

**Potential Bioterrorism-Related Incidents  
Involving Unknown White Powder:  
Comparing Electronic News Media Reports to  
Reports Received by the  
US CDC and the FBI:  
USA, 2009-2011**

**Geroncio C. Fajardo, MD, MBA, MS(Bio), MS(Epi), TC (NRCC)**

**Joseph Posid, MPH**

**Stephen Papagiotas, MPH**

**Luis Lowe, MS, MPH, CPH**

National Center for Emerging and Zoonotic Infectious Diseases

Division of Preparedness and Emerging Infections



# Introduction

## ■ Bioterrorism

- \* man-made disaster
- \* intentional release of biological agents
- bacteria, viruses, or other germs
- \* they can be modified by the terrorist
- to make them more dangerous
- \* *Bacillus anthracis* – Category A

TOM BROKAW  
NBC TV

- ROCKEFELLER

NY 10-

4TH GRADE  
GREENDALE School  
FRANKLIN PARK NJ 08852

SENATOR LEAHY  
433 RUSSELL SENATE  
BUILDING  
WASHINGTON D.C. 20510-

205204501

1111 1111 1111 1111

4TH GRADE  
GREENDALE School  
FRANKLIN PARK NJ 08852

SENATOR DASCHLE  
509 HART SENATE OFFICE  
BUILDING  
WASHINGTON, DC 20520

EDITOR  
NEW YORK TO  
1211 AVE. OF THE AMERICAS  
NEW YORK NY 10036

# Introduction

- ❑ **Samples of unknown substances for law enforcement or public health investigations can come in various types – e.g. powder, liquid, swab or color**
- ❑ **Periodic electronic news media reports of unknown “white powder” since the 2001 intentional dissemination of *Bacillus anthracis***
- ❑ **Unknown “white powder” incidents primarily dealt with as potential biothreat issues (e.g. anthrax)**

# Objectives

- 1. Review and compare potential bioterrorism-related “white powder” incidents reported by electronic news media with those reported to CDC and FBI**
- 2. Describe policies, procedures, and limitations faced by the CDC and FBI ascertaining reports of unknown “white powder” incidents**
- 3. Discuss need to share information about unknown “white powder” and other biothreat incidents between law enforcement and public health**

