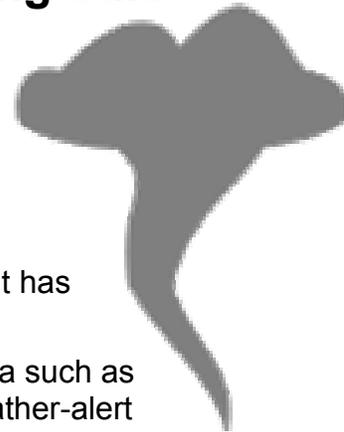


# Tornadoes, JLab Buildings, and Seeking Safe Shelter



Tornadoes are usually by-products of severe thunderstorms, and National Weather Service watches and warnings for thunderstorms often precede or coincide with tornado alerts.

Tornadoes may also be spawned by a hurricane – even after it has been downgraded from hurricane status.

An isolated tornado gives little visual warning in a wooded area such as the JLab site. Advance warning will most likely be via the weather-alert radios distributed around the site and by building occupied.

No building at Jefferson Lab is specifically designed to withstand a tornado; however, most of our structures are engineered to withstand wind velocities up to 100 mph, which is the approximate speed of the majority of tornadoes and tornadic-type winds in our region. The accelerator tunnel and the end stations should provide protection on par with most tornado shelters for higher velocity winds.

***Office and storage trailers are highly vulnerable to tornadoes, and it is unsafe to remain in them if a tornado is approaching.***

**If you are in an office trailer, and a tornado warning is issued, seek refuge immediately in one of these buildings:**

## **Best Choices**

Accelerator Tunnel\*  
Experimental Halls\* & lower corridor  
CEBAF Center  
Counting House  
ARC  
Test Lab (basement is preferable)

## **Alternative Choices**

Accelerator Exit Stairs\*  
Accelerator Access Buildings  
MCC  
Building 87  
Building 89  
VARC

**\* May be inaccessible because of beam operations**

Remember that the safest location in **any** building is an interior room or corridor, away from windows, skylights, and glass doors. Ground floors are preferable to upper floors. Stay out of auditoriums, atriums, or other locations with wide ceilings.

## Tornado Watch

A **tornado watch** means tornadoes may occur in or near the designated area (southeastern Virginia, for example). A tornado watch is usually issued when approaching severe weather (e.g., a squall line) creates the atmospheric conditions that are favorable to tornado formation.

The Emergency Manager, building managers, and safety wardens will inform key line managers that a tornado watch has been issued – as time and circumstances permit.

**If you work in a portable structure, you need to make sure the nearest weather alert radio is on and that you can hear it.** All employees should review actions to take in case a tornado warning follows the tornado watch.



An example of a weather warning radio

## Tornado warning

A **tornado warning** means that a tornado has actually been sighted or has been indicated by radar in the designated area. Warnings sometimes precede the tornado by only a few minutes.

The Emergency Manager, building managers, and safety wardens will attempt to inform key line managers and building occupants receive the tornado warning by the fastest possible means. **It will almost certainly be necessary for occupants of multiple trailer units to pass the word within the building.**

**Follow building procedures to take cover or evacuate to a safer building.** Protect yourself from being blown away, struck by falling objects, or injured by flying debris.

If caught outside, lie down in the nearest depression, e.g., a ditch, and cover your head with your arms. Do not get in a car or vehicle or on a public highway. Remain in place until the threat has passed.

Remain in your sheltered location until an all-clear notice is given by the Associate Director in Charge or designee, and it is relayed to your area.

For complete information on Jefferson Lab's Severe Weather Procedures:

<http://www.jlab.org/ehs/manual/PDF/3510T4SevereWeath.pdf>

More information about tornadoes:

[http://www.jlab.org/intralab/emergency/hurricane/tornado\\_info.pdf](http://www.jlab.org/intralab/emergency/hurricane/tornado_info.pdf)

Information about weather alert radios at JLab:

[http://www.jlab.org/intralab/emergency/alert\\_radio.html](http://www.jlab.org/intralab/emergency/alert_radio.html)

The NOAA Weather Alert System in general:

[http://www.crh.noaa.gov/oax/nwr/nwr\\_main.shtml](http://www.crh.noaa.gov/oax/nwr/nwr_main.shtml)