

# Influenza Outbreaks and How to survive them

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# Influenza Outbreaks and How to Survive Them

- \* Overview of Outbreaks in Region 8, 2014-2015
- \* Responding to an Outbreak
  - The Initial Report
  - Ongoing Communication
  - Documentation and Tracking Tools
  - Follow Up
- \* Submit Final Report

# Overview of Outbreaks

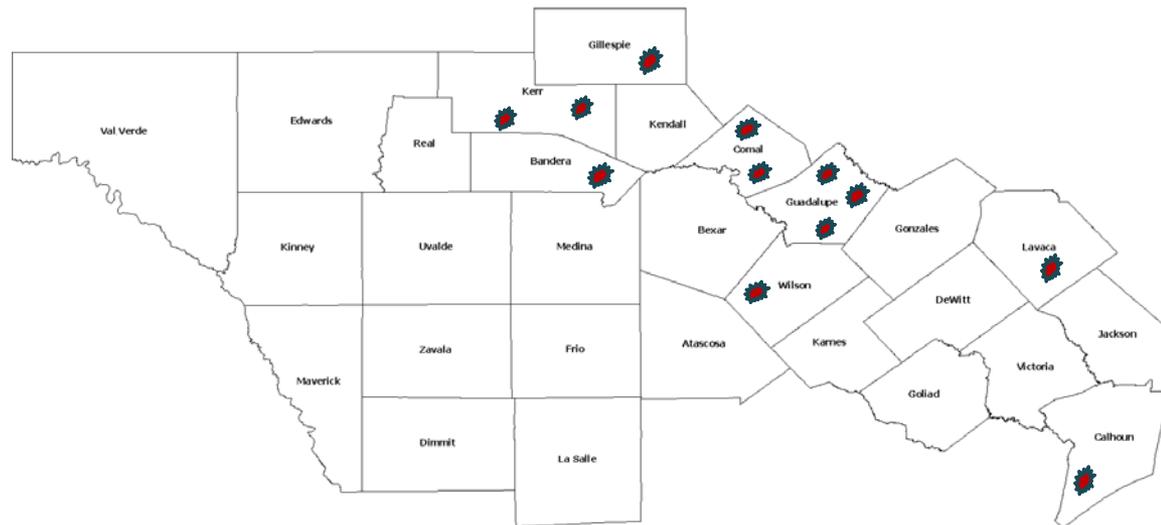
- \* Twelve outbreaks between 12/10/2014 and 01/27/2015
- \* 8 Counties

8 Nursing Homes

2 Schools

1 Medical Clinic

1 SSLC





# Responding to an Outbreak

## The Initial Report



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# Responding to an Outbreak

## The Initial Report

1. **Get the WHO, WHAT, WHERE, WHEN, HOW?**

- Who is sick? (How many?)

- What is the illness?

- Where is the illness occurring?

- When did it start?

- How many people are sick, and how many have been exposed?

# Responding to an Outbreak

## The Initial Report

### **2. Prevent the Spread of Infection**

Handwashing

Isolation of Ill

Proper PPE

Minimize staff movement

Discontinue activities

# Responding to an Outbreak

## The Initial Report



But wait! How do I remember all these things?



# Responding to an Outbreak

## The Initial Report

**Best Practice #1: Use the form as your guide.**



Local health departments should submit this report to the regional health department  
Regional health departments should fax this report to EAIDB at 512-776-7616

