



**POCKET GUIDE**

# Knowledge Management Road Map for Public Health Emergencies

**A 6-STEP SYSTEMATIC  
PROCESS FOR APPLYING  
KNOWLEDGE MANAGEMENT IN  
A PUBLIC HEALTH EMERGENCY**



**USAID**  
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# About this Guide

During a public health emergency, it is essential that public health professionals have access to accurate, up-to-date information they can use to inform their work. However, given the quantity of information being shared during such an emergency, public health professionals and other responders often face:

- **Choice overload:** Too many choices are presented at once, potentially leading to frustration, inaction, and an overreliance on the same sources of information.
- **Cognitive overload:** Information is presented in a way that is difficult to understand, making it hard for professionals to apply that information to their programs.

Knowledge management (KM) can help address and reduce choice and cognitive overload and should be a core component to any public health emergency response. In emergency settings, where speed is of the utmost importance, KM tools and techniques can strengthen collaboration and knowledge exchange and ensure the latest evidence is put into practice.

**This Knowledge Management Pocket Guide for Public Health Emergencies provides an overview of how to implement KM during a public health emergency, such as an infectious disease outbreak. It outlines a step-by-step process that implementing partners, public health professionals, and donors can adapt to their contexts.**

➔ This Pocket Guide is an abbreviated version of a larger guide. Refer to the [Knowledge Management Road Map for Public Health Emergencies](#) for more detailed guidance.


This guide defines KM as a systematic process of collecting and curating knowledge and connecting people to it so they can act effectively and efficiently.

# Who is This Guide For?

This Pocket Guide is meant to be used by public health professionals before, during, and after a public health emergency. It is important to recognize, however, that many sectors—such as education, logistics, and water, sanitation, and hygiene—are often involved in a humanitarian or emergency response.

Specifically, this guide is meant to be used by four primary actors: governments leading overall public health emergency response efforts; international, national, regional, or local donors; the KM Lead (identified and funded by a donor/government); and implementing partners made up of public health professionals (**Table 1**).

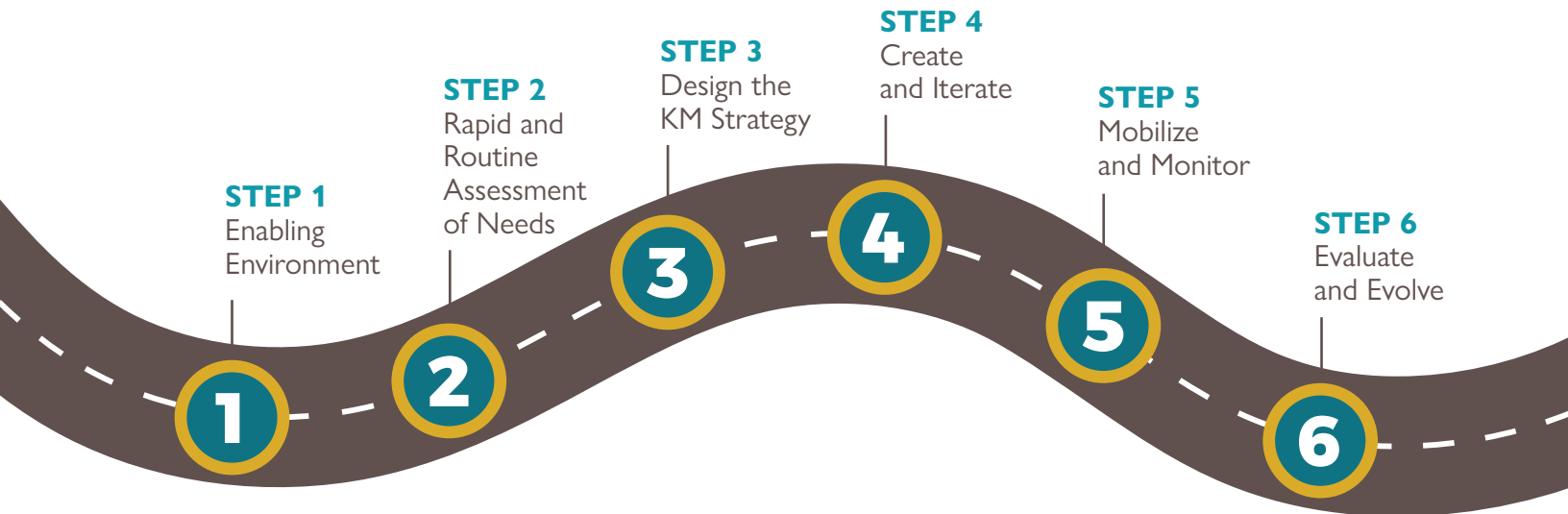
**Table 1. Primary audiences for this guide**

