

## Lesson Summary

### Lesson 2: Knowing Your Hazards

#### Lesson Overview

This lesson presents information on different types of hazards that you may need to consider to make your childcare site safe. At the completion of this lesson you should be able to:

- Identify hazards and threats that impact your childcare site.
- Describe how to prevent or mitigate the impact of likely and high-consequence hazards and threats.

#### Facing Your Hazards

Focusing on all the hazards you might encounter can be overwhelming. Dwelling on all the everyday hazards that surround us might make it difficult to get out of bed! Nonetheless, it is necessary to be aware of hazards to develop strategies to prevent them, prepare for them, and/or minimize their impact.

Being aware of hazards helps you prioritize them and take the appropriate actions. For example, driving your car is dangerous, but you wear your seatbelt to minimize injury and you purchase insurance to help you recover from an accident.

#### Who Can Help?

An important part of being aware of your hazards is including the whole community in the identification process. Include community members in all of your preparedness efforts because they have access to information or subject-matter expertise about threats, hazards, and emergency procedures. People who will bring valuable information to your planning include:

- Your **local/county emergency manager** has historical information about hazards and threats in your community.
- **Parents** can provide expertise based on their experiences and professional knowledge (e.g., in the medical field, in the construction business), or may have had response training.
- **First responders** (e.g., fire marshal, law enforcement) can check your facility for safety hazards and identify vulnerabilities.
- **Local schools and the local school district** can provide information about their planning efforts.
- Your **State department of health** may have requirements for emergency planning and may be able to provide guidance and training.

- Your **childcare site insurance carrier** can provide information about potential risk reduction measures and procedures for claims.
- **Utility company personnel** can identify how to shut off utilities and who to contact with issues or questions.
- **Local business and industry personnel** can provide expertise based on their knowledge and areas of expertise.
- **Childcare organizations** can provide best practices information around preparedness for childcare sites. Childcare resource and referral agencies have resources to help sites with many aspects of running a childcare facility including emergency preparedness. The Web site for the National Association of Child Care Resource & Referral Agencies has links to local resources.

An added benefit to including the community in your planning process is an increased awareness of the existence of your site, enabling you to be alerted to external emergency situations (for example if there is a hazardous materials spill near your site).

## Identifying Hazards

With all the different hazards you face, what can you do to safeguard the children and staff at your site and prepare for incidents that may occur?

This lesson reviews different hazards and threats to help you identify which hazards to focus on, and gives you strategies to:

- Prevent the hazard, or
- Minimize the hazard's impact, and
- Prepare for the hazard.

## Identifying Hazards and Threats

This lesson reviews the following hazards and threats:

- Fires
- General Safety, Hazardous Materials, and Explosions
- Utility Outages and Blackouts
- Criminal Activity
- Missing, Lost, or Abducted Children
- Severe Weather

- Geological Events
- Illness Outbreaks
- Food Safety

## Fires

Fire is the most common of business disasters. Below are some sobering facts about fire:

- More than 4,000 Americans die and more than 20,000 are injured by fire each year.
- Fires can spread quickly and are dangerous not only because of the flames but also the heat, smoke, and poisonous gases emitted.
- Asphyxiation is the leading cause of fire-related deaths.
- Cooking is the leading cause of fires in childcare centers.
- It is difficult for young children to escape from fire because they lack the motor skills and mental capabilities needed and may be unable to awake from a sound sleep.

## Addressing Fire Hazard

Now that you know why you need to be prepared for fire, here are some general steps to protect yourself and the children in your care from the hazards of fire:

- Have an evacuation plan.
- Practice your plan and make sure everyone can get out of each room.
  - Are windows painted or nailed shut?
  - Do you have escape ladders?
  - Can you evacuate children who cannot evacuate on their own?
- Install, test, and clean smoke alarms.
- Schedule visits from the fire department for fire safety information.