Respiratory Disease Outbreak Summary Form		Report type: <input checked="" type="checkbox"/> Initial or preliminary <input type="checkbox"/> Updated <input type="checkbox"/> Final	Report date: ___/___/___
<b>BASIC INFORMATION</b>			
Primary investigating health department (HD):	_____	Date HD first notified:	___/___/___
Name of lead investigator:	_____	Lead investigator's phone: (___) ___-___	_____
Date investigation started:	___/___/___	Lead investigator's email:	_____
Other local, state or federal agencies involved with response: _____			
<b>OUTBREAK OVERVIEW</b>			
Outbreak name:	_____	Pathogen, syndrome or suspected etiology:	_____
Geographical distribution of the outbreak (Cities/counties involved): _____			
In what setting did the outbreak occur? (Check all that apply): <input type="checkbox"/> Community <input type="checkbox"/> Correctional facility <input type="checkbox"/> School (K-12) <input type="checkbox"/> College <input type="checkbox"/> Cruise ship			
<input type="checkbox"/> Child care facility <input type="checkbox"/> Summer camp <input type="checkbox"/> Business (non-healthcare) <input type="checkbox"/> Long term care facility (nursing home) <input type="checkbox"/> Hospital or clinic			
<input type="checkbox"/> Other (specify): _____			
If facility based, name of facility: _____			City: _____

# Responding to an Outbreak

## The Initial Report

**Best Practice #2:** Fill in as much information as possible during initial conversation

### CASE INFORMATION

Date first case became ill: \_\_\_/\_\_\_/\_\_\_ Date most recent case became ill: \_\_\_/\_\_\_/\_\_\_ Average length of illness: \_\_\_\_\_

If applicable, describe identified exposure (e.g. setting, equipment item, procedure, etc.): \_\_\_\_\_

Date of first exposure (if applicable): \_\_\_/\_\_\_/\_\_\_ Date of most recent exposure (if applicable): \_\_\_/\_\_\_/\_\_\_

Total Population

### Case summary table:

*The information from this table can be used to calculate attack rates and assess severity*

		Primary cases		Exposed (cases and non-cases)*		Secondary cases
		Residents / patients / inmates / students / attendees	Employees / staff / faculty / volunteers	Residents / patients / inmates / students / attendees	Employees / staff / faculty / volunteers	Cases among family members, friends, or other contacts not associated with the primary outbreak setting
Total numbers:						
Case status	# of confirmed cases:					
	# of probable cases:					
	# of suspect cases:					
Severity	# of people hospitalized:					
	# of people who died:					
Lab	# of specimens tested:					
	# of specimens positive:					

Total # of Staff  
Include housekeeping, maintenance, etc.

\*e.g., number of persons on ship, number of residents in nursing home or affected ward, number of students in classroom, etc.

# Responding to an Outbreak

## The Initial Report

Texas Influenza Surveillance Handbook Section VII

If specimens have not been collected, make arrangements to do so. 5 - 10 specimens should be collected when the outbreak is first detected to identify what pathogen is responsible

### ACTIONS TAKEN BY HEALTH DEPARTMENT (check all that apply and if applicable indicate the date first done):

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Provided or reviewed prevention and control guidance ___/___/___ | <input type="checkbox"/> Interviewed cases                           | <input type="checkbox"/> Activated ICS on ___/___/___  |
| <input type="checkbox"/> Conducted a site visit on ___/___/___                            | <input type="checkbox"/> Notified a regulatory agency on ___/___/___ | <input type="checkbox"/> Conducted active case finding |
| <input type="checkbox"/> Conducted a case-control study                                   | <input type="checkbox"/> Conducted a cohort study                    | <input type="checkbox"/> Collected clinical samples    |
| <input type="checkbox"/> Collected environmental samples                                  | <input type="checkbox"/> Reviewed medical records                    | <input type="checkbox"/> Other (specify): _____        |
| <input type="checkbox"/> Other (specify): _____   | <input type="checkbox"/> Other (specify): _____                      | <input type="checkbox"/> Other (specify): _____        |
| <input type="checkbox"/> Other (specify): _____   | <input type="checkbox"/> Other (specify): _____                      | <input type="checkbox"/> None                          |