ACTOR	KM ROLE DURING AN EMERGENCY
 <b>Government</b>	Organize overall response efforts and work closely with international donors providing support.
 <b>International, national, regional, or local donors</b>	Identify and fund a KM Lead to manage emergency response.
 <b>The KM Lead Organization*</b>	Organize, manage, and spearhead KM efforts among health professionals during the emergency to address collective knowledge needs, reduce duplication, and streamline response efforts.
 <b>Implementing partners/ Public health professionals</b>	Participate in KM efforts implemented by the KM Lead, share experiences externally, and apply KM activities internally within their organizations.

\*For the purposes of this guide, the KM Lead is assumed to be a national or international NGO

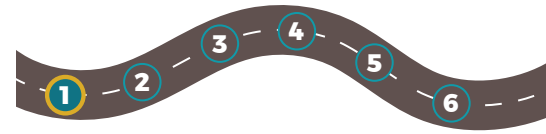
# The Knowledge Management Road Map for Public Health Emergencies

The KM in Emergencies Road Map outlines a six-step process for generating, collecting, analyzing, synthesizing, and sharing knowledge during a global health emergency:



## Equity in KM in Emergencies

In global health emergencies, unfair, avoidable, and remediable differences in health status are heightened through limited knowledge creation, lack of access, and sparse/restricted use among groups of public health professionals. Power and privilege imbalances are amplified as the divisions widen between who has power and who does not. Equity should be considered at each step of the KM Road Map. Refer to [the complete Equity Checklist and how-to guide](#) to help program teams raise awareness about potential inequities in KM and identify where to focus their efforts to achieve a more equitable KM approach.

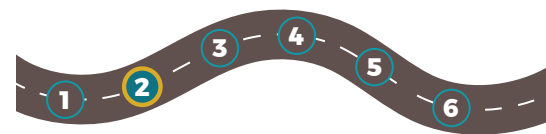


## STEP 1 Enabling Environment

**Allocate and award funds for KM.** KM needs to be funded and prioritized from the beginning of the response. This includes allocating and awarding specific funds for KM activities such as collaboration (e.g., staff time to manage a community of practice), knowledge exchange (e.g., to host in-person or virtual knowledge exchange events or knowledge-sharing platforms), documentation (e.g., to write, lay out, and publish case studies), and curation of resources (e.g., to host a central resource hub) throughout the emergency response.

**Create a scope of work and identify a KM Lead organization who will identify KM needs among public health professionals, as well as manage, implement, and monitor KM initiatives.** A KM Lead organization is necessary to ensure KM is strategic and systematic throughout the emergency. The role of the KM Lead is to facilitate KM throughout the response. The KM Lead and its donors/government should work together to create a KM scope of work that is informed by the needs of implementing partners and public health professionals responding to the emergency.

**Publicly announce the KM Lead among all implementing partners and set clear expectations among all implementing partners regarding their involvement in KM initiatives.** Stress that *all* implementing partners are responsible for contributing to KM efforts and that the KM Lead is meant to support and promote the work of all partners and public health professionals. Donors or governments should articulate and assign roles and expectations for all stakeholders. For example, if implementing partners are expected to share the tools and resources they create with the KM Lead so they can be accessible on one platform, the donor/government needs to make that expectation clear.



## STEP 2 Rapid and Routine Assessment of Needs

**Define the stakeholders of your needs assessment.** Be specific. Conduct your needs assessment among the public health professionals responding to the emergency. Choose individuals who need timely and reliable information quickly to inform their programs and whose knowledge needs you must understand in order to implement the appropriate KM tools and techniques. This step should include conducting a rapid landscape assessment of all implementing partners, their roles, and where they are working.

