



# Risk Communication Training Slide Deck

A partnership between the National Center for Disaster Preparedness and Twilio

DRAFT - PRELIMINARY VERSION



**Operational Communication  
Strategies for Disaster  
Response and Preparedness  
within Tribal Nations**

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NATIONAL CENTER FOR DISASTER PREPAREDNESS

Developed with support from Twilio, this course is designed for Tribal leaders, emergency managers, planners, and public safety officials involved in disaster preparedness and response.

## Course Agenda and Learning Objectives

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- **Module 1:** Foundations of Disaster Communication Operations in Tribal Nations
- **Module 2:** Supporting Community Dialogue Through Text Communication in All Phases of Emergency Management
- **Module 3:** Coordinating Information Across Tribal Partners and All Government Agencies
- **Module 4:** Sustaining Operational Readiness and Community Engagement

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By the end of this course, you will be able to:

- Describe the role of community-centered communication in supporting disaster preparedness and incident operations within Tribal Nations.
- Develop communication workflows that support information sharing, community input, and trust-building during incidents, in alignment with incident management structures within Tribal Nations during emergencies.

## Framing the Course

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**Old model (One-Way Communication) = Broadcasts**

**New model (Two-Way Communications) = Dialogue and Structured Input**

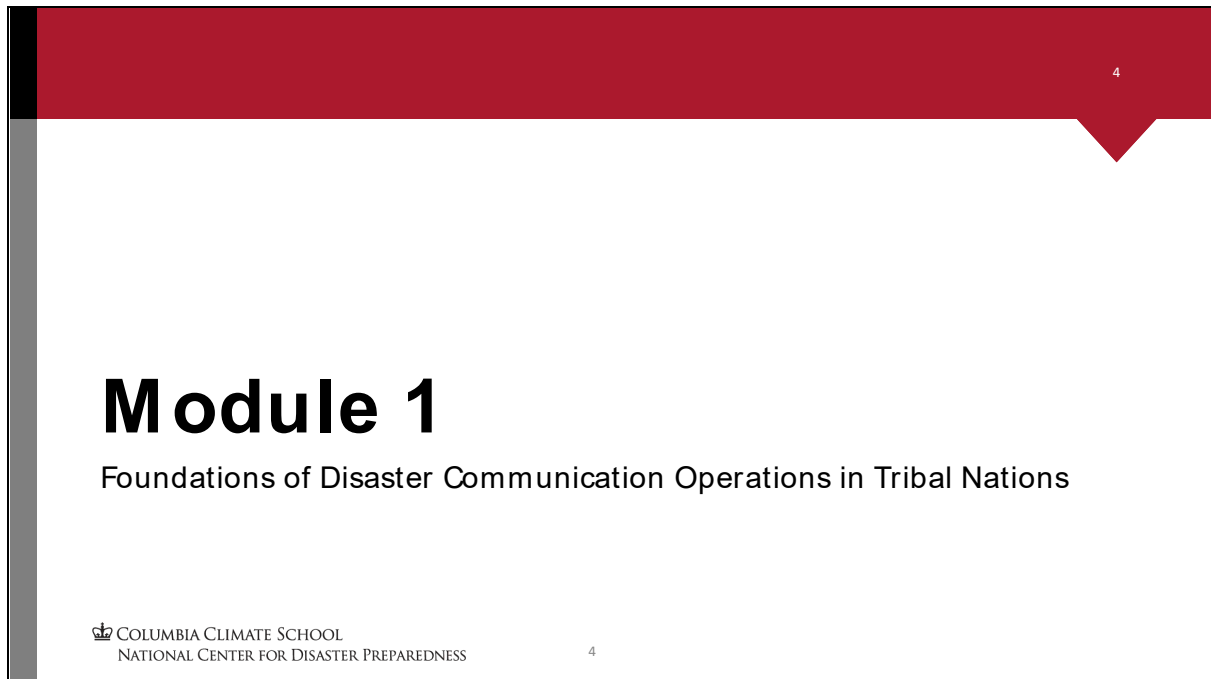
*Example: Wildfire Evacuation in a Tribal Community*

A Tribal emergency management office issues an evacuation notice due to a fast-moving wildfire. The message is shared via radio, a website update, and posted notices at central locations. It instructs residents to evacuate using a designated route and go to a specified shelter.

