Epi-X: A Valuable Resource for Public Health

Great Lakes Border Health Initiative
Plymouth, MI
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Mission

To provide **secure**, moderated communications for public health officials to report and discuss disease outbreaks and other acute health events including terrorism.

Epi-X Components

- **Secure reporting of health events**
  - *Epi-X* reports
- **Secure discussions**
  - *Epi-X Forum*
  - Comments on *Epi-X* reports
- **Notification and alerting**
- **Secure user contact information**
  - *Epi-X* Directory

Security Means…

- Secure Environment
  - Hosted in ITSO Mid-Tier Data Center
  - 24/7/365 operational support for infrastructure
- Digital Certificates
- User Training
  - Managing digital certificates
  - How to share information posted on *Epi-X*

Partners

- Internal CDC programs
  - BioSense
  - Division of Global Migration and Quarantine
  - Vaccine Safety
- Federal agencies
  - DoD, DoS, DHS, EPA, FDA, HHS, USDA, FEMA
- State and local health departments
- Partner Organizations
  - **AAPCC** – American Association of Poison Control Centers
  - **APHL** – Association of Public Health Laboratories
  - **ASTHO** – Association of State and Territorial Health Officials
  - **CSTE** – Council of State and Territorial Epidemiologists
  - **NACCHO** – National Association of County and City Health Officials
  - **NASPHV** – National Association of State Public Health Veterinarians
- Mexican and Canadian Government

Users

- Authorized
- Trained on security responsibilities
- Sign the User Agreement
- Reauthorized quarterly
- Tested
- Identified in the system

Total Number of Users

- *Epi-X* 5,722
  - Reader 4,201
  - Contributor 1,491
  - Other 30
- *Forum* Only 56
- TOTAL 5,778

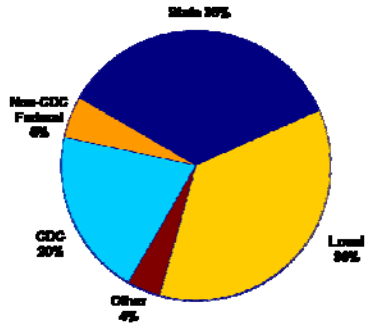
Users Identified By

- Public Health Role
- Employer Type
- State or Country
- Public Health Responsibility

Public Health Role

	Total
State or Territorial Epidemiologist	86
State or Territorial Public Health Laboratory Director	63
State or Territorial Public Health Officer	45
State or Territorial Public Health Veterinarian	52
State or Territorial Terrorism Responder / Coord.	72
Poison Control Center Director	**91**
HAN Coordinator	63
City, County, or Regional Health Officer	373
EIS Officer or Supervisor	168
Preventive Medicine Resident	9
Career Epidemiology Field Officer	27

Employer Type



Reports

- Introduction
- Content Flow / Editing Process
- Notification methods
  - Daily e-mail
  - Immediate e-mail
  - Emergency notification
    - pager, cell phone, land line, e-mail

Report on Outbreaks

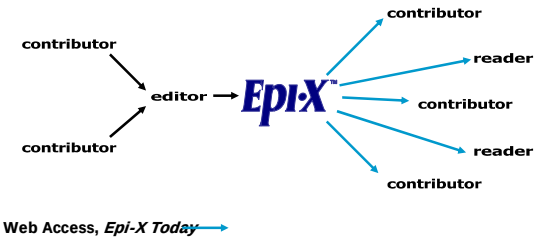
- Reports can
  - contain provisional information
  - be updated
  - have targeted notification and/or access

