

**State-Based Evaluation of the Alert Notification Component of CDC's
Secure Communications Network (*Epi-X*)
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**Carlos Alonso
Project Officer
2500 Century Center, Room 30333, M/S E-90
Atlanta, Georgia 30329
(404) 498-6044**

**National Center for Health Marketing
Centers for Disease Control and Prevention
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A. Justification

1. Circumstances Making the Collection of Information Necessary

The continuing severity of ongoing terrorist threats worldwide requires States to become more proficient in the use of *Epi-X*, CDC's only Web-based communication system for securely communicating public health emergencies having multi-jurisdictional impact and implications. Before the creation of *Epi-X*, CDC had not developed an online, web-based system for the communication of urgent public health information. The events of 9/11 illustrated the need for an encrypted and secure communications system which would permit CDC to communicate urgently with partners at the state/local level, and notify them 24/7--if necessary. Similarly, *Epi-X* was specifically designed to provide public health decision-makers at the state and local level with a tool to communicate unusual or urgent public health events to neighboring jurisdictions as well as CDC, and eliminate the concern of having this information "leaked" prematurely to the press or the general public. The system was also designed to enable an automated request for epidemiologic assistance (*Epi-Aid*) from CDC in a secure and paperless environment.

Epi-X designers have developed new functionalities which permit critical outbreak information to be targeted to specific public health authorities who can act quickly to prevent the spread of diseases in multi-jurisdictional settings, such as may occur with the intentional release of a biologic/radiologic agent. There is, therefore, an urgency to train users on the use of this new functionality, and to assess this program's success with the orientation process. The proposed data collection instrument (attachment 3) is an electronic tool that will collect information from *Epi-X* users on their ability to use and comprehend the targeted notification feature, which is designed to disseminate urgent public health information to select groups of health professionals. Respondents are initially informed about this data collection process through a locally identified Notification Facilitator, who works closely with *Epi-X* program staff to ensure that the notification functionalities of *Epi-X* are comprehended and tested at the local level. The second method of informing respondents occurs when the Zoomerang instrument is embedded as a link to the *Epi-X* state notification proficiency test report. The link is clearly labeled "<<state name>>Notification Proficiency Test Survey", and asks specific questions about the user's experiences during the notification proficiency test.

During CY 2006, 1161 of 1656 test participants (70.1%) completed the voluntary Zoomerang survey from 54 jurisdictions nationwide. In preparation for these tests, 140 new users were registered on *Epi-X* and 124 users who were no longer eligible for access were removed. Of the 3,634 registered *Epi-X* users in the 54 jurisdictions, 1,656 (45.6%) participated in the test surveys, with 35.8% of "key users" successfully logging on to *Epi-X* within 3 hours of the start of the test. A total of 29 (53.7%) of the 54 jurisdictions tested met their response goals. All NPT facilitators were tasked with informing system users to

update their off-hours, mobile, and work contact information and encouraged them to perform notification self-tests. A total of 491 of 537 possible users (91.4%) participated in the 8 role-based NPTs conducted for the first time in 2006. Response goals were met or exceeded in 5 (62.5%) of the 8 tests.

Dissemination of information during public health emergencies is an integral part of the overall mission of the CDC and is authorized by the Public Health Service Act (42 USC 241) (Attachment 1).

2. Purpose and Use of the Information

The purpose of the information is to assess the extent to which *Epi-X* alert notification features are comprehended and applied by users during functional exercises. Ultimately, information acquired from this evaluation process will strengthen the public health communications infrastructure, and our nation's ability to respond to severe or urgent multi-jurisdictional disease outbreaks and bioterrorism threats.

3. Use of Information Technology and Burden Reduction

In past years land-line telephone conversations were viewed as the only "secure" means of communication between Epidemiologists, Health Officers, EIS Officers, and the CDC. *Epi-X* is CDC's first and only communications network currently being used to provide an encrypted and secure means for conveying urgent public health information between key state health officials, HHS, and the CDC. The ongoing prospect of bioterrorism has, of course, heightened the importance and necessity of improving this network.

Epi-X was designed as a web-based communications network to communicate urgent public health information securely, in a paperless environment. All users must apply for, and be granted a digital certificate through CDC's Secure Data Network to access *Epi-X*. Consequently, *Epi-X* is inaccessible to, and does not burden the general public.

Epi-X notification testing enables respondents to practice using functionalities associated with urgent communication, and eliminates the use of labor intensive "phone trees" and other antiquated "call-down" systems for reaching essential personnel during an emergency. *Epi-X* is a CDC-based effort to develop an encrypted and secure web-based communication sharing system for key public health decision-makers at the state and local level.

4. Efforts to Identify Duplication and Use of Similar Information

Because *Epi-X* is presently the only secure public health communications network of its kind, no duplication of effort is expected.

