

# **State Emergency Preparedness and Response Inventory**

A Tool for Rapid Assessment of State Capacity to  
Respond to Bioterrorism, Other Outbreaks of  
Infectious Disease and Other Public Health Threats  
and Emergencies

**Public Health Practice Program Office**

Centers for Disease Control and Prevention

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# EMERGENCY PREPAREDNESS AND RESPONSE INVENTORY

## Background

Public health agencies are the natural leaders in the development of cohesive public health systems. Our nation must ensure that all state and local public health organizations have a strong infrastructure and are prepared to respond to bioterrorism, outbreaks of infectious diseases, and other public health threats and emergencies through comprehensive planning, training, and evaluation.

The Emergency Preparedness and Response Inventory (EPRI) provides a rapid assessment of a public health agency's ability to respond to public health threats and emergencies. The Inventory includes measures to assess progress towards meeting the benchmarks and critical and enhanced capacities described in the grant guidance for Fiscal Year 2002 Supplemental Funds for Public Health Preparedness and Response to Bioterrorism (Announcement Number 99051). The EPRI is organized into six chapters that correspond directly with the six funded focus areas of the grant guidance - Preparedness Planning and Readiness Assessment, Surveillance and Epidemiology Capacity, Laboratory Capacity - Biologic Agents, Health Alert Network/Communications and Information Technology, Risk Communications and Health Information Dissemination, and Education and Training. Questions in the EPRI were derived in part from the Department of Justice Public Health Performance Assessment for Emergency Preparedness (aka DOJ survey), National Public Health Performance Standards assessment instruments, CDC Bioterrorism Core Capacity Project, Council of State and Territorial Epidemiologists (CSTE) capacity assessment tool, and selected state specific assessment instruments. The EPRI assessment tool is available for both state and local levels and can be found at [www.phppo.cdc.gov](http://www.phppo.cdc.gov).

## Purpose

The Inventory is designed for rapid evaluation of the six focus areas in the supplemental funding announcement. The Inventory will :

- Guide state, local, and regional jurisdictions in performing an evaluation to determine the extent to which they are prepared to respond to a public health threat or emergency and to assess progress towards achieving critical and enhanced capacities, and critical benchmarks.
- Identify gaps in preparedness and response capacities that will be the focus of future proposed work plans, as well as the State -Local Public Health Infrastructure Improvement Plan.

- Provide a framework for each state to characterize the status of its public health infrastructure.

## Instructions

In order to comprehensively evaluate a state's ability to respond to bioterrorism, outbreak of infectious diseases, and public health threats and emergencies, the Inventory should be completed by both state and local health public health agencies on an annual basis.

State and/or local public health agency directors should assign responsibility for coordinating completion of the Inventory to at least one staff, or to a team of staff, who can ensure that appropriate agency, emergency response, and other experts convene to answer the questions in the Inventory. State public health agencies should complete the State EPRI and local public health agencies should complete the Local EPRI.

Staff most knowledgeable about agency operations in each of the respective six focus areas should coordinate the completion of the Inventory for their area. For example, the agency's information technology manager(s) should answer the questions in Focus Area E: Health Alert Network/Communications and Information Technology. Likewise, the agency's human resource training manager(s) should coordinate with Centers for Public Health Preparedness, schools of public health, and others in answering the questions in Focus Area G: Education and Training. In addition, state public health laboratories and state regional public health laboratories should complete the state Focus Area C assessment. Large metropolitan or city public health laboratories may also find it more useful to complete the state Focus Area C assessment rather than the local Focus Area C assessment.

Pre-planning to identify subject matter expertise will afford the highest likelihood of accurate answers and the greatest degree of respect for each participant's time. We anticipate that many of the agreements and protocols identified in the focus areas have yet to be written or are not yet written to the satisfaction of all participating partners. Therefore, having all relevant partners convened will begin the process of establishing said agreements and protocols or detecting gaps in existing ones.

There are two types of questions within the Inventory: those that require a "yes" or "no" answer and those that contain a base question with multiple sub-questions. Questions of the latter type should be approached as though each bulleted statement were a "yes" or "no" question, where a "no" response is designated by leaving the box blank. The respondents should check all that apply for each of the multiple-part questions. In a few cases, there are questions that ask the respondent to choose a frequency for a response (e.g., daily, monthly). For these questions, choose the answer choice that most closely matches the frequency with which the agency performs the activity.

It is anticipated that a web-based system will be available soon for data entry. The Public Health Practice Program Office will provide assistance and support for analysis and generation of standardized reports.

## **Relation to other assessment efforts**

CDC has been involved in several assessment efforts including the Department of Justice (DOJ) Public Health Performance Assessment for Emergency Preparedness and the National Public Health Performance Standards Program. Both of these assessment efforts use the ten essential public health services as an organizing framework. The DOJ public health performance assessment is part of a multi-assessment process designed to assess a jurisdiction's ability to respond to incidents involving weapons of mass destruction through a combination of questions focused on both the local public health system and the local public health agency. In comparison, the state, local, and governance performance assessment tool of the National Public Health Performance Standards program are designed to assess optimal infrastructure at the state or local public health system level for the routine delivery of essential public health services.

In contrast, the Inventory provides a rapid assessment of a public health agency's preparedness to respond in times of emergency and its capacity to participate in response with its partners during an actual emergency. Although the Inventory addresses many aspects of the public health system which must be in place to accomplish routine functions, the emphasis of the Inventory is on those priority agency capacities which ensure rapid response capability including detection of biologic threats, communication of information regarding threats, and control of human consequences arising from threats.

## **For Additional Information:**

For additional information or questions on the Emergency Preparedness and Response Inventory, please contact:

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# Focus Area A: Preparedness Planning and Readiness Assessment

## Part A: Strategic Direction, Assessment, and Coordination

1. Does the public health agency have written agreements (e.g., memoranda of understanding, contracts) with the following organizations to manage routine public health problems and emergencies? Written agreements must describe the purpose of the relationship, roles, and responsibilities to manage routine public health problems and emergencies.

	Emergency Response	Routine Response
Governor or representative	<input type="checkbox"/>	<input type="checkbox"/>
State elected officials	<input type="checkbox"/>	<input type="checkbox"/>
State law enforcement (e.g., state bureau of investigation, highway patrol)	<input type="checkbox"/>	<input type="checkbox"/>
Federal law enforcement (e.g., FBI)	<input type="checkbox"/>	<input type="checkbox"/>
Local public health agencies	<input type="checkbox"/>	<input type="checkbox"/>
Department of Agriculture	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Protection Agency	<input type="checkbox"/>	<input type="checkbox"/>
Public Works/Sanitation	<input type="checkbox"/>	<input type="checkbox"/>
Mental health authority	<input type="checkbox"/>	<input type="checkbox"/>
State public utility commission	<input type="checkbox"/>	<input type="checkbox"/>
State hospital association	<input type="checkbox"/>	<input type="checkbox"/>
State health care professional organizations (e.g., state medical association, state nursing association, state veterinarian association)	<input type="checkbox"/>	<input type="checkbox"/>
State pharmacy association	<input type="checkbox"/>	<input type="checkbox"/>
Pharmacies	<input type="checkbox"/>	<input type="checkbox"/>
State bureau of emergency medical services	<input type="checkbox"/>	<input type="checkbox"/>
Medical examiners	<input type="checkbox"/>	<input type="checkbox"/>
Coroners	<input type="checkbox"/>	<input type="checkbox"/>
Department of Education	<input type="checkbox"/>	<input type="checkbox"/>
Department of Transportation	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Management Agency	<input type="checkbox"/>	<input type="checkbox"/>
Federal Emergency Management Agency	<input type="checkbox"/>	<input type="checkbox"/>
Department of Public Safety	<input type="checkbox"/>	<input type="checkbox"/>
Social services	<input type="checkbox"/>	<input type="checkbox"/>
State funeral directors association	<input type="checkbox"/>	<input type="checkbox"/>
Fire department, including state fire marshal	<input type="checkbox"/>	<input type="checkbox"/>
State public information officer	<input type="checkbox"/>	<input type="checkbox"/>
County commissioners association	<input type="checkbox"/>	<input type="checkbox"/>
State public information officer	<input type="checkbox"/>	<input type="checkbox"/>
Poison control centers	<input type="checkbox"/>	<input type="checkbox"/>
Veterans Administration	<input type="checkbox"/>	<input type="checkbox"/>
Military	<input type="checkbox"/>	<input type="checkbox"/>
National Guard	<input type="checkbox"/>	<input type="checkbox"/>
American Red Cross	<input type="checkbox"/>	<input type="checkbox"/>
Salvation Army	<input type="checkbox"/>	<input type="checkbox"/>