Home Page

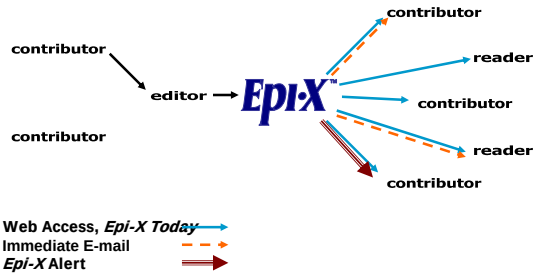
Sample Report

Daily E-mail Summary

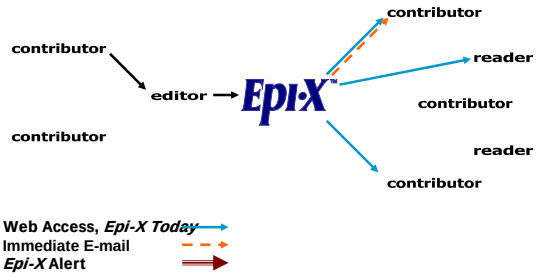
Typical Content Flow



Target Notification



Target Access/Notification



Notification Testing

- Purpose
  - Prepare users for emergency response
- Method
  - State-based facilitators
    - Receive training for their role as facilitator
    - Work with State Epi to review lists of users
    - Remind users to update their digital cert / profile
  - Contributors in the state
    - Receive training for how to submit the test report
  - *Epi-X* staff
    - Summarize test results
    - Review test results with facilitator

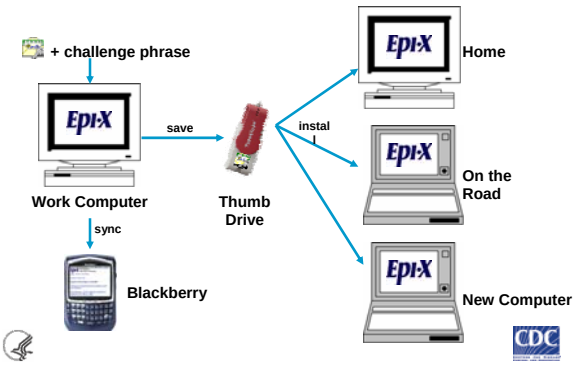
Your Responsibilities

- Get started on *Epi-X*
- Learn how to keep *Epi-X* secure
- Provide contact information
- Report on outbreaks
- Participate in notification tests
- Contact *Epi-X* staff as needed

Get Started

- Apply for Digital Certificate
- Install on work computer
- Save to thumb drive or other media
- Install on Home, Laptop, or other computers
- E-mail a copy to yourself for remote access if you lose or forget it

Install Digital Certs on…



Keep *Epi-X* Secure

- Complete security training
- Sign and adhere to the user agreement

Provide Contact Info

- Enter direct telephone lines
- Provide at least one off-hours contact
- Conduct notification self tests regularly
- Update the information when you move or information changes

Enter Contact Information

Perform Self Test

Mobile Access

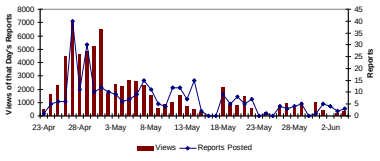
- Install your digital certificate on your Blackberry now
- Mobile interface released

Future Improvements

- More mobile device capabilities
- Move from digital certificates to SAMS
- *Epi-X* 2.0

Novel Influenza A (H1N1)

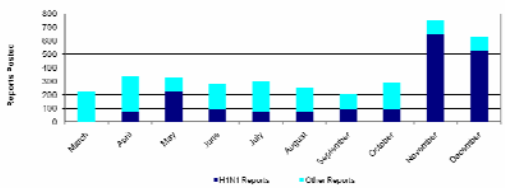
- 311 novel influenza A (H1N1) reports, 4/23 – 6/4



- 5501 users
- 160 users added 4/23 to 6/4/2009
- 21 more users can access *Epi-X* by Blackberry

Novel Influenza A (H1N1)

- From March 1 through December 31, 2009
  - 3,586 reports posted
  - 1,900 (53%) related to H1N1



