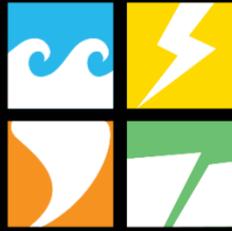


**NATURAL
HAZARDS
CENTER**



PRINCIPLES OF RISK COMMUNICATION WORKSHEETS

Exercises for Integrating
Principles into Risk
Communication
Practice



PRINCIPLES OF RISK COMMUNICATION WORKSHEETS

Exercises for Integrating Principles into Risk Communication Practice

May 2021

This booklet was prepared by the Natural Hazards Center at the University of Colorado Boulder with supplemental support to the National Science Foundation (NSF Award #1635593) from the U.S. Army Corps of Engineers (USACE), Office of Homeland Security. Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the NSF or USACE.



Natural Hazards Center
University of Colorado Boulder
1440 15th Street
Boulder, CO 80309-0483
hazctr@colorado.edu
hazards.colorado.edu

Suggested citation: Campbell, Nnenia. 2021. *Principles of Risk Worksheets: Exercises for Integrating Principles into Risk Communication Practice*. Boulder, CO: Natural Hazards Center, University of Colorado Boulder.

Introduction

This booklet builds from [*Principles of Risk Communication: A Guide to Communicating with Socially Vulnerable Populations Across the Disaster Lifecycle*](#). The guide was designed to assist practitioners managing risks from floods and related natural hazards in applying evidence-based recommendations for effective risk communication to reach populations that tend to experience disproportionate negative impacts from disasters. It identified three core principles of effective risk communication:

- I. Communicate Through Familiar and Trusted Messengers
- II. Provide Clear, Actionable Information
- III. Tailor Messages and Information Pathways for Target Audiences

The content of this booklet expands on the discussion in the *Principles of Risk Communication* guide by presenting several worksheets that walk through the actions needed to help put the principles into practice. There is a detailed worksheet dedicated to each of the three risk communication principles. These worksheets build from one another and are cross-referencing, as some activities expand upon or may be enhanced by activities covered in a different worksheet. This booklet also includes brief worksheets with a series of exercises that highlight key considerations and steps that should be taken before initiating the communication process and after implementing your team's risk communication plan. There are five worksheets in total:

- Exercises to Understand the Community (pages 3-7)
- Principle I Worksheet (pages 8-20)
- Principle II Worksheet (pages 21-34)
- Principle III Worksheet (pages 35-43)
- Exercises to Reflect on Your Team's Work (pages 44-47)

It is advisable for your team to read through this entire booklet in advance of starting a risk communication project to develop a working understanding of the ways in which the principles and various exercises relate to one another.

Overview

Designed as a tool to help practitioners apply the core principles in their own activities, the risk communication principles worksheets present questions that are intended to guide users as they think through the issues associated with each core principle. The exercises and questions outlined in the worksheets are intended to help you and your team identify strategies to:

- Build trust and partnerships to facilitate stronger community engagement;
- Design guidance and outreach strategies that are compatible with the intended audiences' needs and capacities; and
- Frame and disseminate messages in ways that appeal to the identities, concerns, and priorities of different audiences.

The three risk communication principles worksheets do not need to be completed in a particular order; however, note that each one is broken down into three steps for ease of use. While steps *within each*

worksheet are intended to be completed sequentially, the content under each step may or may not be relevant to your team's situation, and should be undertaken or skipped at your team's discretion. As noted above, a pre-review of the materials in this booklet will assist your team in making such determinations. This review can also serve as an opportunity for your team to discuss which activities are appropriate or feasible for your project, which may be modified or omitted, and when and how the selected activities should be completed. The risk communication process as envisioned in this booklet is interactive, collaborative, and, in many ways, non-linear.

The Pre-Planning Worksheet offers exercises to complete *before* using the risk communication principles worksheets. It will help you and your team characterize the community in which you are operating and identify discrete target audiences. The Post-Communication Worksheet provides exercises to complete *after* using the risk communication principles worksheets. This worksheet facilitates continuous learning and improvement through questions that will help your team evaluate plans and activities at the completion of the communication process or once communication activities have been tested in practice. The exercises and steps in each worksheet are followed by Quick Tips that highlight important issues associated with the topics covered in the preceding section and explain how to put the recommended actions into practice. The main sections of each worksheet conclude with Featured Resources such as datasets, tools, and other information products that can facilitate your team's efforts to implement the recommended actions.

The worksheets in this booklet are not intended to serve as a comprehensive risk communication tutorial. Rather, they can prompt your team to think deeply about its objectives, better understand its target audiences, and thoughtfully apply evidence-based risk communication methods. The worksheets provide tips and strategies for developing partnerships that can help to maximize the relevance and value of your messages to the communities you serve. They highlight measures your team can take to address the needs of groups that are often overlooked and underserved, thereby promoting equity while simultaneously enhancing impact. Additionally, the worksheets encourage reflection and self-assessment by suggesting ways that your team can test and document the effectiveness of messages and dissemination plans. They encourage these measures both during and after risk communication efforts to enable both course correction and continuous learning.

For additional resources including best practices and academic research, see [*Risk Communication Involving Vulnerable Populations: An Annotated Bibliography*](#), a resource that is intended to serve as a companion to this booklet.



Pre-Planning Worksheet

Exercises to Understand the Community

Project Title: _____

Project Lead: _____

Project Timeline: _____

Purpose of This Worksheet: This mini-worksheet presents a set of questions that are intended to guide you in thinking through the objectives of your team’s risk communications and planning outreach to target audiences. Listed below are exercises that will help you and your team characterize the community in which you are operating and identify discrete target audiences. The Quick Tips following the exercises highlight important issues associated with social vulnerability and the kinds of factors that should be considered as you examine the demographic details of your target audiences. The Featured Resources at the end of this worksheet link to an online tool for assessing social vulnerability and to a report focused on identifying and engaging socially vulnerable groups.

Exercises to Understand the Community

Specify your team's risk communication objectives, define which specific stakeholder audience(s) you are trying to reach with your messaging, and identify what you know about them and the community more broadly. Consider:



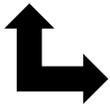
What is the objective of your team's outreach or engagement?



