



get **Epi-X**

## Epi-X: A Valuable Resource for Public Health

Great Lakes Border Health Initiative  
Plymouth, MI  
May 18, 2010

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## Mission

get **Epi-X**

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

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- **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...

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- **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

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- 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

get **Epi-X**

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



## Total Number of Users get **Epi-X**

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



## Users Identified By get **Epi-X**

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

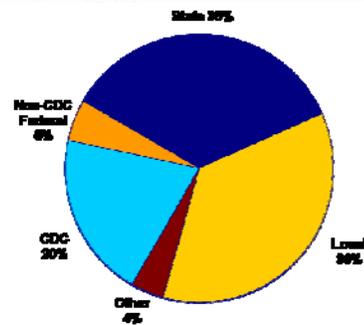


## Public Health Role get **Epi-X**

	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
<b>Poison Control Center Director</b>	<b>91</b>
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 get **Epi-X**



## Reports get **Epi-X**

- 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 get **Epi-X**

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



# Home Page

get **Epi-X**

Home | Search | My Profile | My Epi-X | Contact Us | Help | Log Out

**CDC** The System  
Epi-X Information Exchange

Epi-X Reports Posted Since 8/31/2004

Title	Location	Category	Posted
Arctic Influenza Outbreak - Vermont, January 2004	Other Country	West Nile Disease, Influenza	9/10/2004
Arsonic Exposure at a Chicken Feed Processing Facility	IL	Occupational Health Issue	9/10/2004
Possible Radon Exposure During Renovation of Hot Springs Plumbing - Arkansas, January 2004	AR	Occupational Health Issue	9/10/2004

Navigation: Home, Search, My Profile, My Epi-X, Contact Us, Help, Log Out. Links: Home Page, About Epi-X, Epi-X Reports, Epi-X Directory, Epi-X Alerts, Epi-X News, Epi-X Archives, Epi-X Help, Epi-X Feedback, Epi-X Privacy Policy, Epi-X Terms of Use, Epi-X Security Policy, Epi-X Site Map.

# Sample Report

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**CDC** The System  
Epi-X Information Exchange

Skin Rash Among High School Wrestlers and Call for Cases - Utah, 2002

Release number: 02-0001

Abstract: A skin rash outbreak among high school wrestlers in Utah, 2002. The outbreak was characterized by a rash that was primarily located on the face and neck, and was associated with a history of wrestling. The rash was self-limiting and resolved within 1-2 weeks. The outbreak was limited to the state of Utah and was not associated with a travel history. The outbreak was limited to the state of Utah and was not associated with a travel history. The outbreak was limited to the state of Utah and was not associated with a travel history.

Keywords: Skin Rash, High School Wrestlers, Utah, 2002

Author: [Name], [Address], [City], [State], [Zip]

Publication: [Journal Name], [Volume], [Issue], [Page Range], [Year]

Abstract: [Detailed description of the outbreak, including the number of cases, the location, and the characteristics of the rash.]

Introduction: [Introduction text describing the outbreak and its significance.]

Methods: [Methods used for data collection and analysis.]

Results: [Results of the study, including the number of cases and the characteristics of the rash.]

Discussion: [Discussion of the findings and their implications.]

Conclusion: [Conclusion of the study and recommendations for future research.]

References: [List of references cited in the report.]

Additional Information: [Additional information about the report, including contact information and a link to the full text.]

# Daily E-mail Summary

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Home | Search | My Profile | My Epi-X | Contact Us | Help | Log Out

**CDC** The System  
Epi-X Information Exchange

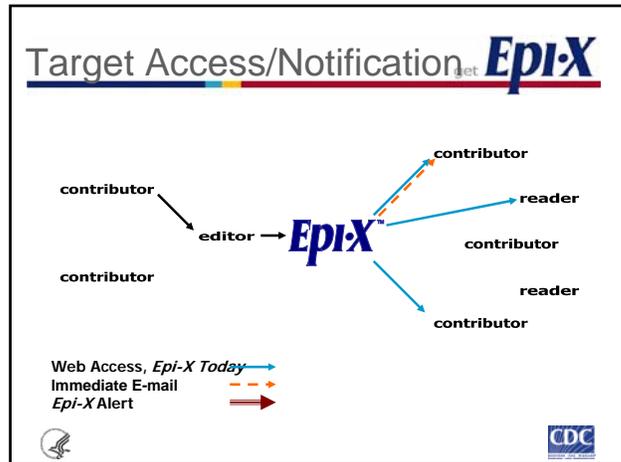
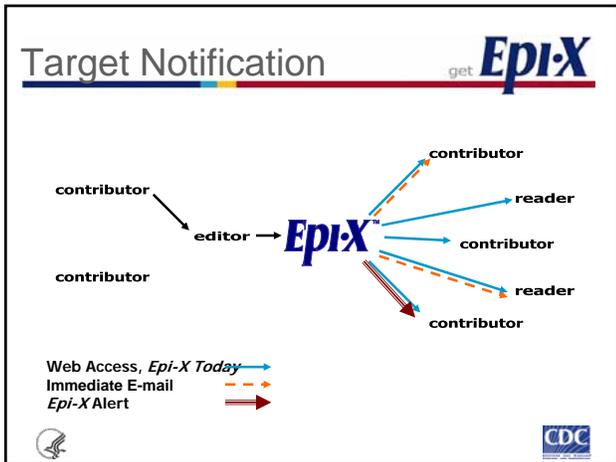
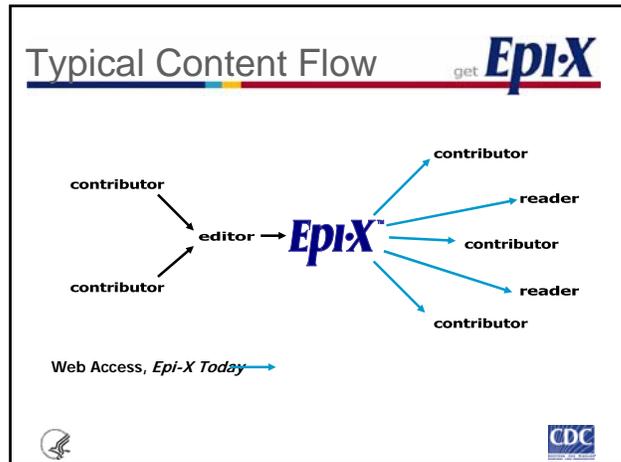
2004-10-01: 10:00 AM