H1N1 Report Types

- Initial reports of URI clusters in Mexico 3/27
- **International Health Regulation report of acute URI in Mexico 4/16**
- Algorithms for Testing and Treatment Decisions
- Case Definitions, **Case Report Form**, Cases
- Epidemic Curve
- Guidance Recommendations
- Harvard Opinion Research Program Press Release
- Health Alert Network Advisories and Info Services
- Key Points from CDC
- Linelist Spreadsheet
- Media Reports
- *MMWR* Early Release, Dispatch, Call for Manuscripts (May 20)
- **New York City's Tools**
- Notice of Media Briefing
- **Peramivir Daily Report**
- Traveler Contact Tracing
- VAERS Weekly Summary Report

H1N1 Most Viewed

- Influenza A (H1N1) Virus of Swine Origin: **Key Points** from CDC, April 29, 2009
- **Algorithms** to Assist in Decisions on Testing and Treatment for H1N1 Influenza -- United States, 2009 [4/30/2009]
- CDC Swine Influenza Response: **Key Points**, April 28, 2009
- CDC Swine Influenza Response: Notice of CDC **Media Advisory**, April 27, 2009
- **Effectiveness of** Surgical Masks vs. N95 Respirators for Preventing Influenza in Health-Care Workers [10/2/2009]
- Human Infections with Swine Influenza A (H1N1): Interim **Recommendations** for Enhanced Surveillance [4/28/2009]
- CDC **Recommendations** for State and Local Planning for a 2009 Novel H1N1 Influenza Program [7/8/2009]
- Interim **Guidance** on Case Definitions to be Used for Investigations of Swine Influenza A (H1N1) Cases [4/29/2009]
- CDC **Guidance**: Preparing for Vaccination with Novel Influenza A (H1N1) Vaccine, July 24, 2009
- CDC Health Update: Swine Influenza A (H1N1) Update: New Interim **Recommendations** and Guidance [4/26/2009]

H1N1 User Feedback

- General Comments
- Most Useful
- Least Useful
- Desired Information

General Comments

- As the first wave hit our region, *Epi-X* became a source of critical information useful to help us refine surveillance, suppress rumors and inform health practitioners. Its value has continued throughout the second wave by supporting surveillance reports with early information on outbreak trends and approaches to mitigation.

Alan Siniscalchi
State of Connecticut Department of Public Health

General Comments

- Timeliness
  - We relied on *Epi-X*
  - We used *Epi-X* often during the response and found it extremely useful in getting timely information.
- Redundancy
  - While there is ultimately repetition in message content from other sources, the biggest advantage of *Epi-X* for us is getting the information in advance.
  - I'd rather have the same information twice sent to me than not have it at all.
  - The volume of information has been so great that it is often easier to look things up on *Epi-X* than to find them in my files.
  - From a local health department perspective, for the first several weeks I was inundated with information, often the same information from several sources (state health department, NACCHO, media, etc.). I decided to use Epi-X preferentially, since CDC guidelines and data seemed to be available there first.

Most Useful

- CDC Guidance, Health Advisories
- Updated Key Points (changes should be highlighted)
- Situational Updates
- Toolkits for Specific Groups
- Newly Available *MMWR* Articles
- Triage Algorithms
- Surveillance Reports
- VAERS Reports
- Prioritization Groups

Epi-X X

- Expected Benefits
  - More robust platform
  - Emphasis on
    - Usability
    - Operational tools for *Epi-X* staff
    - Expandability to accommodate new content
- Status
  - Requirements collected
  - Development plans in progress

Epi-X Forum

Summary

- *Epi-X* is
  - CDC's only SECURE communication system
- *Epi-X* is important because
  - Users are key CDC stakeholders
  - The system can reach one, some or all users at any time
  - Users rely on *Epi-X* routinely and in emergencies
- Users value *Epi-X* because it
  - Provides information not available elsewhere
  - Provides verified information
  - Allows for secure exchange of information

Contact Staff

- Help Desk: digital certificate & other issues
  - Epixhelp@cdc.gov
  - 877-438-3749
- Editor-on-Call: help with posting a report
  - 877-862-2392
- Training
  - Epixtraining@cdc.gov