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GUIDELINES

Infection Control and Prevention of COVID-19 Transmission: Interim Recommendations for Schools in the Philippine Setting (as of August 6, 2020)

THIS GUIDANCE AIMS TO SUPPORT PHYSICIANS WHO COLLABORATE WITH SCHOOLS AND GOVERNMENT IN CREATING INFECTION CONTROL POLICIES FOR SCHOOL RE-ENTRY IN THE TIME OF COVID-19 PANDEMIC, WHILE TAKING INTO CONSIDERATION THE OVER-ALL HEALTH OF EVERYONE, BASED ON AVAILABLE EVIDENCE. THE GUIDANCE IS DYNAMIC AND MAY CHANGE DEPENDING ON THE RAPIDLY EVOLVING KNOWLEDGE, DATA, AND UNDERSTANDING OF SARS-COV-2 IN THE COUNTRY.

Important Considerations:

1. Decisions for school resumption must always be in full cognizance of the risks vs. benefits of doing so, with constant re-evaluation of such decision based on ongoing risks and the success of implementing mitigation strategies in each school setting.
2. School policies should be adaptable to changes in response to new information, with administrators willing to refine approaches when specific policies are not working.
3. Strategies to be implemented are those that can be revised and adapted depending on the transmission of the virus in local community and school settings, and on the available resources that can be sustained through the schoolyear, in collaboration with the local public health authorities.
4. Policies should be feasible, practical and appropriate for the developmental stage of the students.
5. Special considerations and accommodations to account for the diversity of the student population should be made, particularly for the vulnerable and disadvantaged populations (i.e., medically fragile, living in poverty, developmentally challenged, and having special health care needs or disabilities) with the goal of safe reopening of schools.
6. Whenever possible and feasible, on-line learning, depending on the class and or subject matter, is the preferred teaching method, over classroom teaching.

BACKGROUND

School closures have been one of the public health measures implemented to control the outbreak of COVID-19 in the Philippines and in the rest of the world. As of this writing, the Philippine government has set, as a condition for the opening of face-to-face classes, the availability of a vaccine against COVID-19. Some countries, however, have resumed, or have plans of resuming face-to-face classes as their cases of COVID-19 decrease. Some advocates have called for the opening of schools in areas in the Philippines where there are no cases, such as in isolated areas and islands. Successful implementation of health safety protocols to reduce the risk of transmission is of paramount importance once face-to-face classes resume.

Studies conducted on COVID-19 in children show that majority of cases are mild and that children are less likely than adolescents and adults to get infected and to have severe disease. Current observations demonstrate that children are less infectious than adults, and the role of children in transmission is still unclear. There is also equivocal evidence on the impact of school closures on the control of the epidemic.

UNESCO identifies the following six key dimensions to assess the readiness of schools to reopen and to provide basis for planning: policy, financing, safe operations, learning, reaching the most marginalized, and well-being/protection. The risk of potential spread of COVID-19 in the school setting must be weighed against the significant academic, social, emotional, and other benefits that schools provide to children.

This document addresses relevant issues on infection control and prevention of transmission of SARS-CoV-2 in schools, and serves as a complement to recommendations from other authorities and policy-making bodies to guide decision-making for school resumption.

Addressing all issues pertinent to infection prevention during school opening is necessary. With regard to risk-prevention, the disease transmission rates at the local community level should be analyzed - where widespread local transmission of COVID-19 is occurring, schools are recommended to remain closed (i.e. risk outweighs benefit). As for areas with no or low disease transmission, as determined by the relevant health authorities such as the Inter-Agency Task Force on Emerging Infectious Diseases (IATF-EID) or the local Epidemiology Bureau, gradual resumption of face-to-face classes may be considered if: the school has appropriate policies and protocols in place for preventing transmission among its students and staff, school staff is well-trained on implementing these health protocols, and children, parents, and the community are well-informed of these plans. Engineering and administrative controls, as well as use of appropriate personal protective equipment, are recommended.

