

COMMUNITY MITIGATION MEASURES FOR PANDEMIC (H1N1) 2009 IN EDUCATIONAL SETTING

**Interim Guidance from Expert Consultation
15 September 2009**

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**World Health
Organization**

Regional Office for the Eastern Mediterranean

EMRO

Community Mitigation Measures for Pandemic H1N1 in Educational Settings

Interim Guidance on School and Higher Educational Institution Closures

(For adaptation by countries in the Eastern Mediterranean Region)

15 September 2009

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Information used in drafting this interim guidance on school closures and other mitigation measures in response to pandemic (H1N1) 2009 virus infection has been adopted from materials available in WHO/HQ¹, CDC, ²Public Health Agency of Canada³ and Mexico⁴. The draft document was reviewed updated following the inputs and recommendations of the consultations.

¹ <http://www.who.int/csr/disease/swineflu/en/index.html>

² <http://www.cdc.gov/h1n1flu/>

³ <http://www.phac-aspc.gc.ca/alert-alerte/h1n1/index-eng.php>

⁴ http://www.promocion.salud.gob.mx/dgps/interior1/influenza_estacional.html#

Section 1:

Guidelines for Closure of Schools and other Higher Institutions of Learning during Pandemic (H1N1) 2009 in EMR

1. Introduction and justifications

The pandemic (H1N1) 2009 influenza virus has rapidly spread across the world. While influenza activity would normally be expected to wane during the summer months, the pandemic (H1N1) 2009 influenza virus has not and surveillance data suggest that community spread has continued in many countries. To date, infection with the pandemic (H1N1) 2009 influenza virus has resulted in influenza-like-illness (ILI) similar to seasonal influenza. ILI is defined as *the acute onset of respiratory symptoms with fever and cough and one or more of the following symptoms: sore throat, muscle aches, joint pain, or weakness. Gastrointestinal symptoms may also be present and fever may not be prominent.*

The pandemic (H1N1) 2009 influenza virus is spread from person to person in the same way as seasonal influenza. Transmission occurs predominantly through coughing or sneezing. Indirect transmission can also occur through self-inoculation after contact with surfaces and objects contaminated with the virus from infected persons. Like seasonal influenza, the pandemic (H1N1) 2009 influenza infection in humans can vary in severity from mild to severe, with the most severe disease occurring mainly in known and emerging risk groups such as the immunocompromised and pregnant women. Children with underlying medical conditions may also be at greater risk of severe illness or complications. Most illness from the pandemic influenza H1N1 virus (especially in children) has been relatively mild and self-limiting with most cases recovering quickly.

The incubation period for pandemic (H1N1) influenza virus is understood to be up to 4 days and the period of communicability up to 7 days from onset of symptoms in uncomplicated cases. This may be longer (up to 10 days) in individuals with severe illness and children in whom symptoms and virus shedding may persist. Consistent with seasonal flu, transmission of the pandemic (H1N1) influenza virus is most likely during the initial days of infection when the individual is symptomatic and has a high viral load.

As of now, few cases of pandemic (H1N1) 2009 illness among school-aged children and transmission within schools have been reported (few countries) in the Eastern Mediterranean Region. In the light of the current situation of limited community spread of this illness in most of our countries, **widespread school and other higher institutions of learning closures are not recommended by WHO/EMRO at this point of time.** However, the final decisions about school and other higher institutions of learning closures lie at the discretion of individual national authorities and should be based on considerations such as national public health concerns, school community or local community concerns, the impact of school absenteeism and/or staffing shortages on school operations and potential negative consequences resulting from the school closure.