### Hazard/Threat Worksheet

**Use this worksheet to assess the risk level of fire at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.**

<b>Hazard/Threat: Fire</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b>	
<b>None, Low, Moderate, or High</b>	
<b>Steps to reduce my risk:</b>	<b>Comments</b>
<ul style="list-style-type: none"> <li>■ Have properly working smoke detectors.               <ul style="list-style-type: none"> <li>■ Place smoke detectors on every level of your facility and, if possible, in every sleeping area.</li> <li>■ Test and clean smoke detectors once a month.</li> <li>■ Replace batteries in your smoke detectors at least once a year. If the alarm chirps, replace the battery immediately.</li> </ul> </li> <li>■ Have heating, cooling, gas, and electrical systems checked regularly.</li> <li>■ Use fire-resistant materials.</li> <li>■ Install carbon monoxide detectors.</li> <li>■ Install sprinklers, if possible.</li> <li>■ Install fire extinguishers in each room and check regularly (i.e., charge levels, mounted securely, within easy reach, staff and volunteers know how to use).</li> <li>■ Have plan to evacuate infants and toddlers (using evacuation cribs, wagons, strollers, etc.).</li> <li>■ Have a representative from the fire department visit facility regularly. (Ask about fire codes, regulations, and training for children and staff.)</li> <li>■ Keep portable heaters at least 3 feet away from things that can burn – paper, curtains, furniture, bedding, clothing, etc. Ensure they are turned off when adults are not in the room.</li> <li>■ Keep matches and lighters up high and, if possible, in a locked cabinet.</li> <li>■ Train on STOP, DROP, and ROLL and evacuation procedures.</li> <li>■ Check for overloaded outlets.</li> </ul>	

- Have a site diagram.
- Clear exits and ensure there are two exits for evacuation, clearly marked.
  - All windows open.
  - Doors are unobstructed.
  - Escape ladders are available for higher floors.
- Have a designated meeting area.
- Cut back bushes and trees.
- Ensure street address is clearly visible.
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- \_\_\_\_\_
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## General Safety, Hazardous Materials, and Explosions

Let's now look at what you can do to address risks related to general safety, hazardous materials, and explosions in and around your childcare site.

- **General safety** includes childproofing. For sites with young children, follow the American Academy of Pediatrics process of taking a "child's-eye view" survey, going from room to room and addressing the hazards at the level of a curious toddler.
- **Hazardous materials** can be found in all homes and businesses and include cleaning products, pesticides, paint supplies, and lawn and garden products. Make sure hazardous materials are clearly marked, kept in their original containers, and stored out of children's reach.
- **Explosions** are an important risk associated with having hazardous materials at your site.

**Note:** Ensure that the safety measures you take are in accordance with local/State childcare licensing requirements.

### Hazard/Threat Worksheet

**Use this worksheet to assess the general safety and childproofing at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.**

### Hazard/Threat: General Safety

<b>Identify Hazard/Threat Risk Level (circle one):</b>		<b>None, Low, Moderate, or High</b>
<b>Steps to reduce my risk:</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>■ Childproof the facility.               <ul style="list-style-type: none"> <li>■ Protect electrical outlets.</li> <li>■ Remove access to electrical cords.</li> <li>■ Place safety locks on cabinets.</li> <li>■ Place door knob covers on doors.</li> <li>■ Place safety gates at top and bottom of stairs.</li> <li>■ Ensure window blind strings do not have loops.</li> <li>■ Secure tall furniture to walls.</li> <li>■ Lock up cleaning products.</li> <li>■ Lock medicines in high cabinets.</li> <li>■ Place locks on toilets.</li> <li>■ Place guards on windows.</li> <li>■ Place corner and edge bumpers on sharp edges of furniture.</li> <li>■ Place houseplants out of reach of children.</li> <li>■ Remove choking hazards.</li> <li>■ Keep cribs away from draperies, blinds, and electrical cords.</li> </ul> </li> <li>■ Ensure children cannot access water features (e.g., ponds, fountains, pools).</li> <li>■ Ensure trash is not accessible to children.</li> <li>■ Remove broken or unsafe play equipment.</li> <li>■ Designate any unsafe areas as off-limits to children.</li> <li>■ Follow established standards for the care of infants with respect to sudden infant death syndrome (SIDS).</li> <li>■ _____</li> </ul>		

<ul style="list-style-type: none"> <li>■ _____</li> <li>■ _____</li> </ul>	
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**Hazard/Threat Worksheet**

**Use this worksheet to assess the risk level of hazardous materials and explosions at your childcare site and to identify steps you can take to minimize your risk and prepare your site.**

**Hazard/Threat: Hazardous Materials**

**Identify Hazard/Threat Risk Level (circle one):**                      **None, Low, Moderate, or High**

<b>Steps to reduce my risk:</b>	<b>Comments</b>
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<ul style="list-style-type: none"> <li>■ Lock up chemicals, poisonous/toxic items, medicines, and flammable items.</li> <li>■ Dispose of hazardous materials correctly.</li> <li>■ Keep products containing hazardous material in their original containers. Do not remove labels. Do not store hazardous material in food containers.</li> <li>■ Know who to call when there has been contact with a hazardous chemical.</li> <li>■ Know what to do if there is an explosion.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	
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**Utility Outages and Blackouts**

Utility outages and blackouts can occur anywhere, to anyone, at anytime. For prolonged utility outages of more than 2 hours, the main concerns—beyond the safety of children and staff—are minimizing food loss and maximizing comfort.

