

Proposal to Expert Advisory Group.

The Expert Advisory Group notes although children can become infected with COVID-19 there is now a substantial body of evidence to support the following key points

1. Pre-school and primary school age children are less likely to become infected with SARS-CoV-2 than adults
2. Severe disease associated with COVID-19 in pre-school and primary school age children is exceptional
3. Primary school age children do not play a central role in transmission of COVID-19 to adults
4. Opening of schools is not associated with substantial acceleration of transmission of SARS-CoV-2

Background in relation to schools and:

- Recent population screening studies from Iceland (*Gudbjartsson DF, Helgason A, Jonsson H, Magnusson OT, Melsted P, Norddahl GL, et al. Spread of SARS-CoV-2 in the Icelandic Population. N Engl J Med. 2020; (April):14. PMID:32289214*) and Italy (*Lavezzo E, Franchin E, Ciavarella C, Cuomo-Dannenburg G, Barzon L, Del Vecchio C, et al. Suppression of COVID-10 outbreak in the municipality of Vo, Italy. medRxiv 2020.04.17.20053157; (Preprint). <https://doi.org/https://doi.org/10.1101/2020.04.17.20053157>*) identified very few cases of COVID-19 disease in children with PCR testing.
- A report on school-related transmission in New South Wales, Australia, examining the spread of SARS-CoV-2 from 18 confirmed cases (nine students and nine staff) from 15 schools identified only two potential cases of secondary school-based transmission, despite the identification of 863 close contacts (*National Centre for Immunisation Research and Surveillance (NCIRS). COVID-19 in schools – the experience in NSW. Westmead: NCIRS; 2020. Available from: http://ncirs.org.au/sites/default/files/2020-04/NCIRS%20NSW%20Schools%20COVID_Summary_FINAL%20public_26%20April%202020.pdf*.)
- In Ireland, three paediatric cases and three adult cases of COVID-19 with a history of school attendance, prior to their closure in March, were identified. A total of 1,155 contacts of these six cases were identified. They were exposed at school in the classroom, during sports lessons, music lessons and during choir practice for a religious ceremony, which involved a number of schools mixing in a church

environment. Among 1,001 child contacts of these six cases there were no confirmed cases of COVID-19. In the school setting, among 924 child contacts and 101 adult contacts identified, there were no confirmed cases of COVID-19 (*No evidence of secondary transmission of COVID-19 from children attending school in Ireland, 2020* L. Heavey, G. Casey, C. Kelly, D. Kelly, G. McDarby. *Eurosurveillance*, 25, 2000903 (2020))

- The Public Health Agency in Sweden wrote a report comparing the effects of school closures in Finland with their own approach, where primary schools remained open throughout the pandemic. The overall cumulative incidence among school-aged children in Finland and Sweden is similar, even though Finland closed schools for most children and Sweden did not. Sweden has been much more affected by the pandemic than Finland, but this does not show in the incidence among children. The authors concluded that ‘closure or not of schools had no measurable direct impact on the number of laboratory confirmed cases in school-aged children in Finland or Sweden. The negative effects of closing schools must be weighed against the positive indirect effects it might have on the mitigation of the covid-19 pandemic.’ (www.folkhalsomyndigheten.se/publicerat-material/ Public Health Agency of Sweden, Year 2020.)
- Another report from the Public Health Agency in Sweden examining occupational risk found that teachers and other schools staff did not have an increased risk of contracting COVID-19.
- *The role of children in the transmission of SARS-CoV-2. NED TIJDSCHR GENEESKD. 2020;164:D5140* Wim van der Hoek, Jantien A. Backer, Rogier Bodewes, Ingrid Friesema, Adam Meijer, Roan Pijnacker, Daphne F.M. Reukers, Chantal Reusken, Inge Roof, Nynke Rots, Margreet J.M. te Wierik, A.B. (Rianne) van Gageldonk-Lafeber, C.H.F.M. (Toos) Waegemaekers en Susan van den Hof. The researchers examined 369 persons aged 0-18 years with laboratory-confirmed COVID-19 were reported in the Netherlands. This is 0.9% of a total of 42,788 confirmed COVID-19 cases. They also examined 732 transmission pairs. Transmissions appear to take place mainly between people of about the same age, and to a lesser extent between parents and children (of all ages). The authors concluded that transmission mainly takes place between adult peers and from adult family members to children. Transmission

among children or of children to adults, as is known in influenza, seems to be less common.

