Hot Topics in School Health

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Flu Outbreak in Schools

Patrick Henry High School: Hundreds of students absent with symptoms within first 2 days. Up to 1300 with symptoms and absent from school by Thursday.

- preceded by homecoming events prior weekend (mostly outdoors)
- 100+ tested negative for COVID during the first two days (no positives).
- More than a dozen Influenza A positive tests in first 48 hours.

Explanation for such rapid, large absences from school?

- Uncertain – very infectious.
- Other viruses(RSV, rhinovirus, etc).
- With any URI symptoms, students now must stay home now (unlike pre-COVID), "exaggerating" absences.

Flu Outbreak in Schools

Common misperceptions

- Parents demand *flu testing on school sites* (like covid-testing)
- Parents demand flu vaccine clinics on sites
- *Masks:* Some parents wanted mask mandate to return. Others blamed mask mandate for causing students to have poor immune systems.

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What is a "school outbreak" of flu?

? More than 10% absent for similar symptoms (H1N1)?

? More than 3 cases in an enclosed space (e.g., classroom)?

? Other?

! No statewide DEFINITION for "school outbreak".

State is focused on "congregate" settings: skilled nursing facilities, prisons, residential programs for students.

Health Department would like to know about any school with >10% of a school population out (illness") for 2 consecutive days.

Statewide RESPONSE to an outbreak does exist:

Influenza and Other Non-COVID-19 Respiratory Illness Outbreak Quicksheet

December 2021

For management of COVID-19 outbreaks, please do not use this document, but rather refer to CDPH and Centers for Disease Control (CDC) COVID-19 guidance.

Non-COVID-19 Respiratory Illness Outbreaks of Concern

- Outbreaks in high-risk settings, e.g., long-term care facilities (LTCFs) and other congregate settings with vulnerable populations.
- Outbreaks associated with hospitalizations or fatalities.
- Outbreaks assessed as having public health importance such as outbreaks associated with recent swine exposure, recent travel to an area where novel influenza is circulating, or contact with a confirmed case of variant or novel influenza.
- If the source case of the outbreak has recent travel to a country associated with MERS or novel influenza (e.g., H7N9), consult with public health regarding expedited testing and outbreak control measures. See MERS or novel influenza guidance for more information.
- All outbreaks are reportable to the local health department. Outbreaks in licensed healthcare facilities are also reportable to the applicable CDPH Licensing & Certification district office.

Influenza Testing

- Molecular assays, including rapid molecular assays, reverse transcription polymerase chain reaction (RT-PCR) and other nucleic acid
- Immunofluorescence assays are antigen detection assays that generally require use of a fluorescent microscope to produce results in ~2–4 hours with moderate sensitivity and high specificity.
- Rapid influenza diagnostic tests (RIDTs) are antigen detection assays that can detect influenza virus antigens in 10–15 minutes with ~50–70% sensitivity and 90–95% specificity.
- Because the sensitivity of RIDTs vary widely, RIDT results should not be relied upon for the diagnosis of hospitalized patients, fatal cases, or to confirm an outbreak. Rather, positive or negative RIDTs in these situations should be confirmed using a molecular assay.
- Wherever possible, when investigating a respiratory outbreak of unknown etiology, persons with respiratory symptoms should be tested for both influenza and SARS-CoV-2 (the virus that causes COVID-19). Wherever possible, use multiplex influenza A and B and SARS-CoV-2 tests. If point-of-care (POC) multiplex testing is done, confirmatory PCR testing should be done to confirm negative results. If influenza and SARS-CoV-2 tests are negative, obtain a full respiratory virus panel.

Additional influenza testing information for clinicians can be found on the CDC website:

- Information on influenza testing
- Overview of influenza testing methods

+ Professional Development and Events

SCHOOLS EDUCATORS SPECIA

www.sdcoe.net/students/health-well-being/school-nursing

– Current Health Topics

FLU SEASON

- **Parent letter about flu season**
- **CDPH communications toolkit**
- **San Diego County influenza webpage**
- Flu shot locations **in San Diego County** and **across the state**
- Tips To Help You Stay Safe This Flu Season
  - Get a flu vaccine
  - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash aft
    hands.
  - Wash your hands often with soap and water for at least 20 seconds. If soap and water are not availabl
    hand sanitizer.
  - Avoid touching your eyes, nose, and mouth with unwashed hands. Germs spread this way.

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Climate Change and School Health

More Hot Days

- Includes more smog; exacerbation of asthma for more students;
- More concern about those active outdoors for large # of hours.
- Higher risks of dehydration;
    - Highest levels of concern for those with medical fragility and developmental delay

Social Inequities

- Students who are homeless or in homes with less resources (versus those who have access to A.C. for homework, sleep., etc)
- Other environmental issues: treed (high vegetation) neighborhoods (higher income) and low tree/vegetation- neighborhoods – big disparities in outdoor temperature

Extreme Events, aside from heat

Hurricane Sandy, California Fires, and other such events have caused the following problems that schools must contend with:

- Increased number of injuries in / around school
- Destruction of school buildings
- More lock downs
- Carbon monoxide poisonings
- Higher rates of anxiety and adjustment disorders among students (and even staff)

Long term mental health impacts of extreme events

Extreme heat leads to PTSD, Depression

Gradual rising temperatures and reduced air quality are known to be harmful to mental health

Perception of climate change is anxiety-provoking for a segment of the population.

-)

Climate Sensitive Diseases

More vector-borne illnesses (more mosquitos in San Diego; Is Zika, West Nile virus, Chikungunya, Dengue; ?malaria?)

Flooding is associated with: cholera, schistosomiasis, etc

Elevated Carbon Dioxide levels appear to reduce the nutritional content of plant-based foods, putting people at risk for conditions such as zinc deficiency.

Acidifying ocean is now recognized to break down the ocean food webs that help to feed us.

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Next Week:

Home-Hospital Instruction:

- Its Use; Its Misuse:
- What it is; What it isn't
- What every doctor and school nurse should know