### CONTROL MEASURES IMPLEMENTED (check all that apply)

*If needed, attach a list of implemented control measures to this report.*

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> Isolation of ill   | <input type="checkbox"/> Cohorting of ill/exposed and well | <input type="checkbox"/> Movement of staff limited                        | <input type="checkbox"/> Educational materials provided to facility |
| <input type="checkbox"/> Educational materials distributed or displayed by facility | <input type="checkbox"/> Facility modified procedures      | <input type="checkbox"/> Health alert sent                                | <input type="checkbox"/> Facility closed                            |
| <input type="checkbox"/> Vaccinations recommended                                   | <input type="checkbox"/> Vaccinations given                | <input type="checkbox"/> Prophylaxis given, specify what was given: _____ |   |
| <input type="checkbox"/> Other (specify): _____                                     | <input type="checkbox"/> Other (specify): _____            | <input type="checkbox"/> None   |   |

Date control measures were first implemented: \_\_\_/\_\_\_/\_\_\_

Discuss problem areas, and suggest ways to improve infection control

# Responding to an Outbreak

## Ongoing Communication

### Best Practice #3: Consistent Communication

- \* Arrange a time to check in each day, and allow the other person to choose the time of day
- \* Provide your phone number, fax number, email address, and be available for updates from the facility



COMMENTS / CONCLUSIONS / DISCUSSION
Name of contact:
Title:
Office Phone:
Cell Phone:
Email:
Fax Number:
Preferred Time:
Notes:

# Responding to an Outbreak

## Documentation and Tracking Tools

Develop case definitions

Outbreak case definitions need to be very clear and should explicitly state the person, place and time parts of the case definition.

Case definitions have 4 parts:

Clinical criteria- symptoms and/or lab results

Person- who can be a case

Place- the outbreak location

Time- when onset or exposure occurred

Refer to Section VII.10 in the Texas Influenza Surveillance Handbook to read more about developing a case definition

Update your daily totals each day.


 Local health departments should submit this report to the regional health department  
 Regional health departments should fax this report to EAIDB at 512-776-7616

**Respiratory Disease Outbreak Summary Form** Report type:  Initial or preliminary  Updated  Final Report date: / /

**BASIC INFORMATION**  
 Primary investigating health department (HD): \_\_\_\_\_ Date HD first notified: / /  
 Name of lead investigator: \_\_\_\_\_ Lead investigator's phone: ( ) - -  
 Date investigation started: / / Lead investigator's email: \_\_\_\_\_  
 Other local, state or federal agencies involved with response: \_\_\_\_\_

**OUTBREAK OVERVIEW**  
 Outbreak name: \_\_\_\_\_ Pathogen, syndrome or suspected etiology: \_\_\_\_\_  
 Geographical distribution of the outbreak (Cities/counties involved): \_\_\_\_\_  
 In what setting did the outbreak occur? (Check all that apply):  Community  Correctional facility  School (K-12)  College  Cruise ship  
 Child care facility  Summer camp  Business (non-healthcare)  Long term care facility (nursing home)  Hospital or clinic  
 Other (specify): \_\_\_\_\_  
 If facility based, name of facility: \_\_\_\_\_ City: \_\_\_\_\_

**Case definitions\***

Confirmed case:	_____
Probable case:	_____
Suspect case:	_____

\*Please write in the case criteria used for the outbreak. If the clinical portion of the case criteria is the same as the case criteria for reporting a notifiable condition just include the additional information used to associate the case with this outbreak (e.g., person, place, time).

**CASE INFORMATION**  
 Date first case became ill: / / Date most recent case became ill: / / Average length of illness: \_\_\_\_\_  
 If applicable, describe identified exposure (e.g., setting, equipment item, procedure, etc.): \_\_\_\_\_  
 Date of first exposure (if applicable): / / Date of most recent exposure (if applicable): / /

**Case summary table:**

	Primary cases		Exposed (cases and non-cases)*		Secondary cases
	Residents / patients / inmates / students / attendees	Employees / staff / faculty / volunteers	Residents / patients / inmates / students / attendees	Employees / staff / faculty / volunteers	Cases among family members, friends, or other contacts not associated with the primary outbreak setting
Total numbers:					
<b>Case status</b>					
# of confirmed cases:					
# of probable cases:					
# of suspect cases:					
<b>Severity</b>					
# of people hospitalized:					
# of people who died:					
<b>Lab</b>					
# of specimens tested:					
# of specimens positive:					

\*e.g., number of persons on ship, number of residents in nursing home or affected ward, number of students in classroom, etc.



