

Issue Brief

MUMPS OUTBREAK 2006

from the communities that responded

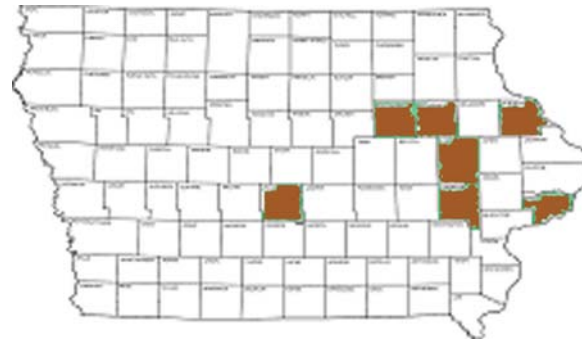
This issue brief documents how counties in Iowa involved in the response to a mumps outbreak took a leadership role and successfully partnered with their communities to contain an epidemic.

INTRODUCTION

The mumps outbreak that began in the Midwest in December 2005 has been described as the worst outbreak of mumps in the United States in over 20 years.¹ Through May 24, 2006, there were 4,016 confirmed, probable, and suspected cases tied to the mumps outbreak in 12 states, including 1,824 in Iowa, according to the Centers for Disease Control and Prevention (CDC). Another 2,144 probable and confirmed cases occurred in Nebraska, Kansas, Illinois, Wisconsin, Missouri, Pennsylvania and South Dakota. An additional 48 probable and confirmed mumps cases were reported from another four states (Colorado, Minnesota, Mississippi, and New York), 10 of which were related to travel to one of the eight mumps outbreak states. CDC also reported that 55 patients had been hospitalized so far for complications from mumps or conditions that may have been caused by mumps.²

Local health departments in the affected areas responded immediately to the outbreak, working to determine the source of the outbreak, maintaining organized and updated logs of symptomatic cases, responding to and containing confirmed cases, and providing up-to-date information to involved partners and the public. Effective preparedness planning and having strong partnerships in place *prior* to the event helped ensure a smooth response. This issue brief documents how counties in Iowa involved in the response took a

COUNTIES IN IOWA WITH OVER 50 CASES



leadership role in bringing together all aspects of the community to ensure that a successful response occurred.

THE RESPONSE

Dubuque County had the highest number of reported cases of all 99 counties in Iowa. According to a May 15th report, Dubuque County had 473 confirmed, probable, and suspected cases out of a total 1,765 cases in Iowa at that time.³ The initial cases that appeared in January occurred in a local business sales department, which resulted in the state being notified. It was not until February that students from local colleges manifested mump-like symptoms. In response to symptoms occurring across the state, the Iowa Department of Public Health (IDPH) provided a log form to its counties. Counties like Dubuque altered the log form to fit their needs and sent it to its partners, including doctors' offices, clinics, and colleges. These partners were asked to record all symptomatic cases on the log and return it back to the county health

department. Logs of suspected cases were then, in turn, sent back to the state.

What worked very well in Iowa was a strong collaboration with the state. As one county put it, "The state did a

"The state did a great job with quick response and keeping everyone up-to-date."

— County Respondent

great job with quick response and keeping everyone up-to-date." IDPH was very responsive to the needs of its counties and quick with answering questions. While the communities handled the confirmed cases, IDPH dealt with suspected cases. The state was very efficient in sending information to the counties in a timely fashion.



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EFFECTIVE LOCAL WORKING RELATIONSHIPS MAKE ALL THE DIFFERENCE

In addition to having strong leadership from the state, effective relationships with partners were also essential. A number of county health departments contracted with the Visiting Nurse Associations (VNA) to lead the response. In Dubuque County, two nurses were dedicated to handle the response – one was a part-time



communicable disease control nurse, and the other was re-assigned to the response from another division. This arrangement was manageable given some days would have up to 20 to 25 confirmed reports from hygienic lab, while other days were just a handful.

Working closely with health centers at local colleges was also helpful. In Dubuque County, the three local colleges affected had updated

information on student immunization status readily available. In addition, faculty and staff from the student health offices were extremely helpful. On the other hand, maintaining updated immunization records on students was identified as a problem by other counties. Colleges should require that students provide this information upon registering for classes.

Greene County indicated great success in having online access to the University of Iowa Hygienic Laboratory results and a strong collaboration with local partners. These types of relationships must be established well in advance and cannot happen at the time of an event.

KNOW YOUR MESSAGES

Counties indicated great success with risk communication. Allamakee County indicated that one of their greatest successes was, “Informing the public about mumps and helping them with their questions.” In Dubuque County, a Public Information Officer (PIO) had already been identified to provide public service announcements and press releases. The PIO was also responsible for sending information to partners in hospitals and doctors. This was sometimes seen as a challenge given the difficulties in reaching the right person.

The state played a major role in ensuring effective communications across the state. IDPH posted updated information on their Web site every Tuesday and Thursday during the week

and informed the press to access their site for the most current information. Counties would refer to the site for their own information, enabling them to provide consistent messages to the press. One county mentioned that they literally printed information off the site and would read it to the press.