What don't officials know from this?:


- Who has received the message
- Which households may need assistance (e.g., Elders, those without transportation)
- Whether the evacuation route is actually accessible in all areas

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# Module 1

Foundations of Disaster Communication Operations in Tribal Nations

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This module focuses on how public information is planned, coordinated, and managed within the National Incident Management System (NIMS), with application to Tribal Nations.

## Module 1: Topics and Learning Objectives

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- Public Information in NIMS/ICS
- Communication Systems vs. Public Information
- Information Management for Incident Response
- Roles and Responsibilities
- Incorporating Community Input

By the end of this module, you will be able to:

- Define risk communication in emergency management.
- Describe how communication supports planning and operational coordination within NIMS.
- Identify key roles and structures involved in information sharing (e.g., the Public Information Officer, Emergency Operations Center, Incident Command Post).
- Recognize considerations for communicating within Tribal Nations.

## Module 1: Why This Matters

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- Emergencies require timely, accurate, and coordinated information sharing
- Communication supports:
  - Situational awareness
  - Decision-making
  - Public Safety actions
- Ineffective communication can lead to:
  - Confusion
  - Delayed response
  - Reduced trust

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## Key Terms

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- Communication systems
- Operational messaging
- Public information
- Situational awareness

- Communication systems: the tools used to send information, like radios, alerts, and messaging platforms.
- Operational messaging: information used by responders to coordinate actions.
- Public information: information shared with the public to support safety. This is coordinated through the Public Information Officer and follows approval processes.
- Situational awareness: a clear understanding of what's happening during an incident, usually maintained at the Emergency Operations Center (EOC) or Incident Command Post (ICP) to support decision-making.

## Defining Risk Communication

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The coordinated sharing of reliable information about hazards and incidents (before, during, and after emergencies) to support informed decision-making and protective actions.

## National Incident Management System (NIMS)

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- Communication is the methods and systems used to share information
- Occurs across all phases
  - Planning: developing communication plans
  - Response: operational information sharing
- Key functions:
  - Supports a common operating picture
  - Enables coordination across agencies and partners

## Where Communication Happens

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- **Emergency Operations Center (EOC):** maintains situational awareness
- **Incident Command Post (ICP):** manages on-scene operations
- **Joint Information System (JIS):** coordinates information across agencies

## Key Role: Public Information Officer (PIO)

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Serves as the official source of public information

- Responsibilities include:
  - Developing and disseminating approved messages
  - Coordinating with partner agencies
  - Ensuring information is accurate and consistent

## Types of Information Shared

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- **Operational information:** supports responders and coordination
- **Public information:** provides guidance to the community
- **Situational updates:** maintains awareness across stakeholders

## Communication Systems and Public Information

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- Communication Systems
  - Infrastructure used to transmit information
  - Designed for reliability and redundancy
- Public Information
  - Information provided to the public during an incident
  - Managed and coordinated by the PIO, and approved through the Incident Command structure prior to release

## Tribal Leadership & Information Coordination

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- Tribal leadership establishes priorities and provides direction
- Emergency managers coordinate communication systems, channels, and information sharing
- Trust in leadership influences how information is received and acted upon
- Coordination supports timely, accurate, and culturally relevant communication
- Community knowledge and trusted messengers strengthen information flow and situational awareness

## Community Input and Situational Awareness 15

- Community members can provide real-time information during incidents
- Examples:
  - Reporting hazards or damage
  - Sharing local conditions
- Supports situational awareness at the EOC or ICP
- Must be reviewed and coordinated through established processes (PIO)

## Incorporating Community Considerations into Planning

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- Engage community members in planning and preparedness
- Use trusted local channels and community leaders to share information
- Incorporate traditional knowledge and community communication practices
- Ensure communication is culturally relevant, accessible, and actionable
- Strengthen trust and support effective response through inclusive planning

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## Module 1: Key Takeaways


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- Communication supports situational awareness, decisions, and public safety
- NIMS structures how information is shared and coordinated
- The PIO manages public information through approval processes
- Communication systems and public information must align for effective response
- Community input improves situational awareness and response actions
- Community-informed planning builds trust and effectiveness

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# Module 2

Supporting Community Dialogue Through Text Communication in All Phases of Emergency Management

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In this module, we shift to making communication more interactive, especially through text-based systems.