This guidance document has proposed measures to mitigate the spread of the pandemic (H1N1) 2009 influenza virus in schools and child care settings. Widespread Preemptive school closures as a control measure have the potential of coming at high economic and social costs since this would impact the many families that have one or both parents working outside of the home. Increases in workplace absenteeism could possibly lead to societal disruption and may lead to a less optimal pandemic response if significant absenteeism occurs among workers critical to the response. Consideration also needs to be given to the likeliness of students to congregate elsewhere in less controlled environments (e.g. shopping malls) thus reducing the intended benefits of school closures

2. Types/options of school and higher educational institution suspension and closures: Definitions and recommendations

2.1 Class dismissal/suspension:

2.1.1 Definition:

A school remains open with administrative staff, and other classes, but children in affected class stay home

2.1.2 Recommendations:

- *All dismissals should take into consideration the estimated attack rate/trend of ILI in the community (if incidence >10% dismissal/suspension is not recommended), situations in the schools, capacity of school to deal with the disease/patients,*
- *When three or more ILI cases are identified within one week in one class, dismissal/suspension of the affected class for 7days is recommended. If the incidence of the ILI in the community is in the same rate class dismissal is not a good option.*
- *In a kindergarten/nursery setting, if two cases of ILI is identified among the children within three days, immediate closure of the setting for one week is recommended. This should apply even when the ILI has been reported by the parents. If the KG is part of a school the closure should only affect the KG services.*
- *The decision to dismiss/suspend a class or a school should be left to the local authorities (not imposed from above)*
- *In such situations, WHO/EMRO recommends a school dismissal/suspension to be one week at the maximum; the children that do not feel well should stay at home; re-attendance upon clearance by the care taker and reconfirmed by the school nurse (or health officers)*

2.2 School closure:

2.2.1 Definition:

Preemptive closure: Closure of school by sending all children and staff home before substantial transmission among the school children

Reactive closure: Closure of a school by sending all children and staff home when many children, staff, or both are experiencing illness

Selective closure: Closure of one or more schools selectively where all or most students are at high risk.

2.2.2 Recommendations:

- *There will be no widespread preemptive kindergarten, schools, post secondary schools and boarding school) closures at this time of the pandemic as long there is no change in severity.*
- *Regardless of the number of the classes in a school, if two classes are closed due to ILI within one week, all classes in the affected building will be closed for one week (starting from the date of dismissal of the second class).*
 - *If the school is composed of separate buildings with no shared activities among students from the different building closure of the affected building should be considered.*
 - *If the school is used in different shifts by different students, with no shared activities among students from the different shifts, the affected shift will be dismissed.*
- *School suspension due to absenteeism of the students and teaching staff should be considered, when 20% of the students are absent for consecutive two days due to ILI (or if the cause is not investigated).*
- *The decision about individual reactive post secondary or boarding school closures remains at the discretion of appropriate local authorities in accordance with national regulations. Such decisions should be based on considerations such as the impact of school absenteeism and/or staff shortages on safe school operations.*
- *There will be no selective school closure as there are no separate schools for medically fragile children or for pregnant students. Schools for children with some disabilities should be studied cases by case.*

3. School Closures/suspension operational issues to be considered

3.1 Need for local sensitivity in timing as the pandemic spreads: (gradual or closure all at once)

As part of a community planning process, school dismissal plans should address possible secondary effects on the community. The planning process should include communicating these plans with all community members affected by school dismissal. These might include effects on critical infrastructure, parents' job security and income loss, school funding due to funding calculations based on attendance, child nutrition due to the loss of access to the school meals program, loss of access to health services, educational progress, and child safety due to possibly increased unsupervised time. Communities should prepare to address these secondary effects so as to increase the acceptability of and participation in school dismissal. Parents should plan for child care while schools are dismissed, as these decisions may be made very quickly.

3.2 Triggers for Preemptive closure

Preemptive school closure can be used to decrease the spread of influenza virus or to reduce demand on the health care system. If global or national risk assessments indicate an

increased level of severity as compared to the spring 2009 H1N1 influenza outbreak, WHO/EMRO might recommend preemptive school dismissals. If schools are dismissed, school-related mass gatherings should be cancelled or postponed. This would include sporting events, school dances, performances, rallies, commencement ceremonies, and other events that bring large groups of people into close proximity with one another. School dismissal is likely to be more effective in decreasing the spread of influenza virus in the community when used *early* in relation to the appearance of the virus in the community and when used in *conjunction* with other strategies (for example, cancellation of community sporting events and other mass gatherings). Cancellation or postponement of community events is a decision of event organizers, local public health officials and other government agencies and should be part of a coordinated community process.