PREVENTING/REDUCING THE RISK OF TRANSMISSION IN THE SCHOOL SETTING

General Considerations:

SARS-CoV-2, the virus causing COVID-19, is primarily spread from person to person via droplet transmission. Thus, strategies to reduce infections are designed to protect against this mode of spread, including hand washing, physical (1-2 meter) distancing, face (nose, mouth and eyes) coverings, and disinfection. Furthermore, the interventions recommended below are most effective when observed altogether to optimize their cumulative benefits for infection prevention and control in the school setting. School authorities are expected to be models and examples of these health practices at all times.

Good Personal Hygiene

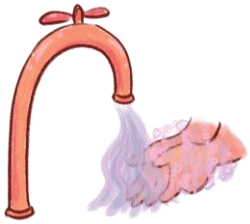
School administrators should promote, demonstrate, and monitor regular hand-washing and positive hygiene behavior. Information dissemination via regular announcements, posting easy-to-understand visual reminders in conspicuous places, encouraging good hand and respiratory hygiene practices, as well as providing information on COVID-19 and prevention of its transmission, should be done in a sustained manner. Spot checkers, i.e. designated personnel at critical locations, may call the attention of students and staff to remind them about hand and respiratory hygiene. Specific class sessions to orient and remind students and staff on infection control measures and good personal hygiene should be done frequently, including demonstrations and return demonstrations of proper procedures.

Note: Infection prevention and good hygiene should extend to the home. Parents should be informed of the practices used in the school and these should also be practiced at home.

Handwashing

- Ensure soap and clean water are available at easily accessible hand washing stations.
- Encourage frequent and thorough hand washing (at least 20 seconds).
- Provide alcohol-based hand sanitizers in toilets, classrooms, halls, and near entrances and exits, where possible.
- Ensure adequate, clean and separate toilets for girls and boys.

Suggested messaging to reinforce handwashing are the following: Wash your hands often, especially before and after eating; after blowing your nose, coughing, or sneezing; after going to the bathroom/ toilets/latrines, and whenever your hands are visibly dirty. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water, if hands are visibly dirty.



Cough etiquette

- Ensure that everyone covers their mouth and nose when they cough and sneeze, using a tissue, handkerchief, or one's inner elbow.
- Direct everyone to place used tissues straight into the garbage can. Bins should be provided in every classroom for used tissues, and should be emptied regularly (ideally, use hands-free covered bins).
- Avoid touching one's eyes, nose and mouth
- Always wash hands with soap and water, or use a hand sanitizer after coughing and/or sneezing.

Use of Masks

The use of masks is part of a comprehensive package of prevention and control measures that can limit the spread of certain respiratory viral diseases, including COVID-19. Masks can be used either for protection of healthy persons (worn to protect oneself when in contact with an infected individual) or for source control (worn by an infected individual to prevent onward transmission). Notwithstanding, the use of a mask alone is insufficient to provide an adequate level of protection or source control, and other personal and community level measures should also be adopted to suppress transmission of respiratory viruses. Whether or not masks are used, compliance with hand hygiene, physical distancing and other infection prevention and control (IPC) measures are critical to prevent human-to-human transmission of COVID-19.

Indirect evidence for the use of masks (medical or other) by healthy individuals in the wider community from evidence in studies studying household transmission suggest that such individuals would need to be in close proximity to an infected person in a household or at a mass gathering (where physical distancing cannot be achieved), to become infected with the virus.

Cloth face coverings are meant to protect other people in case the wearer is unknowingly infected but does not have symptoms. To some extent, they also protect the wearer's nose and mouth from inhaling virus from an infected person who might not be wearing a mask, or is too close physically. An (acrylic) eye shield protects the wearer from virus from infected people coughing or sneezing towards the wearer. For younger children who cannot tolerate wearing face masks, they may be exempt from doing so provided that physical distancing is observed.

- Masks should be worn at school by students and staff. Masks should also be worn when going outside the school and when riding public transportation. In addition, whenever possible, wearing of face shields should be encouraged to increase protection. Should teachers find it difficult to teach with a face covering, he/she may opt to use a face shield while the students in class maintain physical distancing and wear their own masks.
- Cloth face coverings may serve as substitutes for medical grade masks. Face coverings may be challenging for students (especially younger students) to wear in all-day settings such as schools. Face coverings should be worn by staff and students (particularly older students) as

feasible, and are most essential in times when physical distancing is difficult.