To prepare for utility outages and blackouts:

- Know how to use emergency shutoffs for water, gas, and electricity—and mark the shutoffs clearly.
- Have surge protectors.
- Have a land-line phone that does not require electricity.
- Consider purchasing an emergency generator, especially if your building is located in an area where power losses are frequent.

<b>Hazard/Threat Worksheet</b>	
<b>Hazard/Threat: Utility Outages/Blackouts</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
<b>Steps to reduce my risk:</b>	<b>Comments</b>
<ul style="list-style-type: none"> <li>■ Know how to use emergency shutoffs for water, gas, and electricity—and mark the shutoffs clearly.</li> <li>■ Turn off and unplug all unnecessary electrical equipment.</li> <li>■ Have surge protectors.</li> <li>■ Prepare frozen water containers.</li> <li>■ Know how to keep food safe and how to identify if food is safe.</li> <li>■ Have a land-line phone that does not require electricity.</li> <li>■ Consider purchasing an emergency generator, especially if your building is located in an area where power losses are frequent.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	



## Criminal Activity

Crime is a problem in every environment. To keep the children in your care safe, follow general crime prevention rules.

- Conduct background checks to ensure people working at your site have not been arrested or convicted for crimes involving children.
- Ensure doors and windows lock.
- Be familiar with people who should be and should not be around your facility.
- Build a relationship with local law enforcement in your area.
- Contact police about criminal activity, areas of concern, and prevention recommendations.
- Have a process for reporting anything out of the ordinary.

Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of criminal activity impacting your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b>	
<b>Hazard/Threat: Criminal Activity</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Take precautions to ensure people working at your site have not been arrested or convicted for crimes involving children.</li> <li>■ Ensure doors and windows lock.</li> <li>■ Be aware of people around your facility.</li> <li>■ Build a relationship with local law enforcement in your area.</li> <li>■ Contact police about criminal activity, areas of concern, and prevention recommendations.</li> </ul>	

<ul style="list-style-type: none"> <li>■ Have a process for reporting anything out of the ordinary.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	
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**Missing, Lost, or Abducted Children**

“As a parent, I cannot imagine anything more difficult than not knowing where your children are or how they are being treated. Every day across America, children are abducted by family members and acquaintances, and sometimes by strangers. Families traumatized by abduction are faced with the simultaneous challenge of quickly marshaling all available resources to recover their missing child while dealing with the devastation of their loss.”

– Assistant Attorney General Laurie O. Robinson

Most children are taken by someone they know. It is essential that childcare centers:

- Have a process for releasing children only to designated individuals.
- Have a process for accounting for children at all times.
- Conduct background/reference checks on all staff.

Hazard/Threat Worksheet	
<p><b>Use this worksheet to assess the risk level of children being abducted from your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b></p>	
<p><b>Hazard/Threat: Missing Child</b></p>	
<p><b>Identify Hazard/Threat Risk Level (circle one):</b></p>	<p><b>None, Low, Moderate, or High</b></p>
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Have a process for releasing children including documenting who they can be released to and ensuring any legal orders against a parent or guardian are documented and easily identified</li> </ul>	

before releasing children.

- Have a sign-in/sign-out process that also identifies who can be in areas with children.
- Conduct background/reference checks on all staff.
- Designate how children will be accounted for when in and out of the facility—on field trips, at the playground, during drills.
- Do not share information about a child with anyone but parents or guardians.
- Establish a notification process if a child is missing.
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- \_\_\_\_\_
- \_\_\_\_\_

## Severe Weather

Severe weather can happen anywhere and at any time. It is important to know the types of severe weather risks in your area in order to be prepared.

First let's review some general preparedness steps for all types of severe weather events. Then you can select severe weather events that are common to your area and get specifics on how to prepare for those.

### General Preparedness for Severe Weather

You can do some simple things to keep the children at your site safe and your property protected when severe weather strikes. When there is a threat of severe weather:

- Listen to the radio and NOAA Weather Radio (a radio with a special receiver to receive information from the network of radio stations that broadcast continuous weather information from the National Weather Service).
- Follow instructions from local officials.
- Stay inside, postpone outdoor activities, and bring children and staff indoors.

It is also important to have a process for closing your facility and to know the meaning of weather terms such

as watch, warning, and advisory.