Which geographic areas are likely to be directly affected by the risks you are seeking to address, and how do people interact with these environments (e.g., are there residences, recreation areas, industrial facilities, schools, or other interests located there)?



What are the population characteristics in the affected area (e.g., unemployment rate, primary languages other than English, percentage of young adults)?



If you do not know how to identify the population characteristics, consider consulting with external partners (see Principle I Worksheet) who have knowledge of and relationships with the community, or with others within your organization who have expertise in the social sciences or related disciplines.



What factors contribute to disaster vulnerability among your target audiences (e.g., modest incomes make flood insurance unaffordable; low rates of home ownership limit tenants' ability to modify structures)?



See the Quick Tips and Featured Resource boxes below for more information about understanding and assessing social vulnerability. To obtain further information about community context, speak with local officials and other partners about which areas are likely to be underserved.



What is the community's/group's level of experience with the hazards that you and your team are seeking to address?

Quick Tips

- Communities and groups become socially vulnerable—experiencing increased susceptibility to the impacts of hazards—through a range of processes that contribute to social inequality. These conditions may emerge suddenly (e.g., during economic downturns) or as a result of decades, or even centuries, of dynamics that can have lingering impacts on people's lives. As an example, practices such as redlining—a policy that denied funding for investments in communities of color—are directly related to a range of harmful conditions such as degraded infrastructure, the siting of polluting industrial facilities, extreme heat, a lack of green space, economic decline, and other factors that create disproportionate hazard exposure and vulnerability among the people who live in these areas. Social vulnerability is not an inherent characteristic of any particular person or group; rather, it is a fluid condition that can change over time as people move in or out of vulnerable categories. For instance, children are generally considered vulnerable due to their heightened susceptibility to physical harm, dependency on caregivers, and greater likelihood of being overlooked by service providers relative to adults, among other factors; however, this vulnerability declines as they age. Social vulnerability can also be reduced through measures such as inclusion in decision-making, access to resources, and other kinds of social protections. Risk communicators must have a basic understanding of how social vulnerability influences people's lives to communicate effectively and facilitate the desired outcomes.
- Historical practices and collective experiences can affect the relationships residents have with the broader community and external parties. The level of trust in institutions or attitudes toward different kinds of projects may be rooted in longstanding issues and concerns. Additionally, community conditions (e.g., poverty, home ownership rates, representation in decision-making) can influence the feasibility of different courses of action that may be suggested by risk communicators. It is important that those working to reduce flood and other natural hazard risks seek to understand the social and economic conditions in the communities they serve and to be as responsive as possible to residents' everyday realities.

Featured Resources: Identifying Socially Vulnerable Populations

- The [CDC Social Vulnerability Index \(SVI\)](#) provides data and mapping resources to help identify groups that may experience disproportionate negative impacts from hazardous events. The index uses 15 indicators to capture social vulnerability and synthesizes them into four composite scores that encompass factors known to affect a community's suffering and financial loss in a disaster, including: *Socioeconomic Status, Household Composition, Race/Ethnicity/Language, and Housing/Transportation*. The SVI is valuable because it highlights situational characteristics that hinder people's capacity to take protective measures in response to a hazard threat. Accounting for these characteristics when designing risk messages makes the messages more effective by ensuring they address recipients' needs and capacities using actionable recommendations.

The screenshot shows the CDC Social Vulnerability Index (SVI) website. On the left is a navigation menu with categories like 'Place and Health', 'About GRASP', 'What's New', 'Explore Our Work', 'Feature Stories', 'CDC Social Vulnerability Index (SVI)', 'Fact Sheet', 'SVI At A Glance', 'Data & Documentation Download', 'Interactive Map', and 'Publications & Materials'. The main content area is titled 'CDC Social Vulnerability Index' and includes a definition of social vulnerability, a description of the CDC SVI, and buttons for 'Fact Sheet' and 'Publications & Materials'. On the right, there is an interactive map of the United States with a button to 'Explore the CDC SVI Interactive Map' and a link to 'previous interactive CDC SVI Maps'. Below the map is a 'Featured Content' section with text about the 2018 update and the 2020 publication.

- USACE's Institute for Water Resources produced a document entitled [Identifying and Engaging Socially Vulnerable Populations](#) as a primer to assist with building greater awareness about these groups. This resource provides a more detailed primer on the basics of how to identify and engage socially vulnerable populations.

4 Implications of Social Vulnerability in the Dam and Levee Safety Programs

"Successful risk communications leads to a common recognition and understanding of the hazards, risk management options, and a shared acceptance of the risk management decisions."

ER 1110-2-1156 Safety of Dams – Policy and Procedures

Figure 1: Identifying Socially Vulnerable Populations



Principle I Worksheet: Communicate Through Familiar and Trusted Messengers

Project Title: _____

Project Lead: _____

Project Timeline: _____

Purpose of This Worksheet: Trust, credibility, and relationships are key elements of effective risk communication. Building partnerships with trusted entities can strengthen communication efforts by delivering or vouching for messages with your target audiences. However, forging partnerships can require time and sustained effort, particularly in environments where your agency lacks credibility or where target populations are difficult to reach. This worksheet is designed to help you identify key information and activities necessary to build strong relationships with prominent individuals who are familiar with and trusted by your target audience. It breaks down the process of communicating through familiar and trusted messengers into three steps, including:

1. Identify the organizations and gatekeepers¹ that are largely trusted by your target audiences
2. Develop a plan to reach out and build relationships with potential risk communication partners that are trusted by your target audiences
3. Reach out to potential risk communication partners, discuss your risk communication priorities, and collaborate where appropriate

¹ Gatekeepers are people who formally or informally control access to a group or category of people. Gatekeepers serve as key points of connection to the groups they lead or within which they are prominent. For example, a school principal acts as a gatekeeper due to their authority over students and teachers, whereas an imam may act as a gatekeeper for a mosque by serving as the respected leader of a religious community.

Step 1

Identify the organizations and gatekeepers that are largely trusted by your target audiences.

