

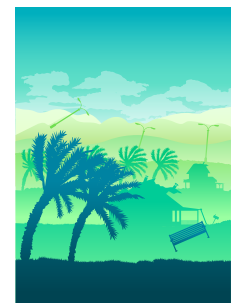
Using NOAA Weather Radio All Hazards (NWR) to Enhance School and Higher Education Emergency Preparedness and Response

READINESS AND EMERGENCY MANAGEMENT FOR SCHOOLS TECHNICAL ASSISTANCE CENTER

The school emergency operations plan's [Communications and Warning Annex](#) and the higher ed emergency operations plan's [Communications and Notification Annex](#) outline how personnel will clearly and effectively communicate necessary information to the whole school or campus community, as well as external stakeholders, before, during, and after an emergency incident. This may include emergency protocols (ideally disseminated before an emergency), internal communication within the Incident Command Center, coordinated communication with community partners, status updates to families, and public information for the media. Within the [Basic Plan](#) section of the emergency operations plan, schools and institutions of higher education address how [information will be collected, analyzed, and disseminated](#) before, during, and after an emergency. This helps outline the education agency's overall approach to emergency operations regardless of the hazard or threat. The ability to communicate timely information to students, faculty, staff, and families can help build the overall preparedness capacity of an education agency.

Discussions with partners regarding use of NWR receivers can help reveal not only who will be responsible for monitoring information shared via the network but also where NWR receivers should be placed.

The National Oceanic and Atmospheric Administration (NOAA) Weather Radios ([NWRs](#)) can be used by education agencies before, during, and after an emergency. The information collected through the NWR may be used to determine which annexes (whether functional or threat- or hazard-specific) should be activated. Furthermore, NWRs may be used to receive information in the event of a power outage, a Wi-Fi outage, or an overloaded mobile phone network. They provide a reliable source of information that will be aligned with information received by local community partners and state-level partners who may support response.



This fact sheet was developed in collaboration with the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service.



This fact sheet is intended for administrators, teachers, faculty, and staff at K-12 schools, school districts, and institutions of higher education (IHEs) to use to prepare to receive emergency notifications. It provides information on the NWR, including key features to look for when purchasing an NWR, where to station NWR receivers on the school campus, where to obtain more information specific to your area, and integration of NWR receivers when practicing the plan.

An Overview of the NWR

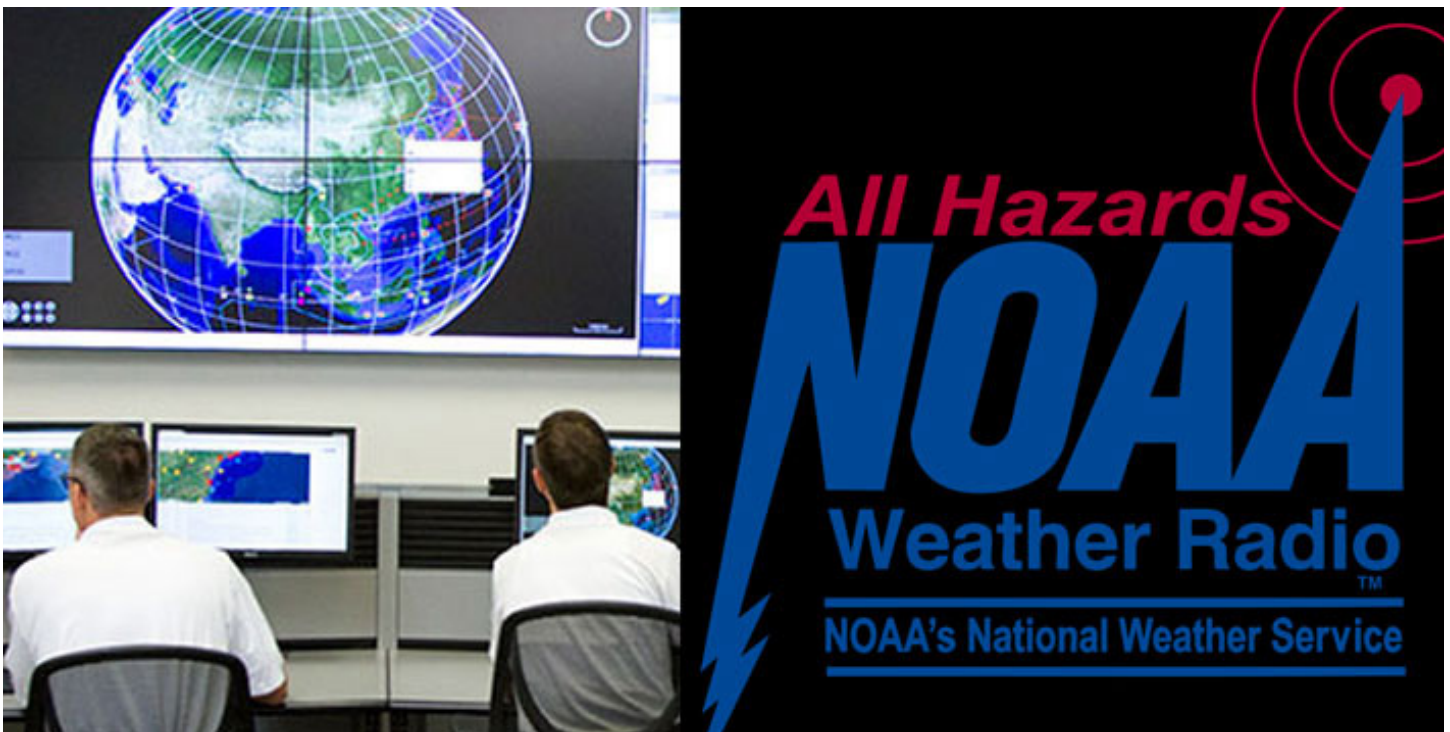
The National Weather Service (NWS) is a federal agency in the NOAA, within the Department of Commerce (DOC). The mission of the NWS is to protect life and property from hazardous weather and to enhance the national economy. [NWR](#) is the official voice of the NWS and provides 24/7 broadcasting of the latest weather information from local NWS offices. With over 1,000 NWR transmitters across the nation, NWR reaches more than 95 percent of the U.S. population. NWR broadcasts include weather forecasts, watches, and warnings as well as non-weather emergency messages, such as the Civil Emergency Message.