3.3 Recommended length of closures

The length of time students should be dismissed from school will vary depending on the type of school dismissal as well as the severity and extent of illness. **When the decision is made to dismiss students, WHO/EMRO recommends doing so for 5 to 7 calendar days.** Reactive school dismissals are likely to be of shorter duration than selective or preemptive dismissals. Because the goals of selective dismissals (to protect students and staff at high risk of severe illness or death) and preemptive dismissals (to decrease the spread of influenza virus) are usually different from those of reactive dismissals, the length of time schools are dismissed might be longer.

The authority for decision-making regarding school dismissal may reside in multiple sectors of member states and local governments; these entities must work in a coordinated manner.

3.4 Sustaining teaching and learning for prolonged period of closure

Schools should prepare homework ahead of time and, if possible, systems for at-home distance learning. Therefore, schools and school boards should plan for more prolonged periods of school dismissal (up to 12 weeks) based on the severity of the disease. If schools attempt to continue educational services to all students during a lengthy school dismissal, students with disabilities should receive comparable access to education. Communities should also plan to allow school staff to use school facilities while students are dismissed. Keeping school facilities open may allow teachers to develop and deliver lessons and materials (for example, by using school teleconference lines or other distance-based education delivery systems) and other staff to provide essential services (such as preparation of meals) keeping in mind basic infection control practices.

3.5 Maintain contacts between families and teachers – the advantage of class suspension over school closure

On a regular basis (for example, weekly) communities that have dismissed students from school should know the epidemiology of the disease, the benefits of keeping students

home, and the societal repercussions of doing so. In the event that WHO/EMRO recommends preemptive school dismissals, this recommendation also might include a modification to the suggested length of dismissal (up to 12 weeks), based on the severity observed across the nation and globally.

3.6 Establish coordination mechanism between different sectors: Education and Health sectors

If global or national risk assessments indicate an increased level of severity compared with the spring 2009 H1N1 flu outbreak, school officials should work closely and directly with their local and state public health officials to make sound decisions, based on local conditions, and to implement strategies in a coordinated manner.

Section 2:

Public Health Guidance for Child Care Programs and Schools (K to grade 12) regarding the Prevention and Management of Influenza-Like-illness (ILI)

This guidance is based on currently available scientific evidence about this emerging disease and is subject to review and change as new information becomes available. This is the first version of this document. It should be noted that this guidance has been developed based on the global and regional situation and individual countries will need to modify it to their national situation before adopting it.

Child care programs: For the purpose of this guidance document, child care settings will refer to both licensed and unlicensed child care programs providing family home or centre-based child care in group settings. These settings provide care and education to children from infants and toddlers to preschool age as well as providing before and after school care for school age children. Some child care programs are located in schools.

Schools: For the purpose of this guidance document, schools will refer to both public and private institutions providing Kindergarten to Grade 12 education programs (K to 12) to children and adolescents in group settings. Other school activities include sports, music and field trips into the community or to other schools and some schools provide meal programs for the children (breakfast & lunch). The school population may include children who require assistance with hygiene. Schools may also include populations such as international students that require special communication materials.

4.1 General information

School and child care programs are known settings for amplification of influenza transmission including the pandemic (H1N1) 2009 influenza virus and children are also important vectors of transmission of the pandemic (H1N1) 2009 influenza virus at home and in the community. Therefore, National authorities should develop systems to assist schools and child care centers to identify individuals with ILI and to implement measures to limit transmission of illness. Generic screening and monitoring criteria using ILI should be used as there will be other

circulating respiratory viruses and most children will not be tested for the pandemic (H1N1) 2009 influenza virus.