Consider:



What trusted individuals, institutions, or outlets do members of your target population turn to for information and assistance during times of crisis (see guidance from the Pre-Planning Worksheet for tips on identifying your target population)?



If you do not know, consider how you might find these trusted sources. Who can you speak to or where can you look to identify appropriate points of contact (see the Quick Tips and Featured Resource boxes below for additional suggestions)?

Examples:

- ***Government agencies²***
- ***Project sponsors***
- ***Newsletters***
- ***Community events***

² Local government representatives (e.g., floodplain managers, zoning officials) are likely to have the strongest familiarity with and connections to your team's target populations and their trusted leaders, followed by state (e.g., state hazard mitigation officers, university extension offices), regional (e.g., Council of Government Resource Conservation District personnel) and federal (e.g., FEMA personnel, Tribal Historic Preservation Officers) agency representatives.



Does your team already have relationships with key individuals, venues, gatekeepers, or other organizations who have relationships with your target audiences?

Yes

No



If no, see Step 2.



What functions do the trusted entities serve within the target communities (e.g., social services, political representation, education)?

Quick Tips: Identifying Familiar and Trusted Messengers

- Observation is key! Visit the areas in which your target audiences are located. Read local print media; follow local television and radio stations.
- Identify local organizations and institutions that provide services to the target audience, and cast a wide net. These could include a wide range of entities, including places of worship, businesses, nonprofit service providers, social services, advocacy organizations, mutual aid groups, or elected officials.
- Populations that occupy temporary residences may have different communications needs than permanent residents. Renters, agricultural workers, college students, and people staying in hotels, transitional housing, camp sites, and other short-term residential facilities may require different kinds of risk information than those who are familiar with their surroundings. For example, tourists may be unacquainted with local hazards, but may be likely to spend time in hazard-prone areas (e.g., beaches). Consider partnering with housing providers to develop and disseminate products to these audiences, such as through hand-outs distributed at check-in or as part of the reservation process.
- Partnerships can unlock knowledge and expertise in addition to helping your team access trusted messengers. When weighing what kinds of partners might be most helpful, consider including those that represent and can contribute diverse perspectives. This can involve reaching out to other groups within your agency or outside agencies, and may include social scientists, technical experts, or a range of other disciplinary backgrounds.
- When engaging with potential partners, observe or inquire about the nature of their relationships with target audiences. Consider whether there are unequal power dynamics, mistrust, historical injustices or other issues of concern that could undermine your messaging efforts.

Featured Resource: Finding Institutions and Gatekeepers

- Finding the right partners with characteristics that can help achieve your risk communication goals is key. The [Community Capacity Inventory](#) maintained by the University of Kansas Center for Community Health and Development provides a list of potential community assets that can be used to brainstorm about potential organizational types and sectors that may be able to provide the kinds of local knowledge your team needs.

TOOL 1: COMMUNITY CAPACITY INVENTORY

Here's a preliminary inventory of community capacities as described by local yellow pages, city/county planning departments, the chamber of commerce, and volunteer placement agencies. In this example, assets are organized by sector. List the name, address, and phone number of a contact person who can give you more information on who and what you find.

GRASSROOTS OR CITIZENS' ASSOCIATIONS

- All local neighborhood organizations
- Community centers
- Seniors' groups
- Local officials, politicians, and leaders

INSTITUTIONS

- Local public schools, universities, and community colleges
- Public hospitals or clinics
- Any publicly funded or private educational institution
- State or federal agencies
- Municipal libraries
- Police officers and other emergency personnel
- Parks and municipal pools or golf courses

COMMUNITY-BASED ORGANIZATIONS

- Housing organizations
- Food kitchens and emergency housing shelters
- Halfway houses, substance abuse homes, domestic violence shelters
- Churches
- Clinics and counseling centers
- Advocacy groups for environment, safety, drug abuse reduction, et cetera

PRIVATE SECTOR

- Banks
- Chamber of commerce
- Businessmen's/businesswomen's associations
- Local businesses

Figure 2: Community Capacity Inventory

Step 2

Develop a plan to connect and build genuine relationships with potential risk communication partners that are trusted by your target audiences. For each entity, consider:



What is your “ask” (e.g., what role would you like this partner to play in your overall risk communication strategy, and what specific actions would you like them to take)?



What are your specific goals and key messages for this relationship (e.g., what does success look like)?



What are this potential partner’s values and priorities?



How might your request fit within *their* routine activities and help the potential partner with *their* goals? What resources or other benefits does your team bring to this partnership?



What strengths does this potential partner have that you would like to learn from or leverage?

Quick Tips: Planning Outreach to Potential Communication Partners

- Many agencies that are responsible for risk communication struggle with modest budgets and limited resources. Local partners can help reduce this burden by drawing upon a deep familiarity with the populations they serve and using their own record of trust to vouch for your team's credibility.
- Genuine partnerships are founded on respect, honest communication, and some form of mutual benefit. While it may not be possible to compensate partners or to otherwise provide them with tangible resources, your team can express deep gratitude and publicly acknowledge the value of their contributions, share its own knowledge and skills as requested, connect them with others who can assist with their priorities, meaningfully involve them in your team's project activities, or find other ways to uplift their work in the community. When reaching out to potential partners, it is vital to consider in advance how your team can reasonably support them in addition to seeking their support.
- Different organizations and individuals may be trusted by different segments of a community. Leveraging multiple partnerships as needed to connect with various target audiences can generate the support needed to develop meaningful and appropriate risk messages and communication strategies to reach the whole community.
- Consider using a variety of formats to make it easy for partners to participate. For example, meetings that offer phone and computer access options can enable people in remote areas to participate without having to travel long distances to be there in person. See the Principle II Worksheet for additional tips on how to reach populations that are not technologically connected.

Featured Resource: Planning Outreach Activities

- The Environmental Protection Agency's [*Public Outreach for Integrated Wastewater and Stormwater Planning*](#) guidebook includes a set of useful tips and considerations to help guide your team's planning for outreach to various stakeholder groups.