In addition, IDPH provided template press releases for the counties to use and insert their own local information. The templates were extremely helpful in allowing counties to release the same information. IDPH also set up an 800 hotline for the general public to call for questions. Having the state maintain this hotline was beneficial in that they were able to provide more definitive answers and having them serve in this role on behalf of the entire state provided greater consistency. The 800 hotline received many calls.

The state also held frequent conference calls with counties. One county mentioned these were extremely helpful, but could be even more effective had they been planned more in advance.

BE PREPARED

Johnson County Public Health indicated success in using their response plan to establish clinical sites. There were 208 cases of mumps in Johnson County, according to the recent IDPH May 15th report – the third highest number of cases in Iowa. Since 2001, Johnson County has had to respond to a number of public health emergencies, including two pertussis

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outbreaks, a measles case, norovirus, and a tornado. They have been very engaged with partners such as their three hospitals, fire, EMS, and ambulance service. They are an active member of the Local Emergency Planning Committee and have coordinated numerous exercises with staff and partners. Johnson County Public Health's participation in evacuation and decontamination drills by a neighboring county's nuclear facility has been beneficial in their preparation for this outbreak. When requirements came from the state to develop a written preparedness plan, Johnson County documented and enhanced the planning that had already taken place. Thus, when cases of mumps appeared and clinics needed to be established, staff at Johnson County Public Health pulled out their plan and got to work.

Equipment that had been purchased and was standing by was used to establish a clinic site quickly. A trailer had been purchased with Department of Homeland Security funds to house and transport the clinic equipment and supplies, resulting in a more effective and efficient response. Two community clinics were, in turn, developed, one at a local campus of a community college, and another at a church.

Vaccinations occurred at the local health department. Lessons learned from the first clinic (e.g., using safety cones for signage, flow design) were applied to create the second. Health

department staff together with staff from the VNA and one community volunteer staffed the clinics and the clinics ran smoothly. Thanks to the preparedness planning that had already taken place within this county, the response was a success.

LESSONS LEARNED

With the response in Iowa came a number of lessons learned listed below:

- A local health department's role is to "keep things in perspective." Response is at the community level and the public looks to its local health department for up-to-date information and reassurance that the local health department is handling the situation.
- A response can be most successful when there is collaboration between the state and local levels. In Iowa, the state served in a coordinating role, providing local health departments with the necessary tools and resources to make their jobs easier. As a result, the response was more coordinated and messages to the public were consistent across the state.
- It is important to make sure doctors' offices have the appropriate information and that this information is conveyed to the



patient. As an example, some counties faced difficulty keeping people in their homes. It is important to get physicians on board and communicate the importance of symptomatic people staying home. Test results would arrive in three to four days, and in the meantime, patients would be "running all around town." Talk to providers and the public to push the message, as one county put it, "Stay home, stay home, stay home!"

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- There were misperceptions among the public on the effectiveness of the vaccine. While IDPH indicated that the vaccine is 95% effective with 2 doses, the media would frame it as, “only 95% effective,”

Inconsistent messages were a barrier to alleviating the public's concerns.

— *County Respondent*

implying that the vaccine is not very effective. Inconsistent messages were a barrier to alleviating the public's concerns.

- Confirm supply lines from external partners. In one county, for example, certain supplies were being warehoused by its suppliers. During the response, when the supplies were needed, the supplies were not in the condition needed. If you expect a supplier to store supplies and have them available when needed, make sure instructions for storage are clear.
- “Staff knowing what their expectations are is just critical.” Exercises are important, and real-life experiences are even better. If an opportunity arises, send staff to an area where a real-life, public health event is occurring to gain experience hands-on.

CONCLUSION

Response is at the community level and local health departments have been working extensively over the last several years to improve public health preparedness. The response to the mumps outbreak in the Midwest demonstrates just how critical local health departments are to a response and how communities are advancing in ways that are more integrated. Response to such outbreaks involves not just public health, but the community as a whole, with the local health department playing a lead role in providing tools and guidance to the public. In Iowa, local health departments stepped up and performed essential roles to immediately monitor the outbreak, set up clinic sites and vaccinate the public, and communicate with health care providers and the public to provide timely information and prevent further risk. Thanks to successful preparedness planning and strong relationships, a smooth response was achieved and on June 2nd, 2006, an IDPH press release indicated that the mumps epidemic was “contained,”

meaning cases may still exist, but “there is a significant decrease in the number of cases and no new populations are being affected.” It pays to be prepared.

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ENDNOTES

¹ CDC Press Briefing, www.cdc.gov/od/oc/media/transcripts/t060419.htm.

² CDC Immunization Update, June 2006, www.cdc.gov/nip/ACIP/.

³ Iowa Department of Public Health: Iowa Mumps Update, http://idph.state.ia.us/adper/common/pdf/mumps/mumps_update_051606.pdf.