## Weather Terms

- **Watch:** A watch is used when the risk of a hazardous weather event has increased significantly, but its occurrence, location, and/or timing is still uncertain. It is intended to provide enough lead time so that those who need to set their plans in motion can do so.
- **Warning:** A warning is issued when a hazardous weather event is occurring, is imminent, or has a very high probability of occurring. A warning is used for conditions posing a threat to life or property.
- **Advisory:** An advisory highlights special weather conditions that are less serious than a warning. They are for events that may cause significant inconvenience, and if caution is not exercised, the conditions could lead to situations that may threaten life and/or property.

Source: <http://forecast.weather.gov/glossary.php>

## Types of Severe Weather

Now that you have some information on general preparedness for severe weather, the next step is to learn more about weather events common to your community. Click on the topics below for more information:

### Excessive Heat

In recent years, excessive heat has caused more deaths than all other weather-related events. A heat wave is a prolonged period of excessive heat, often combined with humidity. Excessive heat contributes to heat disorders, like heat exhaustion and heat stroke. Older adults and young children are more likely to be impacted by excessive heat. Excessive heat can happen anywhere but people in urban areas may be at greater risk for prolonged heat waves.

How can you prepare for excessive heat in your area?

- Ensure air conditioners are installed and insulated properly.
- Install temporary window reflectors.
- Cover windows with drapes, shades, or awnings.
- Keep yourself, your staff, and children hydrated.
- Learn the signs of heat-related health concerns.
- Plan activities that limit exposure during the hottest part of the day.

### Floods

Flooding is the most common disaster in the United States. Floods develop differently and can be caused by

extended periods of heavy rain, tropical storms and hurricanes, warming after a heavy snow, or flash floods. Every State is at risk of flood hazards. Be especially aware if you live in low-lying areas near water or downstream from a dam. Know your risk of flood and flash floods and be familiar with the terms that identify floods: flood watch, flash flood watch, flood warning, and flash flood warning.

What can you do to prepare for floods?

- Protect your building: elevate furnace, water heater, and electrical panel; seal basements with waterproofing; install "check valves."
- Talk with your insurance representative about flood protection insurance.
- Identify evacuation places that are on higher ground.
- Identify how you will transport children to evacuation sites.

What can you do if a flood happens?

- Keep informed about whether water is safe to drink.
- If you have to evacuate, secure your site and turn off utilities, if instructed.
- Avoid floodwaters and moving water.
- Keep children out of the water.
- Stay away from downed power lines.

## **Hurricanes and Tropical Storms**

Hurricanes and tropical storms have high sustained winds and can produce torrential rains. Hurricane-associated floods, landslides, and mudslides along with high winds cause damage to coastlines and several hundred miles inland. All of the Atlantic and Gulf of Mexico coastal areas and parts of the Southwest and Pacific Coast are subject to the impact of hurricanes and tropical storms. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October.

What can you do to be prepared for hurricanes and tropical storms?

- Know the differences between the hurricane categories.
- Secure outside items or bring them inside.
- Cover windows with pre-cut plywood or shutters.
- Remove damaged/diseased limbs from trees.
- Turn off utilities as instructed; otherwise, turn refrigerators to highest setting.
- Turn off propane tanks.
- Ensure you have a supply of water for sanitary purposes; fill bathtub and other large containers.

- Evacuate when instructed by local officials.

## Thunderstorms

Every thunderstorm produces lightning and, on average, lightning kills 300 people and injures 80 people per year in the United States. Lightning is unpredictable; it can strike as far as 10 miles from any rainfall. Other thunderstorm-related dangers are tornadoes, strong winds, hail, wildfire, and flash flooding.

What can you do to lessen the impact of thunderstorms?

- Remove dead and rotting trees.
- Secure outside objects.
- Shutter windows (or close blinds, shades, curtains) and secure outside doors.

What can you do when there are thunderstorms?

- If you can hear thunder, take everyone indoors.
- If thunderstorms are forecasted, limit or cancel outdoor activities.
- During a thunderstorm, do not take baths or showers, or use plumbing or electrical appliances.

**Note:** Lightning can occur without rain. According to the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory, dry lightning is cloud-to-ground lightning without any rain nearby. This kind of lightning is more likely to cause forest fires.

## Tornadoes

Tornadoes are the most violent of storms with winds that usually exceed 100 mph and can devastate a neighborhood in seconds. A thunderstorm is the first step in the development of a tornado; if conditions are right, then a tornado may develop. Tornadoes can appear without warning and can be transparent until dust and debris are picked up. Tornadoes have been reported in every State and can occur at any time of the year. Danger signs of tornadoes are dark or greenish skies; large hail; large, dark, low-lying clouds; and a loud roar, similar to a freight train.

What can you do to prepare for tornadoes?

- Prepare a safe room in advance: storm cellar or basement, interior room or hallway on lowest floor possible.