3 APPROACHES FOR CONDUCTING OUTREACH ACTIVITIES

Outreach approaches should take into account the characteristics of the stakeholder audiences, priorities and messages to be communicated, and appropriate dissemination mechanisms. Understanding stakeholder needs might require some research (e.g., focus groups, surveys) on stakeholders' perceptions of current agency efforts, their values regarding potential future actions, and how they view costs versus benefits when it comes to water resources management.

3.1 Exploring the Characteristics of Stakeholder Audiences

Communication needs are community-specific and depend on the following considerations:

Who are the relevant community stakeholders?

In general, stakeholders can include other government agencies in the community (e.g., planning, public works), representatives from the business community, environmental and conservation groups, neighborhood associations, disadvantaged or low-income communities, and local educational institutions.

groups. Communication channels are highly varied, and can include meetings, news media articles, websites, social networking, newsletters and other venues.

How can the views of others be considered in the planning process and during implementation of the plan?

Planners have a variety of tools for gathering and considering stakeholder views, such as focus groups, online polls or surveys, feedback from stakeholders at community meetings, and input from specially convened multi-stakeholder meetings.

3.2 Communicating with Stakeholders on Integrated Planning Topics

Communicating with stakeholders and soliciting their input about water quality issues can be a complex task. Planning that considers stakeholder input is very much a two-way interaction, not a one-way dispensing of information. The knowledge, perceptions and values of stakeholders play a large role in how they will view planning

Figure 3: Planning Outreach Activities

Step 3

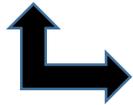
Reach out to potential risk communication partners. Discuss your risk communication priorities as well as how you can support their goals or priorities, and collaborate where appropriate. For each entity, consider:



Have other projects or partnerships been implemented previously by other groups that are similar to what you are trying to accomplish?

Yes

No



If yes, what have been the outcomes of these efforts, and what lessons can be learned? Is there a chance that potential partners were overburdened or otherwise had negative experiences?



What concerns, if any, exist regarding your team's level of trust or credibility in the eyes of the potential partner and/or the populations they serve, and why?



<p><i>How might your team productively acknowledge these concerns and demonstrate its trustworthiness or credibility?</i></p>	
<p><i>Are there specific safety issues (e.g., human health, life safety) that are particularly concerning for potential partners or their constituencies that your team could address?</i></p>	
<p><i>How would the potential partner like for your team to follow up or otherwise continue working through any lingering concerns with them?</i></p>	



What is the resource burden that your request would require of this potential partner (e.g., personnel, monetary, political capital)?



What opportunities are there for your team to support other existing efforts where issues of concern overlap with your risk communication priorities?

Quick Tips: Forming and Maintaining Partnerships with Trusted Messengers

- Organizations that hold trust and credibility with the communities they serve may be reluctant to develop partnerships with unfamiliar entities or those that have a poor track record with their constituencies. Mutually respectful relationships require two-way communication. Your team must therefore be responsive to potential partners' inquiries, considerate of their time, and sensitive to their concerns. Different kinds of partnerships may take more or less time to develop and may thus be more or less feasible, depending on the project's scale and timeline.
- One of the most important steps your team can take during discussions with potential partners is to actively listen and communicate honestly about their concerns. Remember to be respectful and avoid being defensive if stakeholders are skeptical or raise challenges. Building trusting relationships may require patience and sustained effort throughout a longer-term process. Acceptance by potential partners is not guaranteed, but can deliver significant benefits when successful.
- When missions align, it is helpful to support partners' activities and initiatives to reduce duplication of effort and derive mutual benefit. Focusing on shared goals and mutually desired outcomes will assist both your team and its potential partners in assessing the value of the relationship you are trying to build.

Featured Resource: Building Trusting Partnerships

- A report published by the National Policy Consensus Center entitled [*Building Trust: When Knowledge from “Here” Meets Knowledge from “Away”*](#) breaks down processes of consensus-building and dialogue with external stakeholders to provide guidance on deciding which groups to reach out to, what information to share with them, and how to structure conversations productively. These actions can lay the foundation for building trust and developing effective partnerships.

Typical collaborative processes involve a variety of functions and activities organized into three broad phases:

START-UP	INFORMATION EXCHANGE	PROBLEM SOLVING AND CONSENSUS BUILDING
Appraising the situation for possibilities.	Organizing productive and respectful exchanges of different viewpoints.	Making informed choices.
Organizing leadership, sponsorship, and the capacity to convene.	Bringing the best technical, cultural, legal, and economic information to the table.	Working with parties not at the table to ensure acceptability of proposed project or solutions.

Figure 4: Building Trusting Partnerships



Principle II Worksheet: Provide Clear, Actionable Information

Project Title: _____

Project Lead: _____

Project Timeline: _____

Purpose of This Worksheet: Message recipients cannot act on information if they cannot access it, do not understand it, or lack the resources necessary to respond to it. This worksheet is designed to help you construct messages that are clear, consistent, and easily understood. The steps detailed below can empower you to communicate in a way that meets people where they are by aligning your messages with their resources and capacities. It breaks down the process of providing clear, actionable information into three steps, including:

1. Assess how members of your target audiences might access and interpret the information you provide
2. Develop detailed guidance about how message recipients should respond to the risk
3. Pre-test risk communication strategies, plans, and messages, and document findings to maximize their effectiveness

Step 1

Assess how members of your target audiences might access and interpret the information you provide. Consider:



What are the core messages you are trying to relay to the target audiences, and why? What do you hope they will do with this information (see Pre-Planning Worksheet guidance on defining your objectives)?



How can each concept be described in a single sentence using plain language and/or in a simple graphic?



What common access barriers within the target population may affect how people receive and understand messages (e.g., limited English language proficiency; inability to hear warning sirens; limited access to or proficiency in mobile, internet, or other technologies that disseminate risk information)?



What measures are needed to disseminate, frame, or format messages so that audiences can access and understand them?