# Responding to an Outbreak

## Documentation and Tracking Tools

Use data from your line list to fill out this section, and update it each time you speak to your ICP.

Use lab results, medical records, and reports from your ICP to complete this section.

CASE INFORMATION CONTINUED				SYMPTOMS			
Number of people in sex and age group categories by case status	Confirmed cases	Probable cases	Suspect cases	Total number of people with each symptom by case status	Confirmed cases	Probable cases	Suspect cases
Male				Cough			
Female				Fever			
Unknown sex				Sore throat			
<1 year old				Pneumonia			
1 to 4 years old				Other:			
5 to 9 years old				Other:			
10 to 17 years old				Other:			
18 to 24 years old				Other:			
25 to 49 years old				Other:			
50 to 64 years old				Other:			
65+ years old				Other:			
Unknown age				Other:			

**LABORATORY DATA** *If needed, attach a summary of additional tests conducted to this report.*

Were clinical specimens collected for testing?  Yes  No  Unknown      Were specimens sent to DSHS?  Yes  No  Unknown

Test name	Total # of people tested	Total # of people negative	Total # of residents / patients / inmates / students / attendees positive	Total # of employees / staff / faculty / volunteers positive	Total # of secondary cases positive	Pathogen identified
Test 1: _____						
Test 2: _____						
Test 3: _____						
Test 4: _____						

**ACTIONS TAKEN BY HEALTH DEPARTMENT** (check all that apply and if applicable indicate the date first done):

Provided or reviewed prevention and control guidance  Interviewed cases  Activated ICS on \_\_\_/\_\_\_/\_\_\_

Conducted a site visit on \_\_\_/\_\_\_/\_\_\_  Notified a regulatory agency on \_\_\_/\_\_\_/\_\_\_  Conducted active case finding

Conducted a case-control study  Conducted a cohort study  Collected clinical samples  Collected environmental samples

Reviewed medical records  Other (specify): \_\_\_\_\_  Other (specify): \_\_\_\_\_

Other (specify): \_\_\_\_\_  Other (specify): \_\_\_\_\_  None

**CONTROL MEASURES IMPLEMENTED** (check all that apply) *If needed, attach a list of implemented control measures to this report.*

Isolation of ill  Cohorting of ill/exposed and well  Movement of staff limited  Educational materials provided to facility

Educational materials distributed or displayed by facility  Facility modified procedures  Health alert sent  Facility closed

Vaccinations recommended  Vaccinations given  Prophylaxis given, specify what was given: \_\_\_\_\_

Other (specify): \_\_\_\_\_  Other (specify): \_\_\_\_\_  None

Date control measures were first implemented: \_\_\_/\_\_\_/\_\_\_

**SUPPLEMENTAL INFORMATION INCLUDED WITH THIS REPORT** (check all that apply): Total pages attached: \_\_\_\_\_

Copies of interview forms  Line list  Written outbreak report or after action report  Epi curve  Environmental or sanitation report

Educational materials  Other (specify): \_\_\_\_\_  Other (specify): \_\_\_\_\_  None