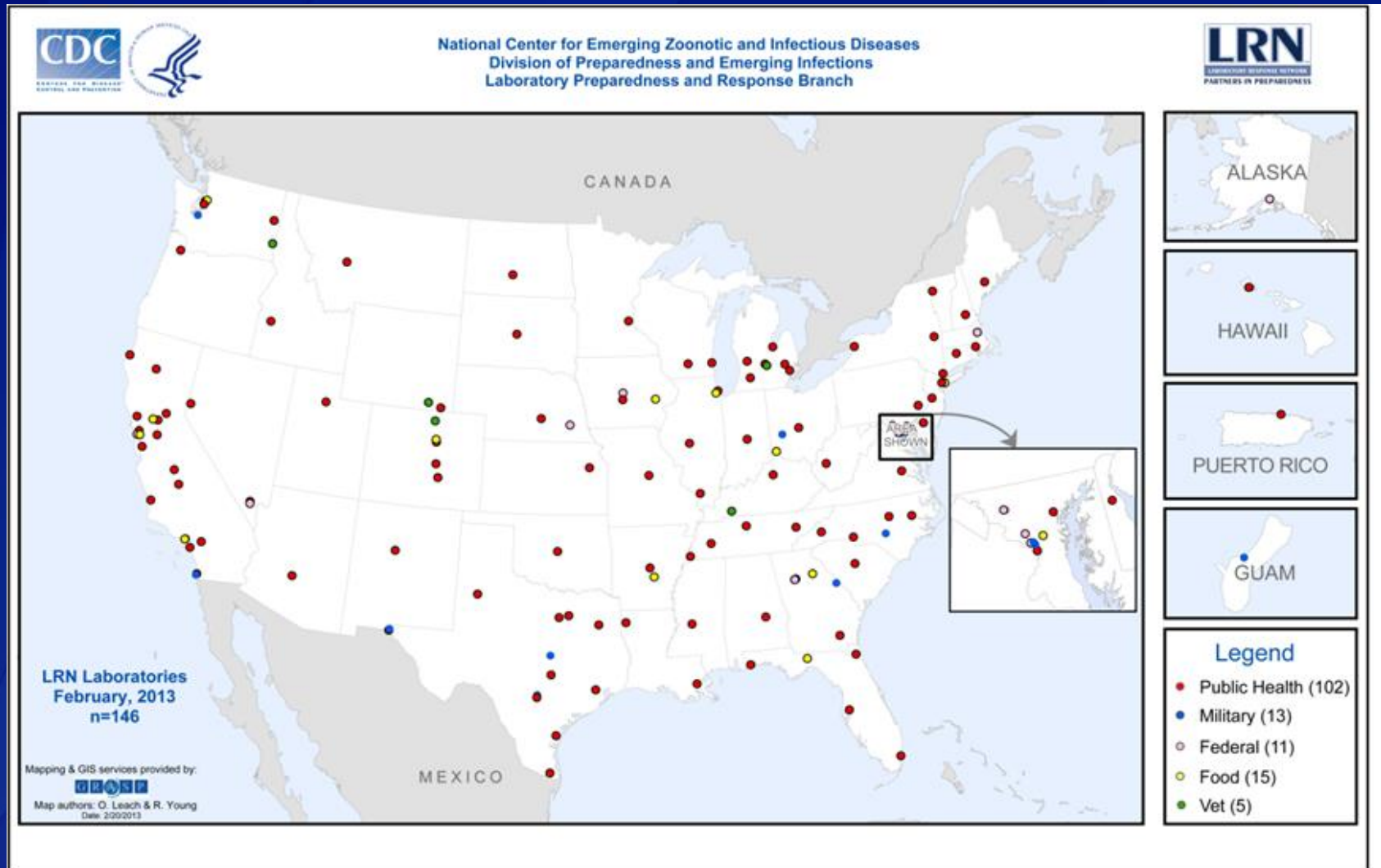


# CDC Emergency Operations Center



Source: <http://www.cdc.gov/phpr/eoc.htm>

**FIG. 1 - Map coverage of the Laboratory Response Network in the United States of America, February 2013 (Source: <http://www.bt.cdc.gov/lrn/usmap.asp>)**





# US Federal Bureau of Investigation



- Responses to these incidents could entail significant human and financial resources.



# Methods

**Reviewed information about unknown white powder from three sources for June 1, 2009 – May 31, 2011:**



**Electronic  
news  
media**



**CDC**



**FBI**

# Methods

- ❑ **Internet searches for “unknown white powder”**
  - Yahoo search engine
  - Google search engine
- ❑ **US CDC DPEI/EPRB incident reports**