<i>Would translation into multiple languages, comparison to past disaster events, or utilization of images help different groups better understand your messages?</i>	
<i>Does your organization have relationships with local partners who could assist or help identify such measures (See Principle I Worksheet)? If so, list them. If not, consider outreach to potential partners.</i>	
<i>Does your team understand how to address complex issues within the local context? If yes, how will they do so? If not, consider outreach to local and agency partners to find strong communicators.</i>	
<i>Does your team understand how to address areas of uncertainty? If yes, how will they do so? If not, consider outreach to project collaborators and partners to determine how to best discuss uncertainty.</i>	



How will your team incorporate the target audience's access barriers and functional needs into the design of your risk communication plan?



Thinking ahead, how will your team use this knowledge to select communication outlets and tactics (See Principle III Worksheet)?

Quick Tips:

Ensuring that Information Can Be Readily Accessed and Understood

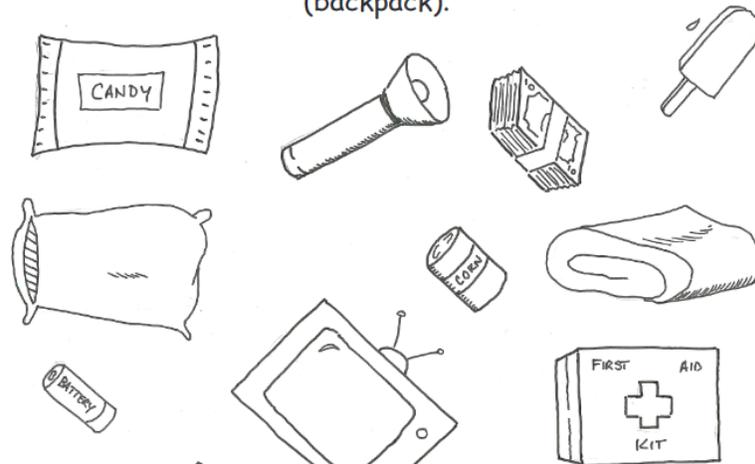
- Strive for simplicity and clarity in all presentations.
- Risk-related information should be easily understood by intended audiences in all formats that are presented. Find ways to incorporate non-verbal elements whenever possible. Use simple visualizations such as pictures and illustrations to effectively relay information without complex words or sentences. Ensure that all content in your materials has a direct purpose and need to be included.
- Remember that not all audiences access or regularly consume information in the same ways. Pictures are not helpful to vision-impaired people, while messages relayed only in English are not accessible to those who only speak other languages. Sometimes, the meanings of words and concepts may differ across cultural groups, and this can make communicating technical information particularly challenging. When possible, use translators or cultural brokers to facilitate conversations and answer questions in real time to avoid frustration and confusion.
- Cultural differences are not the only reasons why concepts may be misunderstood. Technical information can be confusing to unacquainted audiences, even when it is provided in their dominant language. Consider how your team will relay technical details using common speech and incorporate time to answer questions.
- When posting information in public spaces, consider using locations where members of target audiences are most likely to congregate or seek information. Flyers, brochures, and other information products are only as accessible as the spaces in which they are located. For example, community centers, laundromats, and corner stores typically receive more foot traffic than government buildings. Likewise, information posted solely online is unlikely to reach people who do not know where to look, as well as those who have poor internet connectivity or limited access to technology.

Featured Resources:

Utilizing Alternative Communication Formats—Creative Products

- The [I Am Ready Flood Preparedness Activity Book](#) exemplifies the creative use of alternative communication formats. Developed to educate and engage children about preparing for and responding to flood hazards, the book combines information with activities that are fun for children, such as drawing, coloring, and word searches, to keep them engaged while informing them about what to do.

Circle the items that should go in your flood emergency kit (backpack).



- The [Flood Resilience Challenge](#) is a serious game designed by an interdisciplinary team to help community stakeholders (including government representatives, scientists, insurers, private businesses, and the media) increase community resilience to flooding by building capacity for flood risk governance through informed collective decision-making. The game is designed to increase flood literacy, foster social learning, and serve as a medium for exploring risk management and communication strategies.

PURPOSE & GOALS OF FRC GAME



Purpose: To build the capacity of stakeholders to improve flood resilience and enhance flood risk governance, including (collective) decision-making.



The Flood Resilience game achieves this purpose, as an educational and engagement tool, by:

increasing flood literacy, fostering social learning, and creating a safe space for exploring both risk management and communication strategies.



Consider trade offs and the lens of efficiency, legitimacy, and resilience in decision making

POWERED BY weebly

Figure 5: Utilizing Alternative Communication Formats

Step 2

Develop a risk communication plan that addresses the barriers to action at the local level and describes how message recipients should respond to the risk. Consider:



What specific and meaningful actions should message recipients take to prepare for, protect against, respond to, or recover from the risk you've identified? How clearly can your team explain how these actions address the risk?



What challenges, competing concerns, or constraints may hinder audience members' ability to follow the recommended actions (see Quick Tips box below)?



<p><i>Have any known barriers to information access, protective action, or assistance emerged in relation to past disaster events?</i></p>	
<p><i>Are there ways in which the recommended actions might be harmful or objectionable to some message recipients (e.g., due to mistrust, historical injustices, conflicts with personal safety considerations, religious beliefs)?</i></p>	



What resources or alternative approaches are available that could help make the recommended action accessible to all audiences?



For people who cannot take the recommended measures that would most effectively address the risk, are there other actions that could help to reduce it?



What role, if any, might timing (e.g., time of message delivery, time needed to act, immediacy of competing concerns, etc.) play in determining the feasibility of recommended actions for different audiences?



<p><i>Do some groups need more time than others to react or respond to the information you provide? If so, how will your team follow up, address lingering concerns, connect them with resources, or otherwise sustain its engagement?</i></p>	
<p><i>Are the proposed strategies appropriate for the time horizons of the threats your team is seeking to address (e.g., mitigation strategies tailored for short- versus long-term threats)? If not, how can your team bring them into closer alignment?</i></p>	

Quick Tips:

Understanding Motivations and Barriers to Action

- People do not always fail to act because they are unaware of risks or potential protective actions. In many cases, message recipients may be incapable of following the instructions provided. By seeking to understand their motivations, constraints, and other potential reasons for their actions or decisions, risk communicators can find ways to address the gap between knowledge and action.
- Try to understand significant local issues beyond the risk message your team is trying to deliver. People may not be concerned about the particular risk of interest to your team if they have more immediate concerns. For example, messages about flood mitigation may not immediately resonate with communities that are struggling with violence, poverty, disaster recovery, or infrastructure crises. Both day-to-day and systemic issues may consume much of local governments' time and residents' attention. Failing to acknowledge these challenges risks appearing callous and indifferent to the community's needs in addition to hindering your team's ability to develop actionable guidance.

