



Highlights of [GAO-09-604](#), a report to the Chairman, Subcommittee on Communications, Technology, and the Internet, Committee on Commerce, Science & Transportation, United States Senate

Why GAO Did This Study

Emergency communications breakdowns undermined response efforts during terrorist attacks in 2001 and Hurricane Katrina in 2005. In response, federal agencies like the Department of Homeland Security (DHS) and Federal Communications Commission (FCC) have increased efforts to enhance emergency communications. This requested report identifies (1) vulnerabilities, if any, to emergency communications systems; (2) federal assistance available or planned to first responders for addressing vulnerabilities or enhancing emergency communications; and (3) challenges, if any, with federal emergency communications efforts. GAO developed six catastrophic disaster case studies, reviewed agency documents, and interviewed public and private sector officials at the national, state, and local levels.

What GAO Recommends

GAO recommends that DHS complete efforts to help implement the National Emergency Communications Plan; DHS and FCC establish a forum or other mechanism to collaborate on significant agency emergency communications efforts; and DHS leverage its expertise to help federal agencies develop emergency communications plans. DHS and FCC generally agreed with the recommendations. FCC raised concerns about the report's depth and scope. GAO clarified the scope and made other changes, as appropriate.

View [GAO-09-604](#) or [key components](#). For more information, contact David J. Wise at (202) 512-2834 or wised@gao.gov.

EMERGENCY COMMUNICATIONS

Vulnerabilities Remain and Limited Collaboration and Monitoring Hamper Federal Efforts

What GAO Found

Continuity of communications, capacity, and interoperability are primary areas of vulnerability in first responder emergency communications in communities across the country. The destructive nature of catastrophic disasters can disrupt continuity of communications—the ability to maintain communications during and following a disaster. A volcanic mudflow at Mount Rainier, Washington, could destroy infrastructure supporting communications systems. Capacity—a communication system's ability to handle demand, provide coverage, and send different types of information—is also vulnerable in a catastrophic disaster. For example, blind spots, areas outside the range of communications systems, could inhibit response. Lastly, vulnerabilities involving interoperability—the ability to communicate across different organizations and jurisdictions as needed and authorized—remain due to technological and human factors.

Federal agencies provide a wide range of assistance intended to help first responders mitigate emergency communications vulnerabilities. GAO grouped available federal assistance into three categories: (1) new guidance and other significant federal efforts; (2) grants and funding; and (3) technical support and federal assets. DHS and other federal agencies have taken strategic steps to enhance emergency communications by issuing key documents like the National Emergency Communications Plan—the first strategic document for improving emergency communications nationwide. Numerous grants are available and are increasingly aligned with recently developed national and state plans. Federal agencies like DHS also offer technical support intended to help mitigate vulnerabilities through planning and on-the-scene assistance.

Limited collaboration and monitoring jeopardize federal emergency communications efforts, even as the federal government has taken strategic steps to assist first responders. Federal agencies have demonstrated limited use of some best practices that GAO previously reported as helpful for addressing issues like emergency communications. Delays in establishing the Emergency Communications Preparedness Center, which would help define common goals and mutually reinforcing strategies—two collaboration best practices—undermine the National Emergency Communications Plan's implementation. DHS and FCC have also not applied these practices in FCC's effort to promote a public safety network for emergency communications. Agency officials reported it was either too early or not the agency's responsibility to use these best practices in developing this network. DHS did not submit formal comments to FCC and FCC officials described its proposed network as separate from DHS emergency communications efforts. However, GAO found potential opportunities to align these agencies' efforts. Another collaboration best practice is leveraging resources, which DHS has done in providing emergency communications technical assistance and planning guidance. But efforts have focused on state and local jurisdictions and less on federal agencies, some of which lack formal emergency communications plans. Monitoring is also crucial in helping agencies meet goals.