral pathways to services that may be needed in an outbreak response (e.g. protection services/gender-based violence, mental health and psychosocial support).

Related Tools:

- RCCE Competencies: Individual Assessments
- RCCE Roles and Responsibilities
- Example Terms of Reference/Job Descriptions for RCCE Roles
- RCCE basics slide deck
- OpenWHO: Basics of RCCE (videos)
- Public Health Emergency Response Briefing Note Template

Training

Develop and train staff on duty of care protocols for infectious disease outbreaks. Establish safety procedures for staff and mobilizers.

Develop an RCCE training plan and train staff across sectors to build skills in designing and implementing communication and community engagement during outbreak responses.

Train health workers and community health workers on interpersonal communication to build skills and increase response readiness.

Related Tools:

- Guidance for Business Continuity and Program Adaptation Planning
- Staff Health Essentials in a Pandemic (slide deck)
- Staff Safeguarding Operational Checklist
- Compendium of Capacity Building Resources for RCCE Competencies

Coordination

Learn about national public health emergency coordination mechanisms that exist in the event of an outbreak and identify entry points and staff to engage with them.

Identify if a community engagement/accountability to affected populations (AAP) working group exists for NGOs, or if one is formed in a response (e.g. within the cluster system), and if so, identify a focal person to engage.

Advocate to working groups/NGO partner forums to map geographic coverage of NGOs working on community engagement.

Related Tools:

- Emergency Preparedness and Response Planning Spreadsheet
- Example NGO Mapping Tool for RCCE Activities

Communication/Messaging

Maintain reference guides of diseases that rise to the level of epidemics/pandemics, with key behaviors that can be considered for messaging.

Related Tools:

- Messaging Guide: Prevention and Response of Epidemics and Pandemics

Community Engagement

Maintain a standard operating procedure for community engagement in public health emergencies.

Identify entry points to community engagement, starting with an understanding of the hierarchy of decision makers and gatekeepers from the district/provincial to the community level: for example, government officials, formal/informal community leaders, religious leaders, community groups (e.g. women's, youth, religious groups), and community platforms (health services, houses of worship) in areas of operation.

As part of this mapping, understand which mechanisms and services exist already, and which are being used and by whom, to avoid establishing parallel systems.

Maintain updated contact lists: include contacts for community groups (e.g. youth, women, religious) and representatives of marginalized populations (e.g. migrants, people with disabilities) who will need to be engaged.

Conduct assessments in areas of operation to identify trusted and preferred communication channels and sources, languages, community norms, values, beliefs, cultures, and current behaviors. This information will narrow gaps between responders and communities.

Develop/maintain community feedback mechanisms and rumor monitoring tools.

Related Tools:

- Standard Operating Procedure for Community Engagement During Public Health Emergencies
- Emergency Preparedness and Response Planning Spreadsheet
- How to Use Phone Trees
- Phone Tree for Community Leaders
- Community Engagement Tool to Help You Learn About Communities
- RCCE Surveys and Feedback Tools Bank

Knowledge Management

Identify existing knowledge management (KM) platforms used for RCCE and establish and maintain a KM platform for staff that includes internal RCCE tools, guidance, and data.

Related Tools:

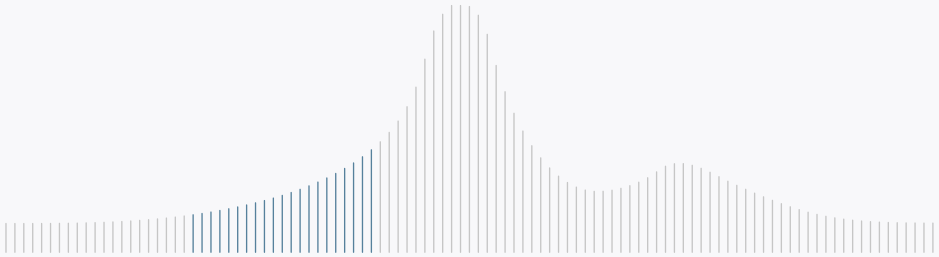
- Key Knowledge Management Hubs for RCCE

Monitoring & Evaluation (M&E)

Establish and maintain indicators for RCCE and include in M&E frameworks for responding to diseases with epidemic or pandemic potential.

Related Tools:

- M&E Planning Tool for RCCE



EARLY ONSET

SCENARIO:

In the Early Onset phase, a new outbreak has occurred. Public health teams will immediately begin to track the disease, trace contacts, and inform the public on the outbreak and how to stay safe. However, there may be many unknowns about the infectious agent (e.g., bacteria, virus). Fear and anxiety may be high, and so might mistrust of authorities. Rumors may start to spread. Stigma and blame may take root as discussions focus on who started the outbreak and who is in close contact with them (e.g., health workers). Marginalized populations and particularly migrants tend to be targets of blame and rumors. These issues contribute to the adoption of unhealthy practices.

Being ready to respond in this phase means:

- Knowing the entry points for coordinating with the government, UN agencies, NGO partners and communities.
- Understanding how to quickly and empathetically communicate about the disease, with simple, clear instructions about protective actions people can take.
- Knowing how to conduct two-way conversations, explaining the response (like the importance of reporting cases and tracing contacts) and the knowns and unknowns of the disease and how to prevent infection.
- Knowing how to use stigma-free language.
- Being able to conduct rapid research to understand the needs of affected populations, and the knowledge, attitudes and behaviors related to the outbreak.

Image Credit: John Hopkins CCP

Human Resources/Staffing

Identify existing activities that will need to adapt to the public health emergency response (e.g. an existing nutrition project may need additional resources to include disease prevention and control). Coordinate with senior leadership on adapting activities for increased safety measures or a transition to remote engagement, depending on the context, and adapting roles/responsibilities across sectors to include RCCE.

Identify staffing/partners and recruit any additional staff and volunteers at the local level needed for community engagement/outreach.

Consider recruiting a social and behavior change professional (e.g. a local consultant) for social science research or identify and work with partners or coordination groups that are collecting and analyzing social science/behavioral data.

Related Tools:

- Example Terms of Reference/Job Descriptions for RCCE Roles
- Guidance for Business Continuity and Program Adaptation Planning
- Standard Operating Procedure for Community Engagement During Public Health Emergencies (See selection, recruitment and placement section)
- NGO Response Team Recruitment Template

Training

Provide new or refresher training to staff, partners, and volunteers on communication and community engagement that include safety/safeguarding during this infectious disease outbreak, with a focus on specific messaging for the disease pathogen.

Related Tools:

- Compendium of Capacity Building Resources for RCCE Competencies

Coordination

Confirm the mechanisms that public health and humanitarian responders use to share epidemiological data, community feedback, social science, and communication and community engagement information.