Featured Resource:

Assessing Needs for Socially Vulnerable Audiences

- The [CDC Crisis & Emergency Risk Communication Program](#) offers an [assessment tool](#) to help risk communicators identify the specific barriers faced by socially vulnerable groups and integrate this knowledge into actionable messages.



6. Describe the communication alternatives for populations that will not receive or take the action recommended and communicated to the general population

Can you, with available resources: change the message, change the population characteristic, or change the delivery system to reach the population described above?

- Message
 - Translate into understood language
 - Translate into pictographs
 - Change message to respect cultural taboos

Figure 6: Assessing Needs for Socially Vulnerable Audiences

Step 3

Pre-test risk communication strategies, plans, and messages and document findings to maximize their effectiveness. Consider:



What scale of pre-testing³ is appropriate or necessary for your project? Does the project engage target audiences with which your team is unfamiliar? Does the project cover topics or techniques that are new to your target audiences? What resources (e.g., personnel, partnerships, interdisciplinary support) does your team have at its disposal to assist with pre-testing?



<i>If pre-testing is not necessary, why is this the case (e.g., audiences are already highly aware, and communication is intended as a reminder)?</i>	
<i>How will you evaluate your success and opportunities for improvement?</i>	
<i>If only minimal pre-testing (e.g., informal review as opposed to systematic data collection with unaffiliated test subjects) is possible or necessary, does your team have external partners or collaborators who can provide feedback?</i>	

³ Pre-testing involves seeking feedback or data on risk messages, outreach strategies, and/or entire communication plans to determine whether they will be accessible to, understood by, and effective with target audiences. It can be as simple as asking partners for input or as complex as a multifaceted strategy involving focus groups, surveys, and knowledge tests.



What aspects of the communication plan will your team pre-test?



What methods (e.g., focus groups) or tools (e.g., questionnaires, scenarios) will you use to pre-test the various communication plan elements?



How will your team engage members of target audiences, particularly at-risk populations, in pre-testing and providing feedback?



Is it possible that this engagement risks overburdening test participants (e.g., through collaboration with partners and gatekeepers)? If so, how might this burden be reduced?



Has your team invited the partners you hope will assist with dissemination strategies and activities (e.g., gatekeepers and other stakeholders, see Principle I Worksheet) to participate in the assessment process?



If not, how else will your team incorporate their input into dissemination plans? How will your team follow up with them after dissemination to assess its effectiveness?



Does your team have enough reviewer support and engagement to assess all essential elements of the overarching communication plan? If not, how will your team seek informal feedback about or otherwise monitor the performance of elements that cannot be reviewed?



How will your team document what was learned, incorporate findings into updated communication designs or plans, and share findings with partners and/or other collaborators?



What are the criteria for success?



If your team worked with partners to refine your risk communication plans and messages, what is the plan to follow up with them?

**Quick Tips:
Message Testing and Evaluation**

- Testing risk messages and strategies enables communicators to learn from past mistakes, better connect with target audiences and communication partners, and continuously improve the effectiveness of messages and communication plans. Evaluations can be as simple as having key representatives review message templates or as complex as conducting systematic research with representative samples. The questions employed to evaluate messages can be similarly varied, ranging from a simple request for external partners to review materials alongside some guiding questions, or a detailed focus group following pre-and post-test surveys. There is vast range of tools and resources on message pre-testing. The SWOT (Strength, Weakness, Opportunity, Threat) and stakeholder engagement resources discussed in the Post-Communication Worksheet may also be used for evaluation purposes if time and resources are limited. Find the approach that best matches your team’s capacity.
- Community partners can contribute critical feedback on message content, framing, and dissemination strategies from the perspective of your target audiences. While your team may not always be able to address all of the partners’ recommendations, they should acknowledge with gratitude the time, expertise, and thought they provide in making them. When partners’ feedback is rejected, your team should be able to describe a clear rationale for doing so and explain why the alternative approach will be more effective.
- It is important to follow up with partners who have provided input on your communication plan after it has been finalized to demonstrate that your team values their contributions. This check-in may signal the conclusion of your partnership or serve as a springboard for ongoing interactions that sustain your collaboration into the future.

**Featured Resource:
Pre-Testing Risk Messages**

The USAID-funded [Compass](#) initiative developed [a tool for pre-testing risk communications messages and materials](#). Although the tool was developed with response to major disease outbreaks in mind, it utilizes criteria that apply to communications involving a broad range of risks. The sample questions provided can be used to guide focus groups or can be converted into survey items completed by test message recipients.

Aspect to Be Pretested	Description	Sample Questions
Attractiveness	Whether the message/material commands attention	<ul style="list-style-type: none"> - What do you like about this message/material? - What do you not like about this message/material? - What was the first thing that caught your eye?
Comprehension	Whether the information is understood as intended	<ul style="list-style-type: none"> - What does the message/material say? - Who do you think the message/material is speaking to? - What words/sentences/images are difficult to understand?
Acceptance	Whether the material is culturally and socially acceptable	<ul style="list-style-type: none"> - Is there anything about this message/material that you find offensive or inappropriate? - Is there anything about this message/material that someone in your community may find offensive or inappropriate?

