

Epi-X Continues Growth

Rossanne M. Philen, M.D., M.S. *Epi-X* Medical Director

Several years ago, the Council of State and Territorial Epidemiologists (CSTE) recommended that CDC develop a single system for rapid notification and communication of outbreaks and other health events as they are identified and investigated. In response, CDC introduced a secure, web-based communications network for public health officials — *Epi-X*. Since its launch in the fall of 2000, *Epi-X* has demonstrated the value of secure communications to public health, and has experienced tremendous growth in use.

The core service of the network provides selected public health officials with a secure, web-based communications tool to rapidly respond to outbreaks and

other acute health events, including terrorism. In addition to its moderated, peer-to-peer environment and rapid notification abilities, *Epi-X* has another unique feature — an editorial board. The board is made up of public health officials from state and federal agencies who provide continual feedback into policies and improvements being considered for the network.

Since the first report was posted in December 2000, *Epi-X* has grown, both in its user base and in the number and variety of reports posted on the network. Postings have increased from approximately 40 reports per quarter to well

over 300 (Figure). In the last 12 months, *Epi-X* has expanded to include officials from public health laboratories, poison control centers, military, CDC and the

***Epi-X* has demonstrated the value of secure communications.**

Department of Health and Human Services (HHS) emergency operations centers, and the World Health Organization (WHO). From an initial estimated user

base of 600, *Epi-X* now has approximately 1,800 users, with an additional 500 users on *Epi-X Forum* (the network's secure discussion board). Postings on *Epi-X* have increased steadily each year, from 563 in 2001 to 1,043 in 2002.

[continued pg. 4]

In This Issue

User Feedback Guides <i>Epi-X</i> Design	2
Exchanges with the <i>Epi-X</i> User Community	3
Behind the Scenes: <i>Epi-X</i> Editorial Board	3
<i>Epi-X</i> Performs Well in FEMA Exercise	4

Maintaining Trust in *Epi-X*

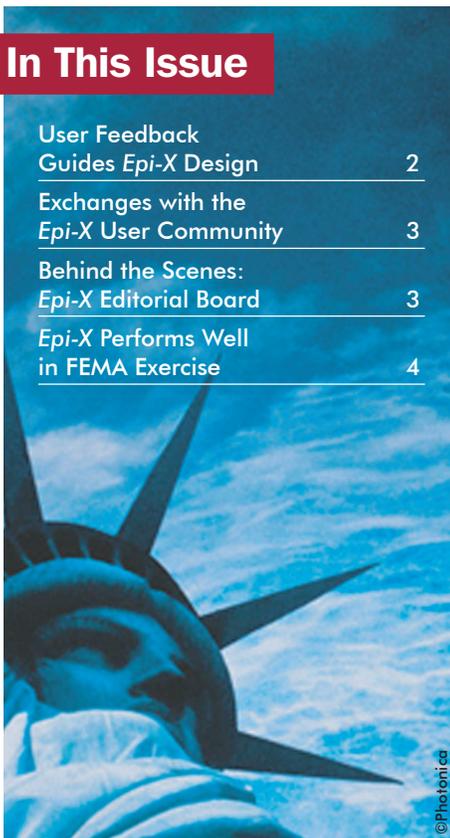
John Ward, M.D., Director, OSHC

To fulfill its role of delivering provisional information about disease outbreaks and other health events, *Epi-X* must continue to inspire trust in users. Over the last year, the number of outbreak reports posted on *Epi-X* has grown, particularly during national public health emergencies such as the West Nile virus (WNV) and Severe Acute Respiratory Syndrome (SARS) epidemics. Also, additional public health officials have requested to join the system, indicating that *Epi-X* is fast becoming an established part of public health communications.

To effectively manage this growth, *Epi-X* is changing. As more officials at the federal, state, and local levels are given access, system modifications and additional user training are necessary to protect security of information. In the

new version of *Epi-X* scheduled for deployment this fall, contributors will be able to limit access to reports they feel are too sensitive for broad distribution. Also beginning in Fall 2003, new users will receive specific training on how to manage confidential information. This training will be conducted during visits to state and local health departments, at national conferences, and through online tutorials and help screens.