# Responding to an Outbreak

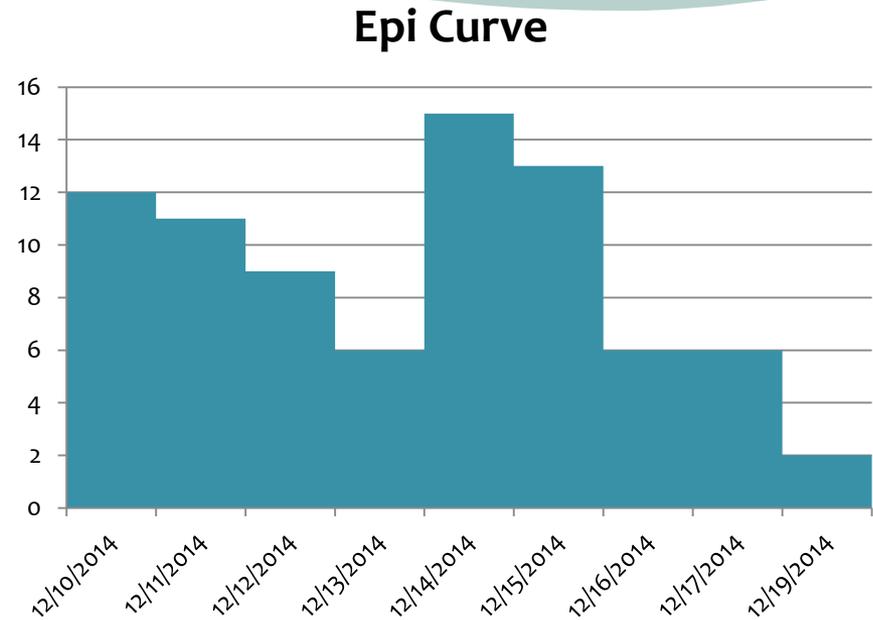
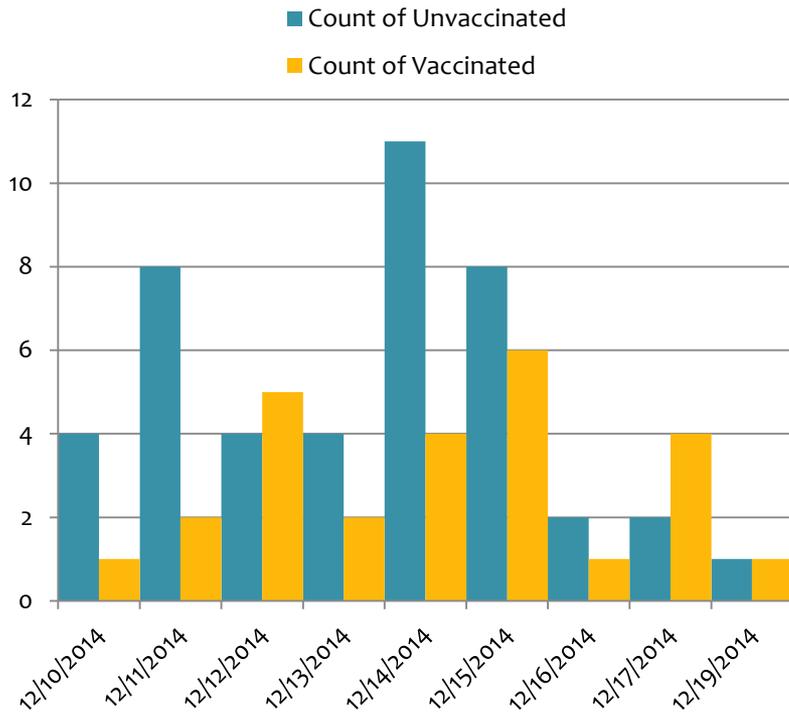
When the outbreak is over...

Analyze Your Data



# Responding to an Outbreak

## Analyze the Data



Include a copy of your epi curve in your final report to IDCU.

# How to Respond to an Outbreak Follow Up

## **Best Practice # 5: Follow up**

Once you've gone an incubation period without new illness, contact your ICP.

Verify the outbreak is over

Discuss problem areas

Demonstrate appreciation

Leave them with testing supplies

# How to Respond to an Outbreak



Submit your final report to IDCU and do the Flu-Free Happy Dance!

# Best Practices

## **Best Practices:**

- \* Use the form as your guide
- \* Obtain as much information as possible during initial conversation
- \* Communicate consistently
- \* Supply facility with line list
- \* Follow up



<http://www.texasflu.org/>

<http://www.cdc.gov/flu/>

<http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/>

<http://www.dshs.state.tx.us/idcu/disease/influenza/Texas-Influenza-Surveillance-Handbook/>