School officials can use NWR information to help them make critical life-saving decisions, such as choosing

to delay student dismissal because of hazardous weather conditions or activating an emergency action plan during a severe weather warning. During severe weather and non-weather emergencies, the NWS interrupts the routine broadcast of weather information and, in most cases, activates a signal that alerts many NWR receivers with alerting functions. Many NWR receivers will then immediately announce the warning message concerning imminent threats to life and property. These warning messages will include detailed information on how to prepare and respond to these threats.

NWR broadcasts continuously on one of seven frequencies. NWR listeners must use a special NWR receiver, which may be purchased online or at many electronics “big box” stores. Information on receiver options, including those approved by NWS to use the official NWR All Hazards™ [logo, is online](#). It is important to remember that when purchasing an NWR receiver to determine if it has an alerting function, since not all do. Some radios have the weather band channel to receive NWR broadcasts for monitoring without alerting.

You can locate the NWR transmitters and station frequency for your county and the station frequency for your area on the [NWR County Coverage website](#).



Key features to look for when purchasing an NWR receiver

The following features make it easy to integrate NWR receivers into school districts, individual schools, and IHEs:

1. Location-specific information. NWS warnings are disseminated at the county (or partial-county) level, and the NWS highly encourages using receivers equipped with [Specific Area Message Encoding \(SAME\)](#). SAME assigns each county (or partial county) a unique, six-digit location code, which can easily be programmed into the receiver. When this is done, the radio will only activate with automated tone alerts for warnings specific to a programmed county (or partial county.) code.

You may also obtain your county (or partial county) SAME code by dialing: 888-NWR-SAME (888-697-7263) – Voice and TTY/TTD accessible

2. Automated notifications. Automated tone alerts signal that critical information (e.g., a weather warning) is about to be aired. This function is vital since the receiver will “wake up” for a warning and alert you immediately when the receiver is set to silent mode. After the audio alert, some receivers will automatically turn “ON” with the broadcast. Other models may require the user to turn on the receiver.

3. Battery-powered/Battery-backup-powered. Power often goes out during severe weather events. Be prepared and keep the receiver equipped with good batteries.

4. Portability. Many NWR receivers are portable. In an emergency, administrators and staff can carry a handheld receiver to another location.

5. Ability to reach diverse communities. In selected areas, the NWS provides Spanish language broadcasts. In addition, to make receivers accessible to persons with disabilities, specific models may be outfitted with strobe lights to alert hearing impaired users about a warning message and may be linked to bed-shaking devices for the deaf or hard of hearing individuals.

Where to station NWR receivers on the school campus

- Central administration office (primary location)
- Large meeting areas such as cafeterias and auditoriums
- Principal’s office
- Transportation office
- Student activity centers
- Libraries
- Sports complexes
- School buses where reception permits
- School security offices

NWRs should be placed in the main offices of the public safety operations department, environmental health and safety department, and other strategic locations where designated staff can monitor the radios throughout the day.

Where to obtain more information specific to your area

Severe weather preparedness is essential for all schools. Every school campus should have a comprehensive severe weather notification and response plan. Every local NWS Weather Forecast Office has a [Warning Coordination Meteorologist](#) who would be happy to talk further with school administrators and staff on improving your school’s preparedness and readiness to respond effectively to all types of hazardous weather situations. In addition, many NWS offices conduct severe weather preparedness drills, when school administrators can receive test warning messages via NWR.

