Let’s Get Ready

What do you need to know before disaster strikes? How can you prepare? How can you help your community prepare?

In this module, you’ll learn about the types of resources needed to prepare for disasters, think critically about the costs and trade-offs involved in investing in these resources, and consider what different people in a community bring to the table.

Step 1: Know Your Resources
Learn about different types of resources that help communities respond to and recover from disaster.

1. Watch the video titled “Let’s Get Ready!”
2. Read the Resource Cards to learn about the types of resources that can increase disaster resilience in a community.
3. Working as a group, sort the cards into three categories: Expensive, Moderate, and Inexpensive.

   Think about how much your community as a whole would need to spend to acquire each resource. You do not need to come up with specific dollar amounts; just make your best guess about the cost of each resource relative to the other resources.

   Once you have sorted all the cards, write $$$ on each of the expensive resources, $$ on each of the moderate resources, and $ on each of the inexpensive resources.

4. Working as a group, re-sort the cards into three new categories: Respond, Recover, and Adapt.

   “Respond” resources are those that help people survive the first 1-3 days of a disaster. Examples: Ambulances, Shelter & Basic Supplies

   “Recover” resources are those that help communities recover and rebuild in the days and months following a disaster. Examples: Road-Clearing Crew, Contingency Plan

   “Adapt” resources are those that help to reduce the impact of disaster before one occurs. Examples: Natural Flood Buffer, Fire-Resistant Building Codes

   Some resources might fit into two or even three categories. Just pick the one that seems to be the best fit. Once you have sorted all the cards, write the category on each card.
Step 2: Imagine the Scenario
Research what makes a city resilient and experience simulated disasters.

1. Work on your own to explore these web resources. Write down at least one key message you got from each experience.

   a. Resilience Jigsaw Puzzle: Complete the puzzle, then select “Learn More” to uncover what a resilient coastal city needs.

      Message:

      Bonus question: Which aspects of a resilient coastal city might also apply to inland communities?

   b. Emerging Infectious Disease: To view the video, click on the "Emerging Infectious Disease” link on the left. You must have Flash enabled on a desktop browser.

      Message:

      Bonus question: How could a disease outbreak affect a community’s ability to recover from a natural disaster?

   c. Safe Drinking Water Is Essential: Use the arrows at the bottom right to view all six pages within the Overview.

      Message:

      Bonus question: What are some ways a disaster might affect the quality, quantity, reliability, or cost of drinking water?
d. **Stop Disasters Game**: Play the game and protect your town from disaster.

   Message:

   Bonus Question: In the game, you got to make all the decisions about how to protect your town. Who would make these decisions in a real-world scenario? List at least 3 types of people/organizations.

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e. **Building Resilient Homes (choose one)**
   - **Home Construction Test Demos**: View demonstration videos for at least two different disaster types.
   - **A Mitigation Success Story**: Watch the video to see how two homes survived Superstorm Sandy with minimal damage.
   - **Wind Resistance Building Codes**: Read a before-and-after comparison showing the effects of new building codes in Florida.

   Message:

   Bonus Question: Why do you think some homeowners invest in disaster protection measures while others do not? What could be done to help more people become willing and able to invest in protecting their property?

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f. **Flood Protection Measures (choose one)**
   - **5 Ideas that Could Have Prevented Flooding in New York**: Read what could have been done differently before Superstorm Sandy.

   Message:

   Bonus Question: Why are you still at risk for flooding even if your hometown has a levee, flood gate, or other flood protection measure in place?
Extreme Event Webquest
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g. Earthquake Protection Measures (choose one)
   • **Seismic Innovations Simulation**: Watch a short video to learn how engineers are protecting San Francisco’s New Bay Bridge from earthquakes.
   • **How Buildings Stay Up When the Earth Shakes**: Read about five construction technologies that help buildings absorb earthquakes.

   Message:

   Bonus Question: If you were designing a bridge or building, what factors might you consider when deciding whether or not to use earthquake-protection techniques?

h. Disaster Communication (choose one)
   • **Social Media – the New Face of Disaster Response**: Explore this infographic to see how social media helps communities respond to disaster.
   • **Communication that Motivates Resilient Actions**: Read examples of successful communication strategies used during past disasters.