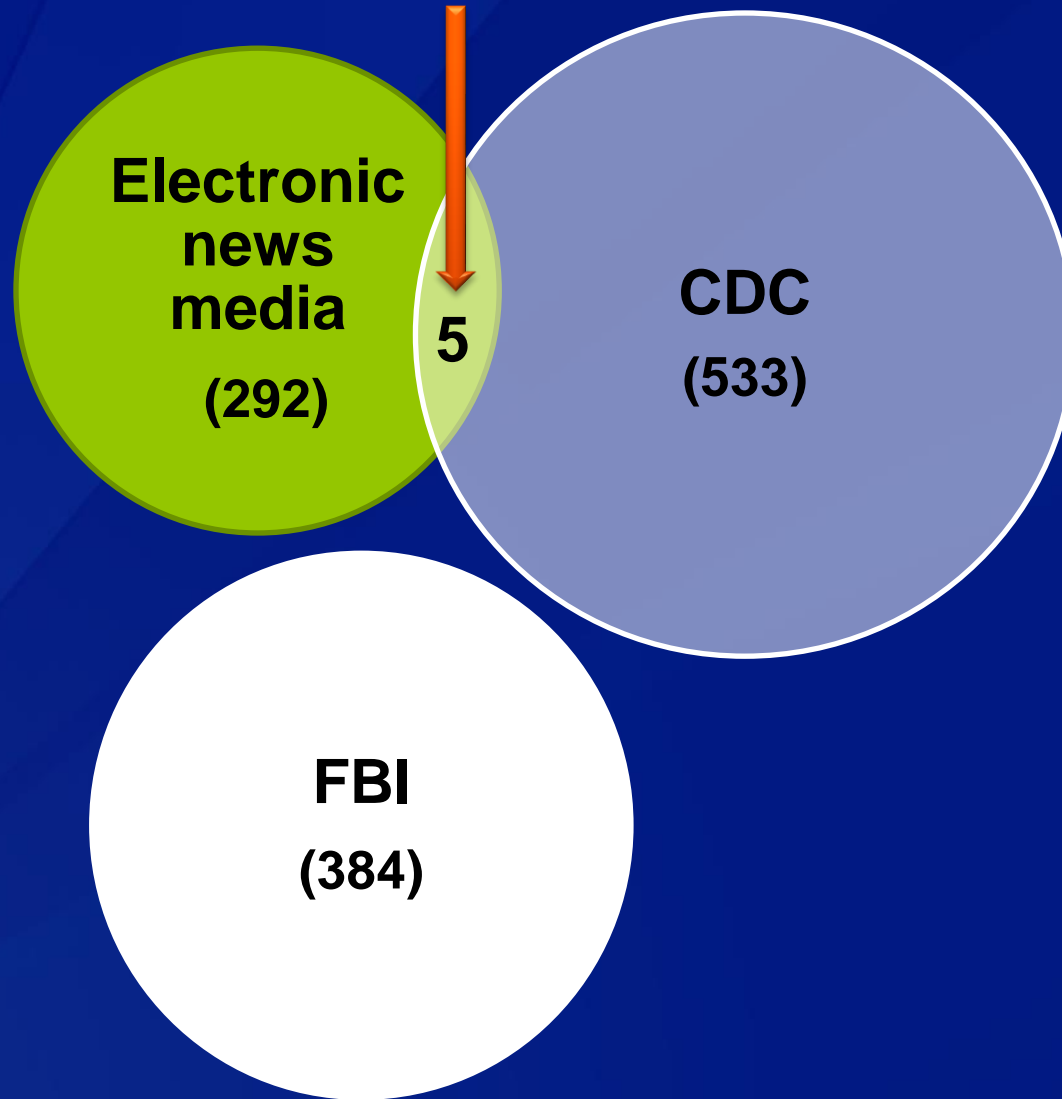
# Methods

- ❑ **Abstracted the following information:**
  - **report date**
  - **state of incidence**
  - **specific location of incidence**
  - **identification of the unknown white powder**
  - **emergency responders involved**
  - **FBI involvement**