**Decide what key questions you want the needs assessment to answer.** Common questions address the types of information your primary stakeholder needs, how they prefer to access information, their capacity-strengthening needs, and facilitators and barriers to accessing, sharing, and using information.



### Example Needs Assessment Questions:

- Where do public health professionals go to find up-to-date information during an emergency?
- What format(s) is information shared in? What formats are most preferred by public health professionals (e.g., case studies, webinars, podcasts, etc.)?

### Select and implement the appropriate methods to answer your questions.

Choosing methods that will provide rapid results and minimize the time commitment from implementing partners is key during an emergency. This could include conducting a desk review, surveying/interviewing members of stakeholder groups, and/or documenting challenges that arise during routine meetings (such as communities of practice).

### Analyze and use the information gathered to adjust your learning objectives as needed.

Much of the data will likely be qualitative. If conducting an online survey, try to use software that produces a compiled report of the findings to save time synthesizing the data. If conducting interviews, use a standard note-taking template and identify key themes after each interview to minimize the time required for analysis. Synthesize the findings and create a summary.

Needs should be assessed frequently, given the rapidly changing environment in an emergency. As new information arises or as the emergency progresses, stakeholder needs will evolve.



### Equity Consideration:

Take into account the social, economic, and environmental categories of people's identities (see Table 1 of the [KM Pocket Guide](#)), as well as aspects of KM systems and processes that are not being delivered equitably. For example, information needs can differ by sex, gender, and age. Different audiences may prefer to receive information through a WhatsApp group or social media posts, while others may prefer a newsletter or website.



## STEP 3

### Design the KM Strategy

**Decide on KM objectives.** Use the results of the needs assessment to create KM objectives that respond to the stakeholders' needs, choosing KM approaches and formats that are accessible and appropriate. Choose three to five objectives and make sure they are SMART: Specific, Measurable, Actionable, Realistic, and Timely.



#### Example of SMART KM Objectives

- Strengthen knowledge exchange among USAID-funded COVID-19 implementing partners through at least one virtual and one in-person knowledge exchange event by X date.

**Define the stakeholders of the KM intervention.** The stakeholders should be the same audience (or a segmented version) of those who responded to your needs assessment. Be as specific as possible.

#### Theoretical Frameworks

Identifying a relevant theoretical model in your KM strategy gives rigor and an underlying evidence base to your KM activities.

An emergency response may require grounding the intervention in a combination of KM and emergency response frameworks. Refer to the [KM Road Map for Public Health Emergencies](#) for examples of relevant frameworks and theories.

**Select the KM tools and techniques you will implement to meet your KM objectives.** Refer to Figure 1 for examples of specific KM tools and techniques that might be appropriate for meeting your stakeholders' needs and accomplishing your objectives, especially in an emergency. Remember to choose tools and techniques that are appropriate for the context and "meet people where they are." Remain cognizant of the timing in an emergency: a simpler technique that is quicker to implement may be more useful than a more robust technique that requires months to implement.

**Develop an implementation plan and budget.** Identify which KM tools and techniques you will employ, among whom, where, and how often. Use this information to complete a budget that includes estimated costs for each KM tool/technique. Financial considerations for equity integration should also be included, such as funds for document translation, interpretation during events/webinars, etc.

**Develop a routine and rapid monitoring and evaluation (M&E) plan.** Employing rapid and routine methods to collect feedback and assess the impact of your KM innovations is essential to ensure that you meet KM needs throughout the emergency response. Develop this plan at the onset of activities and set a routine timeframe for which you revisit it to track progress on all indicators (e.g. monthly, quarterly). Your M&E plan should include how and how often activities will be monitored, indicators to measure progress toward outcomes, data sources, and how success will be defined. Try to disaggregate and analyze findings by gender, age, and other factors that represent your audiences' identities and that are relevant to your program context.

**Bring together relevant stakeholders to launch the KM intervention.** Inform all stakeholders about your KM strategy and implementation plan. This will help ensure everyone understands their roles and how their activities contribute collectively to the larger vision. This could include hosting a webinar, writing a blog post, or sending an email. If possible, donors should also be involved in promotional efforts to ensure expectations regarding each implementing partner's KM contributions are clear throughout the response.



