



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 frequencies. A number of Minnesota’s local public health agencies, tribal governments and hospitals are considering 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 that question. 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 radio operators provided much needed communication during the four storms that hit Florida in the fall of 2004¹, 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 2004². The Federal Communications Commission (FCC) Rules³ 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 code⁴. 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 health in the event of a disaster or other incident, and 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-

¹ The ARRL Letter Vol. 23, No 39 <http://www.arrl.org/arrlletter/04/1001/>

² The ARRL Letter Vol. 24, No 01 <http://www.arrl.org/arrlletter/05/0107/>

³ FCC Amateur Radio Service <http://wireless.fcc.gov/services/amateur/index.html>

⁴ Amateur’s Code <http://www.arrl.org/acode.html>

haul truck drivers. In discussions with amateur radio operators, MDH Health Alert Network staff found the radio operators understand the challenges of emergency communication. Their first question is always "How can we help?"

If you are interested in 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 Skip Jackson, Minnesota Section Manager of the National Association for Amateur Radio (ARRL) at ks0j@arrl.org or 651-260-4330.
3. When you 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. 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 Health Alert Network over the last year. A more formal group of amateur radio advisors will begin meeting soon. We'll provide updates of these activities but encourage you to begin your own discussions with radio operators in your area. The nature of the activity and its primary purpose of providing a backup communication system, calls for local development.

Amateur radio resources:

The National Association of Amateur Radio (ARRL) website offers basic information. <http://www.arrl.org/hamradio.html>

The Public Service Communications Manual at <http://www.arrl.org/FandES/field/pscm/index.html> is also useful reading for understanding amateur radio.

The Hospital Disaster Support Communications System Website has provided emergency communications assistance for Orange County hospitals for 14 years. Written for hospital staff, not radio operators, this is a good resource for any non-ham person who wants to understand more. <http://members.aol.com/emcom4hosp/>

The Joint Commission on Accreditation of Healthcare Organizations offers advice about how to assess backup communication needs. <http://www.jcrinc.com/subscribers/perspectives.asp?durki=2525>