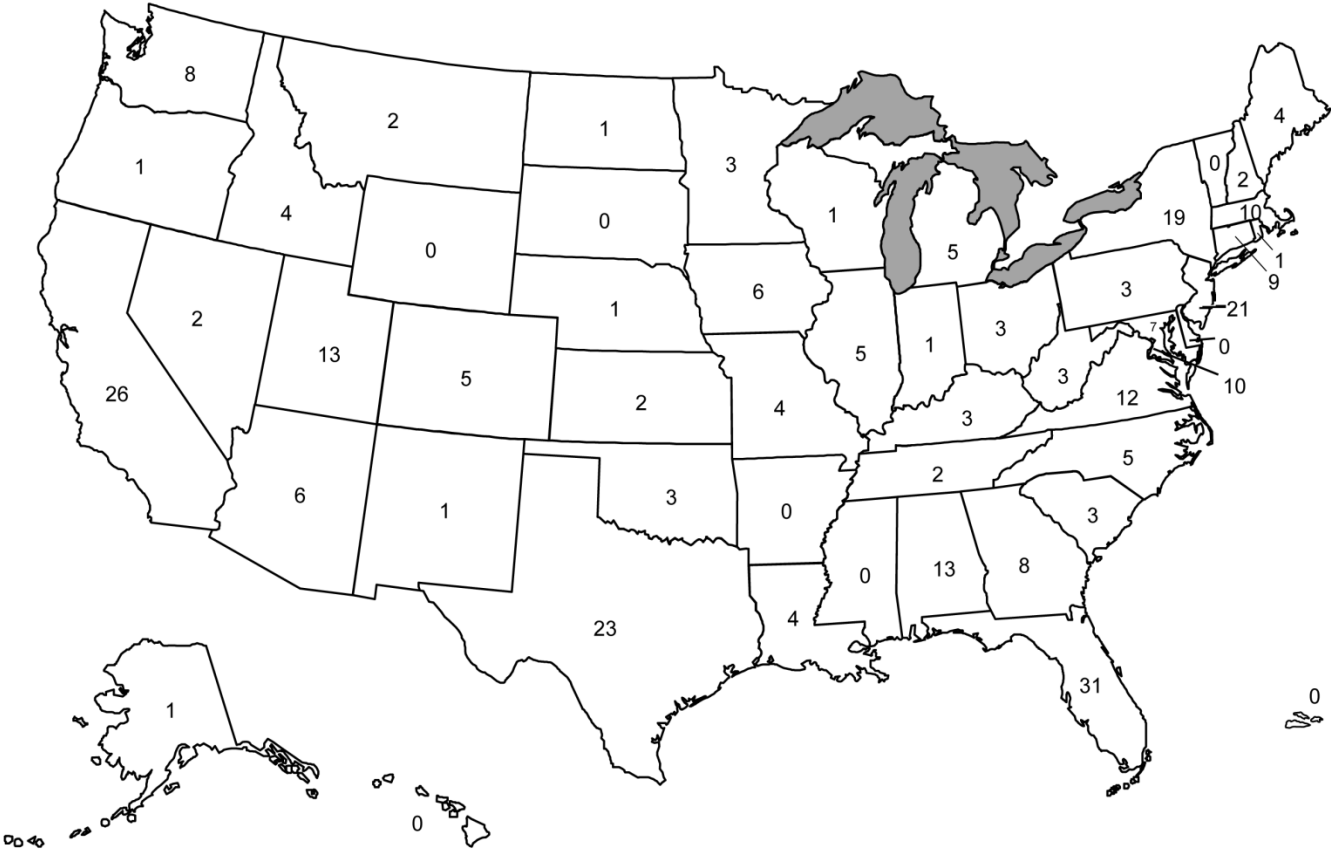
# Methods

- ❑ **Electronic database using Excel 2003**
- ❑ **Descriptive statistical analyses using SPSS 17.0 and SAS 9.2.**