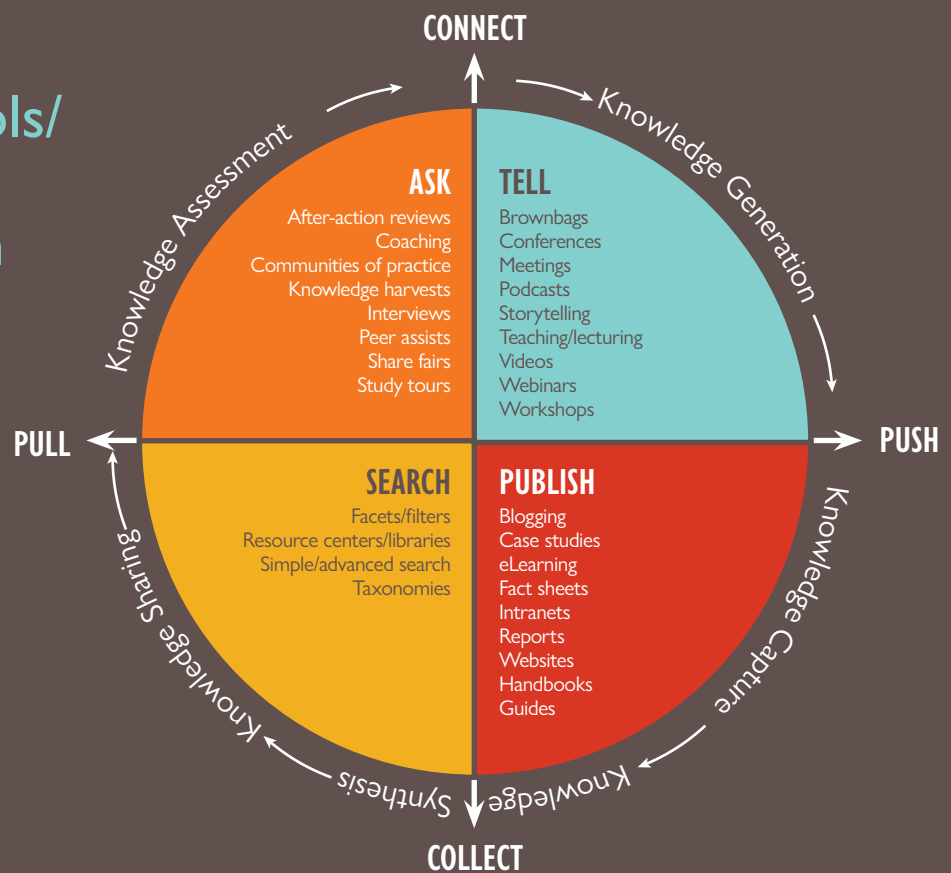
### **Equity Consideration:** \_\_\_\_\_

Carefully consider the platforms you use for KM and who does and does not have access. Ensure all content is accessible to users, regardless of their capabilities. Diversify knowledge-sharing techniques to reach a broader audience. Consider connection issues and communication barriers based on different contexts. Finally, ensure equitable participation in all events, surveys, and other outputs (e.g., sex, gender identity, ability, geographic location, age).



# Sample KM Tools/ Techniques in Public Health Emergencies

**Figure 1.**  
KM Tools and  
Techniques Matrix



## ? ASK:

Communities of practice (CoPs) are especially important during a public health emergency, as they bring together multiple stakeholders to rapidly share knowledge and support adaptive management. Due to the nature of an emergency, it is often more effective to leverage existing CoPs rather than create a new one.

## 📢 TELL:

Webinars can be a great tool to keep public health professionals updated with the most current information, and are appropriate during times of physical distancing.

## 🔍 SEARCH:

Online hubs, resource centers, or resource collections—especially those that have already been established—can be a great tool to curate essential information in one central, easily accessible location.

## ➡ PUBLISH:

Document and publish program experiences, including implementation details, so promising practices are shared and can be adapted for different contexts as appropriate. In an emergency setting, case studies and “how-to guides” may be useful for quick summaries of successful implementation experiences.

Refer to the [KM Training Package](#) for training modules and resources on specific KM tools and techniques.