Ensure the RCCE focal person is participating in an inter-agency forum that coordinates communication and community engagement activities (RCCE technical working group [TWG], Community Engagement TWG, NGO forum, etc.) and reports back to the internal response team.

Related Tools:

- Emergency Preparedness and Response Planning Spreadsheet

Assessment/Data Collection

Determine remote or safe in-person options to collect data partly based on epidemiological context and duty of care measures.

Assess and modify community feedback and complaint mechanisms for the outbreak (as needed). Link with a coordination mechanism that is tracking and analyzing this information (e.g. RCCE TWG). These data will help to identify gaps between how the response is delivered and how communities interpret it.

Adapt rapid assessments to the specific outbreak and conduct assessments in the communities being served. Collect information to tailor responses to people's needs and lived realities: know their perceptions, values, priorities and beliefs regarding the outbreak, as well as how existing systems and services will interact with the response to humanitarian needs.

Related Tools:

- RCCE Planning Tool (See Identify At-Risk Populations and Drivers of Behavior)
- RCCE Surveys and Feedback Tools Bank
- Resources Bank for Remote and Safe In-Person Options

RCCE Planning

Develop an RCCE action plan with costed activities and an M&E plan (make sure this is aligned with the national risk communication strategy).

Ensure communication channels are accessible to people without digital skills, with lower literacy, who may not speak the dominant language or who do not have access to mobile phones, radio, television and other forms of communication. Consider a mix of verbal and non-verbal messages for people with low or no literacy.

Be prepared to advocate to government authorities to ensure full access to information that enables free and informed decision-making.

Consider gender implications across all audience segments.

Related Tools:

- RCCE Planning Tool
- RCCE Budget Template
- Gender Checklist for Content Creators

Communication/Messaging

Work with the government and partners to develop tailored messages and materials in the appropriate languages and formats for audience segments, which should be informed by an analysis of existing epidemiological data, community mapping and assessment data.

Pre-test first-wave messages and materials. Since there may be information gaps at early onset, inform communities that we will update them as we learn more.

Based on the RCCE action plan, establish accessible two-way communication mechanisms. Radio talk shows or other media platforms, community dialogues/focus group discussions and hotlines/information points are examples of channels that can respond to questions and facilitate dialogues.

Related Tools:

- Messaging Guide: Prevention and Response of Epidemics and Pandemics
- Messaging Pre-test Checklist
- Humanitarian Data Exchange, Language by Country (OCHA)
- Tip Sheet: Interpretation and Sensitive Topics (TWB)
- RCCE Planning Tool

Community Engagement

Review community engagement processes and information collected during the pre-crisis phase and reach out to different levels of leaders to orient them on the outbreak and community engagement process to gain buy-in and support for the planned activities. Do these steps even if the activities will just change in focus or scope.

Conduct mobilization and engagement based on risks analyzed involving communities and select appropriate communication and community engagement methods accordingly (e.g. remote technologies such as radio, speakers) in the event of movement restrictions.

Assess safety for any in-person outreach and community engagement strategies, based in part on the epidemiological context and duty of care measures.

Confirm and continue to identify formal/informal community leaders and groups to orient the community engagement partnership, especially people from marginalized populations, which could

include, for example, migrants, indigenous leaders, youth and community health workers.

Related Tools:

- Standard Operating Procedure for Community Engagement During Public Health Emergencies
- Community Meetings in Epidemics and Pandemics: Planning Tool
- Staff Safeguarding Operational Checklist
- Resources Bank for Remote and Safe In-Person Options

Knowledge Management

Update internal knowledge management system to share data and resources for this outbreak.

Establish an agile internal mechanism to monitor the outbreak and adjust program implementation to a changing safety situation.

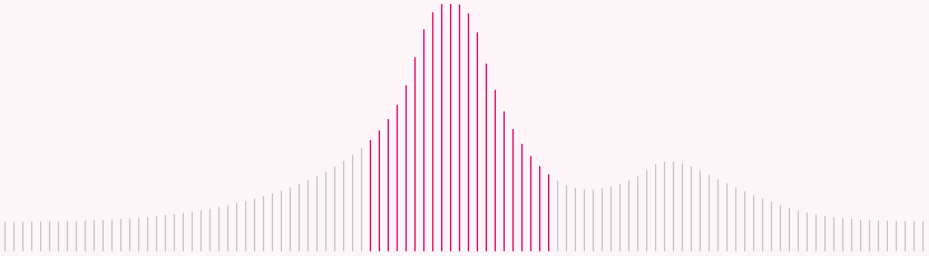
Monitoring & Evaluation

Review and adapt RCCE indicators in M&E frameworks to align with the specific disease outbreak and orient staff on their monitoring and reporting.

Related Tools:

- M&E Planning Tool for RCCE

Source: Save the Children



MITIGATION

SCENARIO:

More information becomes known about the outbreak, and public health measures are adapted accordingly. These measures may conflict with cultural, religious and social norms; there may be mistrust and rumors; and more people may be stigmatized (e.g. front-line workers, survivors, marginalized populations). Fear may be high among some, and yet others may not feel at risk of infection.

Humanitarian needs will increase as the outbreak and measures take a toll on people's work, family, and social lives**.** Particularly in humanitarian settings, people may be unable to comply due to a lack of access to services and funds, crowded living spaces and other issues, or simply because they have other priorities.

Being ready to respond in this phase means:

- Being able to rapidly communicate with two-way approaches that address questions and concerns.
- Knowing how to select a mix of preferred and trusted communication channels for saturation and impact, while reaching the mot vulnerable populations.
- Having the ability to conduct ongoing community feedback, rumor tracking and analysis and use social science data to ensure response activities are accepted, aligned with people's lived realities and respond to their needs.
- Knowing how to reassess remote and in-person delivery of community engagement for affected communities based safety and access to communication channels.
- Understanding how to update messages and materials to reflect the latest science, community perceptions, public policies and any new therapeutic or immunization tools that may be available.

Source: USAID

Human Resources/Staffing

Re-assess staffing needs and recruit additional partners/volunteers, if needed, to carry out outreach and engagement activities.

With supervision, continue to assess staff RCCE capacity and build skills with mentorship/training (e.g. to address new issues such as stigma, rumors, conflict, depending on the context). If treatment and vaccines are available, train staff on promoting their uptake.

Related Tools:

- Example Terms of Reference/Job Descriptions for RCCE Roles
- NGO Response Team Recruitment Template
- Compendium of Capacity Building Resources for RCCE Competencies
- RCCE Competencies: Individual Assessments

See also the community mobilizer section of the Standard Operating Procedure for Community Engagement During Public Health Emergencies

Training

Improve interpersonal communication training of health-care workers and other frontline workers to build awareness of the needs and cultural, religious and social perspectives of affected populations, especially marginalized groups. Include how to address rumors. Teach health-care workers about stigma-free language and the stigmatization of certain groups during the outbreak (e.g. migrants).