- A study published by the Institut Pasteur ([*SARS-CoV-2 infection in primary schools in northern France: A retrospective cohort study in an area of high transmission*](#), June 23, 2020. Arnaud Fontanet, MD, DrPH^{1,2}, Rebecca Grant¹, Laura Tondeur, MSc¹, Yoann Madec, PhD¹, Ludivine Grzelak^{3,4,5}, Isabelle Cailleau, MSc⁶, Marie-Noëlle Ungeheuer, MD, PhD⁷, Charlotte Renaudat, MD⁷, Sandrine Fernandes Pellerin, PhD⁸, Lucie Kuhmel, MD⁹, Isabelle Staropoli³, François Anna¹⁰, Pierre Charneau^{10,11}, Caroline Demeret¹², Timothée Bruel, PhD³, Olivier Schwartz, PhD^{3,4,5,13}, Bruno Hoen, MD, PhD^{1,61} Emerging Diseases Epidemiology Unit, Institut Pasteur, Paris, France) describes an epidemiological survey in of 1,340 people linked to primary schools in Crépy-en-Valois, in the Oise department. 510 students from six primary schools were included in the study. There were three probable cases of SARS-CoV-2 infection in three different schools before the schools closed for the February vacation and then for the lockdown in Crépy-en-Valois. These cases did not give rise to secondary cases among other school students or teaching staff. The teachers were only marginally affected, with just 3/42 (7.1%) teachers infected in total, a similar figure to the number of parents of non-infected children in the study who were infected by the virus (6.9%). For non-teaching staff, the proportion of infection was 1/28 (3.6%). The rate of infection was very high among parents of infected children (61.0%), but just 6.9% among parents of non-infected children. The authors concluded that this suggests that the parents were the source of infection of their children in several cases.
- Brauner JM, Mindermann S, Sharma M, Stephenson AB, Gavenčiak T, Johnston D, et al. *The effectiveness and perceived burden of non-pharmaceutical interventions against COVID-19 transmission: a modelling study with 41 countries.* medRxiv. 2020:2020.05.28.20116129. The authors use models to suggest that school closure is the most effective non-pharmaceutical intervention. However, it might be a confounded finding as it was one of the first interventions in most countries, thus raising the awareness of the gravity of the situation, which would affect behaviour in general.

Measures taken (based on media reports):

- Schools in the Netherlands cut class sizes in half but didn't enforce distancing among students under age 12 when they reopened in April. The Netherlands recently announced that anyone under age 17 does not need to distance.
- Denmark assigned children to small groups that could congregate at recess.
- Some classes in Belgium met in churches to keep students spread out.
- Finland has kept normal class sizes, but prevents classes from mixing with one another. Mask use not enforced.
- Sweden had an optional mask policy.
- Although French preschoolers were photographed sitting inside their own recess squares in May, day cares there have now abandoned all distancing rules for children ages 5 and under. Older students are advised to stay at least 1 meter away from others while inside. But outside they can play freely with others in their class.
- In some schools in Germany, students wear them in hallways or bathrooms, but can remove them when seated at their (distantly spaced) desks. Austria reopened with this approach, but abandoned masks for students a few weeks later, when officials observed little spread within schools

In this context EAG has reviewed the document "COVID-19 Interim Recommendations for the reopening of schools and educational facilities".

EAG broadly supports the content of the advice given by the HPSC but recommends the following amendments to the document in view of emerging experience and consensus of expert opinion.

Item 1. Page 6 Key Points bullet point 3

Current text

"Social (Physical) distancing, hand hygiene and good respiratory etiquette should be observed by all (children, teachers, parents and visitors)."

Proposed amendment.

Hand hygiene and good respiratory etiquette should be observed by all (children, teachers, parents and visitors). The principles of social (physical) distancing should be applied to the greatest extent that is practical in a manner that is appropriate to the age group and context. In particular adults should (staff and parents) should model a high level of adherence to social distancing.

Item 2. Page 8 heading General Recommendations

Current text

*“Managing risk of spread if introduced by the following
Regular hand hygiene
Maintaining physical distancing
Application of respiratory hygiene and cough etiquette
Environmental hygiene”*

Proposed amendment

Managing risk of spread if introduced by the following

Regular hand hygiene

The principles of social (physical) distancing to the greatest extent that is practical in a manner that is appropriate to the age group and context in particular noting that young children cannot be expected to comply with social distancing.

Application of respiratory hygiene and cough etiquette

Environmental hygiene

Item 3 Page 14 Sub-heading “Primary level”

Current text.

“A distance of 1 metre should be maintained between desks or between individual pupils. It is recognized that younger children are unlikely to maintain physical distancing indoors. Therefore, achieving this recommendation in the first 4 years of primary school, is not a prerequisite to reopening a primary school for all pupils.

- Where possible, work-stations should be allocated consistently to the same staff and children rather than having spaces that are shared.*
- The risk of spread of infection may be reduced by structuring pupils and their teachers into Class Bubbles (i.e. a class grouping which stays apart from other classes as much as possible) and discrete groups or ‘Pods’ within those class bubbles, to the extent that this is practical.*
- If a class is divided into Pods, there should be at least [1m distance] between individual Pods within the Class Bubble and between individuals in the pod, whenever possible.*
- Generally speaking the objective is to limit contact and sharing of common facilities between people in different Class Bubbles (and Pods within those Class Bubbles) as much as possible, rather than to avoid all contact between Pods, as the latter will not always be possible.*
- The aim of the system within the school, is that each class grouping mix only with their own class from arrival at school in the morning until departure at the end of the school day. The Pods within those Class Bubbles is an additional measure, to limit the extent of close contact within the Class Bubble.*
- Pod sizes should be kept as small as is likely to be reasonably practical in the specific classroom context.*
- To the greatest extent possible, pupils and teaching staff should consistently be in the same Class Bubbles although this will not be possible at all times.*
- Different Class Bubbles should where possible have separate breaks and meal times or separate areas at break or meal times [or this could be different class years i.e. 2nd class, 3rd class etc.].*
- Sharing educational material between Pods should be avoided/minimised where possible.*

- *Staff members who move from class bubble to class bubble should be limited as much as possible”*

Proposed amendment.

