



State-Based Emergency Notification Proficiency Testing

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Epi-X 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 Provides Unique Services

- Secure information exchange
- Content moderation
- Emergency notification
- National access



Background

Epi-X can notify some, one, or all members of vital public health events.



Typical Content Flow

Epi·X[™]



Typical Content Flow

contributor

contributor

reader

editor

Epi·XTM

contributor

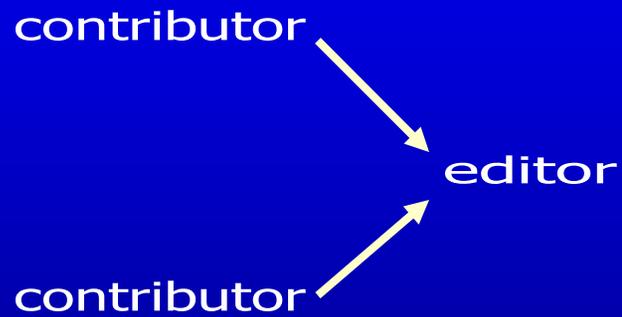
contributor

reader

contributor



Typical Content Flow



*Epi·X*TM

contributor

reader

contributor

reader

contributor



Typical Content Flow



Web Access, *Epi-X Today* →



Targeted Notification



Web Access, *Epi-X Today* →
Immediate E-mail →
Epi-X Alert →



Targeted Access and Notification



Web Access, *Epi-X Today* 
Immediate E-mail 
Epi-X Alert 



Notification Proficiency Testing



Web Access, *Epi-X Today* 
Immediate E-mail 
Epi-X Alert 



Notification Proficiency Testing Objectives

- Prepare *Epi-X* users to receive and respond to public health emergencies
- Improve the processes and technology that support *Epi-X* notifications



Procedure

- Recruit a facilitator
- Establish goals and discuss procedures
- Address user issues
- Train users
- Conduct the test
- Create a report card
- Follow-up with the facilitator



Schedule

		Number of <i>Epi-X</i> Users
January	State A	11
	State B	23
	State C	35
February	State D	27
	State E	10
	State F	8
	State G	16
	State H	13
March	State J	5
	State K	27



Results

	Number of <i>Epi-X</i> Users	Test Participants	Target Response	Actual Response
State A	11	11	50%	91%
State B	23	19	100%	84%
State C	35	24	75%	96%
State D	27	25	75%	80%
State E	10	7	100%	100%
State F	8	8	75%	75%
State G	16	16	30%	69%
State H	13	11	75%	73%
State J	5	5	80%	100%
State K	27	23	60%	74%



Participation by Public Health Role

Career Epidemiology Field Officer	2
City, County, or Regional Health Officer	4
EIS Officer	8
HAN Coordinator	5
Poison Control Center Director	5
Preventive Medicine Resident	1
State or Territorial Epidemiologist	16
State or Territorial Public Health Laboratory Director	8
State or Territorial Public Health Officer	2
State or Territorial Public Health Veterinarian	3
State or Territorial Terrorism Responder / Coordinator	7



Results

	Number of <i>Epi-X</i> Users	Test Participants	Number of PH Roles
State A	11	11	7
State B	23	19	7
State C	35	24	6
State D	27	25	12
State E	10	7	4
State F	8	8	5
State G	16	16	8
State H	13	11	4
State J	5	5	2
State K	27	23	6



Analysis and Results

How well prepared were participants?

How did the system perform?

How would participants respond?



How well prepared were participants?

- Updated user profile
 - No off-hours contact information 15
 - No mobile contact information 36
 - No direct work telephone number 27
 - Public Health Role 14
- Ability to access the system
 - Digital certificate issue 18
 - Digital certificate saved
 - Digital certificate installed in all computers



How did the system perform?

- Membership review
 - 13 members removed
 - 6 newly authorized members added
- Time to contact participants
 - E-mail, alpha pager messages sent immediately
 - Telephone and numeric pager in under 7 minutes



How would participants respond?

Manual systems

- 24 / 7 answering service
- Communications team

Automated systems

- Dialogic
- Virtual Alert
- CityWatch
- Command Caller
- Lotus Notes



Suggested Improvements

- Process
- Technology
- Policy



Suggested Process Improvements

- Send reminders to update user profiles
- Register additional staff on *Epi-X*
- Conduct unannounced tests
- Include other CDC personnel in tests
- Provide targeted access and notification training



Suggested Technology Improvements

- Provide a callback number and voice message
- Provide an alternative to digital certificates



Suggested Policy Improvements

- Clarify when *Epi-X* or HAN will be used
- Don't confuse and overwhelm users with information



Conclusions

- Benefits to users
- Benefits to *Epi-X*



Benefits to Users

- Ensure that *Epi-X* can contact them
- Increase comfort with using the system, especially in the context of their own emergency response plan
- Established communications goals

Benefits to *Epi-X*

- Stronger relationships at the state level
- Verification of user access rights
- Improved ability to target messages
- Focused efforts on correcting user issues
- Improved notification process



Next Steps

- Complete testing for remaining states
 - Collect user experience / satisfaction data
- Work with phin to develop standards