Train trusted community outreach workers and community influencers (community health workers, youth groups, traditional and religious leaders) in messages and two-way communication, teach them about stigma-free language and the stigmatization of certain groups.

Related Tools:

- Compendium of Capacity Building Resources for RCCE Competencies (See Interpersonal Communication section)
- Standard Operating Procedure for Community Engagement During Public Health Emergencies

Coordination

Continue to participate in inter-agency forums that share information on the communication and community engagement response, including community-level data and best practices, (RCCE TWG, CE TWG, NGO forum, etc.).

Related Tools:

- Emergency Preparedness and Response Planning Spreadsheet

Assessment/Data Collection

Ramp up collection of community feedback, rumors, perceptions and other social science data and/or connect with coordination mechanisms for continued updates on this information.

Assess the safety situation and scale up participatory community engagement either in person or remotely. Assess remote/digital platforms for a safe and participatory engagement process, depending on the situation.

With community groups, update information on barriers, enablers and behavioral factors, preferred and trusted communication channels, preferred languages, misinformation, and questions from communities. Work with communities to prioritize these issues. Identify local capacity and resources, and understand local priorities for action.

Assess whether communication channels are resonating and try to ramp them up (while still continuing to explore other creative options). Continue to use a mix of communication channels that includes two-way communication and ensure vulnerable, marginalized and other hard-to-reach populations are engaged.

Related Tools:

- RCCE Surveys and Feedback Tools Bank
- Standard Operating Procedure for Community Engagement During Public Health Emergencies (See Safety Sections and Appendix C)
- ICRC Safer Access Saving Lives Toolkit
- Tool for Identifying Issues and Root Causes in Community Meetings
- RCCE Planning Tool (See Communication Channels)

RCCE Planning

Design RCCE approaches locally by involving affected communities, who often have the best knowledge about what works to drive uptake.

Related Tools:

- Standard Operating Procedure for Community Engagement During Public Health Emergencies

Communication/Messaging

Use new data to inform adaptation to messages, materials and activities. Pre-test new messages and materials with community members and adapt based on results.

Related Tools:

- Pre-test Checklist | How to Conduct a Pre-test

Community Engagement

Continue to conduct community dialogues on the disease and control measures. Either led by community groups or in collaboration with them, validate trusted information sources and influencers and scale up if needed. Develop rapid response plans, with rapid interventions and roles and timeframes for community members. Interventions might include community outreach for prevention in high-traffic areas or ensuring supplies of soap and clean water. Support communities to implement and monitor these plans.

Based on the assessment of communication channels, work with the media to develop engaging communications that address people's priorities and barriers, including marginalized groups. (Include affected and marginalized groups in the creation of programming and report on their experiences and how they have overcome barriers).

Related Tools:

- Standard Operating Procedure for Community Engagement During Public Health Emergencies
- How to Develop a Community Response Plan
- RCCE Planning Tool
- How to Develop a Creative Brief

Link with other sectors to address service needs and access barriers and ensure that referral systems are functional before referring to other services (e.g. mental health, gender-based violence).

Monitoring & Evaluation

Continue monitoring and internal reporting for program adaptation and report to coordination groups and the government.

Related Tools:

- M&E Planning Tool for RCCE

Source: USAID

SUPPRESSION

SCENARIO:

Affected communities may experience confusion, complacency and fatigue with the response. A number of factors may cause cases to increase again, especially if authorities have relaxed public health measures or if there is widespread mistrust. If vaccines and treatment are available, some may be hesitant to accept them, including health workers. Communities may have more humanitarian needs due to socioeconomic disruptions and periods of hardship. Health systems may be overburdened again in some contexts if there are new waves. Mistrust and rumors may continue or even intensify, especially when or if new preventative tools and responses are introduced.

Being ready to respond in this phase means:

- Knowing how to conduct targeted RCCE to address complacency, outbreak fatigue, and other non-compliance issues that continue or newly emerge.
- Being able to assess care-seeing behaviors, not only when symptoms of the disease arise but also for essential services, which people may worry about using during an active outbreak.
- Having the leadership and systems to ensure community engagement is community-led to address complex needs and include referrals to services that may be needed.
- Being able to ensure quality data collection and analysis systems for community feedback, rumor tracking, perceptions and routine monitoring data, with the ability to adapt messages and activities based on these data.

Assessment/Data Collection

Adapt social listening mechanisms (e.g. community feedback and complaints, rumor tracking, focus group discussions) to a changing outbreak reality, which may include issues around vaccines, modified public health measures or responses.

Assess new social science perceptions and social listening data on the outbreak and participate in inter-agency forums (e.g. RCCE Working Groups) that are analyzing data to understand trends and help shape program adaptations.

Related Tools:
- RCCE Surveys and Feedback Tools Bank
- Standard Operating Procedure for Community Engagement During Public Health Emergencies (See community assessment tools)

RCCE Planning

Update the RCCE plan with new objectives and activities, particularly if new response tools are introduced (e.g. vaccines) and continue to adapt assessments, survey tools, and response activities to new information about the disease and the response to mitigate it. Assess new feedback and perceptions on the outbreaks and link with inter-agency forums (e.g. RCCE WGs) that are analyzing data to understand trends and use for program adaptations.

Tailor messaging, communication and community outreach activities to the new realities of communities regarding the outbreak and response. It may be necessary to combat complacency and fatigue or other barriers that arise. Emphasize that communities must stay vigilant, identifying and reporting new cases and maintaining newly adopted preventative and protective behavior. Understand levels of care-seeking and, if there is a decline, develop RCCE activities that focus on rebuilding between communities and services.

Continue to work with the media on accurate reporting of the outbreak, especially if new tools are introduced (e.g. vaccines) and continue using two-way communication platforms to engage in dialogues about new information and barriers (e.g. pivoting dialogues to the risks of infection).

Related Tools:
- Messaging Guide: Prevention and Response of Epidemics and Pandemics (See Messaging Tips and Considerations for Marginalized Audiences)
- Standard Operating Procedure for Community Engagement During Public Health Emergencies (See Appendix C & D)
- RCCE Surveys and Feedback Tools Bank

Training

Continue to train and recruit newer networks of community outreach workers and influencers (e.g. youth, religious and traditional leaders, specific representative groups) where needed, to address arising issues (e.g. vaccines, fatigue).

Related Tools:
- Compendium of Capacity Building Resources for RCCE Competencies

Community Engagement

Ensure data are fed back to communities and continue to implement or adapt community response plans and mobilization activities. Continue to address access issues to services and supplies (e.g. water, sanitation and hygiene, health facilities, vaccines) in community action planning and dialogues, and ensure that referral systems are functional before referring to other services.