What can you do if there are tornado watches or warnings?

- If you are under a tornado warning, immediately take everyone to safe shelter.

- Keep everyone away from windows, doors, outside walls, and corners.

## Winter Storms and Extreme Cold

The National Weather Service calls winter storms “deceptive killers” because of the number of deaths indirectly related to the storms, including traffic accidents, fire, and hypothermia. Even areas that normally experience mild winters can experience major winter storms and extreme cold. Primary concerns with winter storms are the potential loss of heat, power, and telephone, and a shortage of supplies.

What can you do to prepare for winter storms?

- Have rock salt, sand, and snow shovels.
- Ensure you have extra blankets and adequate clothing for children.
- Make sure your site is well insulated.
- Insulate pipes and allow faucets to drip a little during cold weather.
- Know how to shut off water valves.
- Be careful when using alternate heat sources. The U.S. Fire Administration has issued tips on fire safety during and after a winter storm.
- Have a supply of extra food and water.

## Severe Weather Worksheets

Now that you have information on severe weather in your area, you can print the worksheets for these hazards and determine what you need to specifically address at your site to be prepared.

Hazard/Threat Worksheet	
Use this worksheet to assess the risk level of severe weather impacting your childcare site, and to identify steps you can take to minimize your risk and prepare your site.	
Hazard/Threat: Severe Weather – General	
Identify Hazard/Threat Risk Level (circle one):	None, Low, Moderate, or High
Steps to reduce my risk:	Comments

- Know the weather hazards common to your area.
- Have a NOAA Weather Radio onsite.
- When there is a threat of severe weather, listen to the radio or television and a NOAA Weather Radio for information.
- Listen to instructions from local officials.
- If severe weather has been forecasted, stay inside, postpone outdoor activities, and bring children and staff indoors.
- Have a process for closing the facility and notifying parents/guardians and staff.
- Know weather terms—watch, warning, advisory.
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- \_\_\_\_\_
- \_\_\_\_\_

**Hazard/Threat Worksheet**

**Use this worksheet to assess the risk level of excessive heat impacting your childcare site, and to identify steps you can take to minimize your risk and prepare your site.**

**Hazard/Threat: Excessive Heat**

**Identify Hazard/Threat Risk Level (circle one):**                      **None, Low, Moderate, or High**

<b>Steps to reduce my risk:</b>	<b>Comments</b>
<ul style="list-style-type: none"> <li>■ Ensure air conditioners are installed and insulated properly.</li> <li>■ Install temporary window reflectors.</li> <li>■ Cover windows with drapes, shades, or awnings.</li> <li>■ Keep yourself, staff, and children hydrated.</li> <li>■ Be aware of signs of heat-related health</li> </ul>	



concerns. ■ _____ ■ _____ ■ _____	
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**Hazard/Threat Worksheet**

**Use this worksheet to assess the risk level of floods impacting your childcare site and to identify steps you can take to minimize your risk and prepare your site.**

**Hazard/Threat: Floods**

**Identify Hazard/Threat Risk Level (circle one):**                      **None, Low, Moderate, or High**

Steps to reduce my risk:	Comments
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<ul style="list-style-type: none"> <li>■ Protect your building: elevate the furnace, water heater, and electrical panel; seal the basement with waterproofing; and install "check valves."</li> <li>■ Talk with your insurance representative about flood protection insurance.</li> <li>■ Keep informed about whether water is safe to drink.</li> <li>■ Have plans to move to higher ground.</li> <li>■ If you have to evacuate, then secure your site and turn utilities off, if instructed.</li> <li>■ Avoid floodwaters and moving water. Keep children out of the water.</li> <li>■ Stay away from downed power lines.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	
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**Hazard/Threat Worksheet**

<b>Use this worksheet to assess the risk level of hurricanes and tropical storms impacting your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b>	
<b>Hazard/Threat: Hurricanes/Tropical Storms</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <span style="float: right;"><b>None, Low, Moderate, or High</b></span>	
<b>Steps to reduce my risk:</b>	<b>Comments</b>
<ul style="list-style-type: none"> <li>■ Know the differences between the hurricane categories.</li> <li>■ Secure outside items or bring them inside.</li> <li>■ Cover windows with pre-cut plywood or shutters.</li> <li>■ Remove damaged/diseased limbs from trees.</li> <li>■ Turn off utilities as instructed; otherwise, turn refrigerators to their highest setting.</li> <li>■ Turn off propane tanks.</li> <li>■ Ensure you have a supply of water for sanitary purposes; fill bathtub and other large containers.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	

