



Crash Detection

iPhone and Apple Watch can detect severe car crashes and help users contact emergency services.

Key Takeaways

- Crash Detection is optimized for severe crashes of passenger vehicles that are likely to have resulted in injury.
- Users are provided the opportunity to cancel the automatic call to emergency services.
- For automatic calls, an audio message will explain that a severe crash was detected, and provide the user's location.
- No additional logins or software are needed to receive Crash Detection incidents. Audio messages will arrive in the normal way via existing equipment.

Audio Message

"The owner of this iPhone / Apple Watch was in a severe car crash and is not responding to their phone / watch. The emergency location is Latitude 39.98710, Longitude -105.29365, with an estimated search radius of 30 meters. This message will repeat in 5 seconds."

Location

Crash Detection calls provide location estimates using Apple's Hybridized Emergency Location. Location is delivered via each country's native emergency location transport (e.g., SIP, NLR, or AML), via Apple's Enhanced Emergency Data service in supported countries, and, for automatic calls, in the audio message.

The entire iPhone 14 lineup with Apple Watch Series 8, Apple Watch SE (2nd gen), and Apple Watch Ultra will contain powerful new motion sensors that are capable of detecting up to 256 Gs of force. Combined with data from the device's barometer, GPS, and microphone sensors, these sensors work together to detect severe car crashes.

Crash Detection is designed for common passenger vehicles such as sedans, mini-vans, SUVs, and pickup trucks. It is designed to detect severe crashes that are likely to have resulted in injuries that rate level 3 or higher on the Maximum Abbreviated Injury Scale (MAIS). Injuries at this level include things like major lacerations, multiple fractures, crushed limbs, and bruised organs.

Apple has validated sensor and algorithm performance using extensive real world and simulated car crashes, allowing the feature to detect as many severe crashes as possible, while minimizing false positives.

Emergency Calls

When iPhone or Apple Watch detects a severe crash, it will check-in with the user through prominent visual screens, loud whoops, and aggressive haptic cues. The user can easily call emergency services using an emergency call slider, or they can cancel.

If the user doesn't respond in the first 10 seconds, iPhone or Apple Watch will begin another 10 second countdown with louder whoops and more aggressive haptics. If the user is still unresponsive, iPhone or Apple Watch will place an emergency call.

Automatic calls are accompanied by an audio message that informs emergency services of the victim's location and search radius. The audio message will repeat after a five second pause at a reduced volume to enable verbal communication if the user becomes responsive. The user may also tap to cancel the audio message loop.

When the emergency call ends, iPhone will start a countdown to share crash information with all emergency contacts configured in their Medical ID. Additionally, Medical ID information, if configured by the user, can be available to field responders even if the user's phone is locked.

Learn more

For more information email safety_systems@apple.com.