Influenza and School Preparedness

It is simply a matter of when, not if. World leaders, medical scientists, and public health officials are in near unanimous agreement that a global and especially lethal outbreak of influenza (flu) is inevitable, and may occur in the not too distant future. Such a pandemic is vastly different—in its scope and deadliness—from the seasonal flu outbreaks with which Americans are most familiar. Indeed, the three flu pandemics that swept the world in the 20th century, in 1918, 1957, and 1968, caused more than 600,000 American deaths. The worldwide toll of the 1918 Spanish flu alone is placed at more than 50 million lives. The Swine flu outbreak of 2009 is the latest test of the world’s health systems.

According to the Centers for Disease Control and Prevention (CDC), a “medium-level” pandemic in the U.S. 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.

Given the possibility of such dire consequences, federal and state governments began planning to prepare for any outbreak. President George W. Bush issued the National Strategy for a flu pandemic, which makes clear that states and local communities will be primarily responsible for making operational decisions once the pandemic has emerged. As such, state boards of education must provide leadership and oversight for the unique role K-12 schools will play in spreading or stopping the spread of the contagion among the general population.

Some states and local education leaders have been proactive in this area and have already developed comprehensive plans in case of a pandemic outbreak. As others external to the school community develop strategies around this and other issues affecting the wellbeing of children, all state and local boards of education should develop and influence preparedness plans that make sense for the school community. Plans that take into consideration the welfare of all children, the dependence of parents and family on the school as a source for rational and accurate information, and the reality of what happens if schools are closed for any period of time should be developed before there is a need for them.

Given the large number of children convening daily at school, their close proximity to each other in the classroom, and their constant interactions, public schools are “ground zero” in any influenza outbreak. Fortunately, states have had several years to begin implementing policies specifically designed to contain the spread of flu (both seasonal and pandemic strains) among students all year long. State boards of education have been key in ensuring that there are emergency guidelines for school operations that can be used to appropriately respond to a flu pandemic crisis once it is underway.

**Issues to Consider**

**Practical Precautions:** Some of the most common-sensical precautions of good hygiene can help prevent flu transmission, as well as respiratory illnesses and other viral infections, and should be taught to all students every year: covering your nose and mouth with a tissue during a cough or sneeze (and then immediately disposing of the tissue); avoiding any touching of the eyes, nose, or mouth; and frequently washing your hands with soap and water (or with an alcohol-based hand sanitizer if need be). Note: Antibacterial sanitizers are not a substitute for soap and water.

Indeed, this last practice—frequent hand washing—is one of the simplest and most effective ways to limit a contagious infection. The CDC notes that hand washing is “the most important thing that you can do to keep from getting sick.” At a minimum, schools should have a hand washing policy for students and teachers. More broadly, policymakers may want to consider expanding the number of hand washing facilities in schools to promote this activity among students.

**Vaccinations:** While experimental vaccines for the flu pandemic are still in the nascent stages of development and are years away from use, a seasonal flu vaccine combating the common flu is available on an annual basis. The CDC...
Human Services: Flu Plan would be closing a community's schools. Per the first and best options in the event of a flu pandemic, individuals' possibility of exposure to the flu. Therefore, one on containment measures and "social distancing" to reduce an close the schools.

Public health officials will lead any state response to a flu pandemic, which will likely include the legal authority to promote coordination between these two state agencies. Forging cross-departmental relations with their education officials and employees at all levels should begin should one eventually be ready and necessary.

Coordination with Public Health Officials: State education officials and employees at all levels should begin forging cross-departmental relations with their counterparts in the state department of public health to promote coordination between these two state agencies. Public health officials will lead any state response to a flu pandemic, which will likely include the legal authority to close the schools.

Containment and School Closures: Health experts rely on containment measures and "social distancing" to reduce an individual's possibility of exposure to the flu. Therefore, one of the first and best options in the event of a flu pandemic would be closing a community's schools. Per the Pandemic Flu Plan issued by the U.S. Department of Health and Human Services:

Closure of office buildings, stores, schools, and public transportation systems may be feasible community containment measures during a pandemic. Although data are limited, school closures may be effective in decreasing spread of influenza and reducing the overall magnitude of disease in a community. Children are known to be efficient transmitters of seasonal influenza and other respiratory illnesses. A necdotal reports suggest that community influenza outbreaks may be limited by closing schools. Results of mathematical modeling also suggest a reduction of overall disease, especially when schools are closed early in the outbreak.

Of course, such a decision would not be made lightly or without significant and potentially far-reaching consequences for students, parents, and the general public. Because of this ripple effect, it is imperative that school and public health leaders have a clear set of previously agreed upon criteria to guide their deliberations to close and reopen schools. In addition to deciding when and how to close a school, it should be kept in mind that a high absentee rate of ill students and teachers may force the decision for health and education officials. Some have suggested that a school absentee rate of 30 percent or more is the "tipping point" at which it makes academic and economic sense to close a school.

Moreover, education policymakers should have an action plan to serve students and families during and after any school closings. This is especially important considering that school closures may have to last up to eight weeks to be effective. Among the many factors policymakers will have to take into account and address are: communications with parents, making up for lost days, the social and economic disruption (i.e. parents taking leave from work to care for children), the loss of breakfast and lunch meals for disadvantaged students, the continuity of classroom instruction, student counseling needs, the use of schools as overflow emergency medical facilities, and maintaining the basic operations of the central office.

State Actions

Maryland State Superintendent Nancy Grasmick convened a statewide meeting in 2005 of local school superintendents and public health officers for a school-specific tabletop exercise to help begin preparing for an eventual flu pandemic. The exercise, run in conjunction with the state department of health, employed a series of scenarios to illustrate the realistic evolution of an influenza pandemic. The result of the "war game" highlighted for school decision-makers the impact of a pandemic, the school challenges, options, and implications in responding to the crisis, and the criteria for school closures and re-openings.

Resources