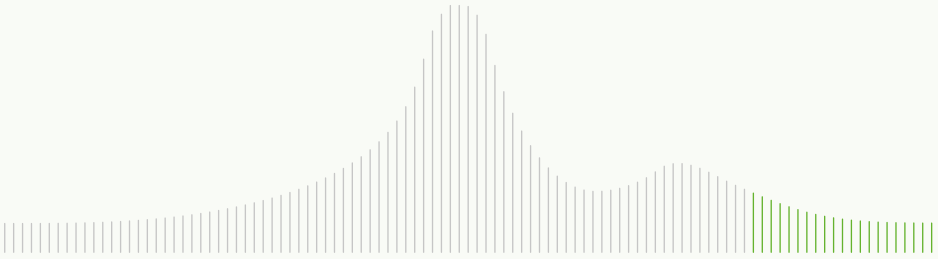
Continue to advocate to government authorities for data-driven and informed decision-making on policies and messages related to outbreaks.

Related Tools:
- Standard Operating Procedure for Community Engagement During Public Health Emergencies
- Tool for Communities to Measure Progress and Use of a Virtual Community Bulletin Board
- How to Develop Community Response Plans

Monitoring & Evaluation

Continue monitoring program activities. Ensure data are fed back to communities for continued motivation and engagement.

Related Tools:
- Guidance for Developing Community Outbreak Response Plans



RECOVERY

SCENARIO:

Emergency is under control and there are fewer cases and less transmission. Once a public health emergency subsides, communities must recover and rebuild. This may include rebuilding trust in health services.

Being ready to respond in this phase means:

- Knowing how to communicate with affected communities to remain vigilant until the outbreak is official declared over.
- Being able to rebuild trust in health systems to support the reduction of mortality and morbidity from other health burdens as communities recover and rebuild.
- Being prepared to conduct an evaluation of RCCE interventions to help identify critical lessons that can feed into further preparedness and response plans.

Source: John Hopkins CCP

RCCE Tools

Tailor RCCE activities so people are aware they should stay vigilant until the outbreak has been officially declared over.

Related Tools:
- RCCE Planning Tool
- Messaging Guide: Prevention and Response of Epidemics and Pandemics (See Messaging Tips)

Assessment/Data Collection

Continue to assess the impact of the disease and response on communities (e.g. low care-seeking due to lingering fear and mistrust).

Related Tools:
- RCCE Surveys and Feedback Tools Bank

Community Engagement

Work with communities and health services to address issues and build more resilient community health systems.

Related Tools:
- Standard Operating Procedure for Community Engagement During Public Health Emergencies

Monitoring & Evaluation/Knowledge Management

Identify development actors to share lessons learned, which should also be shared with communities served and other key stakeholders.

Conduct an evaluation of the RCCE response.

Conduct after action reviews internally and with communities, if possible. Document lessons learned to strengthen the next response.

Related Tools:
- Case Study Template
- M&E Planning Tool for RCCE

HOW WAS THE RCCE READINESS KIT DEVELOPED?

The kit was developed through a multi-step process. Consultations were held with a mix of 27 global, regional and country level experts in RCCE as well as humanitarian response to understand the gaps and needs for strengthening readiness to respond with communication and community engagement. An analysis of the qualitative findings from these consultations was undertaken once the data had been segmented into the following broad themes:

Source: USAID

- Coordination and partnerships
- Assessments and data use
- Staffing and training
- Funding and resources
- Community engagement
- Social science, behavior change and communication
- Inclusion and equity
- Knowledge management
- Guiding standards and tools
- Integration
- Advocacy

READY further summarized these data sets and developed a set of challenges and recommendations that were discussed and verified with READY's Africa and Asia Regional Advisory Groups. A co-design session with global and country-level humanitarian response actors and RCCE experts* followed. A second small-scale validation session was held prior to the release of this kit.

*Participating organizations included representatives from Red Cross Uganda, the United Nations Children's Fund (UNICEF), Save the Children, CARE International, Internews, the Communicating with Disaster Affected Countries (CDAC) Network, the International Rescue Committee (IRC), Oxfam, Humanitarian Initiative Just Relief Aid (HIJRA), Search for Common Ground, UK-Med, and the World Health Organization (WHO)/Global Outbreak Alert and Response Network (GOARN), as well as International Federation of the Red Cross (IFRC) representatives from the RCCE Collective Service.

GLOSSARY OF RCCE AND EPIDEMIOLOGY TERMS

Part 1. Glossary of RCCE Related Terms

Accountability to Affected Persons (AAP): The active commitment of humanitarians to ensure communities have the power and influence to determine and act on their own priorities for preparedness, response and recovery. It ensures humanitarian programs are relevant, inclusive, and accessible to those most marginalized. AAP is grounded in the rights, dignity, capacity and safety of people.

Behavioral Drivers: In public health emergencies, these are the multiple factors in our own psychology, society and in our environment that influence our decisions on our health and well-being in the face of disease risks. This could include anything from personal values, beliefs and social norms, peer pressure and family power dynamics to policies and access to services and supplies, and constructs such as racism, gender, and religion, to name just some examples.

Behavioral Economics (BE): Behavioral economics is grounded in observations that people do not always make the rational or best decisions, despite the information and the tools available to them. Overconfidence, loss aversion, and self-control are foundational concepts in behavioral economics, as is the "availability heuristic" (that says people tend to rely on easily recalled information rather than actual data when evaluating an outcome). An approach used in public health that includes concepts of BE is "nudges," which is a conceptual device for leading people to make better decisions.

Communication Channel: A medium or method used to deliver a message to the intended audience. Examples used in public health emergencies include mass media, such as radio (including community radio), television and newspapers; community engagement (including community mobilization, community dialogues, listening groups or action planning); print media (such as posters, flyers and leaflets); social and digital media (such as mobile phones, applications and social media), and inter-personal communication (such as door-to-door visits, phone lines and discussion groups).

Communication with Communities (CwC): CwC is another term used primarily among humanitarian actors for communication and community engagement in a humanitarian response. CwC helps to meet the information and communications needs of people affected by crises. It is based on the principle that information and communications are critical forms of aid, without which disaster survivors cannot access services or make the best decisions for themselves and their communities.

Community Engagement (CE): In an outbreak context, CE is a process of working collaboratively with affected communities, response organizations and within and between communities. As a dialogic, participatory and inclusive process, it is designed to inform and build trust and acceptance of outbreak control and prevention measures among communities, and to partner with communities to address the outbreak while building upon community capacities to identify challenges and design solutions. CE can leverage multiple communication channels, from face-to-face exchanges to remote options including traditional media and mobile and digital technology, which are important considerations in an infectious disease outbreak.