Figure 7: Pre-Testing Risk Messages



Principle III Worksheet: Tailor Messages and Information Pathways for Target Audiences

Project Title: _____

Project Lead: _____

Project Timeline: _____

Purpose of This Worksheet: As all communities are diverse in different ways, a one-size-fits-all approach is ineffective in communicating about risks. Different audiences have different needs, priorities, capacities, and habits. This worksheet is designed to help improve your team’s ability to reach target audiences by tailoring your outreach strategies and activities. This requires that your team reflect on any knowledge it has gained or data it has collected about target audiences—topics covered in the Principles I and II worksheets—and then use that information to design messages and outreach strategies that are responsive to audiences’ needs. You may wish to review the other worksheets in this booklet to determine the extent to which the activities they recommend should be completed in advance of or simultaneously with those discussed below. This worksheet explains how to tailor both messages and information pathways for target audiences in three steps, including:

1. Reflect on the identities, concerns, and priorities specific to your target audiences and how those characteristics can inform the framing of your messages
2. Tailor risk messages to address or account for the target audiences’ identities, concerns, and priorities
3. Utilize trusted dissemination outlets and strategies to communicate with your target audiences

Step 1

Reflect on the identities, concerns, and priorities specific to your target audiences and how those characteristics can inform the framing of your messages. Consider:



What has your team learned about the target audiences?



Consider geographical distribution, length of residence, seasonality (e.g., among agricultural workers, in college towns), languages spoken, economic conditions, lifestyles, collective experiences (including past experiences with hazards and disasters), worldviews, and cultural characteristics.



Does your team have relationships with the target audiences? If not, how will your team develop these connections (see Principle I Worksheet)?

Quick Tips: Understanding the Needs of Your Target Audiences

- The experiences of communities that suffer disproportionately from disasters often go unrecognized and undocumented by outside organizations. It is important to avoid making assumptions about a particular group's needs and capacities by verifying information.
- Your team may need to do direct outreach to better understand the needs and concerns of certain populations. Focus groups, outreach to trusted representatives, review of lessons learned through documented resources or past experiences, and direct observation are all techniques that can help shed light on these issues for more informed decision-making. As part of your outreach, ask whether there are sensitive or divisive local issues that your team must handle delicately.
- In some instances, your team may need to consider whether there are better times to engage the target audience (e.g., the start of hurricane season, in the key moments following a related crisis) to time messages for release when audiences are most receptive.

Featured Resource: Building Cultural Competence

- Cultural competence involves adopting attitudes, behaviors, and policies to enable systems, agencies, and the professionals that run them to operate more effectively in multi-cultural environments. Building cultural competence can help your risk communication team better understand and respond to the cultural characteristics of your target audience. This will improve your team's ability to meet the needs of the communities it serves.
- The Federal Emergency Management Agency (FEMA) offers resources to assist disaster practitioners with understanding the importance of culture and developing cultural competence. For more information, see:
 - [Building Cultures of Preparedness: Report for the Emergency Management Higher Education Community](#)
 - Course IS-505: [Religious and Cultural Literacy and Competency in Disaster](#)

The screenshot shows the FEMA Emergency Management Institute website. At the top, there is a dark blue header with the FEMA logo and the text "Emergency Management Institute". Below the header is a search bar with the placeholder text "Enter Keyword(s) or Course Code" and a "Search IS" button. The main content area features a large image of a building and the course title "IS-505: Religious and Cultural Literacy and Competency in Disaster". To the left of the course title is a navigation menu with links: "IS Home", "IS Course List", "Register for a FEMA SID", "Critical Infrastructure Security and Resilience", and "Curriculum". To the right of the course title is a "Course Date" section showing "3/4/2016" and a "Course Overview" section with text: "Religious and cultural communities are key partners in building a culture of preparedness. Faith-based and community organizations also offer a wide variety of human and material resources that can prove invaluable during and after an incident. Collaborating with these vital community members will allow emergency managers to access a multitude of local resources and ensure members of the whole community can contribute to disaster resilience efforts." Below the course title is a "TAKE THIS COURSE" section with a link "Interactive Web Based Course" and a "TAKE FINAL EXAM" section with text: "There is currently an issue with verifying FEMA Student Identification (SID) Numbers, as a result Independent Study (IS) course exams are not available".

Figure 8: Building Cultural Competence

Step 2

Tailor risk messages to address or account for the target audiences' identities, concerns, and priorities. Consider:



What has your team learned through observation, data analysis, and/or outreach to members or representatives of target audiences about how to communicate with them most effectively (see Principle I and II worksheets)? How can your team use this information to frame messages so that they address the needs and concerns of your target audiences?



<i>What do message recipients care about most that could be affected by the risks your team seeks to address?</i>	
<i>If applicable, what feedback did you receive from pre-testing your risk communication tools and strategy (see Principle II Worksheet)?</i>	
<i>What ways of communicating are preferred by message recipients?</i>	



Are there competing issues that may siphon attention away from the intended audiences (e.g., misinformation, distrust of the government, perceived downsides of following your team’s guidance)?



If so, how will your team frame messages in ways that address both hazard-related and non-hazard-related concerns?



How might your team incorporate local experiences and stories into messages to make them more compelling for target audiences (e.g., featuring a neighbor who took action to reduce their risk and wants to share their story with others)?

Quick Tips: Framing Risk Messages

- Risk information resonates better when recipients can “see” themselves in the message. Find ways to connect with your target audiences on a personal level by drawing on familiar experiences that relate to their own lives and priorities.
- There are many reasons why people do not respond to risk warnings or prepare for disasters. It is important to understand what factors message recipients are weighing and what constraints they experience that make some protective actions more or less feasible or costly.

Featured Resource: CDC Zika Communication Toolkits

Long respected for its comprehensive risk communication practices, the Centers for Disease Control and Prevention has developed several [toolkits to help communicators reach different audiences](#) with messages about the risks associated with the Zika virus. While some toolkits feature basic information, others target different audiences with messages that speak to the specific concerns of that group, exemplifying the various ways communications can be tailored to the concerns of different audiences.



Figure 9: CDC Zika Communication Toolkits

Step 3

Utilize trusted dissemination outlets and strategies to communicate with target audiences.



Are the communication outlets and technologies that you plan to use accessible and consistent with target audience needs and preferences (see Quick Tips box below)?

--



Has your team made formal arrangements to involve trusted messengers and media partners in information dissemination (see Principle I Worksheet)?

Yes

No



<i>If no, how will you ensure that collaborators will be available to assist when needed?</i>	
<i>If yes, have dissemination partners been involved in discussions about appropriate delivery methods (see Principle I and II worksheets)?</i>	
<i>Are dissemination partners given credit in collaborative activities (e.g., through branding, logos, or speaking time)?</i>	



How will your team encourage engagement (as opposed to one-way communication) with target audiences?