Increasing appropriate access to *Epi-X* while maintaining the security of the system is a challenge; however, the potential benefits are great. Our goal is to maintain member trust while increasing preparedness. That goal is attainable with user-guided design and continued support. Thank you for being a part of *Epi-X*. **E**



User Feedback Guides *Epi-X* Design

Janet Fath, Ph.D.

In the process of creating *Epi-X*, scores of public health officials provided input by participating in interviews and focus groups, and by sharing their opinions of system prototypes. Since the network was launched in December 2000, *Epi-X* users have continued to identify aspects of the system that work well and those that need improvement.

Such feedback was critical for upgrades in 2002, like improvements to *Epi-X Forum* and a major change to the overall look and feel of the system. In 2003, user feedback has informed recent changes to the user search capabilities, Standard Report forms, and the way users save reports.

Epi-X designers are currently working on the next generation of user-guided improvements, scheduled for release in

Fall 2003. One of these changes includes an enhanced audience targeting feature that will allow reports to be sent to specific user groups. A recent scenario illustrates the value of the design change:

On June 11, 2003, the office of CDC's Director, Dr. Julie Gerberding, needed to contact all state epidemiologists immediately for an important conference call about monkeypox. *Epi-X* staff posted a report. The report was subsequently seen by all *Epi-X* users, including individuals who were not asked to participate in the conference call. The message confused many users and resulted in numerous inquiries to the *Epi-X* Help Desk.

With the new, enhanced capability to target specific audiences, reports can be

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sent directly to an intended group of users (in this case, state and territorial epidemiologists); other *Epi-X* users will not be bothered with information that does not pertain to them.

As part of the design process for this new feature, *Epi-X* designers interviewed representatives from within CDC and other members of the *Epi-X* user community. The goal was to learn how users would benefit from the design change. Their ideas were translated into prototypes, which were used to gather additional feedback from users. The result? Improved audience targeting that will help *Epi-X* users communicate more effectively.

Another user-guided improvement includes a new look for posted reports. The improved layout will provide better guidance for report distribution. For example, when the recommended distribution is "Distribute on a need-to-know basis," recipients of the report will have the option to forward the report to other *Epi-X* users.

Research has also found that users read the daily e-mail news messages from *Epi-X* more often than they log on to the *Epi-X* website. This finding has led to improved news message design and readability. Among other changes, daily e-mail messages will now have a subject line of "*Epi-X* Today," followed by the date. This fall, users will be able to choose in their user profiles to receive the messages in either HTML or text format.

Emergency notification will improve, as well. Messages sent via e-mail and alpha pager will contain more information about the urgency of the alert. Additional notification changes will be made to ensure that *Epi-X* users are contacted quickly and can easily find the information they need to respond to an emergency.

As *Epi-X* continues to evolve, we encourage you to give us your feedback. For specific problems encountered while using the system, contact the Help Desk at epixhelp@cdc.gov or (404) 639-3762. *Epi-X* designers work closely with the Help Desk staff to solve both immediate usage problems and larger design challenges. You can also look for an *Epi-X* representative at any of the major public health conferences such as CSTE, APHL, and NACCHO/ASTHO. We look forward to hearing from you. **E**

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Exchanges with the *Epi-X* User Community

Susan Boyer, R.N.



Tim Jones, MD, is the Deputy State Epidemiologist for the state of Tennessee.

Q. What prompted you to become an *Epi-X* user?

A. I started seeing the promotional presentations and materials before *Epi-X* was available. I heard about the system and found the idea compelling and attractive.

Q. What can you tell me about your user experience?

A. Overall, I'm extremely impressed with *Epi-X*. I believe it's something that was needed. The emergency notification system is an important piece of *Epi-X*. It's also the part of *Epi-X* that's the most susceptible to abuse. States couldn't develop a system like that for themselves. The negatives are minor really. Logging on can be difficult. I would advocate a

graduation of the alerts. There's a difference between West Nile virus in the blood supply and a massive smallpox attack.