Community Feedback Mechanisms: A systematic method of collecting information shared by a community member to an organization. It may be positive, negative or neutral. Feedback can come from different sources (for example through social media or directly from a person using a service or interacting with a volunteer) and can be about anything from questions about services, suggestions on how to improve a program/service, to rumors, myths and misconceptions that are circulating in communities.

Community Mitigation: Actions taken to prevent further spread of infectious diseases and protect all people, especially groups of people at increased risk for severe illness, disproportionately affected groups, and essential workers. The goal for using mitigation strategies in countries that are experiencing community transmission is to decrease transmission overall while minimizing the negative social or economic effects of public health and social measures, such as isolation, quarantine, or closing of businesses, schools, etc.

Community Mobilization (often used interchangeably with social mobilization): A process that engages and motivates a wide range of partners at national and local levels to raise awareness of and facilitate change around a particular objective, e.g. the control of an outbreak. This approach typically leverages experienced community health workers or volunteers or influential and active community groups, such as youth groups, to engage communities to become their own agents of change in order to reduce transmission and improve the health and well-being of their families and communities.

Diffusion of Innovation: This theory describes the process by which new ideas (innovations) are spread through a community or social structure. It sees innovations as being adopted initially by a minority of individuals who are more receptive to new ideas. Important to this theory is how certain ideas are spread throughout communities or societies. This theory can be helpful in situations where changes in ideas or behaviors in communities can make significant inroads into crisis situations. For example, changes in burial practices during an Ebola outbreak could be diffused throughout a community to address the spread of Ebola. In particular, this theory tells us that interventions should:

- Assess how, why and how quickly populations respond to the introduction of new ideas. Then, use these findings to inform activities.
- Work with leaders and other influential individuals in target communities to encourage them to adopt the new desired behaviors and promote them to the rest of the community.
- Use agents of change to "diffuse" the new behavior.
- Identify changes in ideas or behaviors that can be diffused by looking at the important factors that affect how quickly they can spread throughout communities.

Disinformation: Deliberately engineered and disseminated false information with malicious intent or to serve agendas. An example of this is 'fake news', which is disinformation disguised as news, often spread for political or economic gain.

Disease Control: The reduction of disease incidence, prevalence, morbidity or mortality to a locally acceptable level as a result of deliberate efforts; continued intervention measures are required to maintain the reduction.

Emergency Preparedness and Response Plans (EPRP) (sometimes referred to as Emergency Preparedness Plans): The EPRP is a continuous process designed to assess a country's risk profile, humanitarian situation on the ground and the operational capacity of an organization and partners to respond to emergencies. According to the IASC guide for Emergency Response and Preparedness, there are three elements of emergency response planning: risk analysis and monitoring, minimum preparedness actions, and advanced preparedness actions and contingency planning.

Extended Parallel Process Model: This model tells us that RCCE activities and messages need to create a balance between perceived threat and perceived efficacy. In emergencies, developing activities that increase both response efficacy and self-efficacy is especially important because perceived threat is already likely to be high – it is critical that people understand what to do to reduce the threat. In particular, this theory tells us that interventions should:

- Provide clear, accurate, believable, humane and respectful information about risk-reduction behaviors and their effectiveness – without escalating fear and panic – to increase efficacy.
- Provide tools, skills and services that support people's engagement in risk reduction behaviors, thus increasing efficacy.
- Maintain a certain level of risk perception when emergencies start to subside and people no longer sense the danger even when it still exists.

As the emergency evolves from the initial and maintenance phases into resolution and evaluation, other theories can begin to inform activities. In the resolution stage, the focus is likely to be on reinforcing new behaviors that have not been promoted by the emergency response. In the evaluation phase, RCCE can start to address at longer-term, sustainable behavior change to prevent further emergencies.

Gender Norms: Gender norms are the spoken and unspoken rules of societies about the acceptable behaviors of girls and boys, women and men—how they should act, look, think or feel. Perpetuated and challenged in families, communities, institutions, and the media, these expectations start early and shape individuals' attitudes, opportunities, experiences, and behaviors, with important health consequences.

Health Promotion: Activities that raise awareness about healthy behaviors for the general public, specific affected populations, and key audiences, which may include public service announcements, health fairs, mass media campaigns, community or social mobilization and health education using job aids and other means and materials.

High-risk subpopulation: A segment of the population that has characteristics that increase the risk of infection or severe disease. For example, people aged 60 years and older, people who live in long-term care facilities and people with underlying conditions like chronic respiratory disease or cardiovascular disease are considered high-risk subpopulations for COVID-19, while unvaccinated younger populations, pregnant women and immunocompromised people may be at higher risk a disease such as measles.

Human Centered Design (HCD): A process that places program beneficiaries and related stakeholders at the center of the design and implementation process. HCD uses research, ideation, iteration, and prototyping, to develop solutions to problems, for example, vaccine acceptance. HCD is said to be rooted in empathy, a comprehensive understanding of the stakeholder(s) involved.

Infodemic: Too much information, including false or misleading information, in digital and physical environments during a disease outbreak. It causes confusion and risk-taking behaviors that can harm health. It also leads to mistrust in health authorities and undermines the public health response. With growing digitization – an expansion of social media and internet use – information can spread more rapidly, which more quickly fills information voids but can also amplify harmful messages.

Information, Education and Communication (IEC): A communication approach emphasizing information and education to enable individuals, groups, and communities to take actions to improve their own health. Embodied in IEC is the process of learning that empowers people to make decisions, modify behaviors, and change social conditions.

Knowledge, Attitudes and Practices (KAP): In an outbreak, KAP surveys are representative studies to collect data from specific populations on what is known (knowledge), believed (attitudes) and done (practices) in relation to an infectious disease. Knowledge typically relates to causes, symptoms, transmission, prevention, and treatment. Attitudes are peoples' opinions and how they feel about the disease and issues related to the disease. Practices are peoples' behaviors in relation to the disease. KAP surveys can also assess communication processes and sources that are key to defining effective activities and messages.

Knowledge Management: A strategic and systematic process of collecting and curating and connecting people so they can act effectively. Knowledge management can improve coordination and enhance meaningful learning, collaboration, and application.

Misinformation: Incorrect information spread by people without the intent to deceive, for example through a misunderstanding.

Non-pharmaceutical interventions (NPIs): Actions or measures people can take other than vaccines or medication, to prevent or slow the spread of infection. For example, wearing a mask, hand washing, and social distancing are all examples of NPIs.

Nudge: In behavioral economics, a "nudge" is a way to manipulate people's choices to lead them to make specific decisions: For example, demarcating places to stand to nudge people in a line to practice social distancing or placing painted footsteps on the ground that lead to a handwashing station, are examples of a "nudges" to get people to choose healthy and risk averting options.