Arctic Influenza Outbreak - Vermont, January 2004

Arsonic Exposure at a Chicken Feed Processing Facility

Possible Radon Exposure During Renovation of Hot Springs Plumbing - Arkansas, January 2004

Web Access, Epi-X Today



## Notification Testing

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- 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

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- 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

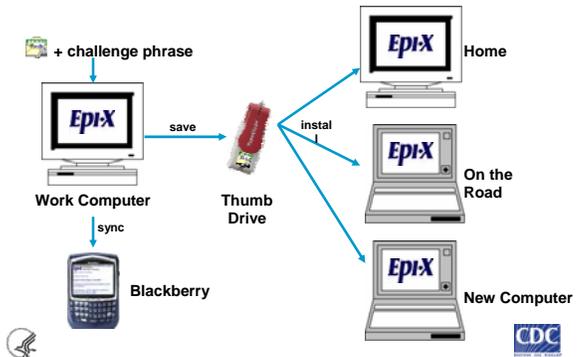
get **Epi-X**

- 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...

get **Epi-X**



## Keep *Epi-X* Secure

get **Epi-X**

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



## Provide Contact Info

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- 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 get **Epi-X**

Return to Top

**Work Contact Information**

\* E-mail Address:

\* Telephone:

Fax:

\* Alternate Contact:

\* Alternate Contact Telephone:

You must supply off-hours contact information for use in case of an emergency.

Call Phone:

E-mail Address for Pager or Cell Phone:

Pager:

Return to Top

**Home Contact Information**

If you have not provided any other off-hours contact information, you must provide a home telephone number.

Telephone:

E-mail Address:

\*Make my home contact information, if provided, available to:  Epi-X Staff only  All Epi-X users



## Perform Self Test get **Epi-X**

Home | Search | My Profile | My Epi-X | Contact Us | Help | Log Out

**CDC** Epi-X The Epidemic Information Exchange

**Your Profile Has Been Updated**

In the event of an emergency, Epi-X needs accurate and complete contact information. Please verify your information below.

To test each e-mail address and telephone number, click a link. Epi-X will send a message and inform you when you have successfully completed the test.

**View**

**My Profile**

All Epi-X Reports  
Epi-X Directory  
Epi-X Forum

**Contribute**

Standard Report  
Epi-X Alert  
Reserve Terminal Report  
Epi-X Request  
Epi-X Try Report

**Verify**

View Checklist  
Personal Preparedness  
Personal Security  
Other Resources  
State and Local Help Sites  
CDC Security Data Release

**Standard Report**

If the emergency occurs on Monday through Friday

Within minutes of an alert, Epi-X sends messages as follows:

Work E-Mail:

Call Phone:

If you do not answer your call phone, the system will attempt to call your home telephone.

Work Telephone:

If you do not answer your work telephone, the system will attempt to call your home telephone.

Home Telephone:

If the emergency occurs on Saturday or Sunday

The system will attempt to call your home telephone but Epi-X is calling your work telephone. You should receive a call within a few minutes.

Report any problems to [epixhelp@cdc.gov](mailto:epixhelp@cdc.gov)

Progress:



## Mobile Access get **Epi-X**

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



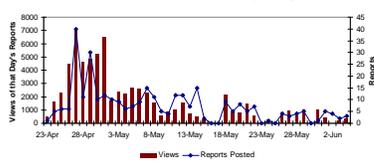

## Future Improvements get **Epi-X**

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



## Novel Influenza A (H1N1) get **Epi-X**

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

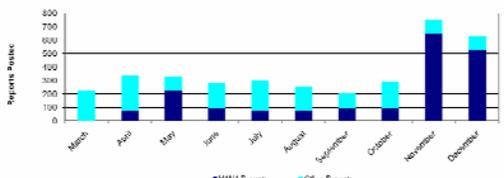


- 5501 users
- 160 users added 4/23 to 6/4/2009
- 21 more users can access Epi-X by Blackberry



## Novel Influenza A (H1N1) get **Epi-X**

- 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



- 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



Topic #	Topic	Topics	Members	Last Post
1	Epi-X Software Update	0	0	Today @ 10:45 AM
2	Announcements - Epi-X	0	0	Today @ 10:45 AM
3	Epi-X Feedback	11	0	Today @ 10:45 AM
4	Health Training Reports	100	1,000	Today @ 10:45 AM
5	Emergency Response	0	0	Today @ 10:45 AM
6	Emergency Response - Questions	0	0	Today @ 10:45 AM
7	Emergency Response - Training	0	0	Today @ 10:45 AM



- *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



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