2. Does the public health agency participate in a state health improvement process?
- Y
  - N

If yes, does the process involve:

- Identifying stakeholders?
- Engaging stakeholders?
- Conducting a state assessment?
- Using data to identify health problems (e.g., service utilization data, surveillance data)?
- Prioritizing health problems?
- Identifying interventions to minimize health problems?
- Formulating action plans to implement interventions?
- Establishing evaluation criteria?
- Evaluating interventions using established criteria?
- Recommending changes in interventions, which prove ineffective?

3. Does the public health agency organize surveillance data and other health information (e.g., state assessment data, service utilization data) into a state health profile?

- Y
- N

4. Does the public health agency have a state health improvement plan?

- Y
- N

5. Does the public health agency evaluate public health programs?

- Y
- N

If yes, does the evaluation framework include:

- Engagement of stakeholders?
- Description of the program being evaluated?
- Description of the evaluation design?
- Analysis of reliable data?
- Justification of conclusions?
- Dissemination of lessons learned?

6. Do health officials collaborate with the state board of health (or its equivalent) and stakeholders to analyze public health problems that require new legal solutions?

- Y
- N

If yes, do health officials collaborate with the state board of health (or its equivalent) and community stakeholders to:

- Develop new legal remedies (e.g., drafting regulations or legislation)?
- Determine if enforcement action is required?
- Allocate resources and funding to address public health problems?
- Improve management of public health problems?
- Explore alternative approaches to enforcement?

- Develop new educational or consultative solutions?

7. Within the past 3 years, what type(s) of leadership/management training have the public health agency director and deputy director attended?

	Director	Deputy Director
None	<input type="checkbox"/>	<input type="checkbox"/>
Formal education program leading to an advanced degree	<input type="checkbox"/>	<input type="checkbox"/>
National Public Health Leadership Management Institute (PHLI)	<input type="checkbox"/>	<input type="checkbox"/>
Regional or State sponsored Public Health Leadership Management Institute	<input type="checkbox"/>	<input type="checkbox"/>
Harvard Executive Education Course	<input type="checkbox"/>	<input type="checkbox"/>
Other leadership/management training courses (one week or longer in duration)	<input type="checkbox"/>	<input type="checkbox"/>
Leadership and/or management seminars or lectures	<input type="checkbox"/>	<input type="checkbox"/>

8. Within the past 3 years, what percent of the senior management staff have participated in the following leadership/management training?

	0-24%	25-49%	50-74%	75-100%
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formal education program leading to an advanced degree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Public Health Leadership Management Institute (PHLI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regional or State sponsored Public Health Leadership Management Institute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Harvard Executive Education Course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other leadership/management training courses (one week or longer in duration)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leadership and/or management seminars or lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Do the job descriptions of agency health officials address [Core Legal Competencies for Public Health Professionals](#) ?

- Y
- N

10. Has the public health agency developed or participated in an emergency preparedness and response advisory committee that includes, at a minimum, representation from:

- Local health departments
- State government
- Emergency Management Agency
- Emergency Medical Services
- Office of Rural Health
- Police
- Fire Department
- Emergency rescue workers
- Occupational health workers
- Other health care providers including university, academic medical and public health
- Community health centers
- Red Cross and other voluntary organizations
- Hospital community, including Veterans Affairs and military hospitals

11. How often does the public health agency director brief policymakers on:

	Never	At Least Semi - Annually	At Least Annually
Emergency operations plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protocols for releasing public information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient confidentiality issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Part B: Terrorism Preparedness and Response Planning

1. Does the public health agency have a public health emergency response plan?

- Y
- N

### If yes:

Indicate which workers safety protocols are included in the public health emergency response plan:

- Use of personal protective equipment and protective measures for biological agents.
- Use of personal protective equipment and protective measures for chemical agents.
- Use of personal protective equipment and protective measures for radiological agents.
- Priority distribution of vaccines and medication to first responders and medical/health care providers.
- Protecting health care providers, emergency response workers, and victims from secondary exposures.

Which of the following environmental protection guidelines and protocols are included in the public health emergency response plan?

- Protocols for proper management of hazardous materials.

- ❑ Guidelines to conduct [environmental surveys](#).
- ❑ Guidelines for [environmental hazard](#) containment, decontamination, and mitigation identified in the agency's state [hazard assessment](#).
- ❑ Protocol to isolate and decontaminate patients at public health facilities.
- ❑ Protocols for proper management of hazardous materials.

Which of the following surge capacity protocols are included in the public health emergency response plan?

- ❑ Instituting mass isolation within a health facility.
- ❑ Decontaminating mass casualties (pre-hospital).
- ❑ Responding to mass mortuary needs.
- ❑ Organizing and coordinating volunteers.
- ❑ Providing food and lodging for volunteers, individual healthcare providers, and emergency response workers during a public health emergency.
- ❑ Distributing and managing the National Pharmaceutical Stockpile including trained personnel to receive and distribute critical stockpile items and manage mass distribution of vaccine and/or antibiotics.
- ❑ Implementing evacuation.
- ❑ Mass casualty transportation.

Which of the following protocols and procedures are included in the public health emergency response plan?

- ❑ Activating the emergency response plan.
- ❑ Identifying facilities within the jurisdiction that are suitable for [Emergency Operations Centers](#).
- ❑ Communicating with the Emergency Operations Center.
- ❑ Identifying suitable alternate facilities for public health agency operations in the event that the regular facility is uninhabitable.
- ❑ Activating and maintaining emergency communications with public health partners (e.g., first responders, hospitals, and healthcare providers).
- ❑ Public health participation in a Joint Information Center (JIC).
- ❑ Implementing an emergency epidemiologic response including enhanced surveillance and [epidemiologic investigation](#) for human and animal exposures.
- ❑ Initiating the [public health response](#) when a device is found that may contain a biological, chemical, radiological, or explosive agent.
- ❑ Obtaining pharmaceuticals and antidotes.
- ❑ Obtaining protective equipment.
- ❑ Managing donations.
- ❑ Coordinating public health responsibilities with law enforcement responsibilities.
- ❑ Developing mutual aid agreements with state, regional, and federal jurisdictions including the military.
- ❑ Identifying shelters and evacuating citizens.
- ❑ Assisting [special populations](#) whomay encounter barriers to health services during an emergency.
- ❑ Referring victims or response personnel to mental health professionals for [critical incident stress counseling](#).

Does the public health agency have protocols for incorporating the following state and local assets into response efforts?

