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2007 San Diego County Wildfire Response: A Lesson in Disaster Preparedness Collaboration

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In October 2007, southern California smoldered in the wake of wildfires that stretched from San Bernardino County to the United States–Mexico border. As many as 20 successive fires consumed the area, with 8 wildfires in San Diego County alone. Despite the magnitude of the event and the staggering amount of people—500,000—evacuated, the death toll was only 10 people. This remarkable achievement gave credence to a robust and well-developed disaster response system.

Dr Wilma Wooten, Public Health Officer of San Diego County, believed that the successfully coordinated mass evacuation was the product of 3 basic components: command, communication, and collaboration. An essential component of mass communication was the new reverse 9-1-1 notification system. Designed using funding from the US Department of Homeland Security under the Urban Areas Security Initiative (UASI), the notification system was created to enhance regional response capabilities during a disaster. The system was designed to make mass telephone calls to the public, and to deliver as many as 240,000 telephone calls in 1 hour in the event of an emergency or disaster. 1 Dr Wooten stated, "The reverse 9-1-1 notification system, on a large scale, helped all first responders as well as the public in the evacuation."

Before the reverse 9-1-1 system was introduced, the methods of informing San Diego County residents of a mass evacuation were limited to use of the media, loudspeakers on emergency response vehicles, and local sheriffs going door to door. The 2004 San Diego Regional Fire Prevention and Emergency Preparedness Task Force Report assessing the 2003 Cedar Fire indicated that broadcast messages were delayed, too broad, and lacked specificity to inform susceptible communities. The report also stated that broadcast methods, such as televisions or radios, carried 2 minutes worth of information and led to confusion among the public as to whether the threat of a fire was actually in their area.² Furthermore, the unpredictability of the Santa Ana winds that helped fuel the Cedar Fire made timely communication during the wildfires a necessity.

The reverse 9-1-1 system used geospatial mapping, which identifies residents living in areas vulnerable to fire. The

advantages of such a system also allowed for locally targeted and timely communications to evacuees. Moreover, the reverse 9-1-1 notification included information regarding accessible evacuation shelters. Dr Wooten reported that directing residents to specific shelters helped logistically pinpoint where public health resources were needed. As an example, ambulance teams were directed to where evacuees were going and assisted in the medical response. This dramatically aided in the evacuation of Fallbrook Hospital, in northern San Diego County where, according to Ronald Lane, Director of the Office of Emergency Services, prepositioned ambulance teams and buses evacuated patients with 2 hours' notice.

Another significant component of the coordinated response was preexisting relationships between the local Red Cross and the San Diego County Public Health Department. Red Cross liaisons communicated directly with the San Diego County Public Health Department to help facilitate response and resource allocation for this disaster. "That allowed," explained Laura Howe, Director of Disaster Public Affairs, "an increase in the flow of information which helped Red Cross responders to be better prepared during the operation. We had improved information about evacuees and we could better serve them."

As the mass evacuation progressed, coordination of medical resources such as doctors, emergency medical technicians, and nurses were diverted to shelters. Tom Gehring, Executive Director and Chief Executive Officer of the San Diego County Medical Society, stated that before the wildfires a database of physician information was collected.

"We had contact information for all of San Diego's 6700 physicians," said Gehring. This database was used during the fires to keep the medical community informed. Blast e-mails and faxes were sent every 24 hours throughout the duration of the fires. Gehring explained, "We considered ourselves the nexus of information for physicians and worked with government to meet needs of evacuees and shelters." This information allowed the San Diego County Medical Society to be a supplier of excess capacity to meet any public health need during the response. According to Gehring, demands for

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medical services and systematic needs never outstripped the supply and capacity to meet those demands.

The Medical Reserve Corps (MRC) was also an invaluable resource. Wooten stated that 276 MRC members were contacted and 66 were deployed to respond. April Wood, the Red Cross Senior Associate of Disaster Health Services, said that their partnership with the MRC provided support needed for the sheltered evacuees. Wood added that more than 200 licensed health services staff, composed of doctors, nurses, nurse practitioners, physician assistants, and emergency medical technicians, were sent to evacuee shelters to provide care. Wood stated, "In terms of a medical response, it was a great success."

In addition, medical resources were distributed during the fires. Dr Asha Devereaux, physician advisor to the San Diego MRC, stated that evacuees who fled their homes often left their medicines behind. Shelters must have the ability to provide basic medical needs. As an example, many Red Cross volunteers were on hand to distribute face masks to evacuees.

This remarkable response exemplified the 3 tenets of command, communication, and collaboration. The development of the private–public partnership and the successful imple-

mentation of the reverse 9-1-1 system provided the framework for the effective coordinated response. Dr Wooten also praised state efforts during the disaster: "This was an example of the collaboration of the highest level—local, regional, state, and federal."

About the Author

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Received for publication December 14, 2007; accepted December 18, 2007.

ISSN: 1935-7893 © 2008 by the American Medical Association and Lippincott Williams & Wilkins.

DOI: 10.1097/DMP.0b013e318165b940

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