Site assessments conducted by a multidisciplinary team, including facilities managers and other members of the core planning team, can help education agencies define distinct locations across school and campus buildings and grounds.

To learn more about NWR All Hazards, please visit www.weather.gov/nwr.

Integration of NWR receivers when practicing the plan

The final step in the six-step planning process outlined in the [Guide for Developing High-Quality School Emergency Operations Plans](#), [The Role of Districts in Developing High-Quality School Emergency Operations Plans](#), and the [Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education](#) recommends that education agencies work in collaboration with their community partners to train key stakeholders on the plan and to conduct exercises that allow portions of the plan to be practiced. Use of NWR receivers can be integrated into exercises and other training opportunities to ensure that staff members assigned to use them in the event of an emergency know how they operate and how information provided by the NWR network can be used to inform a response. There are many strategies that education agencies can use to integrate NWR receivers into efforts to practice EOPs or portions of EOPs. A few are listed below:

1. Partner with the local emergency management agency to conduct a test/exercise alert during designated times of the academic year or to supplement community-based emergency preparedness activities.
2. Train participants in the Teen Community Emergency Response Team (CERT) and campus CERT programs on the use of NWR receivers as a part of skills-building activities.

For example, in the event of a tornado on an IHE campus, the radios may act as an indoor warning system for staff members and students in the many interior offices and classrooms who are unable to hear outdoor tornado sirens. In the school setting, NWR receivers may be used on field trips to ensure staff members can maintain situational awareness in the event of an emergency.

Staff members assigned to monitor NWR receivers must know what course of action to take for each threat or hazard that could be broadcast. Courses of action may vary depending on the type of threat or hazard and/or based on the emergency management function that needs to be activated.

3. Host tabletop exercises with core planning teams to determine how information gleaned from NWR network can inform specific courses of action.

School districts, individual schools, and IHEs might also want to recommend the use of NWR receivers to their local community partners and state education agency, who may not be aware of its benefits. Discussions about building emergency preparedness capacity held with those entities before an emergency takes place can support efforts to refine use of NWR receivers as a universal communication, warning, and notification tool and thus support efforts to ensure alignment at the local and state levels.

Resources

Further Reading—REMS TA Center

- [Communications and Warning Annex at a Glance](#), Web Page
- [Communications and Notification Annex at a Glance](#), Web Page
- [Information Collection, Analysis, and Dissemination at a Glance](#), Web Page
- [SITE ASSESS](#), Mobile Application
- [Managing Emergency Communications, Alerts, and Warnings/Notifications](#), Web Page
- [Using an All-Hazards Approach When Planning for Emergency Incidents](#), Web Page
- [Ensuring Access and Functional Needs Are Met Before, During, and After Emergency Incidents](#), Web Page

Training Opportunities—REMS TA Center

- [Communications and Warning Considerations for Your K-12 Emergency Operations Plan Train-the-Educator](#), Virtual Training by Request
- [Conducting K-12 Site Assessments With SITE ASSESS](#), Specialized Training Package

Further Reading—NWR

- [NOAA Weather Radio](#), Web Page (DOC, NOAA, NWS)
- [All Hazards Logo Information](#), Web Page (DOC, NOAA, NWS)
- [County Coverage by State](#), Web Page (DOC, NOAA, NWS)
- [NWR SAME](#), Web Page (DOC, NOAA, NWS)
- [NWS Regional and Field Leadership](#), Publication (DOC, NOAA, NWS)

Further Reading—Alerts, Communications, and Warnings

- [Checklist for Communications Technology in Training and Exercises](#), Publication (National Council of Statewide Interoperability Coordinators)
- [Be Aware, Be Prepared, Take Action: A Guide for Alerts and Warnings](#), Publication (U.S. Department of Homeland Security, Federal Emergency Management Agency)

Further Reading—Natural Hazards

- [A Preparedness Guide: Including Tornado Safety Information for Schools](#), Publication (DOC, NOAA, NWS)
- [Weather Safety Information for Deaf and Hard of Hearing](#), Web Page (DOC, NOAA, NWS)
- [When the Weather Turns Severe: A Guide to Developing a Severe Weather Emergency Plan for Schools](#), Publication (DOC, NOAA, NWS)

Further Reading—EOP Development

- [Guide for Developing High-Quality Emergency Operations Plans for Institutions of Higher Education](#), Publication (U.S. Departments of Education; Homeland Security, led by the Federal Emergency Management Agency; Justice, led by the Federal Bureau of Investigation; and Health and Human Services)
- [The Role of Districts in Developing High-Quality School Emergency Operations Plans](#), Publication (U.S. Departments of Education, Homeland Security, Justice, and Health and Human Services)
- [Guide for Developing High-Quality School Emergency Operations Plans](#), Publication (U.S. Departments of Education; Homeland Security, led by the Federal Emergency Management Agency; Justice, led by the Federal Bureau of Investigation; and Health and Human Services)