- [National Disaster Medical System](#) (NDMS)
- [Disaster Medical Assistance Teams](#) (DMATS)
- [National Pharmaceutical Stockpile](#) (NPS)
- [Metropolitan Medical Response System](#) (MMRS)
- [Disaster Mortuary Operational Response Teams](#) (DMORTS)

2. Does the public health agency update the public health emergency response plan at least annually by meeting with organizations that have a role in responding to a public health emergency?
  - Y
  - N
3. Does the public health agency have written agreements that describe public health roles with organization(s) that have a command and control responsibility for emergency response and recovery efforts in their jurisdiction?
  - Y
  - N
4. Is the public health agency emergency response plan integrated with the:
  - Jurisdiction emergency response plan?
  - State public health agency emergency response plan?
  - Statewide emergency response plan?
  - Regional emergency response plan (multi-city, multi-county)?
5. Has the public health agency dedicated staff time to review local public health agency emergency response plans to verify that critical components and surge capacity are adequately addressed? (see question 3 for critical components)
  - Y
  - N
6. Does the public health agency have an Emergency Response Coordinator?
  - Y
  - N
7. Does the public health agency maintain a roster that includes 24 hours per day/7 days per week (24/7) contact information for:
  - Local public health directors?
  - State law enforcement?
  - Federal law enforcement?
  - Governor or representative?
  - Hospital association president?
  - Fire marshal?
  - Director of emergency medical services?
  - Director of environmental protection agency?

- Emergency management agency director?
  - Military?
  - National guard?
  - Department of transportation director?
  - Director of public safety?
  - President of state health care professional organizations?
  - State government elected officials?
  - Medical examiners?
  - Coroners?
  - State public information officer?
  - Director of Department of Education?
  - Mental health authority director?
  - Director of American Red Cross?
  - Director of Salvation Army?
8. Has the public health agency identified legal counsel for public health emergencies?
- Y
  - N
9. Does the public health agency have the legal authority to:
- Collect information on suspected and confirmed cases?
  - Close businesses, transportation centers, highways, schools, and other places of public assembly?
  - Mass distribute personal protective equipment (e.g., respiratory masks) and instructions on proper use?
  - Isolate and medically evaluate symptomatic or exposed persons?
  - Mass distribute medical supplies and medications and mass vaccination?
  - To institute mental health evaluation and services?
  - Institute measures to protect the health of others if affected persons refuse treatment (e.g., detainment, isolation, compulsory vaccination)?
  - Quarantine geographic areas or buildings?
  - Restrict travel?
  - Seize personal belongings (e.g., contaminated items, pets)?
  - Seize property (e.g., facilities, supplies, equipment, crops, livestock)?
  - Examine and dispose human remains and/or animal carcasses?
10. In the past 12 months, has the public health agency:
- Conducted tabletop exercises with individuals and/or organizations that have a response role?
  - Conducted functional exercises with individuals and/or organizations that have a response role?
  - Responded to a hoax event (e.g., suspicious letter or package that may contain a potentially harmful biological agent or a bomb threat at a nuclear power plant)?
  - Responded to a real event?
  - Corrected deficiencies in the emergency response plan based on knowledge gained from these evaluations?

# Focus Area B: Surveillance and Epidemiology Capacity

## Part A: Public Health Surveillance and Detection Capacities

1. Does the public health agency maintain surveillance systems for:
  - Communicable/infectious diseases?
  - Critical agents?
  - Chronic diseases?
  - Environmental exposures or diseases?
  - Injuries?
  - Behavioral risk factors?
  - Environmental hazards?
  
2. Does the public health agency mandate reporting of diseases and conditions of public health importance (e.g., list of national notifiable diseases or sentinel occupational disease) by community healthcare providers?
  - Y
  - N

If yes, does the state public health agency have a system in place to:

- Evaluate the level of reporting by healthcare providers in the state?
- Enforce reporting in accordance with its mandate?

3. What is the average lag time between a healthcare provider generating a case report and a state level review:

	Less than 24 hours	1-7 days	8-14 days	15-30 Days	Greater than 30 days
Communicable/infectious diseases?	<input type="checkbox"/>				
Chronic diseases?	<input type="checkbox"/>				
Environmental exposures or disease?	<input type="checkbox"/>				
Injuries?	<input type="checkbox"/>				
Environmental hazards?	<input type="checkbox"/>				

4. Is agency staff time dedicated to developing relationships with healthcare providers to increase reporting of notifiable diseases and unusual infections/syndromes?
  - Y
  - N
  
5. Does the public health agency arrange training/education for healthcare providers on:
  - Infections/syndromes related to the [critical agents list](#) that require immediate notification of the public health agency?
  - Epidemiology?
  - Surveillance?
  - Interpretation of clinical and laboratory information?
  - Disease reporting requirements?

6. Does the public health agency have a designated contact person available 24/7 for healthcare providers to report unusual infections/syndromes?

- Y
- N

If yes, does the public health agency disseminate the contact information to healthcare providers?

- Y
- N

7. Does the public health agency have a validated and tested protocol to conduct [enhanced surveillance](#) upon identification of unusual findings?

- Y
- N

**Part B: Public Health Epidemiologic Investigation and Response Capacities**

1. Indicate how many of the following the public health agency employs:

	#Employed by the agency
Epidemiologists	
Biostatisticians	
Data analysts	
Programmers	
Data entry personnel	

2. Does the public health agency have a validated and tested protocol for conducting epidemiologic investigations?

- Y
- N

3. Has the public health agency designated an epidemiology response coordinator to:

- Do not have an epidemiology response coordinator
- Manage enhanced surveillance and epidemiologic investigations during a public health emergency?
- Coordinate all epidemiology response -specific planning within the jurisdiction overall planning?

4. Does the public health agency have a plan to acquire additional epidemiologists and equipment to accommodate a five -fold increase in suspected and confirmed cases?

- Y
- N

5. Can the public health agency disseminate medical management information for agents on the critical agents list within 1 (one) hour to the following facilities/personnel in its jurisdiction?

- Ambulatory care facilities

- Policedepartment
- Firedepartment
- Emergencymedicalservice
- Healthcareproviders
- Hospitals

6. Inthepast12months,hashe publichealthagency:

- Evaluateditssurveillancesystems?
- Evaluateditsepidemiologicinvestigationsforroutinepublichealthproblems?
- Conductedatabletoporfunctionalexerciseofthe [epidemiologicsystems](#) forpublic healthemergencies?
- Testeditsepidemiologicsystemsduringarealorhoaxevent?
- Evaluateditsepidemiologicsurgecapacityplan?
- Correcteddeficienciesintheepidemiologicandsurveillancesystemsbasedonthese evaluations?

## Focus Areas C and D: Laboratory Capacity – Biologic Agents

1. Does the public health laboratory have a focus on communicating with private and other public laboratories in the state that includes:
  - All full-time positions that coordinate services with the private sector?
  - Comprehensive test menu and submission guidelines on the web?
  - Use of Internet for emergency or routine updates to all private and public laboratories in the state (with acknowledgement of receipt)?
  - Broadcast fax capabilities?
2. Has the public health laboratory established written regional agreements with other states or private laboratories to provide reference testing services that may not be cost effective or practical within the state laboratory?
  - Y
  - N
3. Does the public health laboratory assess the capabilities and capacities for testing of public health importance (e.g. TB, STD, foodborne illnesses) in private and other public health laboratories?
  - Y
  - N

Does the public health laboratory maintain a database of these capabilities?

- Y
- N

4. Has the public health laboratory established written regional agreements with other states to provide contingency testing services (other than neonatal screening) in the event of a public health crisis such as interrupted service from the state public health laboratory?
  - Y
  - N

If yes, are the following capabilities available?

- Molecular typing of organisms for epidemiology (e.g., DNA fingerprinting)
- Biosafety Level 3 (BSL3) testing (other than TB) for unusual pathogens?
- Molecular methods (e.g., PCR) for direct detection of organisms?
- Clinical and environmental toxicology testing?