5. Impact on Small Businesses or Other Small Entities

There will be no impact to the business sector or other small entities during the collection of information. Information will be collected only from authorized *Epi-X* users.

6. Consequences of Collecting the Information Less Frequently

The information to be collected will serve to evaluate and improve current authorized users' acceptance of *Epi-X* as a tool for the dissemination of critical and ongoing public health information. Each respondent will respond **only one time**. There are no legal obstacles to reduce the burden.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

No special circumstances relating to the Guidelines of 5 CFR 1320.5 are noted.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside Agency

- A. A 60-day Federal Register Notice was published in the *Federal Register* on July 6, 2007, page 37024 - 37025, Vol 72, No. 129 (Attachment 2). No public comments were received.
- B. The program did not consult with anyone outside of the agency on this data collection instrument. Within CDC, design architects, medical epidemiologists, program analysts, and health communicators were consulted regarding the design of this survey.

9. Explanation of Any Payment or Gift to Respondents

Respondents will not receive payment or gifts for their responses, which will be voluntary.

10. Assurance of Confidentiality

This request has been reviewed for Privacy Act applicability and it has been determined that the Privacy Act is not applicable. No sensitive or personal identifying information will be collected. The survey will collect information from users of the CDC Secure Communications Network (Epi-X) on the clarity and functionality of the alert notification feature which is designed to disseminate urgent public health information to targeted groups of health professionals. The purpose of the information will be to assess the extent to which *Epi-X* alert notification features are understood and applied during functional exercises. The information gathering process will occur through web-based technology which is deemed to be secure and adheres to standard security protocols.

11. Justification for Sensitive Questions

No sensitive questions will be asked, and no sensitive information will be collected.

12. Estimates of Annualized Burden Hours and Costs

A. Annualized Burden Hours

Respondents	# of Respondents	Responses per Respondent	Average burden per Response	Total Burden Hours
States	1000*	1	10/60	167

* The estimated number of respondents was determined by assuming an average response rate per state of 20 participants (multiplied by 50 states). The average survey completion time is estimated to be 10 minutes.

B. Annualized Burden Costs

Type of Respondents	# of Respondents	Frequency of Response	Hour Wage Rate	Total Burden Hours	Total Respondent Cost
State Public Health Professional	1,000	1	\$20	167	3,340.00
Total					3,340.00

The total Hour Wage Rate is determined by estimating an average hourly wage for key respondents of an *Epi-X* alert in the Atlanta metro area (about \$40 per hour) and halving that number as a more representative wage for the nation. In most instances, an alert would involve the participation of similar professionals at the state level. (Examples include Supervisory Medical Epidemiologist GS-14 @\$60, PHA Bioterrorism Coordinator, GS-12@\$30, PHA/HAN Coordinator @\$40, State Veterinarian@\$40, and Supervisory Laboratory Director @\$50, and a Poison Control Center Director@\$40).

13. Estimate of Annualized Capital and Maintenance Costs.

There are no capital or maintenance costs to the respondents.

14. Annualized Cost to the Federal Government

The annualized cost to the federal government for the performance of this survey and the analysis of the data is approximately \$25,000. This includes the fee for Zoomerang and its online surveying services, survey design, technical support, survey administration and data review, data analysis and provision of recommendations or improvement to respondents and *Epi-X* facilitators in the field.

15. Explanation for Program Changes or Adjustments

There have been no changes.

16. Plans for Tabulation and Publication and Project Time Schedule

No publications or manuals are planned.

The following is the proposed schedule for testing of the *Epi-X* notification feature for calendar year 2008:

Jan	Feb	Mar	Apr	May	Jun
Preparation	Preparation	Preparation	5 states	7 states	8 states
Jul	Aug	Sep	Oct	Nov	Dec
6-8 states	6-8 states	6-8 states	6-8 states	5-7 states	Evaluation

17. Reason(s) Display of OMB Expiration Date is Inappropriate

Not applicable

18. Exceptions to Certification for Paperwork Reduction Act Submissions

No exceptions to Certification for Paperwork Reduction Act Submissions anticipated.

B. Collections of Information Employing Statistical Methods

No statistical methodology will be used.

1. Respondent Universe and Sampling Methods

The Respondent Universe is made up of the public health professionals within the state health departments. No sampling methods will be used.

2. Procedures for the Collection of Information

Collection of information will be through an online surveying instrument (Zoomerang).

3. Methods to Maximize Response Rates and Deal with Nonresponse

Non-respondents may be offered a second opportunity to reply, which is voluntary.

4. Test of Procedures or Methods to be Undertaken

No tests of procedures and methods anticipated.

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

Individuals collecting and/or analyzing data include system design architects, medical epidemiologists, program analysts, and health communications Specialists, all CDC employees.

ATTACHMENTS

ATTACHMENT 1	Authorizing Legislation
ATTACHMENT 2	Federal Register Notice
ATTACHMENT 3	Survey