

Rural Readiness Depends on Teamwork

Regional Partners Help Each Other Stay Prepared

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In 2003, several cases of Norwalk virus sprang up at the YMCA's Camp Orkila in Seabeck, Washington. Seabeck is a small vacation and retirement community in Kitsap County on Washington's Olympic Peninsula. The Camp hosts 3,000 campers every summer. Working across county lines and jurisdictions, public health officials stopped the Norwalk outbreak within two days. In the past, such an outbreak would have swept through the Camp and out into the community before the local public health department had realized what was happening. How did they manage to identify and stop the outbreak this time? Regional planning and regional partnerships.

Regional planning

When the Washington State Department of Health (DOH) began receiving federal funding for Public Health Emergency Preparedness and Response in 2002, it divided the state's 39 counties into nine emergency preparedness and response regions. For some counties, especially small, rural counties with limited financial and human resources, the planning requirements attached to bioterrorism funding were daunting. In response, the counties in Region 2—Clallam, Jefferson, and Kitsap—turned to

innovative methods for building local capacity.

The three counties are home to more than 335,000 people and cover nearly 4,000 square miles. County populations range widely, however. For example, Kitsap has nearly ten times the population of rural Jefferson County, in less than a quarter of the area.

The three counties all have small public health budgets and staff. "We're all thinly spread," said Dr. Tom Locke, health officer Jefferson Counties. "We

didn't have the staff to produce a draft of the emergency plan from scratch," said Lisa McKenzie, a nurse in the Jefferson County Communicable Diseases Program. Since much of the preparedness funding is allocated by population, these counties also received less financial support

than bigger counties to produce the same deliverables the state required.

Regional partnerships

Rather than allowing these constraints to keep them from providing necessary emergency preparedness and response services to their communities, public health officials in Region 2 have developed innovative strategies to maximize what resources and capacities they do have.

A key strategy early on was to contract with a former Washington State epidemiologist, Dr. John Kobayashi, now at the UW Northwest Center for Public Health Practice, to provide epidemiology training to a core team of health officials in the region. The counties identified the people who would make up and be trained together as an Emergency Response team. Kobayashi then trained the heterogeneous group of health workers, who had varying degrees of epidemiology skills, using a series of case studies and tabletop exercises. The team instituted conference calls one Tuesday a month on epidemiology trends and practices in the region. The calls were valuable enough to be continued after the formal training concluded.

Another innovation was the development of a regional duty officer (RDO) system, in which a single pager number serves as the public health after-hours phone number for the entire region. A team of about 10 public health officials, who have been trained and are equipped with a duty officer handbook, take turns answering the region's pager for a week at a time. "Being able to respond in a 24/7 manner has been important," said Locke about the RDO system.

Region 2 responders have used the RDO system to report various emergencies, such as animal bites or a sewer main explosion that contaminated surface water, that might typically have had to wait until the next working day to be reported and addressed. Locke also credits the RDO system for an increase in notification of unusual disease clusters, such as the Seabeck Norwalk virus outbreak. "It seems to have lowered the threshold for reporting notifiable conditions, even things that are not officially reportable. When providers see unusual clusters they call it in," Locke said.

Region 2 has also borrowed strategies from other regions and professions. For example, based on models in Spokane and Tacoma-Pierce County health departments, Region 2 is sending out community liaisons to provide training and outreach to health care providers. "We're reaching out to our providers as we've never done before," said Dr. Scott Lindquist, director of the Bremerton-Kitsap County Health District.

Norwalk Virus

Norwalk infections occur when fecal matter contaminates food or water, often when people don't wash their hands properly after using the restroom, and then touch something that others later put in their mouths. The virus can be transmitted by close contact with infected persons or the things they have touched. Symptoms include vomiting, diarrhea, fever, and abdominal pain. They occur one to two days after contact with the virus and usually last one to three days. The virus causes no long-term health problems.

Most importantly for the region's public health partnerships to work, Region 2 health officials won approval from the boards of health and county commissioners of the three counties to cross-deputize their health officers. Region 2 officials knew that fire and police departments have used similar agreements for years and argued that an agreement to allow the health officers to fill in for one another was crucial for emergency preparedness. The cross-deputizing arrangement and the regional duty officer system both faced considerable administrative hurdles. The different counties and health providers were covered by different insurance carriers, and the new systems raised complex malpractice liability concerns. "Insurers are very nervous with anything related to health," Locke said, "We had to really convince them that this was a valuable service we were providing."

Partnerships with the region's hospitals, boards of health, and health providers have also added to the cooperative spirit in Region 2. Regional activities have also been made possible by the administrative and policy changes made by boards of health and county commissioners. "We are very fortunate," said Locke, "that the politicians are supportive of us working together and have given us the authority to do so. If you don't have that, it is difficult."

Regional results

Regional health officials have identified numerous benefits of their approach to emergency preparedness and response. Among these benefits are a unified public health message, epidemiological methods training, and improved communication among and within counties.

"Particularly related to the emergency planning piece," Locke said, "the whole regional approach allows counties to do some quality planning that they might not otherwise do."

When the counties were required to develop response protocols, they did so together at the regional level first, and tailored them to county needs second. Not only did this save the counties time and money, it improved cooperation, as well. "We are also able to understand how each other will respond," said McKenzie, "because the plans and protocols were developed by the same group of people and are essentially the same."

The region's health officials have observed a marked difference in the relationships between the counties. "There's a lot more relationship building, now. They see us at the table and as a partner and know what we have to offer," said McKenzie. Meeting together, for example, in the monthly epidemiology conference calls and in discussion of each week's RDO report is "the way you learn to work with each other," said Kobayashi.

Staying prepared when not much happens

Region 2 health officials report the usefulness of emergency planning when responding to food borne illnesses, such as the Seabeck outbreak, and when investigating events such as a plane reported to be dispersing an unknown aerosol over Kitsap County and alleged con-

tamination of baby foods in Port Angeles grocery stores. But no large-scale emergencies have occurred in the region.

"There is a problem of maintaining expertise in these small counties. Things don't happen all the time, maybe once a year, or only once in a while," said Kobayashi. McKenzie agrees, "It is more difficult in small counties to keep a team of communicable disease nurses prepared because there is less opportunity for practice."

Health officials in the three counties are confident, however, that they will be able to maintain an adequate level of preparedness through the mechanisms they have already created. The regional partnerships have built on a history of collaboration in the region. Also helpful is that the region's two health officers had worked together in a clinical setting and teamed together in an informal mentorship program for health officers.

In building preparedness capacity, the region's priority has been to deal with the daily capacities that will also be useful in a large-scale scenario. Every staff member is trained and expected to be ready to play a vital role in an emergency. The region's surge capacity also involves a large retired population that includes doctors and nurses, who serve on advisory boards.

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"We don't necessarily need to anticipate all contingencies, but for preparedness we need skilled people in contact with one another," Locke said. "And partnerships are crucial. Not just cooperation or participation, but real partnerships among providers and among communities. Most small counties probably already do this, but trying to share regionally so that we're not all reinventing the wheel is good. It's helpful to feel like we're part of a bigger team," Locke concluded.

Seabeck would agree on the value of that teamwork. The Camp Orkila Norwalk virus made only 89 of the 360 campers ill, and the health officials' quick action and access to shared resources quelled the outbreak before it spread beyond the Camp. Thanks to the cross-county teamwork, residents of Seabeck and the surrounding rural communities can eat their burgers and drink their water with the confidence that they are well-protected by their public health system. ■

Authors

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