5. Does the public health laboratory act as a reference laboratory or have formal agreements with another reference laboratory (other than CDC) for local public health, hospital, and independent laboratories to access:
  - Molecular typing of organisms for epidemiology (e.g. fingerprinting)?
  - Biosafety Level 3 (BSL3) testing (other than TB) for unusual pathogens?
  - Molecular methods (e.g. PCR) for direct detection of organisms?
  - Clinical and environmental toxicology testing?

6. Does the public health laboratory assess and monitor the use of voluntary standards and laboratory practice guidelines for testing of public health importance (e.g., antimicrobial resistance, TB, STD, foodborne illnesses) in private and other public health laboratories?
  - Y
  - N
  
7. Does the public health laboratory have a training program for private and other public health laboratories in the state that:
  - Collaborates with the National Laboratory Training Network (NLTN)?
  - Has at least 1 full-time employee for a training coordinator
  
8. Does the public health laboratory have an advisory committee or other mechanism to directly meet with private and local public health laboratories and programs to determine what public health services should be available?
  - Y
  - N
  
9. Does the public health laboratory have a Laboratory Information Management System (LIMS) that:
  - Functions in the majority of laboratory testing areas within the state public health laboratory?
  - Enables public health programs to access the LIMS data and perform ad hoc queries?
  - Enables electronic reporting to public health programs and other clients?
  - Has operating characteristics of manual and online instrument data entry, searchable databases, and monitoring results for quality standards?
  - Adheres to NEDDS standards?
  
10. Does the public health laboratory collaborate with private and public laboratories to:
  - Audit compliance with disease reporting requirements?
  - Assess capabilities for implementation of electronic disease reporting?
  
11. Does the public health laboratory:
  - Maintain CLIA multi-site limited public health testing certificates for testing in local public health clinics
  - Directly provide support and routine consultation for testing in local public health clinics other than the formal mechanism of CLIA?
  
12. Does the public health laboratory have a specified full-time liaison/coordinator for laboratory emergency response?
  - Y
  - N

If yes, is the laboratory liaison in contact with:

  - Public health agency emergency response coordinator for BT, chemical, and radiological incidents?
  - Federal Bureau of Investigation?

13. Does the public health laboratory have a protocol to specify laboratory testing capabilities in the event of public health emergencies, biological, chemical and radiological incidents?

- Y
- N

If yes, does the protocol identify:

- Laboratory contacts, responsibilities, and lines of authority?
- Testing capabilities for suspected BT, chemical agents, radiological, or other analyses?
- Additional staff for alternate local laboratories for surge capacity for interrupted testing service?
- Clinical and public health laboratories, including Level "A" laboratories
- Contingent methods of communicating laboratory results (e.g. electronic, phone, fax, courier)?
- Contingency plan to send public health and reference testing to other states?

14. Does the public health laboratory have guidelines or protocols in place to address the handling and transport of laboratory and environmental specimens in the event of a biological, chemical, radiological and other disaster incident?

- Y
- N

If yes, does each of these protocols include:

- Collection?
- Labeling?
- Transportation/storage?
- Chain of custody?
- Referral to State Public Health Laboratory?
- Safe disposal of biological waste?
- Safe disposal of chemical waste?
- Safe disposal of radiological waste?

15. Does the public health laboratory have a security system ensuring that no unauthorized personnel have access to testing equipment, reagents or specimens?

- Y
- N

16. Under emergency circumstances, for the potential agents of bioterrorism, including *Bacillus anthracis*, *Brucella sp.*, *Francisella tularensis*, *Yersinia pestis*, *Variola major* (smallpox), does the public health laboratory have access within 4 hours to laboratories that can fulfill the roles of

- Level A** testing, which can rule **OUT** potential agents within 24 -48 hours of specimen collection
- Level B** testing, which can rule **IN** potential agents within 4 -24 hours for culture isolates and 24 -72 hours for specimens

- Level C** testing, which can rule **IN** and **speciate** potential agents
17. Under emergency circumstances, do the public health laboratory have access within 4 hours to a laboratory that can test environmental samples for radiological elements?
- Y
  - N
18. Do the public health laboratory have access within 4 hours to a laboratory that can test environmental samples and specimens for toxic chemicals that could be released accidentally or intentional chemical warfare agents? (e.g., Sarin, Tabun, Soman, VX, sulfur mustard, nitrogen mustard, Lewisite 1, phosgene, chlorine, HCN, CK)?
- Y
  - N
19. Do the laboratories that provide testing services for biological, chemical, and radiological incidents participate in programs that specifically measure their proficiency for detecting these analyses at least 3 times a year?
- Y
  - N

## Focus Area E: Health Alert Network/Communication and Information Technology

1. Does your public health agency have access to information technology (IT) personnel with competencies in the following areas:
  - [Geographic Information Systems \(GIS\)](#) ?
  - IT Project management?
  - Programming including database programming?
  - Network management?
  - Server application management?
  - Web development?
  - IT security
  - IT customer support?
2. Do the internal networks, Internet connections, and broadcast fax capabilities of the public health agency comply with Health Alert Network architectural standards and performance characteristics?

### Internal networks

- The public health agency does not have internal networks
- Y
- N

### Internet connections

- The public health agency does not have Internet connections
- Y
- N

### Broadcast fax capabilities

- The public health agency does not have broadcast fax capabilities
- Y
- N

3. Does the public health agency **have security measures and written policies for** :
  - The public health agency does not have any written information security policies.
  - [Internet firewalls](#) ?
  - [Intruder detection](#), including [portscan](#) protection?
  - Virus scanning?
  - [Public Key Infrastructure](#) (PKI) authentication and encryption technologies?
  - Passwords?
  - [Digital certificates](#) ?
  - [Secure Sockets Layer](#) (SSL)?
  - E-mail systems: (e.g., [S/MIME](#))?
  - Other emerging technologies for authentication (e.g., keyfobs, smartcards, magnetic cards, retinal scan, fingerprint scan)?

4. Does the public health agency have **loss protection measures and written policies for** :
- The public health agency does not have any loss protection policies.
  - Uninterruptible power supply (UPS)?
  - Procedures for on-site data backup (e.g., Zip disk, CD, other)?
  - Procedures for remote-site data backup?
  - Database user audit trail?
  - [Redundant systems](#) ?
  - Alarms against environmental hazards (e.g., smoke alarms, sprinkler system)?
5. Does the public health agency comply with the public health information exchange standards, vocabularies, and specifications including data transmission and security standards developed under the NEDDS initiative as referenced in [Public Health Information Technology Functions and Specifications](#) ?
- Y
  - N
6. Does the public health agency assess its networks and servers to run appropriated data messaging technologies to support data exchange (e.g. data exchange on disease and injury cases, possible disease contacts, specimen information, environmental sample information, lab results, facilities, and possible threat information)?
- Y
  - N
7. Does the public health agency ensure independent validation and verification of: {E.A.3.b}
- Internet security?
  - Vulnerability assessments?
  - Security practices?
  - Continuity of operations?
8. Does the public health agency have the capacity to electronically exchange information for the following routine public health functions:
- Surveillance?
  - Registries?
  - Clinical patient databases?
  - Vital statistics?
  - Laboratory reports?
9. Does the public health agency have a secure electronic link with the following [public health system](#) partners?
- Emergency departments
  - Hospitals
  - Public laboratories (e.g., public hospital laboratories, federally funded public health laboratories, clinics)
  - Sentinel healthcare providers
  - Sentinel veterinarians