- Where possible, work-stations should be allocated consistently to the same staff and children (or groups of children) rather than having spaces that are rotated.
- The risk of spread of infection may be reduced by structuring pupils and their teachers into Class Rooms (that is a group assigned to a room) which stays apart from other class rooms as much as possible).
- The aim of the class room system within the school, is that to the greatest extent practical students in each class room mix only with other students in their own class room group from arrival at school in the morning until departure at the end of the school day.
- To the greatest extent practical, pupils and teaching staff should consistently be in the same Class Rooms groups although this will not be possible at all times.
- Different Class Rooms should where possible have separate breaks and meal times or separate areas at break or meal times particularly when indoors.
- Where it is practical to do so the Class Room may be structured into semi-discrete groups or ‘Pods’ within those class room (for example if the room contains 3 and 4 class students it may be possible to have 3rd class and 4th class pods)
- The aim of the Pods within Class Rooms is an additional measure, to limit the extent of close contact between semi-discrete groups within the Class Room.
- Pod sizes should be kept as small as is likely to be reasonably practical in the specific classroom context.
- While a distance of 1 metre should be maintained between desks where practical it is recognized that younger children are unlikely to maintain physical distancing indoors. Therefore, achieving this recommendation in primary schools is not a prerequisite to reopening a primary school for all pupils.
- If it is practical to divide the class room into Pods, there should be a 1m distance between the seating for individual Pods within the class room where practical
- Generally speaking the objective of is to limit contact and sharing of common facilities between people in different pods as much as is reasonably practical.
- Sharing educational material between Pods should be minimised.
- Staff members or school inspectors who move from class room to class room should be limited as much as practical and/or should maintain distance from the teachers, teaching assistants and students within the class room.

Item 4 Page 15 Sub-heading “Physical distancing outside fo the classroom and within the school”

Current text

Arrangements for dropping off / picking up children:

- *Students should maintain 2 metres physical distance as much as possible.*
- *Walking/Cycling to school should be encouraged as much as possible.*
- *These should be organised to maintain a distance of 2 metres between parents and guardians and between parents and guardians and the school staff.*

- *The aim is to avoid congregation of people at school gates where physical distancing requirements are not respected.*

- *Some approaches that that may be considered include the following:*
 - *Staggered drop off/pick up times where practical/feasible, so that not all children arrive onsite at one time.*
 - *If the school has additional access points, consideration may be given to whether it would be beneficial to open these to reduce congestion.*
 - *Consideration may be given to where children go as they arrive at the facility. This could include heading straight to their small group's designated learning space/classroom.*
 - *For those arriving by car, parents may be encouraged to park further away from the school and then walk with their children to avoid congestion, or alternatively use active travel routes where feasible.*
 - *Where learning spaces can be accessed directly from outside, this should be encouraged to decrease interactions between individuals in circulation space*

Proposed amendment.

Arrangements for dropping off / picking up children:

- Parents and post primary level students should avoid contact and maintain 2 metres physical distance as much as possible. Distancing at dropping off or picking up among the primary school children is not required.

- Walking/Cycling to school should be encouraged as much as possible.

- These should be organised to maintain a distance of 2 metres between parents and guardians and between parents and guardians and the school staff.

- The aim is to avoid congregation of adults and older children at school gates by ensuring that physical distancing requirements are respected.

- Some approaches that that may be considered include the following:

- Planning and coordination of times for drop off/pick up times so that not all children arrive onsite at one time. In particular alighting from and boarding busses needs to be planned and organized to avoid physical contact to the greatest degree practical.

- If the school has additional access points, consideration may be given to whether it would be beneficial to open these to reduce congestion.

- Consideration may be given to where children go as they arrive at the facility. This could include staying outdoors (weather permitting) or heading straight to their class room designated learning space/classroom.

- For those arriving by car, parents may be encouraged to park further away from the school and then walk with their children to avoid congestion, or alternatively use active travel routes where feasible. Students and accompanying adults using public transport should follow current guidance for minimising risk of exposure to COVID-19 on public transport.

- Where learning spaces can be accessed directly from outside, this should be encouraged to decrease interactions between individuals in circulation space.

- When engaged in outdoor play or sporting activities distancing between those involved in the group activity is not required in primary or post-primary level. At secondary level those watching the activity should avoid contact and observe social distancing.

Proposed by

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