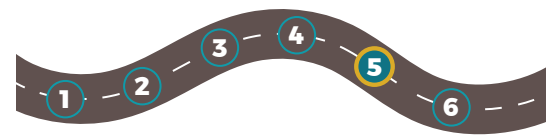
## STEP 4

### Create and Iterate

**Identify your KM Team.** Identify the KM skills required to implement the various KM tools and techniques you have selected, then find staff members to lead and support each. You do not necessarily need to have internal capacity for all these skills; sometimes it might be more efficient and effective to outsource defined tasks. As you assemble your KM team, identify opportunities for roles to be filled by people of different identities, especially those who are traditionally underrepresented and those from the countries where the activity will take place.

**Develop the KM tools and techniques.** For each KM tool or technique, begin by creating a concept note that outlines the objectives, purpose, deliverables, expected outcomes, and specifics of each KM activity. Consider the sustainability of each activity from the design phase, including which components need to be sustained post-emergency and which do not. Take into consideration KM approaches that require maintenance or have associated costs such as resource centers, websites, etc. How will the information continue to be made available after the emergency is resolved and funding ends, so it can be used to inform future response efforts?

**Test or gather feedback about the KM tools and techniques, revise, and retest.** Get rapid feedback from donors and key stakeholders on the elements included in the concept note and incorporate their feedback. For electronic products, prototypes can be used for audience testing and feedback. For KM events, such as a webinar or share fair, get feedback on the concept note and draft agenda. Changes are easier and less expensive during the earliest development stages. One rapid and low-cost way to gather feedback is through CoP meetings.



## STEP 5

### Mobilize and Monitor

**Implement your KM interventions.** Begin implementing your KM tools and techniques according to your plan and timeline.

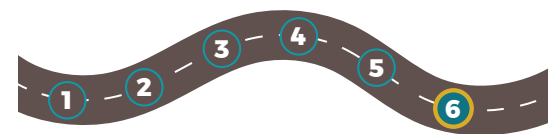
**Schedule routine team meetings.** Set up regular meetings and other channels for systematic and ad hoc communication with those implementing KM activities. Encourage an environment of sharing knowledge about what has and has not been working well and of asking for suggestions on how to improve processes.

**Review progress toward KM objectives.** Refer to your M&E plan and routinely track your program's inputs, processes, and outputs to help quantify what has been done, who has or has not been reached, and who has acted on the appropriate knowledge. In an emergency, monitoring activities should be as un-cumbersome as possible without threatening data quality. Create streamlined processes to ensure rapid collection of information (paper vs. electronic) and enable quick decision-making, and define roles and expectations for monitoring.

**Adapt as necessary.** Monitoring data is only valuable if it is used to inform decision-making and enhance performance. Conduct [after-action reviews](#) to discuss what went well and what could be improved; hold standing team meetings to discuss necessary shifts in activities. Donors and governments need to encourage the KM Lead to be open and honest with what's working and what's not. They must also be flexible to ensure the KM Lead has the autonomy to adjust the workplan and budget to address rapidly changing needs.

## After-action Reviews Help Inform Lassa Fever and COVID-19 Implementation in Nigeria

Through after-action reviews of the response to [Lassa fever outbreaks in Nigeria](#) in 2017–2019, the Nigeria Centre for Disease Control (NCDC) learned that public sensitization about Lassa fever during football matches and the use of environmental sanitation days contributed to increased awareness among citizens in a specific state. The NCDC thus adapted this practice in future outbreaks, including COVID-19.



## STEP 6 Evaluate and Evolve

**Decide which program outcomes to measure.** The KM tools and techniques that you implement should help ensure that critical, high-quality information is available and accessible, that knowledge exchange and collaboration among implementing partners and public health professionals are brokered and supported, and that capacity is strengthened for knowledge sharing. Most KM interventions in emergencies focus on improving initial (and sometimes intermediate) outcomes.