Risk Factors: An aspect of personal behavior or lifestyle, an environmental exposure, or a congenital characteristic that is associated with an increased occurrence of disease or other health-related event or condition.

Remote Engagement: RCCE activities undertaken in situations where restrictions prevent in-person meetings and interactions. Assessments, trainings, communication, and engagement can be done through telephone, teleconferencing, SMS, social media platforms, mass media such as radio, and other means. Many of these platforms allow for participant interaction, such as call-in radio programming (or radio programming that allows listeners to send questions or comments via SMS text), WhatsApp groups, and so on.

Risk Communication and Community Engagement (sometimes used interchangeably with Risk Communication): In a public health emergency, risk communication and community engagement uses a variety of communication channels and approaches to support affected populations to take informed decisions to protect themselves and their communities from an infectious disease and its impacts. Risk communication focuses on the real-time exchange of information, advice and opinions between experts or officials and people who face a threat (hazard) to their survival, health or economic or social well-being. Community engagement fosters two-way, participatory approaches with community feedback loops to gain trust and a community-led response. RCCE requires the understanding of stakeholder perceptions, concerns and beliefs, as well as their knowledge and practices, manage rumors, misinformation and other communication challenges.

Rumors: Unverified pieces of information that can take the form of misinformation (spread in good faith) or disinformation (spread intentionally to deceive). Rumors spread rapidly through a group or population, are unpredictable and can seriously hamper efforts to control and contain an epidemic. Rumors can lead to mistrust of health systems, diversion of critical resources needed to stop transmission and increase fear that incites divisive and harmful behaviors.

Rumor tracking: The process of systematically collecting, analyzing, visualizing, and addressing rumors. Rumors can be identified through a range of sources including embedded community correspondents, national hotlines, or social media.

Social Cognitive Learning Theory: Acknowledges the constant interaction that exists between the individual and his or her environment, both structural and social, to shape behavior. Three personal cognitive factors that are affected by the environment influence behavior:

- Observational learning: Individuals are more likely to perform a desired behavior if they observe others modeling that behavior and experiencing the subsequent positive rewards.
- Outcome expectations: Individuals are more likely to practice a desired behavior if they believe the benefits of performing that behavior and outweigh the costs.
- Self-efficacy: Individuals are more likely to practice a desired behavior if they perceive that they have the necessary skills and capacity to do so.

In particular, according to this theory, interventions should:

- Promote role models who practice the desired behaviors and experience resulting benefits. This can be done through entertainment education activities such a radio and TV dramas, and through community events in which people performing the desired behaviors are celebrated.
- Promote the rewards and benefits that can be expected from engaging in the desired behaviors.
- Provide information, tools and skills to increase people's perceived ability to engage in the desired behaviors.

Social Norms: The implicit and informal rules that most people accept and follow. They are influenced by belief systems, perceptions of what others expect and do, and sometimes by perceived rewards and sanctions. There are two primary categories of norms: descriptive norms (what people think others do) and injunctive norms (what people think others approve of). Social norms are enforced in part by a feeling of wrongness or rightness when we think or act in the "right" or "wrong" way.

Socio-Ecological Model: A person's behavior is influenced by many factors both at the individual level and beyond. The levels of influence on behavior can be summarized by the socio-ecological framework. This framework recognizes that behavior change can be achieved through activities that target four levels: Individual, interpersonal (family/peer), community and social/structural.

Social and Behavior Change (SBC) (sometimes referred to as behavior change communication or social and behavior change communication (SBCC)): A process that seeks to understand and facilitate change in behaviors and the social norms and environmental determinants that drive them at different levels of society: individual, community, services and structural or policy levels. SBC interventions are grounded in a number of different disciplines, including SBCC, community mobilization, marketing, advocacy, behavioral economics, HCD, and social psychology.

Social Listening: The systematic monitoring of conversations, rumors, and public discourse among different populations through traditional media, digital media, off-line and on-line sources, including community feedback mechanisms. Insights drawn can inform RCCE strategies, policies, service delivery and quality improvement activities.

Social Science (sometimes used interchangeably with behavioral science): The study of how society and individuals interact with each other, how people behave and the dynamics between different population groups. In a public health emergency, social science primarily draws from anthropology, psychology, sociology, and political science to understand behaviors, culture, belief systems, historical roots, power dynamics and other related areas that influence them in the context of the emergency.

Stigma: In the context of health, it is the negative association between a person or a group of people who share certain characteristics and a specific disease. In an epidemic, this could lead to people being labeled, stereotyped, discriminated against, treated separately and unfairly, and/or experience loss of status because on a perceives link with a disease.

Theory of Planned Behavior: Behavior is influenced by three factors:

- Attitude toward the desired behavior: This is determined by the individual's belief that a beneficial outcome will occur if a particular behavior (the desired behavior) is practiced.
- Subjective norms: These relate to the individual's belief about what people in their reference groups (peers, family or social networks) think about the desired behavior as well as their motivation to comply with these norms.
- Perceived behavioral control: This refers to the individual's belief about his or her capacity to practice the desired behavior.

The theory of planned behavior acknowledges the individual's role in changing a behavior (attitude and perceived ability), as well as the influence of significant others (subjective norms) In particular, this theory tells us that interventions should:

- Highlight the short-term benefits of the desired behavior as this improves attitude toward that behavior.
- Target close social networks to promote a desired behavior and improve the individual's perceived norms.

Two-way Communication: A type of communication in which both the parties involved in the conversation transmit the message or share the information. During community engagement efforts, two-way communication allows community members to ask questions, comment, share concerns and opinions. Examples of two-way communication channels include in-person interactions, telephone/ WhatsApp conversations, interactive radio programs, video conferencing, etc.

Sources and Additional Resources for RCCE Terms

Definitions and examples in this glossary were adapted from a wide range of resources. Please see below for a list of these resources and some additional resources that may be of interest.

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Part 2. Glossary of Additional Epidemiologic Terms

Agent: Cause of disease; a factor whose presence is essential for the occurrence of a disease. An agent can be biological, physical, or chemical. For infectious diseases, the agent is biological for example a virus, bacterium, fungus, protozoan or worm. For non-communicable diseases, the agent can be a physical environmental factor like exposure to air pollution or toxins. Note that an agent may be present but if it is not in a large enough quantity it may not cause disease unless other conditions are met.

Asymptomatic: Showing no signs or symptoms of a disease. Cases with asymptomatic infection normally do not feel ill and often do not know they are infected. They often continue their regular activities, which can contribute to continued transmission of the agent to others.

Attack Rate: A measurement of the transmissibility of an infectious agent. The attack rate measures the cumulative number of people in a given population that become symptomatic during a specified time period. The attack rate is normally presented as a percentage (%). Also referred to as the incidence proportion or risk. To calculate the attack rate:

$$\frac{\textit{New cases in a population in a specified time period}}{\textit{Total population at the start of the specified time period}}$$

Attack rates can be further analyzed by age, sex, occupation or other key factors to provide further insight into an **outbreak**. Note that attack rate is cumulative during the specified time period.