<b>Hazard/Threat Worksheet</b>	
<b>Use this worksheet to assess the risk level of thunderstorms at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b>	
<b>Hazard/Threat: Thunderstorms</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <span style="float: right;"><b>None, Low, Moderate, or High</b></span>	
<b>Steps to reduce my risk:</b>	<b>Comments</b>

<ul style="list-style-type: none"> <li>■ Remove dead and rotting trees.</li> <li>■ Secure outside objects.</li> <li>■ Shutter windows (or close blinds, shades, curtains) and secure outside doors.</li> <li>■ If you can hear thunder, go indoors.</li> <li>■ During a thunderstorm, do not take baths or showers or use plumbing.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	
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**Hazard/Threat Worksheet**

**Use this worksheet to assess the risk level of a tornado at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.**

**Hazard/Threat: Tornadoes**

**Identify Hazard/Threat Risk Level (circle one):**                      **None, Low, Moderate, or High**

Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Prepare a safe room in advance: storm cellar or basement, interior room, or hallway on lowest floor possible.</li> <li>■ If you are under a tornado warning, immediately take everyone to safe shelter.</li> <li>■ Keep everyone away from windows, doors, outside walls, and corners.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	

Hazard/Threat Worksheet	
<p><b>Use this worksheet to assess the risk level of winter storms and extreme cold at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b></p>	
<p><b>Hazard/Threat: Winter Storms and Extreme Cold</b></p>	
<p><b>Identify Hazard/Threat Risk Level (circle one):</b>                      <b>None, Low, Moderate, or High</b></p>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Have rock salt, sand, and snow shovels.</li> <li>■ Ensure you have extra blankets and adequate clothing for children.</li> <li>■ Make sure your site is well insulated.</li> <li>■ Insulate pipes and allow faucets to drip a little during cold weather.</li> <li>■ Know how to shut off water valves.</li> <li>■ Be careful when using alternate heat sources.</li> <li>■ Have a supply of extra food and water.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	

## Geological Events

You may be in an area where geological events are also a concern. According to the U.S. Geological Survey, geologic hazards, such as earthquakes, landslides, volcanic eruptions, coastal erosion, and floods, result in considerable human suffering and billions of dollars in losses in the United States every year. For more information on a geological event, click on the image below:

## Earthquakes

An earthquake is one of the most frightening and destructive incidents that can happen. An earthquake is the sudden movement of the earth caused by the breaking and shifting of rock beneath the earth's surface. One can occur without notice any time of the day and year. Every region of the United States is at risk of earthquakes, with 45 States and territories at moderate to high risk.

What can you do to prepare for an earthquake, and what should you do if one happens?

- Familiarize yourself with earthquake terms.
- Fasten/secure heavy items and furniture to wall studs and brace overhead light fixtures.
- Place cribs, sleeping mats, and sitting areas away from hazards that can fall in or on them (pictures, mirrors, lamps, etc.).
- Clear exits and ensure there are at least two exits for evacuation. Make sure all exits are clearly marked.
- Know how to shut off gas valves.
- Have emergency kit ready.
- When shaking starts, drop, cover, and hold; keep everyone away from windows; and stay inside until the shaking stops. (Be prepared for aftershocks.) Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.

### **Landslides and Debris Flow**

Landslides can be caused by natural incidents (earthquakes, storms, fires, or volcanoes) or human modification of land. In a landslide, masses of rock, earth, or debris move either slowly or rapidly, destroying property and possibly taking lives. Landslides occur in all States and territories of the United States.

What can you do to prepare for landslides or debris flow?

- Be familiar with whether debris flow has occurred in your area.
- Watch how water flows during storms.
- If in imminent danger, evacuate your site immediately.

### **Tsunamis**

Tsunamis are enormous waves caused by underwater disturbances such as earthquakes. The waves created travel in all directions and waves that approach the shore build in height. The first waves can reach the shore before any warning has been issued. A tsunami can strike anywhere along the U.S. coastline, but the most destructive have been along the California, Washington, Alaska, and Hawaii coasts. A dramatic recession of water is nature's warning of a tsunami. Hazards from tsunamis include drowning, flooding, contamination of drinking water, and fires.

What can you do if there is the possibility of a tsunami?

- Listen to local officials.
- Be prepared to act quickly and evacuate inland.
- Stay away from low-lying coastal areas, if there is a tsunami warning.

## Volcanoes

A volcano is a vent in the earth that, when pressure builds and it erupts, releases dangerous molten rock and gases. Volcanoes are mainly a concern for Hawaii, Alaska, and the Pacific Northwest.

What can you do if a volcano in your area may erupt?

