



Pandemic Influenza

The potential impact of a pandemic influenza on schools could be enormous. School districts must implement policies designed to contain the spread of flu among students and create plans that anticipate potential emergencies in schools.

According to the Centers for Disease Control and Prevention (CDC), a “medium-level” pandemic in the United States could cause more than 200,000 deaths, 700,000 hospitalizations, 40 million outpatient visits, and nearly 50 million people being sick. Between 15 and 35 percent of the U.S. population could be affected by an influenza pandemic, and the economic impact could cost up to \$166 billion.

What is a pandemic?

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person to person, causes serious illness, and can sweep across the country and around the world in very short time. The avian influenza (or bird flu) is an example of a disease that can cause a pandemic.

What is avian influenza?

This contagious virus is a subtype of the naturally occurring influenza A virus group in birds. A unique arrangement of surface proteins characterizes the virus subtype H5N1 that has been identified as the cause of the recent news-making outbreaks. While it rarely affects its wild avian carriers, virus H5N1 can infect domesticated birds such as ducks, turkeys, and chickens which, in turn, may pass the virus to humans.

The H5N1 virus has raised concerns about a potential human pandemic because:

- it is especially virulent
- it is being spread by migratory birds
- it can be transmitted from birds to mammals and in some limited circumstances to humans and
- like other influenza viruses, it continues to evolve.

What are the symptoms?

Animal-borne pathogens that affect people can present greater complications than common human viruses because the human immune system has not been conditioned to recognize and/or successfully respond to them. The avian flu virus exemplifies this occurrence. In addition to the typical flu ailments such as body aches and fever, avian flu can be manifested as eye infections, pneumonia, and other respiratory illnesses.

How is it contracted?

An individual can become infected with the virus from being in contact with an infected animal or its bodily fluids.

How is it treated?

The development of viral resistance to drugs is a constant challenge. H5N1 has been found to be resistant to two influenza drugs – amantadine and rimantadine. Vaccine development and clinical trials are underway.

What is the risk?

Since a majority of the reported flu cases were children and young adults, schools need to consider their risk prevention and infection control policies. Unfortunately, the full array of symptoms has not yet been determined, so numerous cases may have gone unchecked by health officials. Currently, the risk of person-to-person transmission of H5N1 is very low; however, this may change if the virus changes.

What can be done to protect students and staff?

Prevention and emergency preparation measures in schools can greatly reduce the threat of avian influenza. Detailed information is available from the U.S. Department of Education’s *Practical Information on Crisis Planning: A Guide for Schools and Communities*. Additionally, the following checklist can serve as a starting point for a pandemic influenza plan.

Planning checklist

Emergency preparedness plan

- View the ReadyCASchool.org Web site for information on pandemic influenza preparation for schools, including fact sheets, guides, letters, posters, skits, teaching exercises, and videos geared to different grade levels addressing the following four topics:
 - Prevention and mitigation
 - Preparedness
 - Response
 - Recovery
- Form a committee to review and revise the district's emergency and disaster preparedness plan to develop a response to a flu pandemic.
- Determine the chain of command for the emergency plan and the individuals responsible for specific duties such as quarantine.
- Invite the local health department, and other medical providers as necessary, to participate in the review and revision of the emergency plan.
- Review existing employee sick leave policies and student absence policies to ensure they are consistent with the emergency preparedness plan.
- Ensure that the emergency preparedness plan includes a crisis communications strategy addressing the pandemic status and response action within the school that takes into account cultural and language differences.

Collaboration with health community

- Participate in the local health department pandemic planning process to ensure that school interests are represented.
- Maintain contact with public health and education officials who can provide regular updates on pandemic status.
- Work with local health department to create a system to provide updates on student and staff health, such as an increase in absenteeism that may signal an outbreak.

Prevention

- Promote current infection control policies such as good hygiene with the help of the local health department.
- Reduce anxiety within schools and the community by providing information about avian influenza facts and myths.

Additional issues to consider

- Given that frequent hand washing is one of the simplest and most effective ways to limit a contagious infection, do the policies, practices and facilities in place promote or inhibit this preventative activity?
- Do emergency plans anticipate situations and events that might result from an outbreak (e.g. student and staff absences) and consider how they would affect student learning and school operations?
- If school closure is deemed to be the most effective means of reducing exposure to the flu, does the district's plan address subsequent impacts? Examples of challenges school communities with closed facilities may experience include: communicating with parents, the loss of meals for disadvantaged students, maintaining continuity of classroom instruction, adapting to schools being used as overflow emergency medical facilities, making up for lost days, alternative methods for instruction (e.g. Web-based) and maintenance of district office functions (e.g. payroll).

Further reading

U.S. Department of Education, Office of Safe and Drug-Free Schools

Practical Information on Crisis Planning: A Guide for Schools and Communities (January 2007)

www.ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf

U.S. Department of Health and Human Services / Centers for Disease Control and Prevention (CDC)

www.pandemicflu.gov

California Department of Health Services / California Department of Education

www.ReadyCASchools.org

Pandemic Influenza Preparation for Schools

www.cde.ca.gov/ls/fa/sf/pandemic.asp

Flu Prevention

www.cde.ca.gov/ls/he/hn/fluinfo.asp