

Integrated Public Alert and Warning System

Wireless Emergency Alerts

In weather emergencies, warnings can save lives. But traditional warning methods such as television, radio and outdoor sirens don't always reach everyone.

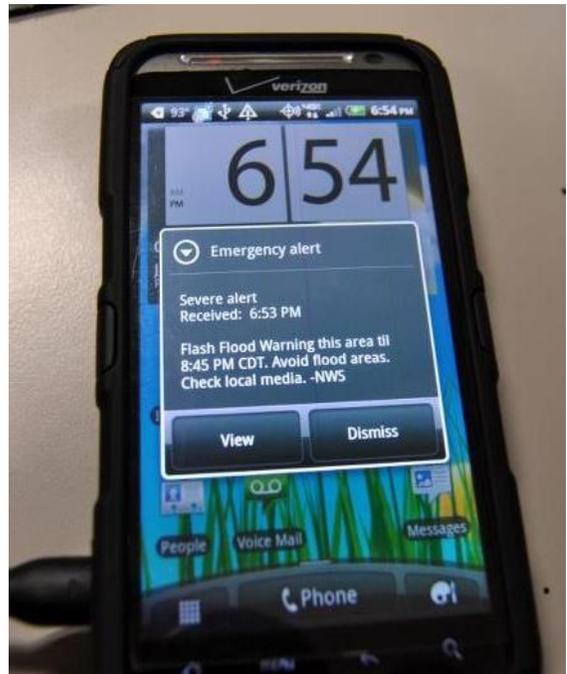
Beginning in June 2012, emergency officials had a new way to send warnings directly to cell phones in affected areas — Wireless Emergency Alerts (WEAs).

These short messages may look like a text message, but unlike texts, which are sent directly to your phone number, these warnings will be broadcast to all phones within range of designated cell towers through the Commercial Mobile Alert System (CMAS).

The alerts will tell you the type of warning in your area and the duration. You'll need to turn to other sources, such as television or your NOAA All-Hazards radio, to get more detailed information about what is happening and what actions to take, if any.

Key facts to know:

- WEA messages may look like a text, or appear over your home screen.
- View the message as you would any text, and seek additional information (e.g, media). Do not delete the message as it may be retransmitted back to your phone.
- The alert message will include a unique ringtone and vibration.
- You will never be charged for WEA messages (NO fee or subscription).
- Emergency alerts will not interrupt any calls or downloads in progress. If you're on the phone when the alert goes out, you'll get the message when you end your call.
- You need not have GPS or any other special features turned on to receive the alerts.
- The system does not identify your location or phone number — it simply sends the message to all devices in a given area.
- If you're on the road and enter an area with an active warning, you'll receive a WEA message as soon as you come within range of one of the affected cell towers.



Example of WEA message on cell phone. Appearance will vary on each phone. The National Weather Service had issued a flash flood warning in the county or near the cell tower in range of this phone.

Is your phone ready for WEA?

If you have an older model phone, you may not receive the Wireless Emergency Alerts. Some, such as newer-model iPhone and Android phones, will soon receive software updates that add this feature.

Check with your service provider to find out if your phone is WEA-capable. AT&T, Cricket, Sprint, T-Mobile and Verizon all have information about the new alert system on their websites. Search for WEA (Wireless Emergency Alerts) or CMAS (Commercial Mobile Alert System) to find your provider's list of WEA-capable phones.

Cell tower geography may lead to overwarning

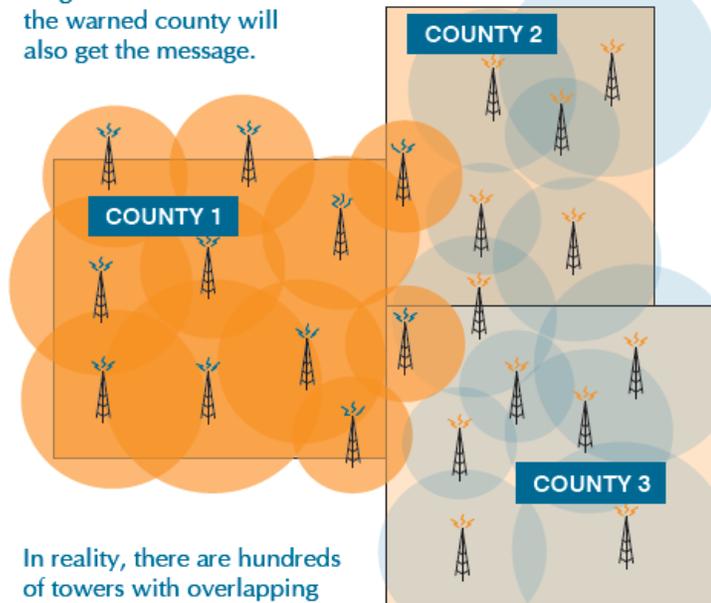
Because cell towers broadcast in a radius, or circle, their coverage areas don't line up neatly with county boundaries. This means you may receive warnings for an adjacent county if you're within a few miles of the border.