- Listen to local officials.
- Bring children inside.
- Shut windows and doors to maintain air quality.
- Be prepared to evacuate quickly.
- Include goggles and nose and mouth protection in your emergency supply kits.

## Geological Events Worksheets

Now that you have information on geological events that may impact your community, you can print the worksheets for these hazards and determine what you need to specifically address at your site to be prepared.

Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of earthquakes at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b>	
<b>Hazard/Threat: Earthquakes</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
<b>Steps to reduce my risk:</b>	<b>Comments</b>

- Familiarize yourself with earthquake terms.
- Fasten/secure heavy items and furniture to wall studs and brace overhead light fixtures.
- Place cribs, sleeping mats, and sitting areas away from hazards that can fall in or on them (pictures, mirrors, lamps, etc.).
- Clear exits and ensure there are at least two exits for evacuation. Make sure all exits are clearly marked.
- Know how to shut off gas valves.
- Have emergency kit ready.
- When shaking starts, drop, cover, and hold; keep everyone away from windows; and stay inside until the shaking stops. (Be prepared for aftershocks.)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of landslides and debris flow at your childcare site.</b>	
<b>Hazard/Threat: Landslides and Debris Flow</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Follow proper land-use procedures.</li> <li>■ Be familiar with whether debris flow has occurred in your area.</li> <li>■ Watch how water flows during storms.</li> <li>■ If in imminent danger, evacuate your site</li> </ul>	

immediately. <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	
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Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of tsunamis at your childcare site.</b>	
<b>Hazard/Threat: Tsunamis</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li><input type="checkbox"/> Listen to local officials.</li> <li><input type="checkbox"/> Be prepared to act quickly and evacuate inland.</li> <li><input type="checkbox"/> Stay away from low-lying coastal areas, if there is a tsunami warning.</li> <li><input type="checkbox"/> _____</li> <li><input type="checkbox"/> _____</li> <li><input type="checkbox"/> _____</li> </ul>	

Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of volcanoes at your childcare site.</b>	
<b>Hazard/Threat: Volcanoes</b>	
<b>Identify Hazard/Threat Risk Level (circle one):</b> <b>None, Low, Moderate, or High</b>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li><input type="checkbox"/> _____</li> <li><input type="checkbox"/> _____</li> <li><input type="checkbox"/> _____</li> </ul>	



- Listen to local officials.
- Bring children inside.
- Shut windows and doors to maintain air quality.
- Be prepared to evacuate quickly.
- Include goggles and nose and mouth protection in your emergency supply kits.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Other Hazards and Threats

Two other hazards you may need to prepare for are:

- **Illness Outbreaks:** When children get sick it is important that your site is prepared to manage the illness by knowing which illnesses require the child be excluded, how parents will be notified of illnesses that arise at the childcare site, and how regular health checks will be conducted.
- **Food Safety:** Because childcare providers are often in the role of serving children food, it is important that you also take steps to prevent food-borne illness and are careful about what you serve children in your care.

Hazard/Threat Worksheet	
<b>Use this worksheet to assess the risk level of an illness outbreak at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.</b>	
<b>Hazard/Threat: Illness Outbreaks</b>	
<b>Identify Hazard/Threat Risk Level (circle one):                      None, Low, Moderate, or High</b>	
Steps to reduce my risk:	Comments
<ul style="list-style-type: none"> <li>■ Avoid close contact with people who are sick. Advise staff to stay home when they are sick and ask parents to keep sick children home.</li> </ul>	

- Cover your mouth and nose with a tissue when coughing or sneezing.
- Clean your hands often.
- Avoid touching your eyes, nose, and mouth.
- Practice good health habits: Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, get your flu shot, and eat nutritious foods.
- Require proper immunization of children in your care.
- Have disinfectant/cleaning processes for bathrooms (including changing tables and children’s potties), food preparation areas (including dishes, high chairs, and utensils), toys, beds, and bedding.
- Establish a policy for handling sick children: exclusion, dismissal, and care.
- Clean/sanitize hands between handling of children.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Hazard/Threat Worksheet**

**Use this worksheet to assess the risk level of food safety hazards or threats at your childcare site, and to identify steps you can take to minimize your risk and prepare your site.**

**Hazard/Threat: Food Safety**

**Identify Hazard/Threat Risk Level (circle one):**                      **None, Low, Moderate, or High**

**Steps to reduce my risk:**

**Comments**

- If you prepare food at your site, follow food safety

<p>procedures: clean, separate, cook, and chill.</p> <ul style="list-style-type: none"> <li>■ Know how to properly store foods – including breast milk, formula, and baby food.</li> <li>■ Know foods not to serve due to child choking hazards.</li> <li>■ Inform everyone about children’s food allergies, specifics on the allergies, and how to respond to an allergic reaction.</li> <li>■ Know when to save and when to throw out food after power outages.</li> <li>■ _____</li> <li>■ _____</li> <li>■ _____</li> </ul>	
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### Mitigating Hazards

Now that you have considered the hazards and threats facing your childcare site, you also need to consider how to mitigate (lessen) hazards specific to the structural and nonstructural elements of your facility’s building and grounds.