Case: An identified person having a particular disease, disorder, or condition. A variety of criteria may be used to identify cases—for example, a clinical diagnosis or a positive laboratory test.

Case Classification: In epidemiology, cases can be classified differently based on how much information is available. For example, a confirmed case is a case that meets the case definition as set by the surveillance reporting system. A laboratory confirmed case is a case that meets the clinical case definition and is laboratory confirmed, meaning the infected person received results from a laboratory test indicating their infection. A suspected or probable case normally meets clinical signs and symptoms and has known exposure to the agent (perhaps an infected family member) but has not been laboratory-confirmed (due to lack of access to laboratory testing, lack of laboratory capacity, etc.). The clinical signs and symptoms and laboratory confirmation criteria will vary by disease and context.

Case Definition: A case definition is an agreed-upon set of criteria which need to be present for an infection to be defined as a case. A case definition normally includes:

- clinical criteria (the signs and symptoms associated with the infection)
- a standard description of person, place, and time (i.e. a description of the characteristics of the people that are affected, the geographical location and the time period)
- an epidemiological link, meaning the patient can be linked to another confirmed case, such as a close contact
- confirmation by laboratory testing (if a case cannot be identified through symptoms only and if a laboratory test exists and is available).

Case definitions should be standardized so that everyone is counting the number of cases in the same way. However, they will often vary between countries or regions or within levels of a disease surveillance system or at various different stages in an outbreak response. For example, the case definition for COVID-19 has changed over the course of the pandemic as scientists and physicians discovered more information about identifying and diagnosing the disease.

Case Fatality Ratio (CFR): The proportion of cases who die from a specific condition or disease in a set period of time. CFR is a useful measure of how severe a disease or condition is. Note that the CFR is calculated based on cases that are *infected and detected* by the surveillance system. It does not necessarily include the number of asymptomatic cases or symptomatic cases that were not reported (for example if someone chose not to seek medical care). See the infection fatality ratio (IFR) definition for more information. CFR is typically presented as a percentage. For example, if there are 500 confirmed cases in January and of those, 50 die, the CFR=100*50/500=10%. CFR can be influenced by case definition, testing capacity, care seeking behavior, and the lag between infection and death. In an ongoing epidemic, like COVID-19, the CFR will likely change over time due to changes in the likelihood of detecting cases (new laboratory tests or decreased laboratory capacity) and changes in reporting systems (active cases may die after calculation or be recorded more rapidly as the epidemic progresses).

Cluster: A greater-than-expected number of cases of a disease that occurs in a group of people, often those living or working in the same area. For example, a high number of cases of a disease among a group of students at a university would be a cluster. Disease clusters typically occur with infectious disease outbreaks but may occur also for non-communicable diseases.

Compartmental Model: A type of model in which individuals in a population are divided into groups or compartments and tracked collectively. People can progress through the different groups/compartments. For example, in the **SEIR model**, individuals are grouped into 4 "compartments": susceptible, exposed (but not yet infectious), infectious and recovered (or immune).

Contact: A previously uninfected person who has been exposed to a case or a case's environment such that they had an opportunity to acquire the infection. For example, if a person that is infected with influenza (the case in this example) goes to a birthday party, the other people at the party would be considered contacts. Depending on the type of disease and how it is transmitted, the term close contact may be used to indicate those who had more exposure to the case. For example, the US CDC defines a close contact of a COVID-19 case as "an individual within 6 feet of an infected person for a total of 15 minutes or more".

Contact Tracing: The process of identifying people who have been exposed to an infected person (i.e. contacts) and who might have been exposed to the disease. Once a potential contact is identified they are informed of their risk and advised to take precautions such as quarantine or, for some diseases, vaccination or prophylaxis.

Diagnostic Testing: Testing to confirm or rule out a condition or infection. For infectious diseases, this is often laboratory testing of blood or other samples. However, there are hundreds of procedures that can be used ranging from X-rays to biopsies and more.

Endemic: The constant presence of a disease or infectious agent within a given geographic area or population group; may also refer to the usual prevalence of a given disease within a given area or group. For example, malaria is endemic in most of Sub-Saharan Africa.

Epidemic: The occurrence of more cases of a disease than expected in a given area or among a specific group of people over a particular period of time. An epidemic is actively spreading, the number of new cases is higher than expected and often occurs quite suddenly. Epidemic and outbreak are often similarly defined but the term outbreak is normally used when discussing a more limited geographical area such as a town or province. The epidemic threshold (the level of cases that has to be reached to classify as an epidemic) varies for each disease and context.

Epidemic Curve (epi curve): An epidemic curve, commonly called an "epi curve," is a visual representation of the number of cases of a disease over time. Epidemic curves are often used to help understand key transmission characteristics including incubation period, magnitude of the outbreak and trends over time. Epidemic curves are bar charts with the number of cases on the Y axis (vertical axis) and the date when symptoms start (date of onset) on the X axis (horizontal axis). However, in some epidemic curves the reporting date may be used instead of the date of onset.

Epidemiology: The study of the distribution and determinants of health-related events in a population and the application of this study to improve population health.

Herd Immunity: When a large enough proportion of the population has immunity to a disease either through vaccination or acquired immunity, there are limited susceptible individuals in the population and the disease can no longer be widely transmitted. The most common example of herd immunity is when a population acquires immunity to a vaccine-preventable disease like measles due to high vaccination rates.

Host: A person or other living organism that can be infected by an infectious agent under natural conditions. For example, a person can be infected with varicella, the virus that causes chickenpox, and act as a host. A host can develop symptoms or remain **asymptomatic**.

Incidence Rate: A measure of the frequency with which an event, such as a new case of disease, occurs in a population over a period of time. The numerator is the number of new cases occurring during a given time period and the denominator is the population at risk over the same time period. It is important to note that attack rate is % and incidence is cases per population per time (e.g. cases per 10,000 per day).

Incubation period: The time interval between infection of an individual by an infectious agent and the appearance of the first sign or symptom of the disease. For SARS-CoV-2, the incubation period is on average 4–5 days but may be as long as 14 days.

Index Case: The first documented person in a disease epidemic within a population. This may not in fact be the first case in the population as often this is never known (as with HIV) but simply the first case to be detected and reported.