--

<p><i>Has your team allotted sufficient time for the audience to digest and reflect on the message?</i></p>	
<p><i>Does your risk communication plan identify multiple pathways for message recipients to reach appropriate points of contact?</i></p>	

Quick Tips: Partnering for Message Dissemination

- Whenever possible, it is best to use multiple communication channels and sources to reach target audiences, as this helps to maximize opportunities for exposure to the message as well as emphasize its importance through repetition. However, some outlets are more appropriate than others for a given audience. Potential channels include, but are not limited to, mailings, public meetings or workshops, videos, social media posts, podcasts, serious games, radio, exhibits at community events, and art installations.
- It is vital to involve communication partners in developing dissemination strategies to ensure that all parties can effectively implement risk communication best practices.
- Enabling two-way communication involves more than simply sharing contact information, and may differ according to the communication format, from providing detailed responses to individual questions to sharing information and collaboratively discussing options. Providing opportunities for participation by people with different ways of communicating (e.g., by building breaks for one-on-one discussion into meeting agendas to engage people who are less comfortable speaking in large groups) can make risk communicators more accessible to a wider variety of message recipients.



Post-Communication Worksheet: Exercises to Reflect on Your Team's Work

Project Title: _____

Project Lead: _____

Project Timeline: _____

Purpose of This Worksheet: This mini-worksheet facilitates continuous learning and improvement by walking through questions designed to help you and your team evaluate your risk communication plans and activities at the completion of the communication process, or once they have been tested in practice. The exercises included below expand upon the assessment efforts recommended in the Principle II Worksheet, which provides guidance on evaluating your team's risk communication plan and identifying necessary modifications before implementation. This worksheet is designed to help your team reflect on what worked well and what aspects of the communication effort needed further modification after implementation.

Exercises to Reflect on Your Team's Work

Document your process and evaluate the effectiveness of your methods. Consider:



What data or feedback have you received throughout the planning and implementation processes regarding the effectiveness of your team's risk communication strategy in meeting the identified objectives (see Principle II Worksheet for tips on evaluating messages and plans)?



What will your team document to update the lessons learned post-implementation?



How will you review and evaluate the effectiveness of your messages and the quality of your team's engagement now that the communication process (or this phase of it) is complete?



<i>What kinds of data have you collected or will you collect?</i>	
<i>What are the criteria for success?</i>	
<i>How will your team incorporate the documented findings from this final assessment into future messaging?</i>	



How will your team follow up with partners to share documentation and findings?



When appropriate, how will your team keep lines of communication with partners open over time?

Quick Tips

- Creating a comprehensive risk communication plan is an excellent first step that enables you to reach your target audiences. However, a plan alone is insufficient for learning and continuing to improve your team’s practices. The Principle II Worksheet provides instructions for how to pre-test messages and evaluate their effectiveness so that they can be refined and improved before being put to use. It is also important to consider gathering feedback in the aftermath of a disaster or at the completion of your team’s risk communication activities. This kind of real-world feedback can provide a helpful point of contrast to pre-test data by identifying what happened in practice and how that compares with your team’s expectations.
- Documenting what has been learned from each round of assessment or feedback will help your team or others interested in learning from its activities to reflect on what worked, what didn’t, and why.
- Consider following up with partners to share lessons learned and to sustain your team’s relationship with them over time.

Featured Resource: Using SWOT Analyses for Assessments

- Reflecting on your team’s risk communication activities can be as simple or as complex a process as warranted by the parameters of your project. There are a variety of tools and techniques available that can support your assessment activities and inform future efforts. Creating a SWOT (Strength, Weakness, Opportunity, Threat) analysis can help your team identify positive outcomes, areas that need improvement, potential pitfalls, and other lessons that can improve your future risk communication efforts. The University of Kansas Center for Community Health and Development offers a [basic SWOT template](#) along with instructions for how to conduct the analysis and a discussion of how to tailor it according to different needs.

[Main Section](#) | [Checklist](#) | [Examples](#) | **Tools** | [PowerPoint](#)

TOOL: PERFORMING A SWOT ANALYSIS

Here are some general questions in each SWOT category to prompt analysis of your organization, community, or effort.

	Positives	Negatives
Internal <ul style="list-style-type: none"> Human resources Physical resources Financial resources Activities and processes Past experiences 	Strengths What are your own advantages, in terms of people, physical resources, finances? What do you do well? What activities or processes have met with success?	Weaknesses What could be improved in your organization in terms of staffing, physical resources, funding? What activities and processes lack effectiveness or are poorly done?
External <ul style="list-style-type: none"> Future trends - in your field or the culture The economy Funding sources (foundations, donors, 	Opportunities What possibilities exist to support or help your effort - in the environment, the people you serve, or the people who conduct your work?	Threats What obstacles do you face that hinder the effort - in the environment, the people you serve, or the people who conduct your work?

- The nature of stakeholder engagement may take on many forms depending on the objectives of your risk communication effort and the parameters of your team’s project. The [International Association for Public Participation](#) offers a [Spectrum of Public Participation](#) that can be used to characterize your team’s approach to public engagement relative to what it sought to achieve.

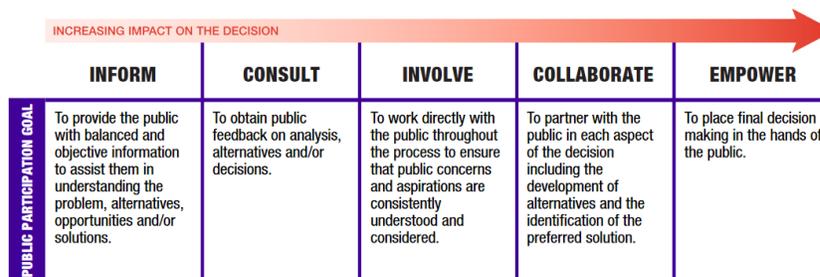


Figure 10: SWOT Analysis Tool and Spectrum of Public Participation