- Policedepartment
  - Firedepartment
  - Emergencymedicalservice
  - Managedcare
10. Doesthepublichealthagencyhaveapublichealthinformationweb sitethatisavailable 24/7?
- Y
  - N
11. Doesthepublichealthagencyequiptits [EmergencyResponseCoordinator](#) andother **key responsepersonnel** withacomputerconfiguredto [PublicHealthInformationTechnology FunctionsandSpecifications](#) ?
- Y
  - N
12. Whatp ercentofthepopulationinyourstateisservedbyapublichealthjurisdictionthat participatesintheHealthAlertNetwork?
- Lessthan30%
  - 30%to59%
  - 60%to89%
  - 90%orgreater
13. Doesyourpublichealthagencyassignresponsibilitytoatleastoneper sonto:
- MaintainadistributionlistfortheHealthAlertNetwork?
  - Updatethedistributionlistatleastquarterlytoensurecompleteandaccuratecontact information?
  - ProvideadjacentjurisdictionsupdatedcopiesoftheHealthAlertNetworkdistribution list atleastquarterly?
14. Doesyourpublichealthagencyhaveasystemforsendinghealthalertswithin1(one)hourof theirfinalapproval:
- Duringtheday(Monday –Friday,8AMto5PM)?
  - Afterbusinesshours(Monday –Friday,5PMto8AM)?
  - During theweekend(SaturdayandSunday,24hoursperday)?
15. Doesyourpublichealthagency'ssystemforsendinghealthalertsinclude:
- Amechanismtoconfirmreceiptofhealthalerts?
  - Amechanismtoconfirmhealthalertshavebeenreadbytherecipient?
16. Doesthepublichealthagencytestitssystemforsendinghealthalertsatleastonceevery three(3)months?
- Y
  - N
17. Dothepublichealthagency'sinformationtechnologysystemssupportemergency

response management for the following activities?

- Disaster simulation and training?
- Logistics management?
- Threat tracking and management ?
- Geographic visualization of events (modeling, eg. plume analysis)?
- Geographic visualization of emergency resource allocation and management?

18. Does the public health agency have access to the following equipment and support mechanisms to ensure reliable communications?

- Facsimile
- Dedicated radio frequencies (e.g., two-way radios)
- Satellite or cell phones
- Back-up power sources (e.g., spare batteries, generators)
- Periodic training for equipment orientation and updates
- Pagers
- Palm pilots

**If yes:**

Does the public health agency evaluate surge capacity for this equipment and support mechanisms?

- Y
- N

Does the public health agency establish redundant systems to maintain communications during an emergency?

- Y
- N

19. How often are communication systems tested?

- Never
- Every 6 -12 months
- Every 3 -5 months
- Every 1 -2 months
- Every 1 -4 weeks

## Focus Area F: Risk Communication and Health Information Dissemination

1. Does the public health agency have a designated public information officer with competencies in:
  - The public health agency does not have a public information officer.
  - [Risk communication](#) ?
  - [Media advocacy](#) ?
  - Preparing verbal and written communication tailored to each type of media (e.g., newspaper, radio, television)?
  - Preparing verbal and written communication tailored to the dominant cultures of the community?
  - Preparing and distributing a news release?
  - Developing communication objectives for each media appearance/publication?
2. Is the public information officer available 24/7?
  - Y
  - N
3. Does the public health agency have a designated backup for the public information officer?
  - Y
  - N
4. Does the public health agency staff have a policy to routinely route media calls to the public information officer?
  - Y
  - N
5. How often does the public information officer provide routine reports to the media on community health issues?
  - Never or Rarely
  - Quarterly
  - Monthly
  - Weekly
  - Daily
6. Does the public health agency have factsheets for use during a \_\_\_\_\_ emergency for the agent on the critical agent list?
  - Y
  - N
7. Does the public health agency have [emergency communications protocols](#) for:
  - The public health agency does not have emergency communications protocols.
  - Releasing public information on potential, suspected, or confirmed hazards

- Releasing public information on associated risks
- Releasing public information on prevention measures
- Instituting rumor control measures
- Releasing information in the dominant languages of the community
- Linking with the Emergency Broadcast System

8. During an emergency, does the public information officer:

- Arrange news conferences as required or requested?
- Respond to misinformation or rumors generated by the media or the general public?
- Meet with policymakers at least once daily?

## Focus Area G: Education and Training

1. Does the public health agency staffing plan:
  - The public health agency does not have a staffing plan.
  - Identify the number of personnel required to meet routine public health and emergency response needs?
  - Identify the qualifications of personnel required to meet routine public health and emergency response needs?
  - Identify the geographic distribution of personnel required to meet routine public health and emergency response needs?
  - Include a contact list to support staffing requirements?
  - Include a mechanism to maintain staffing requirements 24/7 during an emergency?
  - Use a workforce assessment that is conducted at least once every 3 years to annually update the staffing plan?
2. Does the public health agency have policies and procedures to assure its regulated professionals (e.g., physicians, nurses, registered sanitarian) maintain current certifications and licenses required by law or recommended by State, or federal policy guidelines?
  - Y
  - N
3. Has the public health agency conducted a [training needs assessment](#) at least once in the past 3 years for routine public health functions and emergency response?
  - Y
  - N

### If yes:

Does the public health agency have a written training plan based on the most recent training needs assessment?

- Y
- N

Does the public health agency conduct an annual review to assess progress towards meeting training needs?

- Y
- N

Does the training needs assessment include BT preparedness and response needs for the:

- Public health agency director?
- Public health agency deputy director?
- Public information officer?
- Emergency response coordinator?
- Epidemiology response coordinator?

- Information technology staff?
- Other public health agency personnel?

Does the training needs assessment include eBT preparedness and response needs for:

- Infectious disease specialists?
- Infection control nurses?
- Emergency department physicians?
- Emergency department nurses?
- Other healthcare providers?

4. Does the public health agency have written training policies for:

	Emergency Response	Routine Response
New employee orientation?	<input type="checkbox"/>	<input type="checkbox"/>
Division/unit specific orientation?	<input type="checkbox"/>	<input type="checkbox"/>
Job specific orientation?	<input type="checkbox"/>	<input type="checkbox"/>
Continuing education?	<input type="checkbox"/>	<input type="checkbox"/>

5. Does the public health agency cross-train agency staff for routine and emergency response roles?

- Y
- N

6. Does the public health agency cross-train staff with partner organizations for emergency response?

- Y
- N

7. Does the public health agency provide the following for workforce development?

- Workforce/Staff development coordinator
- Distance learning coordinator
- Access to distance learning for all employees
- Online learning resources for all employees (e.g., hardware, software, course fees)

8. Does the public health agency have written agreements with academic institutions **and** other organizations to provide education and training?

- Y
- N

9. Which of the following distance learning technologies does your public health agency have?

- The public health agency does not have distance learning technologies
- Video conferencing over IP
- Video streaming
- Satellite Video/Audio/Data broadcast uplink capability
- Satellite Video/Audio/Data broadcast downlink capability
- Internet-delivered courses

- Cd-rom
- Audioconferencing

10. Does the public health agency:

- Evaluate the effectiveness of training?
- Revises training based on the results of the evaluation?
- Evaluate organizational emergency response competency through drills, simulations, and events?
- Evaluate individual emergency response competency through drills, simulations, and events?
- Incorporate lessons learned from emergency response drills, simulations, and events?

11. Has the public health agency developed plans to provide provisional credentials and professional liability coverage for out-of-state clinicians to support surge capacity policies during an emergency?

- Y
- N

# **Resource Dictionary for Inventory**

## **Conditions of Public Health Importance**

Conditions of public health interest as determined by each state. Each state lists notifiable diseases in accord with the contagiousness, severity, or frequency of the conditions. Most states adhere to the list of nationally notifiable diseases recognized by the Council of State and Territorial Epidemiologists (CSTE). States, however, are at liberty to compile their own lists, which typically include communicable diseases, traumatic injuries, and cancers. Occasionally a state might include conditions such as animal bites, reflecting the severity of the problem in the state.