## Module 2: Topics and Learning Objectives

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- Communication Workflows Across All Phases
- Text-Based Communication for Community Input
- Managing Community Feedback and Reports
- Addressing Misinformation and Rumors
- Adapting Communication for Diverse Communities

By the end of this module, you will be able to:

- Describe how communication supports information sharing across all phases of emergency management.
- Identify how text-based communication methods can support public information and community input.
- Explain how community input contributes to situational awareness and decision-making.
- Recognize considerations for using text-based communication within Tribal Nations.

## Module 2: Why This Matters

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- Effective communication requires both information sharing and community input
- Community input strengthens situational awareness and supports decision-making
- Trusted communication pathways improve how information is received and acted upon
- Incorporating traditional and modern communication methods strengthens effectiveness
- Community engagement builds trust and supports coordinated response

## Communication Across All EM Phases

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### Communication supports the Emergency Management (EM) Phases

- **Mitigation:** Build and share risk awareness; support ongoing community engagement; inform long-term hazard reduction and resilience efforts.
- **Preparedness:** Establish communication systems and procedures; identify trusted channels and community needs.
- **Response:** Share timely public information; receive and incorporate community input.
- **Recovery:** Provide updates and ongoing guidance; support continued community engagement

## Role of Text-Based Communication

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- Supports timely delivery of public information
- Enables communication across all phases of emergency management
- Expands reach to community members through accessible channels
- Supports structured collection of community input
- Complements existing communication systems and processes

## Supporting Community Input Within Communication Workflows

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- Community input provides critical insight during incidents
- Use accessible and trusted communication channels
- Document, organize, and prioritize incoming information
- Triage input to support life safety, incident stabilization, and property protection
- Integrate input into established workflows and decision-making

## Strategies for Addressing Misinformation and Rumors

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- Monitor communication channels for misinformation and rumors
- Provide timely, clear, and accurate public information
- Use trusted community voices to reinforce credibility
- Coordinate responses through the PIO and approval processes
- Incorporate misinformation tracking into communication workflows

## Adapting Communication Methods to Reach Community Members

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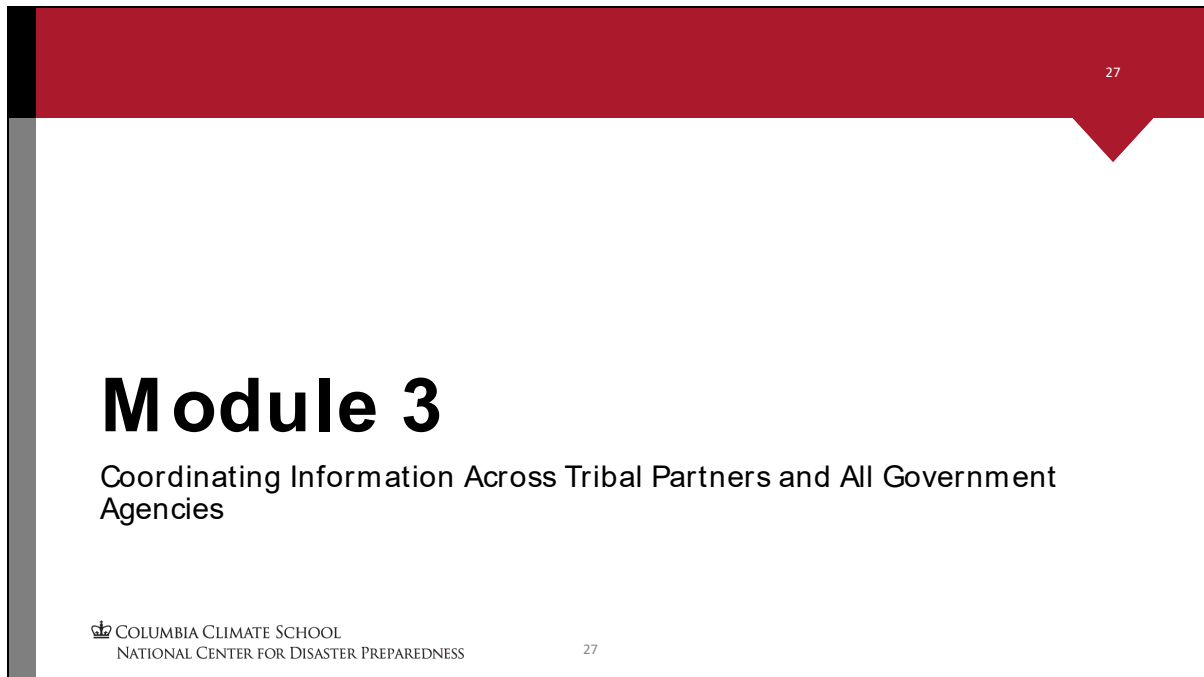
- Use multiple communication methods to reach diverse community members
- Incorporate traditional and trusted communication practices
- Consider access, language, and infrastructure limitations
- Tailor messaging to different audiences and needs
- Use feedback and After-Action Reports (AARs) to improve communication

