



**Taking it one step at a time.**

# EMERGENCY COMMUNICATIONS

*During a disaster, telephone communications may be hampered by a combination of circuit overload and equipment damage. If the power goes out, you could lose the use of your television or radio. With some pre-disaster planning, you will have other communications options.*

**It isn't only telephones that are dependent upon telephone lines.**



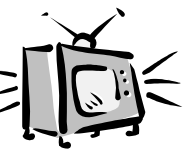
Telephones, cellular telephones, satellite telephones, pagers, facsimile machines, e-mail, and internet connections may all be dependent upon "land lines" provided by your local telephone company. Whether using a public or private telephone system, your call may traverse several different types of transmission paths before completing your connection.

**Designate an out-of-state telephone contact.**

Disasters don't always happen when you're at home, so you'll need a way to check in with family members. Sometimes, when local telephone lines are down, it is still possible to make an out-of-state call. Arrange with someone living in an area that is covered by a different telephone area code, and have family members call to report their location and status. Carry that telephone number in every wallet in the family, so it is accessible during a disaster. As with the rest of your family disaster preparedness plans, practice, practice, practice! Make sure the procedures are worked out before you need to use them.

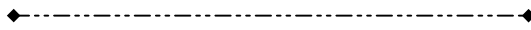
**You can learn a lot from the local news.**

Radio - The same radio stations you normally listen to for news coverage will probably be covering the local disaster situation. Stations compete for listeners by being first with the latest news scoop. Many radio stations have backup power, so they can stay on-the-air in the event of a power failure. You should also have a backup plan, including a battery-operated or hand-cranked radio.



Television - The same is true of television stations - they'll compete for your viewing by bringing the disaster right into your home in living color! Many stations use generators to remain on-the-air during a power failure. Your backup plan should include a battery operated television. A less expensive alternative is a battery-operated or hand-cranked radio that receives television audio.

**Emergency Alert System** - You hear EAS tested periodically on radio and television - those obnoxious tones followed by the message, "This has been a test of the Emergency Alert System..." A recent EAS equipment upgrade by all radio and television broadcasters, cable TV providers, and the National Weather Service has greatly improved our ability to get the emergency message out. If you're listening on the radio, you'll hear the warning tones followed by a recorded emergency message of up to two minutes in length. If you're watching local broadcast or cable television, you'll get the same warning tones and recorded message, but you'll also get a written message scrolled across the bottom of your television screen. *Note: If you are watching a television that is subscribed to a satellite broadcast service, you will not receive the emergency warning unless you are viewing a local station. Satellite systems cover too broad an area to transmit "local" EAS messages.*



**Communications Tip:** Don't depend upon "high tech" solutions, and don't overlook the obvious. Sometimes, sending a runner is the best solution! You could set up a "sneaker net" in your neighborhood, where neighbors go from home to home to pass the latest disaster news.

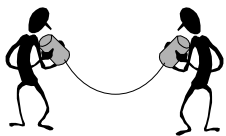


## Some Emergency Radio Communications Options

*NOTE: For more information on regulations governing these radio services, see the Code of Federal Regulations Title 47, Part 95 (<http://www.fcc.gov/wtb/prs/>) and Part 97 (<http://www.fcc.gov/wtb/amateur/>).*

**Citizen's Band Radio** - This may be the most familiar radio system, due to its popularity with truckers and as part of the pop culture of the 1970s. CB has 40 radio channels to choose from, and you can be heard for a distance of 4-5 miles. Channel 9 is set aside by the FCC for emergency communications, and many CB enthusiasts monitor that channel for distress calls. You do not need a license to operate a CB radio.

**Family Radio Service** - These small, battery-operated, handheld radios with up to 14 channels can be heard for a distance of 1-2 miles. They are great in an emergency and also great for keeping track of each other during family outings. On the downside, they tend to use up batteries very quickly, so you might want one that is rechargeable or has a cigarette lighter adapter. You do not need a license to operate an FRS radio.



**General Mobile Radio Service** - GMRS radios may transmit at higher power and be heard for 5 - 25 miles. Many GMRS radios share 7 of the 14 FRS channels, so you can communicate between the two systems. *You must have an FCC-granted license and station identification to operate a GMRS station.* Licenses are granted for the benefit of the licensee and immediate family members only.

**Amateur Radio** - It's not just a hobby, it's an emergency communications adventure! Amateur radio operators, or "hams," have been providing emergency radio services since 1936. Your local Emergency Manager is supported by a group of well-organized ham enthusiasts who have voluntarily registered their qualifications and radio equipment for duty during emergencies. You are also likely to have one or more hams living in your neighborhood. (Hint - look for the antennas!)



*You must have an FCC-granted license and call sign to operate amateur radio equipment, and operating privileges are different for each of the three levels of licensing.*

Hams can operate in most frequency bands from their homes, vehicles, or outdoors. The high frequency (HF) band can communicate across the country or worldwide. Very high frequency (VHF) and ultra high frequency (UHF) bands provide more local communications, often from a handheld radio that fits in your shirt pocket! Amateur radio has one especially useful emergency feature: they can interconnect with the local telephone company to make a call (when phone lines are working). They can also send voice messages or video with a latitude/longitude location tag, which is useful for initial reporting of disaster damages to local authorities.

**Communications Tip:** If you'll be using radios in a noisy environment, invest in a good, comfortable headset. Your ears will thank you! An added benefit is that your batteries will last longer at the lower volume level.



### Emergency Radio Etiquette:

- Refrain from using the radio except for bona fide emergency needs, *and keep conversations short.* Radio frequencies are shared, and your chatter may prevent someone from requesting needed help.
- Good News - You'll be heard by anyone monitoring the radio frequency! This increases your chances of getting the help you need.
- Bad News - You'll be heard by anyone monitoring the radio frequency! No radio communication is truly private, so don't broadcast sensitive information.
- Use plain language. Although you may know the meanings of all the "10 codes" and other radio jargon, the folks you're trying to talk to may not, or they may know a different meaning altogether.
- Listen before you transmit. Make sure you aren't interrupting a conversation.
- If you must interrupt for a bona fide emergency, say "Break for a medical emergency" or other appropriate language. The other parties should yield the frequency to you or attempt to assist.
- Do not use obscene, indecent, or profane words, language, or meaning.
- Do not use the radio to advertise the sale of goods or services.