## **Core Legal Competencies for Public Health Professionals**

Coursework in public health law which consists of 10 print-based modules that explain the public health legal system, demystify legal language, and encourage the effective use of legal tools in forwarding public health goals. Since public health laws are different in every state, the course is designed so that it can be customized by a state (or region), with some of the content being provided by local legal experts.

[http://www.trainingfinder.org/search.cgi?action=view\\_course&course\\_id=10137](http://www.trainingfinder.org/search.cgi?action=view_course&course_id=10137)

<http://www.publichealthlaw.net/MSEHPA/MSEHPA2.pdf>

## **Critical Agents List**

A list of biological and chemical agents likely to be used in weapons of mass destruction and other bio-terrorist attacks.

<http://www.cdc.gov/ncidod/EID/vol8no2/01-0164.htm>

## **Critical Incident Stress**

The emotional, physical, cognitive, and behavioral reactions, signs, and symptoms experienced by a person or group in response to a traumatic event outside of the ordinary range of human experiences. Such events are usually sudden and powerful, having sufficient emotional impact to overwhelm usually effective coping skills.

## **Cross-train**

To undergo or provide training in different tasks or skills. Typically, an employee selected for cross training is taken out of the department to which he is primarily assigned and temporarily placed in a "receiving" department to learn a second skill. Alternatively, cross training can be accomplished through job rotation. In job rotation, cross-training employees rotate through the jobs, which provide the experience and skills the employee requires.

ary

## **Digital Certificates**

Attachments to an electronic message used for security purposes. The most common use of a digital certificate is to verify that a user sending a message is who he claims to be, and to provide the receiver with the means to encode a reply.

An individual wishing to send an encrypted message applies for a digital certificate from a Certificate Authority (CA). The CA issues an encrypted digital certificate containing the applicant's public key and a variety of other identification information. The CA makes its own public key available through print publicity or perhaps the Internet.

The recipient of an encrypted message uses the CA's public key to decode the digital certificate attached to the message, verifies it as issued by the CA and then obtains the sender's public key and identification information held within the certificate. With this information, the recipient can send an encrypted reply.

**Webopedia.com**

## **Disaster Medical Assistance Teams (DMAT)**

A Disaster Medical Assistance Team (DMAT) is a volunteer group of medical and paramedical professionals who have prepared themselves to assemble rapidly as a self-sufficient medical unit. This group of individuals is trained, skilled, equipped and capable of mobilization and deployment to any destination within 24 hours of notification.

The basic unit of a DMAT is the patient care nucleus. Composed of physicians, nurses, rescue and support staff, this grouping provides both acute emergency and primary care to an affected population. Team members are trained to deliver medical and surgical care, and to stabilize victims at a disaster site until they can be evacuated to a receiving hospital. A DMAT is also equipped to provide primary care services in cases where communities may have lost their health care facilities. All individual DMAT members serve on a volunteer basis, bringing with them the skills they practice in their daily work.

A DMAT may be deployed to meet regional disasters, nationwide disasters requiring several teams present at the disaster sites, and international disasters in nations requesting assistance from the United States.

## **Disaster Mortuary Operational Response Team (DMORT)**

The Federal Response Plan tasks the National Disaster Medical System (NDMS) under Emergency Support Function #8 (ESF#8) to provide victim identification and mortuary services.

These responsibilities include:

- Temporary morgue facilities
- Victim identification

- Forensic dental pathology
- Forensic anthropology methods
- Processing
- Preparation
- Disposition of remains

In order to accomplish this mission, NDMS entered into a Memorandum of Agreement with the National Association for Search and Rescue (NASAR), a nonprofit organization, to develop Disaster Mortuary Operational Response Teams (DMORTs). DMORTs are composed of private citizens, each with a particular field of expertise, who are reactivated in the event of a disaster.

DMORT members are required to maintain appropriate certifications and licensure within their discipline. When members are reactivated, licensure and certification is recognized by all States, and the team members are compensated for their duty time by the Federal government as a temporary Federal employee. During an emergency response, DMORTs work under the guidance of local authorities by providing technical assistance and personnel to recover, identify, and process deceased victims.

The DMORTs are directed by the National Disaster Medical System in conjunction with a Regional Coordinator in each of the ten Federal regions. Teams are composed of Funeral Directors, Medical Examiners, Coroners, Pathologists, Forensic Anthropologists, Medical Records Technicians and Transcribers, Finger Print Specialists, Forensic Odontologists, Dental Assistants, X-ray Technicians, Mental Health Specialists, Computer Professionals, Administrative support staff, and Security and Investigative personnel.

The Department of Health and Human Services (HHS)/United States Public Health Service (USPHS) Office of Emergency Preparedness (OEP)/National Disaster Medical System (NDMS), in support of the DMORT program, maintains a Disaster Portable Morgue Unit (DPMU) at the OEP warehouse located in Gaithersburg, Maryland. The DPMU is a depository of equipment and supplies for deployment to a disaster site. It contains a complete morgue with designated workstations for each processing element and prepackaged equipment and supplies.

<http://www.hhs.gov/news/press/2001pres/20010911c.html>

### **Epidemiologic System**

The coordination of activities that result in prevention and control of disease, disability, and death. An epidemiologic system begins with characterizing health events— infectious and chronic diseases, injuries, environmental and behavioral problems— in terms of where, when, and to whom these events occur within population groups. Next begins the search for causes or factors associated with increased risk or probability of experiencing the health event. Finally, data gathered through epidemiologic study is used to develop, choose, and evaluate

interventions intended to minimize the human consequences of adverse health events.

### **Emergency Operations Center**

The protected site from which state and local civil government officials coordinate, monitor, and direct emergency response activities during an emergency.

Federal Emergency Management Agency GuidetoAll -Hazard Emergency Operations Planning, State and Local Guide (SLG) 101, September 1996

### **Enhanced Surveillance**

A stance of “hyper-vigilance” in monitoring. With respect to public health, enhanced surveillance pertains especially to alertness for clinical and epidemiologic clues, which might suggest an outbreak of disease or a rash of injuries. Increased reporting is an essential aspect of enhanced surveillance. Clues of a disease outbreak include: 1) any unusual increase or clustering of patients presenting with symptoms suggestive of infectious disease (e.g. many patients with respiratory conditions), 2) any single case of a suspected or confirmed communicable disease that is not endemic to the area (e.g. viral hemorrhagic fever), 3) any unusual aged distributions for common diseases (e.g. severe chickenpox-like illness in adults who report previous history of chickenpox), 4) any unusual clustering in time or geography of patients with similar illness (e.g. persons who attended the same event).

Chicago Department of Health, Health Alert, October 12, 2001

### **Emergency Communications Protocols**

Standard procedures for exchanging and disseminating information in times of emergency. Protocols should address such elements as: 1) who is authorized to speak and issue written messages on behalf of the agency, 2) who is authorized to receive messages from various levels of leadership of other agencies, 3) what is the chain of approvals for written messages, 4) what format will text messages use (e.g. date/time, who the message is to, who the message is from, nature of the problem, etc.), 5) how will calls, faxes, e-mail be sorted and logged, 6) will confirmation of message read be required and how will confirmation be recorded, 6) etc.

