

Tornado Preparedness and Response

Preparedness

Preparedness involves a continuous process of planning, equipping, training and exercising. Planning for tornadoes requires identifying a place to take shelter, being familiar with and monitoring your community's warning system, and establishing procedures to account for individuals in the building. Employers may need to obtain additional equipment and/or resources (e.g. Emergency Supply Kits) identified in the plan. In addition, workers need to be trained, and plans need to be practiced ensuring that personnel are familiar with what to do in the event of a tornado.

Planning

Identifying Shelter Locations

An underground area, such as a basement or storm cellar, provides the best protection from a tornado. If an underground shelter is unavailable, consider the following:

- Seek a small interior room or hallway on the lowest floor possible
- Stay away from doors, windows, and outside walls
- Stay in the center of the room, and avoid corners because they attract debris
- Rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead
- *Avoid* auditoriums, cafeterias and gymnasiums that have flat, wide-span roofs.

Personnel should also be aware of what to do if caught outdoors when a tornado is threatening. Seek shelter in a basement or a sturdy building. If one is not within walking distance, try to drive in a vehicle, using a seat belt, to the nearest shelter. If flying debris is encountered while in a vehicle, there are two options: 1) staying in the vehicle with the seat belt on, keeping your head below the windows and covering it with your hands or a blanket, 2) if there is an area which is noticeably lower than the roadway, lie in that area and cover your head with your hands.

Accountability procedures

The following steps are recommended to help ensure the safety of personnel if a tornado occurs:

- Develop a system for knowing who is in the building in the event of an emergency
- Establish an alarm system to warn workers
 - Test systems frequently
 - Develop plans to communicate warnings to personnel with disabilities or who do not speak English
- Account for workers, visitors, and customers as they arrive in the shelter
 - Use a prepared roster or checklist

- Take a head count
- Assign specific duties to workers in advance; create checklists for each specific responsibility. Designate and train workers alternates in case the assigned person is not there or is injured

Some businesses are required to have an Emergency Action Plan meeting the requirements under [29 CFR 1910.38](#), see [Evacuation Plans and Procedures eTool](#) for more information. Though Emergency Action Plans primarily involve evacuations, emergency planning for tornadoes involve identifying safe places of refuge for workers to go to in the event of tornadoes.

Employers whose workers will be involved in emergency response operations for releases of, or substantial threats of releases of, hazardous substances regardless of the location of the hazard must comply with OSHA's [Hazardous Waste Operations and Emergency Response](#) (HAZWOPER) standard, [29 CFR 1910.120](#). This may include emergency response following an earthquake. [Instruction CPL 02-02-073](#) describes OSHA enforcement procedures under the relevant provisions of the HAZWOPER standard.

The U.S. Environmental Protection Agency (EPA) has promulgated a standard applying OSHA's HAZWOPER standard to state and local government workers in states where there is no [OSHA-approved State Plan](#). See [40 CFR Part 311](#).

[OSHA's HAZWOPER Safety and Health Topics](#) page explains requirements of the OSHA HAZWOPER standard, including required worker training.

Equipping

- Get emergency supply kits and keep them in shelter locations
 - [Basic Disaster Supplies Kit](#)
- Learn more about [NOAA Weather Radio](#).

Training and Exercises

- Ensure that all workers know what to do in case of an emergency.
- Practice shelter-in-place plans on a regular basis.
- Update plans and procedures based on lessons learned from exercises.

For more information, see the [preparedness guide](#) developed by NOAA, FEMA and the American Red Cross.

Additional guidance on emergency plans:

- [Tornadoes: Being Prepared](#). Centers for Disease Control and Prevention (CDC)
- [Tornadoes](#). Ready.gov - Federal Emergency Management Agency (FEMA)