## Module 2: Key Takeaways

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- Communication supports information sharing across all phases of emergency management
- Text-based communication enhances timely public information and community input
- Community input strengthens situational awareness and supports decision-making
- Communication workflows support the collection, prioritization, and coordination of information
- Addressing misinformation requires timely, coordinated, and approved responses
- Adapting communication methods ensures information reaches all members of the community


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A slide with a red header bar containing the number 27. The main content area is white with a black border. It features the title 'Module 3' in large bold font, followed by the subtitle 'Coordinating Information Across Tribal Partners and All Government Agencies'. At the bottom left is the logo for Columbia Climate School National Center for Disaster Preparedness, and at the bottom right is the number 27.

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# Module 3

Coordinating Information Across Tribal Partners and All Government Agencies

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This module explores how information is coordinated across Tribal partners and government agencies to ensure communication is consistent, accurate, and aligned with incident management processes.

## Module 3: Topics and Learning Objectives

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- Coordinating Public Information Across Partners
- Prioritizing and Sharing Critical Information
- Roles and Responsibilities for Coordination
- Tools and Strategies for Information Sharing

By the end of this module, you will be able to:

- Describe how information is coordinated across Tribal partners and government agencies.
- Identify key NIMS structures that support interagency communication (e.g., JIS, JIC, Unified Command).
- Explain roles and responsibilities for coordinating public information across partners.
- Recognize the importance of Tribal sovereignty in multi-agency coordination.
- Describe how coordination supports consistent and approved messaging during incidents.

## Module 3: Why This Matters

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- Tribal Nations may operate independently or coordinate with partners based on incident needs
- Resource limitations may require coordination with external agencies
- Coordinated communication ensures consistent and approved messaging
- Established structures (PIO, ICS, Unified Command) support information sharing
- Clear communication plans identify roles, systems, and information flow

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## NIMS Structures for Coordination

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- **Unified Command (UC):** Enables multiple agencies to coordinate and make joint decisions
- **Joint Information System (JIS):** Coordinates information sharing across agencies and partners
- **Joint Information Center (JIC):** Central location for coordinating public information activities
- **Public Information Officer (PIO):** Develops and coordinates approved public information

## Defining Roles in Emergency Communication

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- Clearly defined roles support coordinated communication
- ICS establishes responsibilities and accountability
- Tribal leadership and governance structures guide communication
- Defined approval and dissemination roles prevent delays and confusion
- Continuity and shift transitions support sustained operations

## Coordinating Public Information Across Tribal Partners and Agencies

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- Verify information before sharing
- Coordinate public information across partners to ensure consistency
- Establish protocols for message development, approval, and dissemination
- Maintain Tribal leadership and decision-making authority
- Support a single, coordinated source of information

## Prioritizing What the Community Needs First

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- Prioritize information that supports life safety
- Provide clear, concise, and actionable guidance
- Sequence information as incident conditions evolve
- Balance speed with accuracy
- Align updates with incident priorities and operational briefings

## Identifying and Verifying Information to Support Decision-Making

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- Use trusted and authoritative information sources
- Prioritize Tribal, local, and Native-led resources
- Verify information before sharing or acting
- Evaluate source credibility and potential bias
- Align information with Tribal laws, policies, and priorities

## Supporting Coordination Through Tools and Strategies

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- Use shared platforms and regular briefings to support coordination
- Establish update schedules and communication protocols
- Document decisions and message updates to support continuity
- Evaluate tools under emergency conditions, not just daily operations
- Build relationships across partners before incidents occur

