Managing Outbreaks in Healthcare Settings

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Vision

 Communities of Illinois will achieve and maintain <u>optimal health</u> and safety.

Mission

 Protect the health and wellness of the people in Illinois through the prevention, health promotion, regulation, and the <u>control of</u> <u>disease</u> and injury.





OUTBREAK

A disease outbreak is the occurrence of disease cases in excess of normal expectancy.



Outbreaks are the result of either failures in infection control practices or contaminated equipment or medications.



Consider that you may have an outbreak when a population is afflicted with similar illnesses (symptoms) **in excess of the norm.**

This does not confirm an outbreak but should alert you to the potential of a cluster or outbreak



Report it for everyone's sake



Mandatory Disease Reporting

Illinois Administrative Code, Part 690 Control of Communicable Diseases Code mandates reporting of infectious diseases or conditions to public health by anyone with knowledge.

Listing of all reportable conditions can be found at <u>http://dph.illinois.gov/sites/default/files/publications/illinois-</u><u>laboratory-reporting-requirements-poster.pdf</u>

Identifiable information, including names and contact information, is reportable to public health



Early identification and implementation of control measures will limit the number of ill and duration of the outbreak.

4 Components one should consider during outbreak



Number of cases required (for certain diseases, one case can be considered an outbreak)

Timing of cases (incubation period)



Laboratory confirmed and/or by symptoms



Epidemiologically linked



Influenza Surveillance for Congregate Setting Outbreak Log

An influenza outbreak or cluster should be suspected whenever 10 percent of the resident population becomes ill with a febrile, respiratory disease consistent with influenza, when three cases of influenza-like illness occur on the same unit within 72 hours, or if at least one resident tests positive for influenza by any testing method. Health care facilities are required by law to report outbreaks and suspected outbreaks of disease to the Illinois Department of Public Health.

Facility Name:

List all ill residents and employees. Designate employees with an "E" by their names.

Name	Age	Unit or Wing	Onset Date	Symptoms/ Signs*	Influenza Specimen Collection Date	Lab Result	Seasonal Flu Vaccine Date	Hospitalized (Y/N)	Died (Y/N)
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							-		

Line List



Case Definitions

- A CASE DEFINITION INCLUDES CRITERIA FOR PERSON, PLACE, TIME, AND CLINICAL FEATURES. THESE SHOULD BE SPECIFIC TO THE OUTBREAK UNDER INVESTIGATION.
- CASE DEFINITIONS INCREASE THE LIKELIHOOD THAT **TRUE CASES ARE COUNTED** AND **NON-CASES ARE NOT COUNTED**.
- DEVELOPMENT OF A CLEAR CASE DEFINITION IS CRITICAL TO EFFECTIVE INVESTIGATION OF AN OUTBREAK.
- USE OF A COMMON CASE DEFINITION ALLOWS FOR STANDARDIZATION OF THE CASES OF INTEREST BOTH WITHIN AN ONGOING OUTBREAK INVESTIGATION



Communication

It is important that you contact your local health department during outbreak situations for reporting and guidance.

Periodic updates from you will assist the local health department with their monitoring of your situation.

The local health department will assist in the investigation and reporting to IDPH.

Note:

Since some outbreak require surveys, it is good idea to up to date demographic information which can be shared if needed with the LHD.





Control Measures

- Control measures are based upon the mode of transmission and characteristics for a given disease and fall into several general categories:
 - Person to Person (i.e., Scabies, Norovirus, etc.)
 - Respiratory (i.e., Influenza, RSV, etc.)
 - Food or Water Borne (i.e., Salmonella, Legionella, etc.)
 - Animal or Vector Contact (i.e., Rabies, Zika, etc.)
 - Environmental Contamination Non-food/Non-water borne (i.e., lead, asbestos, etc.)
- Regardless of mode of transmission use and availability of Hand Hygiene, PPE, and appropriate environmental cleaning supplies are essential.





Tis the Season to be ____under "influenza del freddo!"



Illinois Sentinel Influenza-Like Illness (ILI) Surveillance





VISITORS Visitation Restrictions Now in Effect for Flu Season

CSECTURY

ly immediate family members and significant other not experiencing flu-like symptoms and who are on age of 18 may visit patients at this time.

