



First Statement of ASPHER on COVID-19 and its Impacts on Children During and After the Pandemic



July 2020



authors:

Séverine Deguen Email: severine.deguen@ehesp.fr

John Reid Email: john.reid@chester.ac.uk

Melissa Sawaya Email: melissa.sawaya@eleve.ehesp.fr

John Middleton ASPHER President Email: john.middleton@aspher.org

COVID-19 – How, why, and for how long will children be affected by the COVID-19 pandemic and what are the solutions to mitigate these consequences, particularly on education and schooling

A-Brief epidemiologic evidence on COVID-19 among children population

1- Transmission and circulation of the virus

Similar to adults, it is a human-to-human transmission (sneezing and coughing by generating droplets and respiratory secretions in the air), and direct contact with surfaces that are already contaminated with the virus (Guo et al, 2020). In comparison to general population, only a few studies documented the attack rate value among children. While a study conducted in China (Bi Q et al, 2020) revealed that the level of infectivity among children less than 10 years is comparable to the one measured among general population (about 7%), in Iceland a study found that the rate is twice more for children >10 years compared to <10 years (13.7% vs 6.7%) (Gudbjartsson DF et al; 2020).

2 - Most frequently reported symptoms and severity of infection

The median age was 6.5 years (range 0-12) with no difference between boys and girls (Selim L. et al, 2020). Children represented about 1% to 5% of the total number of confirmed COVID-19 cases and were usually mildly affected:

From a systematic review, eleven studies were analysed in term of symptoms most frequently reported among children and neonates aged between 0 and 12 years old. Most of them presented with cough (49%), fever (47%) and sore throat (36%). Other symptoms less frequently reported were gastrointestinal (17%), rhinorrhoea (9%) or fatigue and sneezing (very few) (Selim L. et al, 2020).

Children younger than 18 years made up about 1.7% of the total cases in USA, 1% in the Netherlands and 2% in UK (Ludvigsson, 2020). About 60% of children admitted to hospital had a Pneumonia (Selim L. et al, 2020). Intensive care unit admission and death are extremely rare among children (Selim L. et al, 2020). According to WHO, there has been an increase in ICU admission of children due to an inflammatory condition that overlaps with COVID-19. This apparently, limits the body's ability to reduce inflammatory process. In France, 144 cases in children between the age of 4 and 20 were reported with atypical paediatric inflammatory diseases (Chadwick L., 2020).

B- COVID-19 lockdown and its impact on children in terms of inequalities

The low rate of infection among children reflects a lower susceptibility to contracting the disease as compared to adults, or might also be due to children being much less symptomatic. However, while the effects of COVID-19 on children appear much less significant in the short term as compared to adults, these effects might prove to be more significant in the long term.

The current pandemic crisis highlights the inequalities that various age groups face – urgent matters that must be addressed in order to ensure more equal health and education for all children.

Expanding the learning: Much of the debate has been about contraction of opportunity and social and physical restrictions. ASPHER would promote a new 'expansionary' way of looking at how to respond to the pandemic from the adverse experiences from the first wave. Children who suffer from vulnerability, disadvantages and inequalities need special attention to catch up and progress well during the rest of the pandemic. ASPHER would recommend that extra resources are made available quickly to respond comprehensively in all deprived areas and for all vulnerable groups of children. Such strategic solutions should be developed by school staff and linked to teacher and parent representatives, and where possible student representatives.

- **Expanding teaching spaces**: Schools should enable maximum attendance by maximising available teaching accommodation through school layout redesign, additional temporary accommodation and use of local community building assets.
- **Expanding teaching time**: Schools can seek flexible use of the timetable so that physical distancing can be maintained for students and staff. This should also consider extra investment over the summer school holiday period for paid volunteer teaching input for vulnerable children.
- Expanding opportunity to learn better: More intensive investment of time and resources should be allocated to those who have fallen behind during lockdown. Tackling the digital divide in each school population is essential. There is a big opportunity now also to promote wider health literacy and engagement with disadvantaged children and their parents using inclusive practices.

Types of issues children encounter with the suspension of schooling or home schooling:

- 1. Learning difficulties and inequalities: weak student-teacher interaction, inadequate internet connectivity, computer unavailability, unfamiliarity of teachers with online teaching tools, lack of social and intercultural learning, and lack of support for children with special education needs. Schools are much more than a place for the transmission of knowledge. The etymological genesis of a school (from the Greek SCHOOLÉ) comes from the concept of conviviality and recreation. Schools have a substantial socialisation function and function as community resources. Schools contribute substantially to the physical, intellectual and social growth of the child to adulthood. This horizontal relationship between students, and vertical relationship with teachers has an equally important role in the formation of the future adult than the school content itself. There are risks to the learning ability of children and to the development of their personalities by being out of school, by being only involved in classes by tele-work, and in enforced physical separation from other children.
- 2. **Mental and Physical health issues**: Lack of family support in terms of food due to an increase in unemployment rates in all sectors, child safety (abuse, violence, anxiety, depression), vaccine campaign interruption, lack of physical inactivity, and absence of school meals.