## Example KM Monitoring and Evaluation Indicators

Example KM Monitoring and Evaluation indicators include the number/percent of public health professionals who:

- Report knowledge gained
- Feel confident they know where to go to access reliable and up-to-date information to inform their work

**Choose the evaluation design and collect, analyze, and synthesize the data.** Strong evaluation designs take before-and-after measures of key indicators to identify changes over the duration of an intervention. For completely new public health emergencies, baseline data regarding accessibility to key information/guidelines will be sparse, as information did not exist prior. However, tracking this information is still essential to observe changes over time and assess confidence in one's ability to access accurate, up-to-date information to inform programs. Given the speed at which emergencies occur, an emphasis is often placed on implementation over evaluation. However, evaluations are essential to inform future emergency responses. Suggestions for conducting rapid evaluations include online surveys, periodic polls or pulse surveys, reporting on web analytics, etc.

**Share evaluation findings and lessons learned broadly and with key stakeholders.** Sharing evaluation findings, as well as lessons learned and recommendations, is essential to inform future emergencies. Insights can be shared via implementation stories, case studies, project briefs, and—if time allows—peer-reviewed manuscripts.

**Promote use of evaluation findings in policy and practice.** To ensure the findings are shared with the appropriate stakeholders, consider hosting an in-person or virtual event (such as a share fair) to share the findings, lessons, and recommendations broadly and identify champions who can advocate use of the results beyond the current emergency.



## Equity Consideration:

Qualitative data methods, such as focus group discussions or key informant interviews, are often more effective in gathering a comprehensive and detailed picture of an experience than quantitative methods (like surveys or online forms). They can therefore provide a more in-depth, accurate picture of equity-related opportunities or challenges to accessing and using the KM intervention. In an emergency setting, these can often be used once the response is established, and the initial activities are well underway.

## CASE STUDY

# The Knowledge for Health (K4Health) Project Applies KM to the USAID Zika Response

The Zika virus was declared a public health emergency by the [WHO](#) in 2016. USAID provided emergency support in 10 Latin American and Caribbean countries. The case study below is outlined following the six steps of the KM Road Map for emergency response:

## STEP 1 Enabling Environment

The Knowledge for Health (K4Health) Project was awarded funds by USAID to serve as the KM Lead for implementing partners working to mitigate the health effects of the Zika epidemic. The KM objectives were to promote knowledge sharing among partners, document and share lessons learned, and adapt, translate, and ensure access to timely family planning and reproductive health resources for the Zika response.

## STEP 2 Rapid and Routine Assessment of Needs

K4Health conducted needs assessments through surveys and discussions at partner meetings among public health professionals responding to the emergency.

## STEP 3 Design the KM Strategy

It became apparent that the main KM need was to connect implementing partners with one another and with USAID. The KM strategy outlined multiple KM approaches to achieve this goal throughout the various stages of the response.

## STEP 4 Create and Iterate

K4Health created the Zika Communication Network (ZCN)—an online repository that curated essential, evidence-based tools and resources created by a variety of partners to help minimize the spread of Zika and related negative pregnancy outcomes. K4Health conducted usability testing on the website prior to and after its launch to ensure it met the stakeholder audience's needs.

## **STEP 5**

### **Mobilize and Monitor**

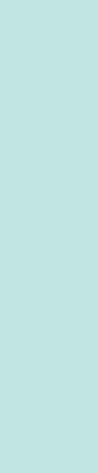
Initially, K4Health planned to promote the ZCN on social media, assuming that, given the rapid nature of the response, partners would prefer social media's immediate delivery of information. However, through a survey, K4Health found that partners preferred to receive information through email, and the project quickly pivoted to launch a bilingual (Spanish/English) ZCN e-newsletter to share upcoming events, tools, and resources. K4Health also hosted two in-person share fairs, one implemented mid-response and the other near the end of the response, each of which had specialized focuses depending on stakeholder needs.

## **STEP 6**

### **Evaluate and Evolve**

K4Health used the insights from the second share fair to publish [Learning from Zika: A synthesis of lessons learned for future public health emergencies](#).

K4Health systematically and strategically used KM tools and techniques to quickly adapt its activities to the emerging and ever-changing needs of implementing partners, ultimately supporting documentation, knowledge exchange, and knowledge use to support the Zika response and inform future public health emergencies.



The Knowledge SUCCESS project champions the strategic and systematic use of knowledge by individuals and organizations who design, implement, manage, and evaluate global health programs and policies.

Learn more at [www.knowledgesuccess.org](http://www.knowledgesuccess.org)