- Individuals should be frequently reminded not to touch the face covering and to wash their hands frequently especially before and after wearing a mask.
- Information should be provided to staff, students, and students' families on proper use, removal, and washing of cloth face coverings. Frequent demonstrations by teachers on proper donning and doffing of face masks would be useful.
- *Note:* Cloth face coverings should NOT be placed on:
    - Children younger than 2 years old
    - Anyone who has trouble breathing or is unconscious
    - Anyone who is incapacitated or otherwise unable to remove the cloth face covering without assistance

Screening Prior to Entry

Health screening (including temperature, symptoms, and exposure history) should be done daily for students and staff in schools that have re-opened. On the other hand, pre-testing (with either serology or PCR) of all children and staff prior to school reopening is not feasible nor recommended at this time, as the results of such tests only demonstrate if the person is infected at that specific moment of testing.

- Any child who has tested positive for SARS-CoV-2, or is experiencing symptoms (see Table 1), or has had close contact with a person who has tested positive or has COVID-19 symptoms, should stay home and not go to school at all. The school authorities, or teacher, are informed by the parent promptly, and medical care and advise is sought for the child though his/her physician. The same applies to teachers and other school staff.
- Parents/caregivers should be provided with a list of symptoms to check before sending their children to school. Prior to school entry, health and safety guidelines include temperature checks and reporting symptoms upon arrival at the school and before entering the classroom. Having students take their own temperatures may be considered in schools with enough equipment to do so, to reduce congestion at entryways.
- Staff should wear appropriate protective gear when taking students' temperature, such as face shields, masks and gloves, and clean thermometers after each use; these materials should be provided by the school or local health authorities.
- Avoid having large groups of students gather at the entrances or exits of the school premises; this may happen when screening is done in these areas. Staggering the time of the start and dismissal of classes of each group should be done.
- School policies regarding temperature screening must balance the practicality of performing these procedures for large numbers of students and staff, the risk of transmission in schools, and the possible lost instructional time when such screenings are conducted.

Physical Distancing

Physical distancing, sometimes referred to as social distancing, reduces the risk of droplet transmission.

- Class sizes should be reduced to accommodate seating students 1-2 meters apart. The group or class to which the student belongs to, serves as his/her cohort, and serves as a "bubble" to which they may have interactions and to which they have a traceable contact history, should the need arise. Classes may also be held at larger venues to accommodate spacing. Open-air venues have been found to entail a lower risk of infection transmission.
- Innovative scheduling, including staggering classes, so that students can come and leave the

school in batches, may decrease the number of exposures of one student to others, and properly enables the suggested physical distancing. Holding shorter face-to-face class durations (i.e. only in the morning, or only in the afternoon, or classes only on alternate days), complemented by online instructions, may be done to accommodate a smaller class size.

- If possible, a separate entrance and exit gate should be designated, with unidirectional paths clearly marked to minimize congestion/crossing of students, staff, and others.
- Parents and non-essential visitors should not be allowed within the school premises unless with special permission from a designated school authority.
- Whenever possible, avoid situations where long lines form, or encourage the appropriate 1-2 meter distancing between students, by placing markings on the floor. Minimize close student contact when outside of classrooms by putting signs and barriers for uni-directional hallways (e.g. put physical guides/tape, on floors or signages on sidewalks to create one-way routes).
- It is suggested that teachers be the ones to move between classrooms, instead of students, to reduce crowding and opportunities for conversation between students during classroom transfers.
- Students who may find it difficult to follow physical distancing instructions (i.e. younger children, children with cognitive disabilities) should not attend physical classes and should be accommodated via other means of instruction.
- There should be a minimum number of teachers and adults in staff rooms, where they should maintain the required 1-2 meter distance, and refrain from mingling with others for more than 15 minutes. Activities that involve mixing of classes and other large activities/gatherings should be avoided. Visitors should be discouraged; one parent/caregiver, per student, may accompany a child to school, as necessary.
- Physical distancing during travel to and from the school should also be maintained, as well as other health protocols relevant to transportation as formulated by authorities.

Mealtimes

It is of utmost importance to make students and teachers realize that the highest risk of infection will occur when people remove their masks and eye shields when it is time to eat. As such, meals are best taken alone, with no one beside and in front of anyone who is eating.