At this time, the most important factors in the control of the spread of the pandemic (H1N1) 2009 influenza virus at schools and child care programs are:

- **Early identification of ill students and staff exhibiting symptoms of ILI,**
- **Exclusion from the setting of anyone ill with symptoms of ILI and,**
- **Practicing cough/sneeze etiquette and frequent hand cleaning.**

Communication and age appropriate education programs for parents/guardians, students, children and staff play an important role in the control of the transmission of pandemic (H1N1) 2009 influenza virus in school and child care settings. The following section contains recommendations and information that can be shared by public health officials when communicating with school or child care administrations.

4.2 Personal care and hygiene and respiratory Etiquette:

- **Parents/guardians, students and staff should be taught and encouraged to;**
- Wash hands promptly after coughing or sneezing, before and after eating, after recreation/play times, after going to the washroom .
- Use the correct hand washing technique with plain soap and water. In instances where hand washing sinks are not available, supervised use of alcohol based hand rubs may be considered. If hands are visibly soiled, alcohol based hand rubs may not be effective at eliminating the influenza virus.
- To encourage respiratory etiquette, students and staff should have access to tissues and must be educated about the importance of respiratory etiquette, including keeping hands away from the face. If a tissue is not immediately available, coughing or sneezing into one's arm or sleeve (not into one's hand) is recommended..
- Protect themselves when caring for someone who is ill.

4.3 Monitoring:

- Parents/guardians, students, and staff should be provided basic information on how to recognize symptoms of ILI.
- Parents/guardians should be encouraged to monitor the health of their children daily for symptoms of ILI.
- Teachers and child care program staff should observe children for any signs of ILI.
- Cases of ILI should be identified when illness reports are received from parents/guardians and reports of ILI should be recorded.

- Schools and child care centers should develop communication programs that meet the needs of parents/guardians, students, faculty and staff.
- Schools and child care centers should adopt programs for monitoring of student/child and staff illness and develop a strategy to recognize an outbreak of pandemic (H1N1) 2009 influenza and/or other triggers that warrant consultation with local public health officials. Prompt action will help to ensure appropriate measures can be implemented to mitigate the impact and spread of the illness to both students/children and staff.

4.4 Reporting

- Schools and child care programs should establish mechanisms to monitor ILI activity in their setting and processes for reporting staff and student/child illness above normal expected absenteeism levels to local public health officials.
- Any unusual cluster of ILI should be notified to the local health authorities. Examples of such situations would be when absenteeism of students/staff is greater than what would normally be expected on any day or when unusual or more severe illness is observed.
- To facilitate reporting, institutions may consider establishing a dedicated phone line and/or web-based method of receiving illness reports from students, staff and faculty.

4.5 Isolation

- Schools and child care programs should be prepared to promptly isolate students/children who become ill with ILI while in school or child care settings in a room/area separate from others with adequate supervision until they can go home.
- To help prevent transmission, good respiratory and hand hygiene practices are recommended, as well as, to the extent possible, having the ill children stay two meters away from others.
- Schools and child care programs should have protocols in place to notify parents/guardians if their child becomes ill with ILI while at school/child care.
- Children who become ill with ILI while at school or child care should be sent home with their parent or guardian and should not travel on school buses. If there is no other option and the child must ride a school bus, it is recommended that staff ensure the child sits on a seat by themselves and is able to cover their mouth and nose with a tissue.
- A limited number of staff (should not be at increased risk of influenza complications, such as pregnant women) should be designated to care for ill persons until they can be sent home.
- Staff who provide care for persons with known, probable or suspected influenza or influenza-like illness use appropriate personal protective equipment.
- Students/staff who become ill at home with ILI should **stay at home** until they are symptom free and are feeling well and able to fully participate in all normal day to day school activities (e.g., intra/extramural activities and school trips).
- In settings where a large proportion of children have underlying illness that puts them at risk for severe illness or complications from the pandemic (H1N1) 2009 influenza virus, it is recommended that staff and children with influenza-like illness remain at home until

they are fully recovered and at least 24 hours after they are free of fever (100° F [37.8°C]), or signs of a fever without the use of fever-reducing medications.

