

# Getting Started with Amateur Radio

## A BACKUP COMMUNICATION SYSTEM FOR HEALTH EMERGENCIES

Amateur radio, also known as “ham” radio, is a noncommercial, two-way transmission of signals over short-wave and other radio frequencies. A number of Minnesota’s local public health agencies, tribal governments and hospitals are using amateur radio as a backup communication system for health emergencies.

Minnesota has a well-developed alerting and notification system in the Health Alert Network. Infectious disease, vaccine preventable disease, the laboratories and environmental health experts maintain MDH websites with recommendations to health emergency responders. It doesn’t take long in any discussion of emergency communication before someone asks, “What happens if the Web goes down?” or “We could lose electricity and phone lines. How do we communicate then?”

There is not a single answer to the question of what to do if power is lost. Satellite phones might fill some of the gap. Strong, stand alone, local Health Alert Networks are another part of the answer. Developing connections, planning and exercising with local amateur radio operators are another part of the answer.

## Amateur Radios in Response

Amateur radio operators provided much needed communication during storms that hit Florida in the fall of 2004, and Indian Prime Minister Manmohan Singh has praised the contribution amateur radio operators have made in the aftermath of the South Asia tsunami of December 2004. More recent events include: Support to 2018 California Fires, Oregon ARES Drill Scenario, and internationally, South Africa Wild Fires. The Federal Communications Commission (FCC) Rules note the provision of emergency communication as one of the principles of amateur radio service, and aid to country and community is part of the amateur’s code. One of the key purposes of amateur radio is to provide a group of skilled volunteers to assist emergency responders in law enforcement, emergency management, and public health in the event of a disaster or other incident. This sort of public service is the primary justification for the radio spectrum the FCC allows amateur radio operators to occupy.

Radio amateurs come from all walks of life: physicians, lawyers, scientists and engineers to entertainers, mothers, government employees, and long-haul truck drivers. In discussions with amateur radio operators, MDH Emergency Preparedness staff found the radio operators understand the challenges of emergency communication. Their first question is always “How can we help?”

## How to Get Involved

Some Radio Amateurs seek additional training to better understand the Incident Command System, policies and procedures, so that they may more fully participate in a Response. This includes trainings through FEMA, ARES, and other local and nationally supported organizations.

## GETTING STARTED WITH AMATEUR RADIO

If you are interested in Amateur Radio or developing amateur radio as a backup emergency communication system in your area, here are some suggestions:

1. **Don't** purchase equipment unless you have a knowledgeable amateur radio operator and backups for that individual on staff who will be free to operate the radio during an emergency.
2. **Do** contact local amateur radio operators. To find radio operators in your area, contact Bill Mitchell, Minnesota Section Manager of the National Association for Amateur Radio (ARRL) at [ae0ee@arrl.org](mailto:ae0ee@arrl.org).
3. **Do** meet with radio operators; discuss what you need and ask what they can provide. If you're not sure what you need, the links below may give you some ideas.
4. **Do** include amateur radio operators in your preparedness exercises.
5. **Do** participate in amateur radio operators Field Day. During these exercises, radio operators set up portable equipment that uses emergency power to test their emergency communication skills.

Several amateur radio operators have provided invaluable advice to the MDH over the past year. A formal group of amateur radio operators and advisors meet regularly to discuss events and activities.

The Minnesota Department of Health has Amateur Radio equipment at our St. Paul (Freeman Building) and St. Cloud locations. These locations are set up as Multi Resource Communications Centers and have fixed base configurations, with outdoor antenna systems for radio equipment.

This equipment is primarily used for response but can be used as needed to support MDH events and activities throughout the state. Amateur Radio equipment is available for use by volunteers and staff that are FCC Licensed Amateur Radio Operators.

We also encourage you to begin your own discussions with amateur radio operators and amateur radio clubs in your area. The nature of these activities and their primary purpose are to provide a backup communication system and to support calls for local development and deployment when needed.

### Amateur radio resources

- [The National Association for Amateur Radio Website](#)  
Basic information on ham radio.
- [Public Service Communications \(ARES\) Manual \(PDF\)](#)

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