### **Emergency Response Coordinator**

A person who is authorized to and charged with the responsibility of orchestrating the activities, which are defined in the agency's emergency response plan. Consequently, the emergency response coordinator (ERC) must be knowledgeable regarding all aspects of the response plan. The ERC must, by training and experience, be able to assess the degree of the emergency and to determine appropriate initial action. During an emergency, the ERC would be expected to coordinate personnel and resources, report on the evolving situation, and monitor the adequacy of the response. In addition, the ERC should represent the agency at meetings, conferences, and work groups convened to

develop and update the emergency response plan. ERC would also attend debriefings after emergencies to identify deficiencies in the current plan and make recommendations to improve the plan based on those observations. A job description defining the duties, responsibilities, knowledge, skills, and abilities required should be composed for the Emergency Response Coordinator position, regardless of whether the ERC is a primary or secondary role for the person assigned to it.

### **Geographic Information Systems (GIS)**

Combines modern computer and supercomputing technology with data management systems to provide tools for the capture, storage, manipulation, analysis, and visualization, of spatial data. Spatial data contain information, usually in the form of a geographic coordinate system that gives the data location relative to the earth's surface. These spatial attributes enable previously disparate data sets to be integrated into a digital mapping environment.

Healthy People 2010, Chapter 23, Infrastructure, Terminology

### **Hazard Assessment**

An inventory and appraisal of the hazards, risks, and vulnerabilities in the public health agency's jurisdiction which, if improperly managed or targeted in a terrorist attack, would pose a serious and credible threat to public health. Examples include: chemicals stored in pesticide, pharmaceutical, munitions, or chemical manufacturing plants, the presence of fire works vendors, school and university chemistry labs, nuclear power plants, water treatment and distribution centers, food manufacturing plants, ventilation systems of large occupancy facilities, dams, and levees, etc. The results of the assessment process should be used to determine the personnel, resources, training, and equipment necessary to plan for and respond to emergency situations involving identified hazards.

Fiscal Year 1999 State Domestic Preparedness Equipment Program (aka DOJ Survey, 1.2.1)

### **Hazardous Substances Emergency Events Surveillance (HSEES)**

State-based surveillance system maintained by the Agency for Toxic Substances and Disease Registry (ATSDR) to describe the public health consequences associated with the release of hazardous substances. Data collected for the system include general information on the event, substance(s) released, victims, injuries, and evacuations.

ATSDR HSEES Annual Report, 1996

### **Hazardous Waste**

A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (a) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

### **Internal Networks**

A group of two or more computer systems linked together. There are many types of computer networks. The most common are local area networks (LANs) and wide-area networks (WANs). Local area networks are computer networks that span relatively small areas. Most LANs are confined to a single building or group of buildings. However, one LAN can be connected to other LANs over any distance via telephone lines and radio waves. A system of LANs connected in this way is called a wide area network (WAN). Most LANs connect workstations and personal computers. Each node (individual computer) in a LAN has its own central processing unit with which it executes programs, but it also is able to access data and devices anywhere on the LAN. This means that many users can share expensive devices, such as laser printers, as well as data. Users can also use the LAN to communicate with each other, by sending e-mail or engaging in chat sessions.

### **Internet Firewall**

A system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both hardware and software, or a combination of both. Firewalls are frequently used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria. The term derives from the construction industry in which walls are built to prevent the spread of fire.

[Webopedia.com](http://Webopedia.com)

### **Intruder Detection**

Hardware, software, or a combination of hardware and software designed to discover the presence of unauthorized entry into a computer network.

### **IP**

Abbreviation of *Internet Protocol*, pronounced as two separate letters. IP specifies the format of packets, also called *datagrams*, and the addressing scheme. Most networks combine IP with a higher-level protocol called Transport Control Protocol (TCP), which establishes a virtual connection between a destination and a source.

IP by itself is something like the postal system. It allows you to address a package and drop it in the system, but there's no direct link between you and the recipient. TCP/IP, on the other hand, establishes a connection between two hosts so that they can send messages back and forth for a period of time.

## **Joint Information Center (JIC)**

A center established to coordinate the public information activities on-scene. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating federal, state, and local agencies and organizations should collocate at the JIC.

Federal Emergency Management Agency

## **Laboratory Levels**

### **Level A Laboratory**

Level A laboratories are public health and hospital laboratories with a certified biological safety cabinet as a minimum. These laboratories have the ability to rule out specific agents and to forward organisms or specimen to higher-level laboratories for further testing.

### **Level B Laboratory (Core Capacity)**

Level B laboratories are state and local public health laboratories with Biosafety Level (BSL) 2 facilities that incorporate BSL-3 practices and maintain the proficiency to adequately process environmental samples, rule in specific agents, and perform confirmatory and antibiotic susceptibility testing. These laboratories can identify appropriate higher-level laboratories and can forward samples to them for further testing.

### **Level C Laboratory (Advanced Capacity)**

Level C laboratories are BSL-3 facilities with the capability to perform nucleic acid amplification, molecular typing, and toxicity testing. Level C laboratories can conduct all tests performed in Level B laboratories and can provide surge capacity, when needed. Additionally, these laboratories will evaluate reagents and test to facilitate their transfer for use in Level B laboratories.

### **Level D Laboratory**

Level D laboratories can conduct all tests performed in Levels A, B, and C laboratories. They can validate new assays, detect genetic recombinants, provide specialized reagents, securely bank isolates, and possess BSL-3 and BSL-4 biocontainment facilities. For bioterrorism events affecting civilian populations, CDC is the Level D laboratory.

[Public Health Response to Biological and Chemical Terrorism  
Interim Planning Guidance for State Public Health Officials  
http://www.bt.cdc.gov/Documents/Planning/PlanningGuidance.PDF](http://www.bt.cdc.gov/Documents/Planning/PlanningGuidance.PDF)

## **Media Advocacy**

Deliberate and strategic use of mass media to motivate an audience to action, advocate for policy or law, or bring attention to issues.

[http://www.apha.org/news/Media\\_Advocacy\\_Manual.pdf](http://www.apha.org/news/Media_Advocacy_Manual.pdf)

### **Medical Management Information for Critical Agents**

Written materials, which describe how to 1) recognize the signs and symptoms produced by critical agents, 2) evaluate patients having such signs and symptoms, and 3) provide medical care for such patients.

[http://www.nbc-](http://www.nbc-med.org/SiteContent/medRef/OnlineRef/FieldManuals/medman/Handbook.htm)

[med.org/SiteContent/medRef/OnlineRef/FieldManuals/medman/Handbook.htm](http://www.nbc-med.org/SiteContent/medRef/OnlineRef/FieldManuals/medman/Handbook.htm)

[http://ndms.dhhs.gov/CT\\_Program/Response\\_Planning/response\\_planning.html](http://ndms.dhhs.gov/CT_Program/Response_Planning/response_planning.html)

### **Metropolitan Medical Response System (MMRS)**

The Metropolitan Medical Response System program was originated in 1996 and is managed by the Office of Emergency Preparedness (OEP). The primary focus of the MMRS program is to develop or enhance existing emergency preparedness systems to effectively manage weapons of mass destruction (WMD) incident. This includes both biological and chemical threats. The goal is to coordinate the efforts of local law enforcement, fire, hazmat, EMS, hospital, public health and other personnel to improve response capabilities in the event of a terrorist attack.

<http://www.mmrs.hhs.gov/>

### **National Disaster Medical System (NDMS)**

The National Disaster Medical System (NDMS) is a cooperative asset-sharing program among Federal government agencies, state and local governments, and the private businesses and civilian volunteers to ensure resources are available to provide medical services following a disaster that overwhelms the local health care resources. The National Disaster Medical System (NDMS) is a Federally coordinated system that augments the Nation's emergency medical response capability. The overall purpose of the NDMS is to establish a single, integrated national medical response capability for assisting state and local authorities in dealing with the medical and health effects of major peacetime disasters and providing support to the military and Veterans Health Administration medical systems in caring for casualties evacuated back to the U.S. from overseas armed conflicts.