- Given the potential for more severe illness or complications from influenza infection, schools and child care centers should inform parents/guardians about the need for rapid medical assessment of high risk children.

4.6 Environmental Cleaning

- Influenza viruses can survive on some surfaces for several hours to days but are rapidly destroyed by cleaning. Cleaning of objects and surfaces that are frequently touched by multiple students or staff, high touch surfaces such as doorknobs, faucet handles, toys, computer keyboards, telephones, school bus hand rails, etc., will help to prevent the transmission of the influenza virus from person to person through contaminated hands.
- It is recommended that high touch surfaces in schools and child care centers be cleaned at least twice daily. No special disinfectants or waste handling practices are required for influenza; regular household or commercially available cleaning products are sufficient for this purpose, and waste handling would be according to usual standards.
- Schools are advised to increase the frequency of cleaning during school hours as well as monitoring hand cleaning supplies. All sinks in washrooms, kitchens and classrooms should be well stocked with hand washing supplies at all times. (i.e., soap and paper towels). Consider the supervised use of alcohol-based hand rubs (with 60-90% alcohol) in classrooms without hand washing sinks.

Section 3:

Public Health Guidance for Post Secondary and Boarding Schools regarding the Prevention and Management of Influenza-like-illness (ILI)

Post secondary / Vocational / Adult Learning Settings: For the purpose of this guidance document, these settings include public and private colleges, universities and vocational/technical schools. School populations are comprised of young adults who live in on-campus housing, private accommodation off campus or in the family home.

Residential/boarding schools: For the purpose of this guidance document, these settings include those where students reside at the school and return home on holidays and vacations.

The following section provides recommendation on infection prevention and control for the post secondary and boarding schools in addition to the recommendation stated in section 2.

5.1 Isolation

- Students/staff/faculty who becomes ill with ILI at home or in their dormitory or residence should be encouraged to self isolate until their symptoms resolve and they

are feeling well and able to fully participate in all normal day to day school activities (including intra/extramural activities). Or seek medical advice if severe.

- Students/staff/faculty who becomes ill while attending classes or other school activities should isolate themselves by returning to their room or home until they are symptom free and are feeling well and able to fully participate in all normal day to day school activities (i.e., intra/extramural activities).
- Post secondary institutions and residential/boarding schools may wish to consider developing plans to group students with ILI in one dorm area as a measure to contain the spread of the virus for on-campus residences and boarding schools. This may facilitate monitoring of ill students and prevention of transmission of the virus to others.

5.2 Support

- Post-secondary and residential schools may want to consider providing support for those students (residing on or off-campus) who are ill and do not have other support available. This may include providing in-room meals and care.
- Students/staff/faculty and parents should be given information on how to take care of themselves if ill.
- Students should also be provided information on how to access healthcare for assessment of their medical condition if needed.