Q. What role does *Epi-X* perform for you in your position as a deputy state epidemiologist?

A. We increasingly rely on *Epi-X* to keep us up-to-date about acute events. I am impressed by the things that show up on *Epi-X*. The items appear faster and have more detail than people were ever willing to put on the CDC public website. Two years ago, if you waited for a West Nile virus update on the regular CDC site, you'd wait for weeks. It's common for us to go on *Epi-X* and see if something has real importance. If it's on *Epi-X*, then it's real. If it isn't there, then it probably isn't that critical.

Q. In the very near future, local health departments will be able to access *Epi-X*.

How do you feel about expanding the *Epi-X* user base?

A. It's interesting that you ask this question. I feel that preserving the core user base is important. The more you share the information on *Epi-X*,

“If it's on *Epi-X*, then it's real.”

the more it becomes public. *Epi-X* is already at size that makes people nervous, I'm afraid that it could backfire and that the news will leak. We'll see.

Q. Would you recommend *Epi-X* to a colleague?

A. Absolutely.

*Dr. Jones, thank you for speaking with me and sharing your views so candidly. We appreciate having you and your colleagues in Tennessee as members of the *Epi-X* community. —SB* **E**

Behind the Scenes: *Epi-X* Editorial Board

Darlene Rumph-Person

In the theatre, some of the most important roles are behind the scenes, such as the director. Likewise, the *Epi-X* Editorial Board (EEB) continues to play an integral role in the design, development, and implementation of *Epi-X*.

The board consists of approximately 20 members from CDC, state health department officials, and *Epi-X*'s external partners. Board members serve as subject matter experts for *Epi-X* postings and comment individually on the program's activities, policies, and development strategies.

Annually, the EEB convenes in Atlanta to discuss and address the most pressing issues facing *Epi-X*. At the most recent meeting in November 2002, the board discussed a proposed technical revision to the network that would provide access to three new user groups: CDC's National Institute for Occupational Safety and

2003 *Epi-X* Editorial Board

CDC

Laura Fehrs (EPO), Paul Garbe (NCEH), Patricia Griffin (NCID), Paul Halverson (PHPPPO), Douglas Hamilton (EPO), Rossanne Philen (*Epi-X*), Susan Reef (NIP), Charles Schable (NCID), Dixie Snider (OD), John Ward (OSHC)

External

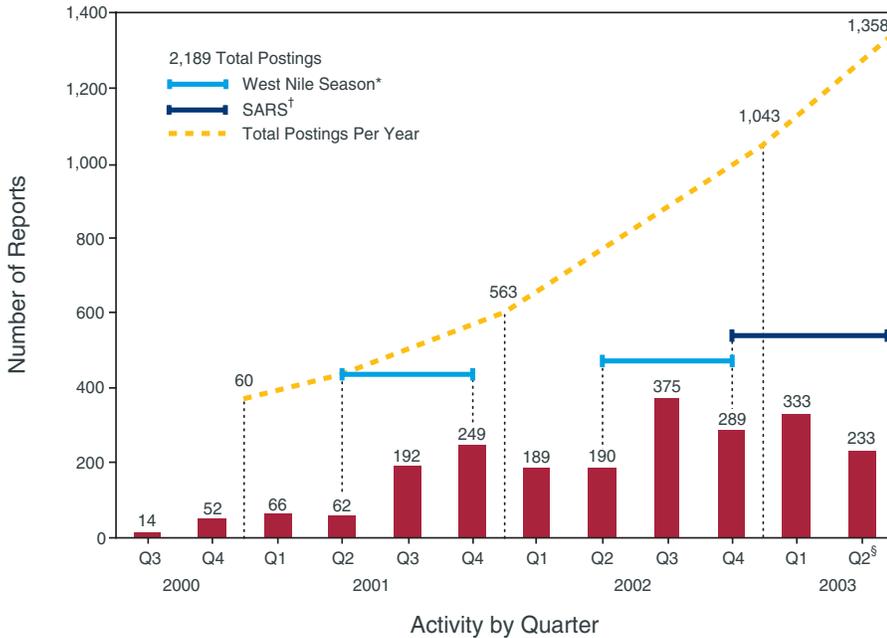
Doug Drabkowski (Association of Public Health Laboratories), Gail Hansen (Kansas Bureau of Epidemiology and Disease Prevention), Arthur Hathcock (Delaware Division of Public Health), Marci Layton (New York City Department of Health), Toby Litovitz (Association of Poison Control Centers), Pat M'Connon (Council of State and Territorial Epidemiologists [CSTE]), William (Phred) Pilkington (NACCHO), Mary Shaffran (Association of State and Territorial Health Officers), Steven Wiersma (CSTE)