- **Structural elements** include any component of the building whose primary function is to support the dead load (e.g., building, roof).
- **Nonstructural elements** include any portion of the building or grounds not connected to the main structure (e.g., bookshelves, file cabinets, furnishings).

Building and Grounds Mitigation Checklist	
<b>Area:</b>	
<b>Surveyed By:</b>	
<b>Date Surveyed:</b>	
Hazard	Mitigation Measures
<b>Building:</b>	

- Extended, unsupported roof spans
- Large windows or panes of glass, especially if:
  - Not composed of safety glass
  - Located near exits or evacuation routes
- Suspended ceilings and light fixtures
- Incompatible chemicals stored in close proximity or not stored in a manner to withstand falling and breaking
- Hazardous materials located in areas that do not have warning signs
- Paper or other combustibles (e.g., greasy rags) stored near heat source
- Unsecured heavy or unstable items, including:
  - Portable room dividers
  - Appliances (e.g., water heaters, space heaters, microwave ovens)
  - Filing cabinets, bookcases, and wall shelves
  - Athletic equipment
  - Vending machines
  - TV monitors
  - Wall-mounted objects
  - Aquariums
  - Table lamps
  - Hanging plants above seating areas
- Electrical equipment

**Grounds:**

- Equipment in need of repair

- Rocks or other material that could cause injury
- Fences in need of repair
- Exposed nails, screws, or bolts
- Trees or shrubs that present a fire hazard or wind hazard or provide areas for an intruder to hide
- Streams in close proximity
- Electrical wires
- Gasoline or propane tanks
- Natural gas lines

## Now What?

You now have information on many different hazards and threats. Your next steps are to:

- Identify hazards and threats that are of the highest consequence and most likely for your site.
- Develop strategies to address those hazards and threats. (Use the hazard and mitigation worksheets for guidance.)
- Identify members from the community to review and comment on your strategies and identify hazards or threats that are missing. Include community members such as:
  - Local/county emergency manager,
  - Parents,
  - First responders,
  - Local schools/school district,
  - State department of health,
  - Childcare site insurance carrier,
  - Utility company personnel,
  - Local business and industry personnel, and
  - Childcare organizations.
- Develop and implement a process to regularly check for new hazards and address them as needed.

## More Resources

This lesson provided information on identifying and preparing for hazards. Below are some additional resources that can help you address hazards.

- The Federal Emergency Management Agency (FEMA) has information on including the whole community to help you prepare to address hazards: [www.fema.gov](http://www.fema.gov)
- The National Association of Child Care Resource & Referral Agencies (NACCRRA) has information for childcare sites: [www.naccrra.org](http://www.naccrra.org)
- The U.S. Fire Administration site has a smoke alarm safety quiz you can take: [www.usfa.dhs.gov](http://www.usfa.dhs.gov)
- Ready.gov and the American Red Cross provide information on additional types of hazards and threats and how to address them:
  - [www.ready.gov](http://www.ready.gov)
  - [www.redcross.org](http://www.redcross.org)
- The FloodSmart.gov Web site provides additional information on flooding and flood risks: [www.floodsmart.gov](http://www.floodsmart.gov)
- The Food and Drug Administration, the U.S. Department of Agriculture, and FoodSafety.gov have information on food safety:
  - [www.fda.gov](http://www.fda.gov)
  - [www.fsis.usda.gov](http://www.fsis.usda.gov)
  - [www.foodsafety.gov](http://www.foodsafety.gov)
- Flu.gov provides updated information on the flu: [www.flu.gov](http://www.flu.gov)
- FEMA's Multihazard Emergency Planning for Schools Toolkit has tools and resources that can be useful for emergency planning: [training.fema.gov/emiweb/emischool](http://training.fema.gov/emiweb/emischool)

## Lesson Summary

This lesson described how to identify threats and hazards in and around your childcare site, and how to address them. Now you can:

- Identify high-consequence and most likely hazards for your site.
- Track prevention and mitigation steps to take for those hazards.
- Engage members of your community to help with hazard identification and prevention and mitigation steps.

The next lesson presents processes to include in your emergency plan and different types of plans to use to ensure you are ready.