

Responding In An Emergency

Executive Summary

Customer Name
Oakland County
Michigan

Industry
Government

Challenge

- 1.2 million residents
- Pandemic exercise
- Maximize citizen vaccination
- Cross-boundary planning and response
- Innovative vaccine-dispensing model

ConnexAll® Solution

- ConnexAll Emergency Management Solution
- Cisco Video Surveillance System

About Oakland County

Oakland County was officially organized on January 12, 1819 and was divided into two townships. The northern section was Oakland Township and the southern section was Bloomfield Township. In 1827, Oakland County was further divided into five townships: Farmington, Bloomfield, Troy, Oakland and Pontiac. The 2000 U.S. Census reports 1,194,256 people reside in Oakland County, the second most populous county in Michigan, and the 26th most populous in the United States.

Challenge of a County-Wide Pandemic

It would begin with a slow trickle of the sick into emergency rooms. But within hours of word breaking that the region was hit with a pandemic flu, healthy and ill citizens alike would be clamoring for care at hospitals, at drugstores, at schools, even at local government offices.

More chaotic than the crowds, though, would be the confusion: principals asking if their schools should be on lockdown, quarantined. Thousands of citizens calling government offices, asking about their loved ones, where to go, what to do next.

The situation could quickly escalate from a pandemic crisis into a law enforcement crisis as well. The county would be responsible for working with the first responders, community leaders, relevant agencies, and the media. Coordinating the effort to react to the pandemic while simultaneously assuring the public of their safety. Critical to fulfilling all of these roles and responsibilities is the ability to quickly and accurately share real-time information across sectors and boundaries, and mobilize citizens, agencies and public health officials to work together to mitigate the crisis.

Oakland's Challenge

Officials in Oakland County knew the stakes were high – the impact of an influenza pandemic on the 1.2 million residents of Oakland County could include 300,000 persons ill, 36,000 persons hospitalized and 840 deaths.

One of the lesson learn from Oakland's annual county flu clinic was that their current plan for communication among the wide network of responders, volunteers and medical professionals hindered effective preparation and response. In a public health emergency in Oakland County thousands people might need to be contacted and given direction regarding their roles and responsibilities. Under their current plan, select OCHD staff would contact other employees and volunteers via work phones, cell phones or email. Many departments would utilize calldown lists, discovering that calling staff and volunteers individually wasted precious time.



Officials knew they needed a more robust plan for cross-boundary communication and coordination. With a better system, they could mobilize locations and the incident-command structure faster, and optimize situational awareness. This would be the foundation for meeting their primary goal of maximizing the number of citizens managed within the first hours and days of any crisis.

The ConnexALL Solution

Network-centric business models play a critical role in enabling a region to act on the two dimensions. First, they help provide the tools for information sharing and align the cross-boundary roles, responsibilities and resources that can increase the comprehensiveness of planning and preparation. Second, they help increase the speed of mobilization and response to a crisis as key personnel know the location and level of resources, can communicate with enhanced interoperability, and can respond with greater situational awareness and clarity in purpose.

When a region uses a network-centric approach it can mobilize resources and people with greater speed than with older methods such as one-on-one contact and silo-based organizational communication. Thus, a region can exponentially increase its surge capacity and response ability – which is critical when attempting to mitigate a crisis that itself grows exponentially.

Using the Emergency Operations Center (EOC) as the system's hub, Oakland County deployed the ConnexAll to which enable interoperability between disparate radio networks and traditional communications networks. They also deployed the Cisco Video Surveillance Manager (VSM) solution which can use both analog cameras and IP cameras to stream visuals over the server to the EOC or to other devices. As ConnexAll and the VSM send data over an IP network they enable comprehensive communications interoperability between different networks and devices such as Land Mobile Radio (LMR) systems, push-to-talk (PTT) phones, IP phones, and PCs.

Having ConnexAll dramatically increased the effectiveness of Oakland County officials and responders. The next annual flu clinic demonstrated that in a real pandemic, the EOC representative could stand in front of the workstation and pull up information from the health division on what the symptoms of the outbreak look like. While looking at this content on the screen, the official could have a real-time conversation with an incident commander who could be on an 800-MHz radio, a dispensing site official on a mobile phone, an official from the health department on a networked desktop computer, and a hospital administrator on a traditional telephone. While they are in discussion, the EOC official could add other users to the system such as a first responder on a mobile phone. The EOC official could also view in real time the video feeds of the dispensing sites and provide critical information as to what is happening in the field (such as too many citizens flowing into one particular dispensing location), which could help the others change their strategies and make decisions based on accurate and real-time information.

"Old silo-based planning and response approaches to a major crisis just don't work. The new and most effective way is through better partnerships across agencies and sectors – the cross-boundary collaboration that improves our surge capacity and our ability to save lives,"

says George Miller.

Oakland County
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