# Results

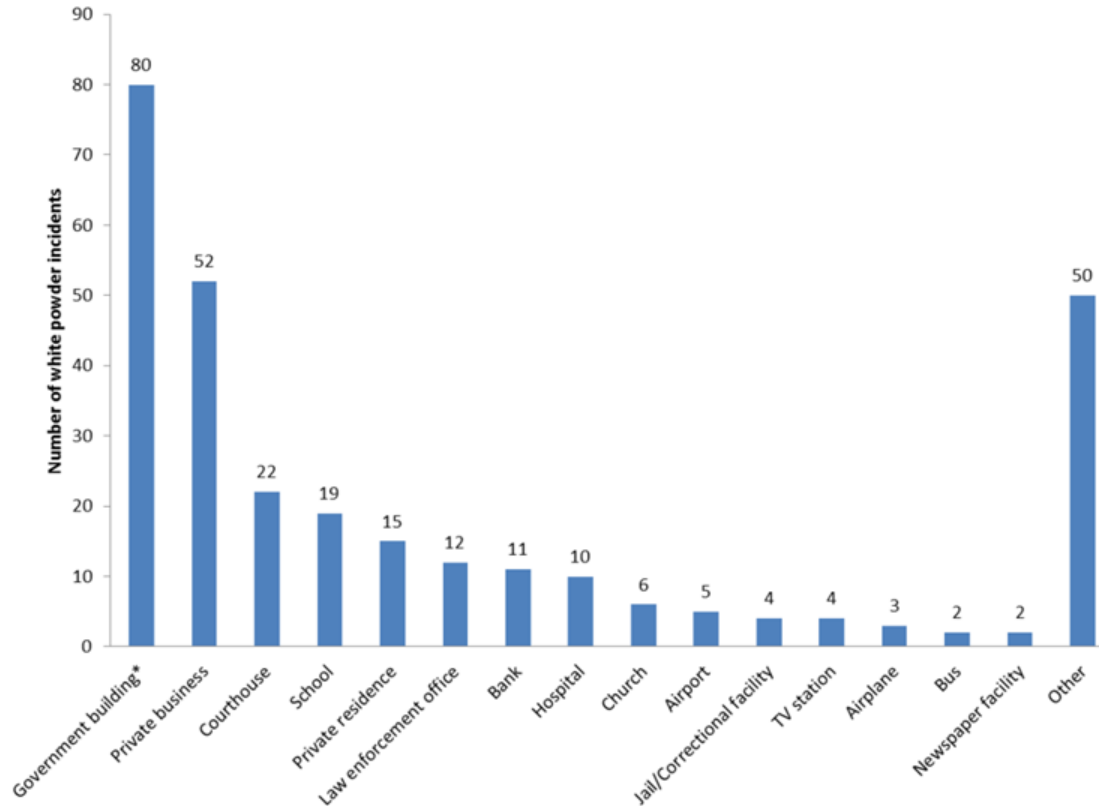


**Fig. 2 - USA map showing frequency distribution of electronic news media unknown “white powder” incidents by state, 2009-2011 (n=297)**





**Fig. 3 - Electronic news media reports of unknown “white powder” incidents by location, USA, 2009-2011 (n=297)**



\*refers to government buildings other than courthouses, law enforcement offices and jail/correctional facilities

## Identities of unknown white powder (n=74)

Identity	N	Identity	N
Sugar/artificial sweetener	10	Brownie or cake baking mix	1
Flour	9	Calcium carbonate	1
Talcum powder	5	Crushed silica	1
Medical powder	4	Foot powder	1
Narcotic	4	Instant soup	1
Baking powder	3	Office dust	1
Baking soda	3	Ordinary household product	1
Coffee creamer	3	Powdered alfredo sauce	1
Corn starch	3	School project source	1
Baby formula	2	Soap shavings	1
Candy	2	Sodium bicarbonate	1
Cream of Wheat	2	Table salt	1
Fire extinguisher residue	2	Titanium dioxide	1
Bean substance and cream sauce	1	Ultra Slim-Fast powder	1
Boric acid or warfarin	1	Whey powder	1

# Responders

- Fire department
- Police department
- bomb squad
- FBI
- US Postal Inspection
- Public health laboratories
- Environmental Protection
- National Guard
- US Marshall Service
- Regional transit authorities



- **Joint public health and FBI investigations were mentioned in some of the electronic media news reports (n=66, 22.2%).**



**TABLE 1 – Unknown “white powder” incidents\* by FBI region† and source of information:  
January 1, 2009 – May 31, 2011**

Region	Source of information					
	News media		CDC		FBI	
	n	%	n	%	n	%
Central	39	13.13	94	17.50	87	22.66
Northeast	95	31.99	269	50.00	122	31.77
Southeast	71	23.91	58	10.80	66	17.19
West	92	30.98	117	21.70	109	28.39
Total =	297	100.00	538	100.00	384	100.00

\* redundant or updated reports of the same unknown "white powder" incident is counted as one incident

† Region (field office area of responsibility):

Northeast - New York, Maryland, West Virginia, Massachusetts, Rhode Island, Connecticut, New Jersey, Washington, DC, Northern Virginia, Vermont, Pennsylvania, Maine, Delaware, New Hampshire

Southeast - rest of Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Kentucky, Tennessee, Puerto Rico