The alerts are delivered directly from cell tower to cell phone through a one-way broadcast. The Commercial Mobile Alert System does not track or locate individual cell phones or phone numbers — it simply broadcasts to all phones within range. Unfortunately, in some cases, this may result in overwarning.

For example, if a tornado warning is issued for a particular county, it will go to all towers that serve that county.

Towers in urban areas generally serve a radius of two to five miles, and in rural areas up to 10 miles, so the warning message may reach a little beyond the warning boundaries.

As this simplified illustration shows, when a warning is issued for County 1, people in County 2 and County 3 who are within range of a tower that serves the warned county will also get the message.



In reality, there are hundreds of towers with overlapping service areas

Wireless Emergency Alerts (WEA): Three Types of Warnings

The Commercial Mobile Alert System (CMAS) can be used to broadcast 3 types of WEA:

- **PRESIDENTIAL ALERTS** — Issued by the U.S. President in the event of a nationwide emergency.
- **IMMINENT THREAT ALERTS** — Typically issued by the **National Weather Service**; for San Diego, Orange, San Bernardino and Riverside counties, these would include **flash flooding, dust storm and tornado warnings**. For the counties of San Diego and Orange this also would include **tsunami warnings (not advisories)**.
- **AMBER ALERTS** — Issued by law enforcement (CHP) to share information about a child abduction.

No president in history has issued a presidential alert, but should one become necessary, cell phone providers are required to broadcast it to all WEA-capable phones.

Cell phone users may choose to opt out of imminent threat and/or AMBER alerts, but the procedures vary by carrier. Some providers will allow customers to opt out of one or the other, while others only allow you to opt out of both. Contact your wireless provider for more information.

If you receive a message then acknowledge it (do not delete) and seek additional information. A deleted message can lead to retransmitted text messages. It is encouraged for all residents not to disable these potentially life-saving messages but phones have options.

Original document from the Kansas City Metropolitan Emergency Managers Committee. **To learn more, contact your local emergency management office or wireless service provider.**

WEA Messages Originated by NWS

When new alert or correction issued or time/area extended

Warning Type	WEA Message
Tsunami Warning	Tsunami danger on the coast. Go to high ground or move inland. Check local media. -NWS
Tornado Warning	Tornado Warning in this area til hh:mm tzT. Take shelter now. -NWS
Extreme Wind Warning	Extreme Wind Warning this area til hh:mm tzT ddd. Take shelter. -NWS
Flash Flood Warning	Flash Flood Warning this area til hh:mm tzT. Avoid flooded areas. Check local media. -NWS
Hurricane Warning	Hurricane Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS
Typhoon Warning	Typhoon Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS
Blizzard Warning	Blizzard Warning this area til hh:mm tzT ddd. Prepare. Avoid Travel. Check media. -NWS
Ice Storm Warning	Ice Storm Warning this area til hh:mm tzT ddd. Prepare. Avoid Travel. Check media. -NWS
Dust Storm Warning	Dust Storm Warning in this area til hh:mm tzT ddd. Avoid travel. Check local media. -NWS

Legend

tzT = timezone

ddd= three letter abbreviation for day of the week

Useful Links

Weather Ready Nation WEA website including FAQ's

<http://www.nws.noaa.gov/com/weatherreadynation/wea.html>

Wireless consumer information

http://www.ctia.org/consumer_info/safety/index.cfm/AID/12082

Article on WEA

http://www.noaa.gov/features/03_protecting/wireless_emergency_alerts.html

10 minute video on CMAS/WEA

http://www.youtube.com/watch?v=OVhX_SbVxnY

More Questions?

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