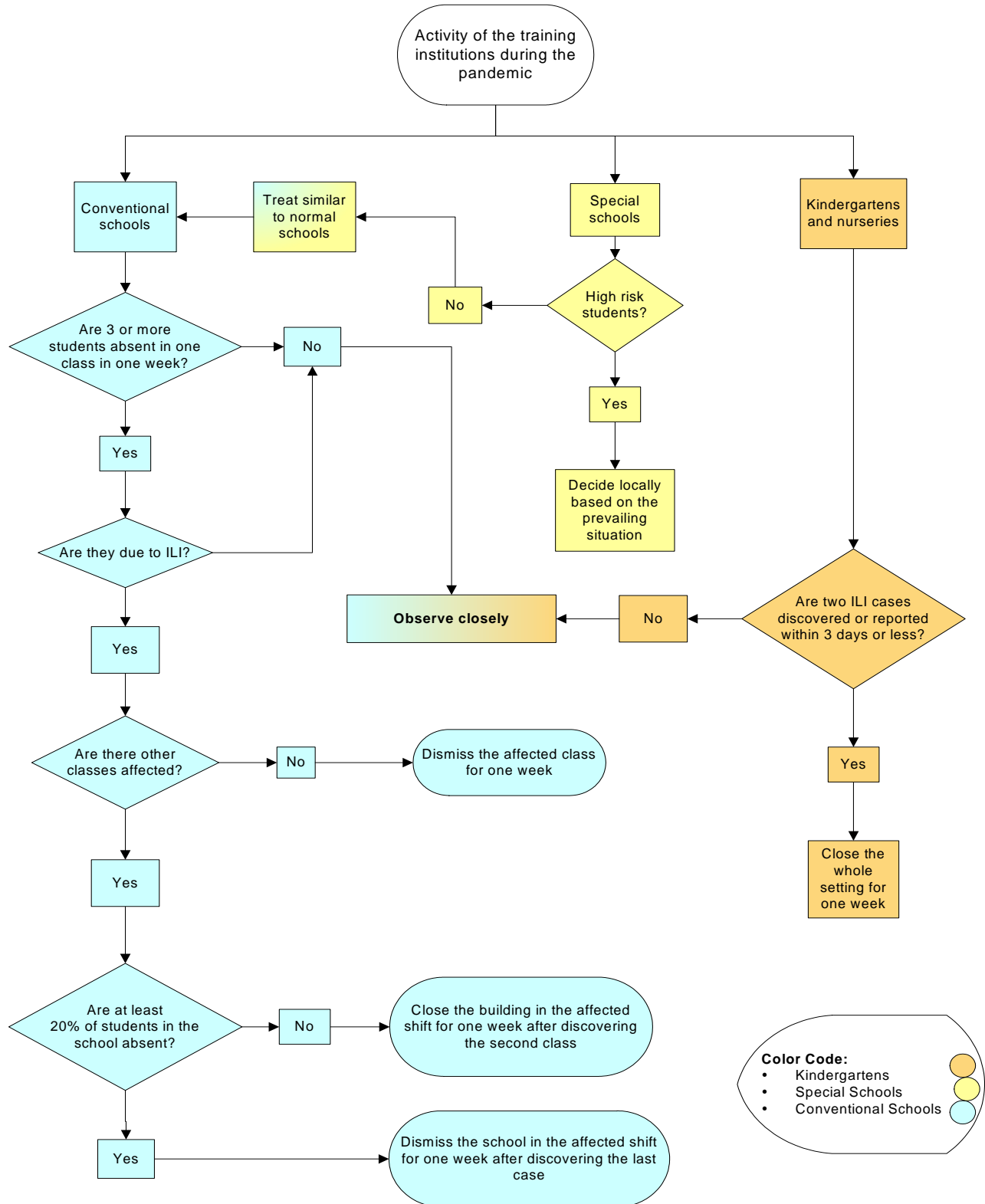
5.3 Considerations Prior to Travel

- Schools should communicate with individuals who are traveling from other parts of the country or other countries in advance of their travel and advise them not to travel while ill.
- Schools should develop plans in case of the temporary closure of study abroad programs and to support both ill and healthy individuals affected in the event they cannot return home.
- While not currently recommended, individuals who are traveling should be warned of the possibility that quarantine or other public health measures may be applied at international borders.

It is important to note that there are many protective factors present in post secondary and boarding school settings that must be considered especially during a time of disruption such as a pandemic. Such settings are excellent places to:

- Educate, inform and communicate with students, their families, staff and faculty in an efficient and timely manor,
- Support the economic and social elements of the community by continuing to operate,
- Provide a structured environment able to support efficient and effective administration of vaccines.

Figure 1: Flowchart for decision making on school suspensions and closures during pandemic (H1N1) 2009



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