### **National Pharmaceutical Stockpile (NPS)**

The mission of CDC's National Pharmaceutical Stockpile (NPS) Program is to ensure the availability and rapid deployment of life-saving pharmaceuticals, antidotes, other medical supplies, and equipment necessary to counter the effects of nerve agents, biological pathogens, and chemical agents. The NPS Program stands ready for immediate deployment to any U.S. location in the event of a terrorist attack using a biological toxin or chemical agent directed against a civilian population.

## **PortScan**

Systematic examination of a computer's ports. Since a port is a place where information goes into and out of a computer, a port scan identifies open doors to a computer. A port scan has legitimate uses in managing networks, but a port scan can also be malicious in nature if someone is searching for a weakened access point to break into a computer.

[Webopedia.com](http://www.webopedia.com)

## **Public Health Information Technology Functions and Specifications**

A document for information technology (IT), which describes the capacities necessary to have a secure, coordinated public health system capable of acquiring, managing, analyzing, and disseminating public health information. The document includes a delineation of functions performed by CDC and its partners, IT industry standards, and detailed specifications.

<http://www.cdc.gov/cic/functions-specs/>

## **Public Health System**

The public health agency working in partnership with other government agencies, private enterprises, and voluntary organizations to provide services essential to the health of the public.

National Public Health Performance Standards  
State and Local Instruments

## **Public Health Response**

The public health response to finding a suspicious device begins by assuming the device has mass destruction potential. Initial steps include notifying the local Hazardous Materials Unit (HAZMAT) and law enforcement authorities. Be aware that the scene could be booby-trapped to impede response and cause more casualties if terrorism is involved. Until HAZMAT and law enforcement officials arrive, and without entering the immediate hazard area, isolate the scene as well as possible to keep people away from the scene.

US Fire Administration, Federal Emergency Management Agency  
Hazardous Materials Guide for First Responders  
General Approach to a Hazmat Incident

<http://www.usfa.fema.gov/hazmat/>

## **Public Key Infrastructure**

A cryptographic system that uses two keys (data fields) – a public key known to everyone and a private or secret key known only to the recipient of the message. When John wants to send a message to Jane, he uses Jane's public key to encrypt the message. Jane then uses her private key to decrypt it.

[Webopedia.com](http://www.webopedia.com)

## **Redundant Systems Communication**

Alternate means of transmitting and exchanging information in case the primary system fails. Alternatives to computer e-mail, for example, include fax, pager,

cellphone, personal digital device or voice -mailbox. Two -way radios , satellite phones, wireless phones, and amateur radio operators provide further examples of alternative communication means.

## **Computer**

Computer systems in which every operation is performed on two or more duplicate systems, so if one system fails the other can take over. Systems which respond seamlessly to unexpected hardware or software failures are said to be fault tolerant.

## **Risk Communication**

According to the National Research Council of the National Academy of Science (NAS 1989) "risk communication is an interactive process of exchange of information and opinion among individuals, groups and institutions. It involves multiple messages about the nature of risk... that expresses concerns, opinions, or reactions to risk messages or to legal and institutional arrangements for risk management". Excellent insight as to why the Academy defined risk communication as an interactive process is found in a treatise on Risk Communication by Mike Campbell, professor of medical statistics, Institute of General Practice and Primary Care, Sheffield University:

"When risks are unavoidable but controllable, then a consensus has to be developed as to what is acceptable".

<http://www.shef.ac.uk/uni/projects/wrp/riskcom.html>

<http://www.ci.sf.ca.us/puc/wqfs/risk.htm>

[http://www.inspection.gc.ca/english/corpaffr/publications/riscomm/riscomm\\_ch2e.shtml](http://www.inspection.gc.ca/english/corpaffr/publications/riscomm/riscomm_ch2e.shtml)

## **Secure Sockets Layer**

A protocol developed by Netscape for transmitting private documents via the Internet. SSL works by using a public key to encrypt data that is transferred over the SSL connection . Both Netscape Navigator and Internet Explorer support SSL, and many Websites use the protocol to obtain confidential user information, such as credit card numbers.

[Webopedia.com](http://www.webopedia.com)

## **S/MIME**

Multipurpose Internet Mail Extensions, a specification for formatting non -ASCII messages so they can be sent over the Internet. Many -mail clients now support MIME, which enables them to send and receive graphics, audio, and video files via the Internet mails system. MIME was defined in 1992 by the Internet Engineering Task Force (IETF). A new version, called S/MIME, supports encrypted messages.

[Webopedia.com](http://www.webopedia.com)

## Senior Management Staff

Agency leadership responsible for multiple programs. Generally consists of the management staff in the layer below and the second layer below the deputy director in the organization chart. Titles vary, but typically include assistant or associated directors, bureau chiefs, and department heads.

## Sentinel Health Care Providers

A network of selected providers whom monitor disease activity in the general population through regular reporting. Sentinel providers, in aggregate, see a broad mix of patients who represent the population in age, gender, regional distribution, and degree of urbanization. Typical practice types which participate as reporting sites include offices of family physicians, internists, and pediatricians, as well as, emergency rooms, urgent care centers, student health centers, and health maintenance organizations. Generally, states have been asked to recruit one reporting site for every 250,000 people. Sentinel sites report on specific diseases using the Centers for Disease Control and Prevention (CDC) case definitions. For example, states participating in the sentinel surveillance system are asked to report cases of "influenza-like illness" or ILI. The CDC case definition for ILI is fever >100 °F and cough and/or sore throat (in the absence of a known cause). Sentinel providers report the total number of patient visits each week for the months October through May and the number of patient visits for ILI each of the following age groups, each week, also for the months October through May: 0-4 years (preschool), 5-24 years (school age through college), 25-64 years (adult), >65 years (older adults). Sentinel providers then transmit their data to a central data repository at CDC on a weekly basis between October and mid-May. In cases of ILI, sentinel providers are also asked to collect throat or nasopharyngeal swab specimens for virologic testing, usually send to the state public health laboratory for testing. Sentinels are asked to collect a minimum of 2-3 swabs during each of the following times and types of cases:

- ILI cases at 1) the beginning of the season (i.e. when ILI cases first begin presenting in increased numbers), 2) peak of the season, and 3) toward the season's end
- Unusual clinical cases or unusually severe cases
- Outbreak-related cases

In exchange for agreeing to act as sentinels, providers have Internet access, via assigned identification number and password, to view their own and regional sentinel provider data. The benefit to the community, of course, is having providers knowledgeable that influenza has entered the community.

Influenza Sentinel Physician Surveillance, Missouri Department of Health

## Sentinel Veterinarians

A network of selected veterinarians whom monitor disease activity in the animal population through regular reporting.

## **Special Populations**

Special populations include persons who by reason of language barriers, living conditions, confinement, lack of transportation or other unique situations might require additional assistance to understand publicly issued instructions or obtain needed care, especially in times of emergency. Homeless persons, nursing home patients, mentally ill or mentally retarded individuals living in group residential homes, students in university dorms, juveniles in detention centers, prisoners and migrant laborers are examples of special populations.

## **Threat Tracking and Management**

A system, which supports decision-making by enabling timely presentation of information through ongoing monitoring, analysis, and reporting of threat data. The following is an example of tracking the West Nile virus threat using a Geographic Information System (GIS):

<http://www.esri.com/news/arcuser/0701/wnvirus.html>

## **Training Needs Assessment**

Information collected and analyzed to determine if performance problems can be solved through training. A well-designed training needs assessment identifies the following:

- What training is relevant to employees' jobs
- What training will improve performance
- If training will make a difference
- Distinguish training needs from organizational problems
- Link improved job performance with the organization's goals

[http://www.amxi.com/amx\\_mi30.htm](http://www.amxi.com/amx_mi30.htm)