Around The Region In Homeland Security
January 2010

The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by the Pacific Northwest National Laboratory (PNNL), to support regional preparedness, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest. This monthly newsletter summarizes activities related to homeland security in the Pacific Northwest, and this issue highlights

- Input from the emergency management community on Precision Information Environments
- Lessons learned from a stakeholders conference on public health countermeasures preparedness
- A demonstration of a pandemic influenza planning tool for emergency preparedness.

Emergency Management Community Guides Research in Precision Information Environments

A December 14 and 15 workshop in Seattle brought together researchers and stakeholders to define the research challenges involved in creating future work environments for the emergency management community. These Precision Information Environments (PIE) will provide tailored access to information and aid decision making in a system that supports multiple user roles and contexts associated with emergency planning, management, and response. A PIE provides analytic and simulation capabilities that transform the way stakeholders engage with each other and with information.

The workshop was sponsored by the U.S. Department of Homeland Security (DHS) Science and Technology Directorate's Command, Control, and Interoperability Division. The goal of the workshop was to help the research community gain an initial understanding of challenges faced by the emergency management community, identify major science and technology gaps in addressing these challenges over the next decade, and identify and prioritize research and development approaches to close these gaps. Participants represented academia, industry, and local and federal organizations that would use the PIEs.

Together, they identified 13 research themes needed for PIE development. Working groups then detailed research activities and milestones over the next 10 years for the top 5 of these themes, which included

- Tailoring information based on relevance to users
- Creating appropriate hardware and software architectures
- Designing new adaptive interfaces to improve user experiences
- Developing predictive methods for simulation and decision making
- Supporting user and organizational work processes.

In the coming months, the results of the workshop will be used to craft a research agenda that will be widely distributed. In addition, a series of interactive conceptual prototypes that demonstrate core concepts are being developed to communicate the positive impact PIEs will have on the homeland security stakeholder community.

Stakeholder Conference Shares Lessons Learned in Public Health Countermeasures Preparedness

December 2-4, the U.S. Department of Health and Human Services (HHS) sponsored the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) Stakeholders Workshop. More than 500 participants from federal, state, and local governments; academia; and the pharmaceutical and biotechnology industries met with the American Medical Association to discuss lessons learned and the latest developments in public health countermeasure preparedness.

PHEMCE is an interagency effort to define and prioritize requirements for public health emergency countermeasures. The group focuses research, development, and procurement activities on those requirements. They also establish deployment and use strategies for medical countermeasures in the Strategic National Stockpile. Besides the HHS Office of the Assistant Secretary for Preparedness and Response, which leads the effort, the participating federal agencies include the Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health, DHS, Department of Defense, Department of Veterans Affairs, and Department of Agriculture.

Participants discussed medical countermeasures development and perspectives from state, local, and tribal leaders on best practices for dispensing countermeasures. Many of the workshops and panels were recorded and are available online as webcasts.

Pandemic Planning Tool Prototype Demonstrated

In late September, PNNL demonstrated an early prototype of the Pandemic Influenza Planning Tool during a Walla Walla County, Washington, pandemic influenza emergency exercise. The Pandemic Influenza Planning Tool models the spread of a disease through various age groups and geographic populations. It also allows decision makers to carefully assess the benefit of their decisions for different scenarios in advance.

During the exercise in September, officials simulated an H1N1 Swine Flu outbreak and used the tool to predict resource needs and shortfalls, such as the loss of critical staff and lack of hospital beds.

"The tool illustrated how essential services can fail when critical employees became ill," said Gay Ernst, Director of Emergency Management in Walla Walla County. "Visualizing possible disease progression enables us to consider how many critical personnel may be unavailable at one time and plan accordingly."

Upcoming Events

Feb. 18-21
Emergency Medicine Learning and Resource Center
International Disaster Management Conference
Orlando, Florida

March 10
Social Network Workshop
Seattle

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