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## Applying What We've Discussed

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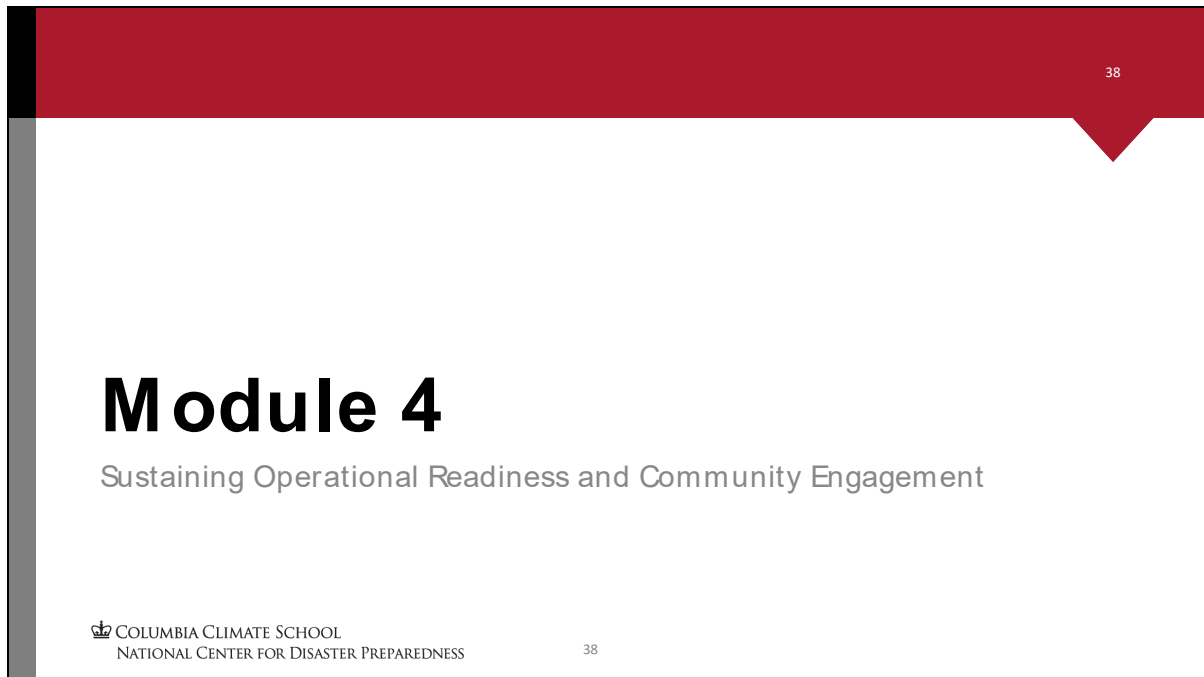
- Who are your key communication partners?
- Where could coordination break down?
- What could improve consistency?

## Module 3: Key Takeaways

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- Coordination ensures consistent, accurate, and approved public information
- NIMS structures (UC, JIS, JIC, PIO) support interagency communication
- Clearly defined roles and responsibilities reduce confusion and delays
- Information should be verified, prioritized, and aligned with incident objectives
- Shared tools, protocols, and relationships support effective coordination


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A slide with a red header bar containing the number '38'. The main content area is white with a black border. It features the title 'Module 4' in large bold black font, followed by the subtitle 'Sustaining Operational Readiness and Community Engagement' in a smaller grey font. At the bottom left is the Columbia Climate School logo and name, and at the bottom right is the number '38'.

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# Module 4

Sustaining Operational Readiness and Community Engagement

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This module focuses on how to sustain communication readiness and strengthen community engagement over time to support effective response and long-term resilience.

## Module 4: Topics and Learning Objectives

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- Sustaining Communication Readiness
- Continuous Improvement and Lessons Learned
- Building Community Trust and Engagement
- Evaluating Communication Effectiveness

By the end of this module, you will be able to:

- Describe how communication readiness supports ongoing emergency management efforts.
- Identify strategies to sustain communication systems and operational capacity over time.
- Explain the role of training, exercises, and planning in maintaining readiness.
- Recognize the importance of ongoing community engagement and relationship-building.
- Describe how evaluation and lessons learned support continuous improvement.