Health (NIOSH), the National Association of County and City Health Officials (NACCHO), and the U.S. Department of Agriculture (USDA).

NIOSH's Health Hazard Evaluation Program (HHEP) proposed *Epi-X* be used to inform states about requests for health hazard evaluations. NACCHO requested that *Epi-X* allow county and city health officials access as readers. USDA's Animal and Plant Health Information Service (APHIS) proposed that *Epi-X* allow approximately 12 USDA staff (primarily public health veterinarians) access to the system, emphasizing the need to improve communication between animal health and public health.

Based on the board's discussion, *Epi-X* approved these proposals and is making the necessary editorial and technical changes to accommodate the new users. **E**

FIGURE | All Epi-X Reports by Quarter/Year
2000–May 2003 and Total Estimated Reports for 200



* West Nile — November of Each Year.
† SARS November 16, 2002–May 31, 2003.
§ Only April–May are reported for Q2.

Epi-X Growth [cont. from pg. 1]

Future plans for *Epi-X* include several user-directed design changes, as well as new additions to the user base, including representatives from federal agencies like USDA, FDA, and EPA. *Epi-X* also looks forward to working with the National Association of County and City Health Officials (NACCHO), as local health officers increase participation in the network.

As *Epi-X* enters its fourth year of operations, new challenges and opportunities will continue to present themselves. Having earned a place in public health as the nation's secure communications network, *Epi-X* facilitates collaboration between public health officials and meets a vital public health need. Through user-feedback and support, *Epi-X* will continue to be an effective part of protecting public health. **E**

Epi-X Performs Well in FEMA Exercise

Jamila Fonseca

What's one of the best ways to prepare for a disaster? Fake it, of course, through a simulation. In April 2003, *Epi-X* participated in an emergency simulation exercise conducted by the Federal Emergency Management Agency (FEMA) and CDC. The exercise is part of an ongoing training program for the CDC/ATSDR Emergency Response Team (ERT) and provides hands-on experience in responding to bioterrorism events in the United States.

The April 2003 exercise marked the first time *Epi-X* was integrated into the simulation. The *Epi-X* team participated in various development and implementation aspects of the exercise, which was held at the Noble Training Center in Anniston, Alabama. Many of the ERT participants had never seen *Epi-X* perform in a crisis situation and were impressed with the system's abilities.

ERT participants learned how important *Epi-X* features like 24/7 editorial support and emergency notification can facilitate accurate public health communications. Participants also received training on how to post reports with supporting attachments and how to use the *Epi-X* user directory. For the *Epi-X* team, the experience identified additional training needs, focused future training efforts, and established an effective working relationship with CDC's Office of Terrorism Preparedness and Emergency Response (OTPER), Preparedness Training and Exercise Branch.

"Overall, we are very pleased with *Epi-X*'s performance in the simulation. The emergency notification function was a big asset in the exercise," said Rossanne Philen, *Epi-X* Medical Director. "This gave us a chance to test the system in a realistic setting and was a great learning experience." **E**

Contact Epi-X

For assistance with access and registration to the Epi-X site

Epi-X Help Desk Phone
(404) 639-3762
Epi-X Help Desk e-mail
epihelp@cdc.gov

For help with preparing and posting a report

Darlene Rumph-Person (404) 639-4216
Epi-X Editor e-mail
epixeditor@cdc.gov

For emergency and after hours questions

Editor-on-Call
(888) 259-0341