CURRENT VISITATION RESTRICTIONS: Help us protect our patients and others

Please respect these temporary visitation restrictions PLEASE WEAR A MASK if you have flu symptoms, or you're visiting a patient with flu. Please do not visit if you are not feeling well today. No one age 16 or under may visit

patients in the hospital

Only patient's immediate family or caregiver is permitted to visit

Check in at Nurses' Desk before entering a

emporary Visitor's

equard our patients from respiratory ing this period of increased VIRAL ELIN visitation is being restricted



ATTENTION VISITORS

Mandatory Visitor Restrictions at St. Joseph's/Candler Due to the Flu

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FLB-LIKE SYMPTONS INCLUDE:

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Are you ready to take control?



Prevention

- **Residents** should receive trivalent inactivated influenza vaccine (TIV) annually before influenza season.
- Health Care Personnel should be vaccinated annually against influenza.



Multi-faceted approach

- Preventing transmission of influenza viruses and other infectious agents within health care settings, including in long-term care facilities, requires a multi-faceted approach that includes the following:
 - Vaccination
 - Testing
 - Infection Control
 - Antiviral Treatment
 - Antiviral Chemoprophylaxis



Vaccinate Health Care Personnel

Health care personnel who get vaccinated help to reduce:

- Transmission of influenza
- Staff illness and absenteeism
- Influenza-related illness and death, especially among people at increased risk for severe influenza illness
- Higher vaccination levels among personnel have been associated with a lower risk of health care facility-associated influenza cases.
- Influenza outbreaks in hospitals and long-term care facilities have been attributed to low influenza vaccination coverage among health care personnel.
- • Higher influenza vaccination levels among health care personnel can reduce influenza-related illness, and even deaths, in settings like nursing homes.



Surveillance

Be aware of what's happening in the community!



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Testing

• Even if it's not influenza season, influenza testing should occur when any resident or patient has signs and symptoms of influenza-like illness.



Implementing Active Surveillance in health settings

- Test for influenza in the following:
 - ill persons who are in the affected unit as well as previously unaffected units in the facility
 - Persons who develop acute respiratory illness symptoms more than 72 hours after beginning antiviral chemoprophylaxis
 - Ensure that the laboratory performing the tests notifies the facility of tests results promptly.









Transmission Based Precautions.



Droplet Precautions

Prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.

Should be implemented for residents with suspected or confirmed influenza for 7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, while a resident is in a health care facility.



Examples of Droplet Precautions include • Placing ill residents in a **private room**. If a private room is not available, place (**cohort**) residents suspected of having influenza residents with one another

• Wear a facemask (e.g., surgical or procedure mask) upon entering the resident's room. Remove the facemask when leaving the resident's room and dispose of the facemask in a waste container.

• If resident movement or transport is necessary, have the resident wear a facemask (e.g., surgical or procedure mask)

Communicate information about patients with suspected, probable, or confirmed influenza to appropriate personnel before transferring them to other departments.



- All long-term care facility residents who have confirmed or suspected influenza should receive antiviral treatment immediately.
- All eligible residents in the entire long-term care facility (not just currently impacted wards) should receive antiviral chemoprophylaxis as soon as an influenza outbreak is determined.
- Antiviral chemoprophylaxis can be considered or offered to unvaccinated personnel who provide care to persons at high risk of complications.

Antiviral Treatment and Chemoprophylaxis





Be Aware of the Possibility of a Drug-Resistant Virus

• <u>Notify the health department</u> if a resident develops influenza while on, or after receiving antiviral chemoprophylaxis.



Consider the following additional measures to reduce transmission among residents and healthcare personnel:







Limit Large Group Activities

Avoid activities No Bingo Or

Limit visitation



Avoid new admissions with symptomatic residents











STOP DROPLET PRECAUTIONS STOP EVERYONE MUST:



Clean their hands, including before entering and when leaving the room.



Make sure their eyes, nose and mouth are fully covered before room entry.



Remove face protection before room exit.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention





Thank you



Reference Links

https://www.cdc.gov/ophss/csels/dsepd/ ss1978/SS1978.pdf

https://www.cdc.gov/flu/pdf/professionals/interi m-guidance-outbreak-management.pdf