   Message:

   Bonus Question: Would these methods of communication still be effective in communities where many people do not speak English? Why or why not?

Additional Resources (optional):
**Severe Weather Preparedness Adventure**: A game that lets you test your weather knowledge.
**Building it Better**: A video about engineering research to increase earthquake resistance in complex buildings such as hospitals.

**Inexpensive Ways to Fortify a Home against Natural Hazards**: Read how simple, low-cost measures can make a big difference in resilient home construction.

**This is what it will look like when the Big One hits New York City**: Coastal flooding scenarios based on sea level rise projections in the Nature Conservancy’s [Coastal Resilience Mapping Portal](#).

**Chile and Haiti: Two earthquakes, different outcomes**: A video exploring why two earthquakes had such different effects on human lives and property.

**Ready Wrigley**: A storybook, coloring book, and activity app for children up to age 8, developed by the CDC.

**Living with Fire**: Explore wildfire risks and make tough decisions to safely manage your forest.

(See [Teacher Notes](#))

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2. Report back to your team to share and compare your answers:

   a. If all of your team members reviewed the same web resources, how are your “key messages” similar or different?

   b. If you reviewed different web resources than others in your team, briefly describe each one and what you learned from it.

3. Work with your team to identify five additional resilience resources that were not included among the Resource Cards in Step 1. Create cards for them.

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**Step 3: Weigh Your Options**

Money, time, and knowledge are limited, so it’s impossible to get ALL of the resilience resources. Prioritize and determine which resources are most critical for specific scenarios.
1. As a team, select one disaster type to focus on. Circle your choice below. From the Resource Cards, choose the 10 resources you believe would be most critical for that type of disaster.

   - Earthquake
   - Tornado
   - Flood
   - Wildfire
   - Hurricane
   - Heat Wave

2. Now choose a different disaster type. Identify which of your 10 selected resources would also be helpful for this disaster. Questions for discussion:
   
   a. Are any resources critical for the first disaster type but not at all useful for the other one? Why?

   b. Are there any resources that you think would be useful for just about any type of disaster you can imagine? Why?

Step 4: Think about Your Role

Building resilience takes the whole community. Consider what your character brings to the table.

1. Review your answers to Step 1 of the “Know Your Risks” module.
2. Read the **Sector Descriptions**. Determine which sector best describes your character (circle one). For the rest of this activity, you will represent this sector and not just your own character.

- **Households**
- **First Responders**
- **Community Groups**
- **Local & State Government**
- **Businesses**
- **Federal Government**

3. As a group, identify how many sectors are represented among your team members. If there are any sectors that are without representation on your team, write the sector name on a sheet of paper to serve as a “stand in” for that sector. It’s okay if a sector is represented by more than one character in your team.

4. Working as a group, divide the Resource Cards among the six sectors.

Try to match each card with the sector that would be most likely to provide that resource in your community. *Example: National Flood Insurance Program is most likely to be provided by the Federal Government.*

If a resource could be provided by more than one sector, put it aside and return to it after you’ve sorted the rest of the resources. *Example: Citizen Volunteers could be provided by Households or Community Groups.*

Try to distribute the cards somewhat evenly among the sectors, but you don’t have to be exact. Once your team has agreed on a sector for each resource, write the sector names on the corresponding resource cards.

**Step 5: Make a Decision**

Consider the available resource options in the context of your team’s location and the specific disaster threats you face.

1. Review your city description from Step 3 of the “Know Your Risks” module.

2. Review your 2x2 matrix from Step 6 of the “Know Your Risks” module.
3. Working as a team, pick the 15 resource cards that you think would be most critical for your city and the threats it faces.

**Step 6: Share Your Process**

Every community faces slightly different risks, but we all face tough decisions when we try to weigh our options, consider trade-offs, and decide what actions to take. Think about how your team tackled Step 5. Then share your experiences to see the different ways communities can approach similar types of dilemmas.

1. How did your team decide which resources to choose? Did you focus on the disaster type that poses the greatest risk to your city, or did you try to invest in resources that would help in many different scenarios?

2. Did you try to achieve a balance among Respond/Recover/Adapt resources, or did you focus on one area in particular?

3. How did cost factor into your decision making?

4. What did your team members disagree about, and why? How did you resolve those disagreements?