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PRACTICE NOTE

H1N1 Preparedness: The Marin County, California, Sheriff's Office of Emergency Services H1N1 Threat Assessment

PRACTICE

The Marin County, California, Sheriff's Office of Emergency Services (OES) developed a threat assessment for a possible resurgence of novel influenza A (H1N1) in fall of 2009. The assessment helped to define the H1N1 influenza threat to the county, to communicate that threat to county officials, and to identify potential shortfalls in the county's response capabilities.

DESCRIPTION

The 2009 H1N1 pandemic began in the spring of 2009 when Mexico experienced an unusually high number of respiratory illnesses. By mid-April, the Centers for Disease Control and Prevention (CDC) reported confirmed cases of H1N1 in several states. On June 11, 2009, the World Health Organization issued an alert that a global H1N1 pandemic was underway. Marin County announced the county's first confirmed cases of H1N1 on April 28, 2009. The county closed its first school due to the pandemic several days later. OES recognized that a large-scale H1N1 pandemic in the fall of 2009 could exceed the county's healthcare surge and response capabilities.

Marin County's [Marin Operational Area H1N1 Threat Assessment](#) is available on *Lessons Learned Information Sharing (LLIS.gov)*.

In June 2009, OES decided to conduct an H1N1 threat assessment to evaluate the potential impact of a pandemic on county services and functions as well as to guide preparedness efforts. OES based its threat assessment on three different outbreak scenarios to reflect the possible evolution of the H1N1 virus: mild, moderate, and severe. Each scenario included a narrative and varying attack, hospitalization, and case fatality rates based upon the CDC's FluSurge model. OES adjusted the model to account for high-risk populations associated with H1N1 and to reflect the county's demographics.

OES consulted with epidemiologists from the Marin County Department of Health and Human Services (H&HS) to translate the attack, hospitalization, and case fatality rates into absenteeism rates, medical costs, and economic impact for the county. OES personnel analyzed these metrics for each scenario to determine the appropriate:

- Emergency operations center (EOC) activations;
- Emergency proclamations;
- Isolation, quarantine, or social distancing measures; and
- County staffing and funding levels needed to carryout preparedness activities.

OES used the threat assessment to identify potential response capability shortfalls and to recommended preparedness actions. OES presented the threat assessment in a decision briefing format that communicated the risk of an H1N1 pandemic quickly and clearly to county officials. This helped to ensure that these officials were familiar with the range of preparedness and response options that were available to them. The threat assessment also informed officials about the challenges they might face from a resurgence of H1N1. By quantifying the H1N1 threat, OES effectively communicated that preparations needed to begin immediately to mitigate the potential impact of an influenza pandemic in Marin County.

The H1N1 threat assessment identified several gaps in Marin County's response capabilities. For example, OES learned that it would need to strengthen its virtual EOC operations during a pandemic to sustain operations for longer periods of time. Additionally, a county supervisor realized that the county's ventilator capacity would be exceeded during a pandemic and consequently directed H&HS to obtain additional ventilators.

OES plans to keep the methodology utilized in this threat assessment in place to use in the event of future pandemic influenza strains. The scenarios are easily scalable and adaptable to conditions in other jurisdictions. Marin County has circulated this assessment to all 58 counties in California. Two northern California counties have adopted this assessment for use in their own H1N1 planning.

CITATIONS

Godley, Christopher. Emergency Services Manager, Marin County Sheriff, Office of Emergency Services. Interview with *Lessons Learned Information Sharing*, 09 Sep 2009.

Marin County Sheriff, Office of Emergency Services. *Marin Operational Area H1N1 Threat Assessment*. 15 Jul 2009.

<https://www.llis.dhs.gov/docdetails/details.do?contentID=37964>

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