- Meals should preferably be done in the classroom to minimize movement and mixing.
- Each student should have his/her own utensils; utensils should not be shared.
- Meals and drinks should also not be shared. It is preferred that students bring their own food to school.
- The use of water fountains should be avoided to prevent cross-contamination.
- Food preparation and safety standards, as prescribed, should be adhered to.
- Conversation between students, while eating, should be totally avoided, while their masks are off.
- Mealtimes should be staggered to minimize interaction between groups. When meals are distributed, this may be done in the classroom; if a designated area i.e. a canteen is used, the use of the area should be limited to one group to avoid mixing of students.
- Acrylic barriers in the canteen tables may be installed, or an alternate seating arrangement can be designed, with markings on seats and tables, to minimize exposure of students when masks are removed while eating.

Ventilation

There is little evidence that ventilation directly reduces the risk of disease transmission, but many studies suggest that insufficient ventilation increases disease transmission. There is insufficient data to estimate the minimum ventilation requirements in schools, offices and other non-hospital buildings, to prevent the spread of airborne infection. Likewise, no technical specifications and standards for air-conditioning systems to reduce the risk of COVID-19 transmission in indoor spaces are available.

- Classrooms and other school rooms should be properly ventilated, and indoor air should have appropriate egress outdoors by opening windows and doors. Consider utilizing outdoor spaces whenever possible. Do not open windows and doors if doing so poses a safety or health risk (e.g., risk of falling debris, triggering asthma symptoms) for certain children using the facility.
- Guidance from the European Centers for Disease Control (ECDC) include: 1) maintenance of air-conditioning systems according to the manufacturer's current instructions, particularly in relation to the cleaning and changing of filters; 2) energy- saving settings, such as demand-controlled ventilation controlled by a timer or CO2 detectors, should be avoided; 3) direct air flow should be diverted away from groups of individuals to avoid pathogen dispersion and transmission from infected subjects; 4) avoid the use of air recirculation as much as possible.

Cleaning and Disinfection

- Daily cleaning of classrooms, as well as of libraries, cafeterias, toilets, pantries, gymnasiums, auditoriums, lockers, and other facilities in the school should be done.
- If possible, eliminate the need to use frequently-touched surfaces. For example, classroom doors can be left open rather than opening the door when entering and leaving.
- Clean and disinfect frequently touched surfaces, including desks, chairs, other furniture, commonly shared items, and the floor, at least, once daily or as often as possible; this may be done after classes are dismissed so that no students are exposed to disinfectant chemicals; students should NOT be handling disinfectants.
- For disinfection, diluted household bleach (mixing 1 part of household bleach containing 5.25% sodium hypochlorite with 99 parts of water) may be used; leave for 15-30 minutes,

rinse with water and wipe dry afterwards. For metallic surfaces, disinfect with 70% alcohol.

- Proper protective equipment should be worn by disinfecting staff.
- Standard precautions should be adopted when providing first aid to students who may become unwell while in class such as use of gloves and an apron when dealing with blood or body fluids/substances. If a child spreads droplets by sneezing or coughing, clean surfaces with disinfectant wipes immediately.
- Outdoor playgrounds/natural play areas only need routine maintenance, and hand hygiene should be emphasized before and after use of these areas. Play equipment with high-touch surfaces, such as railings, handles, etc., should be cleaned and disinfected regularly.
- Resources and equipment for regular cleaning and disinfection must be accessible to the appropriate staff.

Staff Training

- Develop detailed protocols on hygiene measures, including handwashing, respiratory etiquette, use of protective equipment, cleaning procedures for facilities and safe food preparation practices.
- Train administrative staff and teachers, on implementing physical distancing, screening, school hygiene practices, and increase staff at schools as needed. Teachers and school staff must serve as examples of best practices and must be consistent in observing and implementing infection control measures. A phased opening, wherein implementation problems are assessed and addressed, should be considered.
- Cleaning staff should also be trained on disinfection and equipped with personal protective equipment.

- Whenever feasible, it is encouraged that school personnel are also trained to do contact tracing in coordination with local health authorities, should the need arise.