## Module 4: Why This Matters

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- Sustaining readiness requires trained personnel and clear roles
- Cross-training and continuity planning support ongoing operations
- Staffing challenges and extended incidents can impact communication effectiveness
- Supporting responder well-being is essential for sustained operations
- Culturally grounded support strengthens resilience and continuity

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# Quick Check-In

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## Learning and Improving Over Time

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- Continuous improvement supports operational readiness
- AARs capture lessons learned from incidents and exercises
- Incorporate feedback from community members and partners
- Update plans, workflows, and protocols based on lessons learned
- Maintain current contact information for ICS roles and personnel

## Module 4: Key Takeaways

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- Sustaining readiness requires trained personnel, clear roles, and ongoing support
- Continuous improvement strengthens communication over time
- Training, exercises, and AARs support preparedness and performance
- Evaluation helps identify strengths, gaps, and areas for improvement
- Ongoing community engagement builds trust and supports effective communication

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## Communication Shift

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- **Traditional model:**
  - One-way SMS alerts
  - Information broadcast to recipients

Two way communications are becoming available  
–how do we, could we use them?

- **Scenario-based model:**
  - Preparedness and planning
  - Two-way communication
  - Participants respond, react, and influence outcomes
  - Enables community-level interaction

## Next Step: Scenario-Based Learning

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- **With scenario-based learning:**
  - Participants make decisions in realistic situations
  - The focus is on how people think and act, not just knowledge recall
  - Encourages comparison of different responses
- **Why it matters:**
  - Builds engagement through participation
  - Surfaces real-world decision patterns
  - Helps simulate operational complexity safely

## Exploring A New Communication Approach 46

### **This is not current standard practice**

- Example of structured two-way communication
- Focus: organizing community input
- Built to work alongside existing protocols (NIMS)

## Simulation Demo: Applying These Concepts <sup>47</sup>

*With a cell phone, text (or WhatsApp) the word:*

**Safe**

*To the following number:*

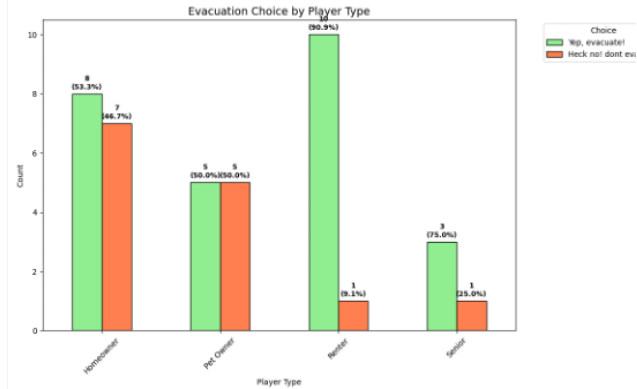
**+1 (646) 217-0881**

*To leave simulation text (or WhatsApp): #bye*

## Scenario Results and Simulation Comparison

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- Literature suggests that people with animals are less likely to evacuate (e.g., [doi.org/10.3390/ani5020173](https://doi.org/10.3390/ani5020173))
- Below are results from our text-based exercise at the time this slide was generated
- **What patterns do you notice?**
- [A link to the most recently tabulated figures is available here](#)



## Research Insights and Evidence

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- Research has shown that scenario-based systems increase engagement and participation
- In some studies:
  - ~20% of participants show high accuracy
  - Engagement is often driven by curiosity & interaction

## Example: Colombia Coffee Farmers

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### Co-designing system (Colombia)

- Built With Coffee Farmer cooperatives
- Scenario: how to design farmer assistance payments for different kinds of droughts
- “Guess which year your neighbors would say was worse”
- Uses environmental data (Satellite products)
- Winner was 16 year old—with her Grandmother
- Lessons:
  - Separate playful answers from experience-based ones
  - Experienced participants gave more accurate input
  - Pair phone-savvy users with those who have more real-world experience



## Example: WENDOUFI Pastoralist Simulation

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### Co-designing system (Senegal)

- Building with pastoralist communities (paused)
- Scenario: choose where to move livestock based on water availability
- “Guess which pond your friends would go to.”
- Uses environmental data (NASA products)
- Lessons:
  - Include voice messages in local languages
  - Integrate with radio shows



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# Thank you for your participation!

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