Central - Ohio, Michigan, Illinois, Indiana, Arkansas, Louisiana, Mississippi, Missouri, Kansas, Oklahoma, Nebraska, North Dakota, South Dakota, Iowa, Minnesota, Wisconsin

West - California, Oregon, Idaho, Washington, Montana, Colorado, Nevada, Texas, New Mexico, Arizona, Alaska, Hawaii, Wyoming, Utah

# Conclusions

- ❑ **Unknown “white powder” incidents occurred in practically every state and region**
- ❑ **Emergency responses to unknown “white powder” incidents generally managed at the state/local level**
- ❑ **CDC LRN a technical resource for credible threats**
- ❑ **Unknown “white powder” incidents require Integrated response activities from various emergency responders including law enforcement**
  - **Joint Criminal and Epidemiological Investigations Workshops**

# Acknowledgment

- ❑ **CDC Emergency Operations Center for providing us the data**
- ❑ **FBI for providing us the data and for helpful comments and suggestions**

**“The findings and conclusions in this report/presentation are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry.”**

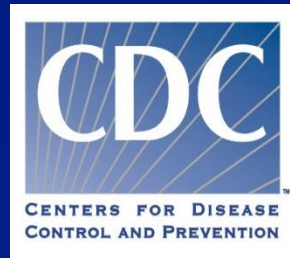
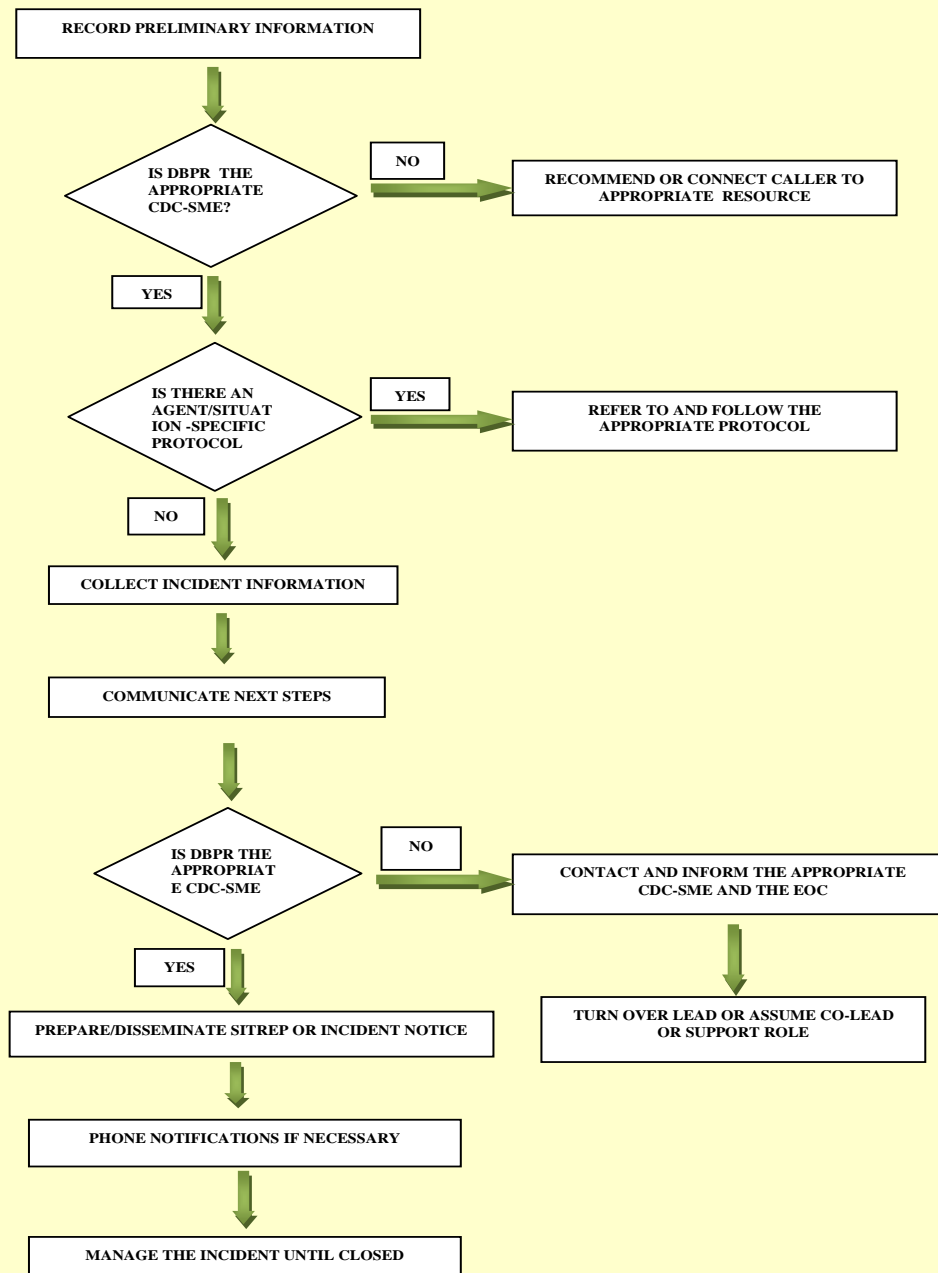




