

Measures in school settings

Pandemic (H1N1) 2009 briefing note 10

11 SEPTEMBER 2009 | GENEVA -- WHO is today issuing advice on measures that can be undertaken in schools to reduce the impact of the H1N1 influenza pandemic. Recommendations draw on recent experiences in several countries as well as studies of the health, economic, and social consequences of school closures. These studies were undertaken by members of a WHO informal network for mathematical modelling of the pandemic.

Experience to date has demonstrated the role of schools in amplifying transmission of the pandemic virus, both within schools and into the wider community. While outbreaks in schools are clearly an important dimension of the current pandemic, no single measure can stop or limit transmission in schools, which provide multiple opportunities for spread of the virus.

WHO recommends the use of a range of measures that can be adapted to the local epidemiological situation, available resources, and the social role played by many schools. National and local authorities are in the best position to make decisions about these measures and how they should be adapted and implemented.

WHO continues to recommend that students, teachers, and other staff who feel unwell should stay home. Plans should be in place, and space made available, to isolate students and staff who become ill while at school.

Schools should promote hand hygiene and respiratory etiquette and be stocked with appropriate supplies. Proper cleaning and ventilation and measures to reduce crowding are also advised.

School closures and class suspensions

Decisions about if and when schools should be closed during the pandemic are complex and highly context-specific. WHO cannot provide specific recommendations for or against school closure that are applicable to all settings. However, some general guidance comes from recent experience in several countries in both the northern and southern hemispheres, mathematical modelling, and experience during seasonal epidemics of influenza.

School closure can operate as a proactive measure, aimed at reducing transmission in the school and spread into the wider community. School closure can also be a reactive measure, when schools close or classes are suspended because high levels of absenteeism among students and staff make it impractical to continue classes.

The main health benefit of proactive school closure comes from slowing down the spread of an outbreak within a given area and thus flattening the peak of infections. This benefit becomes especially important when the number of people requiring medical care at the peak of the pandemic threatens to saturate or overwhelm health care capacity. By slowing the speed of spread, school closure can also buy some time as countries intensify preparedness measures or build up supplies of vaccines, antiviral drugs, and other interventions.

The timing of school closure is critically important. Modelling studies suggest that school closure has its greatest benefits when schools are closed very early in an outbreak, ideally before 1% of the population falls ill. Under ideal conditions, school closure can reduce the demand for health care by an estimated 30–50% at the peak of the pandemic. However, if schools close too late in the course of a community-wide outbreak, the resulting reduction in transmission is likely to be very limited.

Policies for school closure need to include measures that limit contact among students when not in school. If students congregate in a setting other than a school, they will continue to spread the virus, and the benefits of school closure will be greatly reduced, if not negated.

Economic and social costs

When making decisions, health officials and school authorities need to be aware of economic and social costs that can be disproportionately high when viewed against these potential benefits.

The main economic cost arises from absenteeism of working parents or guardians who have to stay home to take care of their children. Studies estimate that school closures can lead to the absence of 16% of the workforce, in addition to normal levels of absenteeism and absenteeism due to illness. Such estimates will, however, vary considerably across countries depending on several factors, including the structure of the workforce.

Paradoxically, while school closure can reduce the peak demand on health care systems, it can also disrupt the provision of essential health care, as many doctors and nurses are parents of school-age children.

Decisions also need to consider social welfare issues. Children's health and well-being can be compromised if highly beneficial school-based social programmes, such as the provision of meals, are interrupted or if young children are left at home without supervision.

Source:

http://www.who.int/csr/disease/swineflu/notes/h1n1_school_measures_20090911/en/index.html