Special Considerations for the Sick and Vulnerable

- Children with underlying medical conditions that render them vulnerable to infection and disease should not be allowed to attend face-to-face classes, at the present time. Consultation with a medical professional should be done, if the parents or teachers are unsure whether a child with a medical condition is considered vulnerable to COVID-19 or not, should he/she attend school.
- Teachers and staff who are 65 years of age or older, or those 60 to 64 years with underlying medical conditions, or are pregnant, are considered vulnerable and should not attend school.
- The presence of any signs or symptoms or significant exposure to a COVID-19 positive case should dictate that the student/staff not attend school to prevent spread to others.
- When a child is sick, the requirement for a doctor's note to allow return to class is deemed necessary, to reduce the possibility of the child leaving the home when he/she is symptomatic.
- Children or staff who develop symptoms (fever, cough or sore throat) while at school should be isolated in an appropriate area or school clinic with appropriate adult supervision, and collected by a parent as soon as possible.
- Proper education and information is necessary to remove stigma on those who were sick. They should be handled in a sensitive manner so that they do not feel "dirty".
- Creating clear and flexible policies on missing classes may remove the reluctance for taking a leave of absence for both students and staff, as well as enable continuing learning if the need for quarantine happens. Generous opportunities for making up for missed classes may also encourage students and staff to be more forthcoming with regards to screening for symptoms.
- All children and school staff are encouraged to remain updated with regard to their immunization requirements, especially with vaccines against outbreak-prone and respiratory diseases.

Testing, Contact Tracing, and Isolation

- Symptomatic students and staff should be tested for COVID-19 to facilitate contact tracing and quarantine of contacts. Schools must coordinate with the local government unit's Department of Health or city/town health personnel to have access to PCR testing and to initiate contact tracing by the concerned local authorities. Whenever possible, schools are encouraged to do their own contact tracing as regards potential exposures in the school setting.
- Schools should be prepared to follow public health guidance regarding exclusion and isolation protocols for sick children and staff identified at the time of arrival, or throughout the school day. In the event of a confirmed or suspected case of COVID-19 among students or staff, the school should have, in place, guidance on communication protocols, designated physical space for temporary isolation of the involved person prior to going home, and appropriate cleaning and contingency plans for closing classrooms or schools, based on identified cases and in compliance with public health guidelines.
- Return-to-school guidelines for students and staff should follow official policies of the Department of Health. Children and school staff who were previously sick and suspected or confirmed to have COVID-19 may be released from isolation and may return to school provided the following criteria are met:
    - Completed 14 days of isolation or quarantine, **AND**
    - 14 days have passed since the symptoms first appeared, with clinical recovery (afebrile for at least 3 days and without respiratory symptoms), **OR**
    - 14 days after a positive COVID-19 RT-PCR if with no symptoms, **OR**

- 14 days after the last exposure to a known case of COVID-19 case.

Note: Repeat COVID-19 testing is NOT routinely recommended to document recovery and should not be a requirement for school readmission.

Importance of Communication and Transparency

- School authorities must provide accurate, timely, scientific evidence-based information regularly to their staff, students, and parents. Education about the pandemic and infection control measures is essential to successful implementation of these strategies.
- School administrators should inform parents, staff, and local health facilities what measures are being taken by the school. Regular updates of these efforts should be done in a transparent and prompt manner.
- Provide age-appropriate information on COVID-19 and its prevention by hygiene, physical distancing, use of masks and other measures, via television or posters, as feasible based on the resources of the school.
- Communicate and monitor developments with local health authorities, employees, and families regarding cases, exposures, and updates to policies and procedures.

When to Consider Closing

While the decision to open classes is vested upon the Department of Education, school authorities should be empowered to decide if they should temporarily close their facilities, should the need arise, especially in the context of preventing further spread. Taiwan, for example, follows procedures that it used during the H1N1 influenza outbreak. If one or more students or staff in a class is confirmed to have COVID-19, that class is suspended for 14 days; in high school this applies to all classes the person attended. If two or more cases are confirmed in a school, the school is closed for 14 days. If one third of schools in a city or district are closed, then all schools must close. This example may be considered in coordination with national policies on school closures.

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