Figure 1. ESRB Basic SITREP/IN Protocol Flowchart



**Figure 4. Proposed revised SITREP/IN**

**SITREP TEMPLATE**

\*\*\*\*\*

**CDC RESPONSE STATUS:**

**DATE OF EVENT:**

**TIME OF EVENT:**

**DATE OF EOC NOTIFICATION:**

**TIME OF EOC NOTIFICATION:**

**LOCATION OF EVENT:**

**ORGANIZATION REPORTING AN EVENT:**

**ORGANIZATION REQUESTING ASSISTANCE:**

**LEAD AGENCY:**

**LEAD CDC CIO:**

**DESCRIPTION:**

**REQUEST FOR ASSISTANCE:**

**ACTION TAKEN:**

**PERSONS CONTACTED<sup>1</sup>:**

\*\*\*\*\*

**NARRATIVE:**

**BACKGROUND:**

**ACTIONS:**

**NEXT STEPS:**

\*\*\*\*\*

**SITREP AUTHOR/AGENCY AFFILIATION:**

**Date:**

**Time**

**INCIDENT NOTICE TEMPLATE**

\*\*\*\*\*

**CDC RESPONSE STATUS:**

**DATE OF EVENT:**

**TIME OF EVENT:**

**DATE OF EOC NOTIFICATION:**

**TIME OF EOC NOTIFICATION:**

**LOCATION OF EVENT:**

**ORGANIZATION REPORTING EVENT:**

**LEAD AGENCY:**

**LEAD CDC CIO: (NO CDC ASSISTANCE REQUESTED)**

**DESCRIPTION:**

**REQUEST FOR ASSISTANCE: (NO CDC ASSISTANCE REQUESTED)**

**ACTION TAKEN:**

**PERSONS CONTACTED:**

\*\*\*\*\*

**NARRATIVE:**

**BACKGROUND:**

**ACTIONS:**

**NEXT STEPS: No CDC assistance requested at this time.**

\*\*\*\*\*

**INCIDENT NOTICE AUTHOR/AGENCY AFFILIATION:**

**Date:**

**Time**

# The Clearance Process

## Intra-Agency versus Inter-Agency

### Department of Health & Human Services



Office of the Director  
Office of Public Health Preparedness and Emergency Response  
Office for State, Tribal, Local and Territorial Support  
Center for Global Health  
National Institute for Occupational Safety and Health  
Office of Infectious Diseases –  
    National Center for Emerging and Zoonotic Infectious Disease  
        Division of Preparedness and Emerging Infection  
            - Laboratory Preparedness and Response Branch  
            - Emergency Preparedness and Response Branch  
Office of Non-communicable Diseases, Injury and Environmental Health  
Office of Public Health Scientific Services

### Department of Justice