Infection Fatality Ratio (IFR): The number of people who die of the disease among all the infected individuals (both asymptomatic and symptomatic). To calculate the IFR, we need to know the total number of infected individuals, not just those who present with symptoms (this is the key difference between IFR and CFR, which only looks at fatality amongst detected cases). For SARS-CoV-2, this requires serological (blood) testing because of the possibility of asymptomatic infection. The formula for IFR is (*Note: like CFR, IFR is typically presented as a percentage*):

$$\frac{\text{Number of deaths from a disease in a specific time period}}{\text{Total number of all cases of a disease in a specific time period}}$$

Infectious disease: Diseases that are caused by pathogens, including bacteria, viruses, parasites, or fungi. Some can be spread from one person to another, or from one animal to another or from one animal to a person. For example, measles is an infectious disease caused by a virus and can be spread from person to person by direct contact or through the air. Rabies is an infectious disease that is commonly spread from animals like dogs to humans through a bite or scratch.

Infectious period: Period of time during which an infected individual is able to transmit the infectious agent to others.

Immunity: The ability of an organism to resist a particular infection due to specific antibodies or sensitized white blood cells. A person is considered immune if they have this ability. The main types of immunity are:

- **Active immunity** is immunity that is developed in response to an external stimulus like vaccination.

- **Passive immunity** is immunity from antibodies produced from another host and acquired naturally like how infants received antibodies from their mothers. However, you can also develop passive immunity from anti-serum or immunoglobulin.

- **Acquired immunity** is immune resistance developed as a result of previous exposure to the pathogen like how people who have measles develop immunity. (*Note that this is not true of all pathogens!*)

Isolation: Separation of a case from contact with susceptible individuals. Isolation occurs under conditions that will prevent or limit the transmission of an infectious agent to those who are susceptible (for example, having a private bedroom and bathroom or having an isolation ward in a health care facility to keep the case away from other patients). Cases should be isolated for the entirety of their infectious period. Unlike quarantine, isolation applies to those who are ill. For example, a person who is sick with COVID-19 should be in isolation. Their close contact who is not currently sick should be in quarantine.

Latent Period/Latency Period: The time period between exposure to an infectious agent and being able to transmit the agent to others. In some scenarios, this can be shorter or longer than the incubation period as a person may become infectious before or after developing symptoms.

Mode of Transmission/Transmission: Transmission is the mode or mechanism through which an infectious disease can spread in the environment and from one person to another. An infectious agent may be transmitted from its natural reservoir to a susceptible host in different ways. Some common modes of transmission for infectious diseases are listed below:

- **Direct contact -** When a pathogen spreads through direct, person-to-person (or person-to-animal or animal-to-animal) contact. A common example is sexually transmitted infections that spread through direct contact. Droplet transmission (see glossary definition above) is a form of direct contact. For example, through coughs or sneezes.

- **Indirect contact -** When a pathogen spreads through suspended air particles, fomites (physical objects like forks, tissues, doorknobs that are able to transmit infectious agents), or vectors (see glossary definition below).

Outbreak: Occurrence of more than the expected number of cases of disease in a specified time and place. An outbreak can be localized and only include a small number of cases if that is more than expected or can also refer to a generalized epidemic. Epidemic and outbreak are often similarly defined but outbreak is normally used when discussing a more limited geographical area such as one town or province.

Pandemics: An epidemic that has spread over several countries or continents, usually affecting a large number of people.

Pathogen: A pathogen is an organism that can produce disease. Pathogens can be bacteria, viruses, fungi, or other microorganisms. Note that while all pathogens are considered to be agents, there are many agents that are not pathogens (for example air pollution or toxins).

Prophylaxis: A measure taken to prevent disease. This can be medication (like taking a malaria medication when traveling to malarial areas), screenings (mammograms or colonoscopies), lifestyle adjustments (exercise, healthy diet), or vaccines.

Public Health Surveillance: The systematic ongoing collection, collation and analysis of data for public health purposes, and the timely dissemination of public health information for assessment and public health response as necessary. There are different types of surveillance depending on the needs and resources available:

Quarantine: The act of restricting a contact's activities. The contact is separated from others to prevent onward disease transmission to those who are susceptible. Contacts should be quarantined for the duration of the incubation period. Unlike isolation, which is for people who are confirmed cases, quarantine is for those who have been exposed to an infectious disease but have not yet developed symptoms. People in quarantine may never develop symptoms and leave quarantine after the incubation period has passed or they may become ill and then be counted as a case.

Active Surveillance - A system that actively looks for **cases** of a disease or condition by conducting interviews, looking at health facility and laboratory data, and conducting investigations to confirm suspected cases. For example, during an Ebola outbreak, case investigators and community health workers visit communities to try to identify cases proactively, instead of waiting for cases to present at a health post.

- **Passive Surveillance -** Disease reporting through routine reporting. For example, hospitals monitor and record patients that suffer or die from specific diseases on a weekly, monthly, or quarterly basis, but may not actively seek out new cases.

- **Sentinel surveillance -** Specific facilities or sites are identified as key reporting units and are trained to identify cases of a specific disease. Sentinel surveillance is often used to measure incidence rates of vaccine-preventable diseases.

- **Syndromic Surveillance -** Public health surveillance in which cases are identified based on symptoms instead of laboratory confirmation. This is often used to detect outbreaks early, in the hopes of preventing further spread. For example, community health workers use fever-rash surveillance to detect potential measles outbreaks.

Reservoir: The habitat in which an infectious agent normally lives, grows and multiplies; reservoirs include human reservoirs, animal reservoirs, and environmental reservoirs. For example, rabies has several animal reservoirs like dogs, bats, raccoons, etc. and can be transmitted animal to animal or from animal to human.

Respiratory droplets: These are particles of respiratory secretions that are exhaled and typically consist of water-like fluid. Respiratory droplets may contain a disease agent, and therefore be infectious. Respiratory droplet particles cannot float in the air; they drop to the ground by gravity, usually within 3–4 feet (0.9-1.2 meters). From a technical standpoint, these particles are defined as >5 microns in diameter.

SEIR Model: A common infectious disease model where the population is represented in a series of compartments that relate to different stages of disease transmission and progression. Rate and probability parameters are used to model how the population moves through the compartments. The four compartments in an SEIR model are:

- **Susceptible:** The fraction of population that is made up of susceptible individuals.

- **Exposed/Pre-Infectious:** The fraction of exposed individuals (infected but not yet infectious).

- **Infectious:** The fraction of individuals who are infected and capable of transmitting the infection to others.

- **Recovered**: The -fraction of individuals who are "resolved" --that is, either recovered or dead.

Susceptible Individual: A member of a population who is at risk of becoming infected by a specific pathogen. A susceptible individual does not have immunity. At the start of an outbreak of a new disease, the entire population are susceptible individuals, as no one had previously had the disease and developed immunity and there was no vaccine.

Sources and Additional Resources for Epidemiological Terms

Definitions and examples in this glossary were adapted from a wide range of resources. Please see below for a list of these resources and some additional resources that may be of interest.

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