The effects of COVID-19 both in the short and long term on children's education, mental and physical health will need particular caution for the next couple of years:

- 1. **Short-term impact**: For starters, there will be an increase in the percentage of malnutrition (over nutrition and undernutrition). In addition, and in terms of education the probability of failing will certainly increase and students are more prone to drop out of school, especially if they are living in vulnerable household (SES, unemployment).
- 2. Long-term impact: The Increase in poverty is one of the most unfortunate long-term consequences the world is witnessing, along with the resurgence of vaccine-preventable diseases such as measles and mumps. Not to mention, the mental health disorders that are going to arise due to this pandemic such as PTSD, anxiety and depression among children. In addition, with the decrease in number of students going to universities, the country will inevitably face long-term economic difficulties. Finally, and due to the interruption of education for children with special needs it will extremely difficult to make up for lost time which might limit future knowledge acquisition.

C- Post-lockdown; Reopening of the schools

Reasons for reopening of schools

Not only do schools offer education, but they also provide social protection, nutrition, immunization, health and emotional support that are a life security for children. Therefore, prolonged closure and social isolation can both have severe long-term consequences on children in terms of learning ability, social interaction, as well as mental and physical health.

Reopening schools as safely as possible, in compliance with each country's COVID-19 health response, is thus in the best interest of children given that practical protective measures are taken to ensure the safety of students, staff, and their families.

Protective measures that must be taken for reopening the schools

Safety Actions

- a. Promote healthy hygiene practices by teaching and reinforcing hand washing, covering coughs and sneezes, and avoid face touching.
- b. Placing adequate supplies of gel dispensers in toilets, classroom, and at the entrance as well as the exit of the school.
- c. Providing adequate supply of masks for adults (teachers, staff, parents) and for students (only masks should be used and communication of the mask should be adapted to the pedagogical need of age group https://www.aspher.org/mask-use-children.html)
- d. Sanitize and disinfect frequently touched surfaces such as toilets, equipment, and door handles.
- e. Regular and proper hand washing with soap and water in wash basins, with disposable paper towels for drying as well as correct application of disinfectants.
- f. Adequate ventilator functioning and increase of outdoor air circulation as much as possible.

Promote physical distancing

- a. Distribution and alternation of children's' drop off times with the teachers to limit close contact with the parents and prevent crowding of school entrances.
- b. Ensure a minimum of one meter between classroom tables, and similarly ensure a safe arrangement of dining places in the canteens.
- c. Creation of small groups, composed if possible of the same children and keep the same teacher/teaching assistants with the same group.
- d. Limit gatherings, events, and extracurricular activities to those that can maintain social distancing and find alternatives to balance the pedagogic needs of children.
- e. Barrier gesture training for teachers and staff in order to communicate it with repeated explanations to children.
- f. Introduce pedagogical practices that, even at a distance to maintain the sense of Social Being, a common belonging to avoid future traces of social isolation. In order to compensate for this momentary failure, they can address the concern for a more balanced nature, more just societies, and respect one another
- g. Consider routes to school and local transport arrangements to support physical distancing and limit risks in commuting to school.

Monitoring and Preparing

- a. Advise about daily health check-ups (temperature and symptoms) for both children and staff prior to their arrival to school in order to prevent transmitting the virus to healthy individuals.
- b. If staff or children are feeling sick or someone in their household does, encourage them to stay at home in line with each country's self-isolation and testing policies.

Plan for when someone becomes sick

- a. Separate anyone with suspected COVID-19 in a defined area, then safely ask parents to transport them back to their home (or direct to a nearby hospital only if urgently and severely ill), and notify local health officials, staff, and families immediately with due confidentiality.
- b. Close an area that has been presumed contaminated with COVID-19 for the rest of the day, and then disinfect it properly before reopening to reduce the risk of transmission.

Social measures

a. Tackle social stigma and discriminatory behaviour by teaching kids about misconception, rumours, misinformation, and do's and don'ts on their language regarding the COVID-19 situation.

Table 1: Country examples of re-opening approaches in Europe.

- b. Help children adapt and fully engage to this new learning environment, and manage any overwhelming feelings by providing clear factual information and help them process and regulate all these emotions when it comes to COVID-19.
- c. Normalize messages about fear, anxiety and self-care strategies not only for students and their families but also for teachers and other school staff.
- d. Attention may be needed to limit particular activities such as singing, shouting, playing wind instruments that could spread respiratory viruses.

Different measures in different European countries

In brief, Denmark, Poland, and France for instance, are reopening schools for younger children since they require constant supervision from parents who are still working from home. In addition, it seems that adolescents adapted more easily to online learning during confinement thus giving priority to younger children. Whereas, Austria and Greece are reopening schools for the adolescents because they comprehend better the situation and can comply more easily with rules on masks and social distancing better than younger children.

Countries	School level
Germany	 Step-by step reopening of schools depending on levels; different solutions in federal states
France	-Nursery and primary school opened on 15 May. -Secondary schools on May 18 & High school beginning of June
Nether-lands	-Primary school -Secondary schools and universities won't open until June.
Denmark	-Day care centres and primary schools returned on April 14 -Secondary schools and exam students returned on May 18
Austria& Greece	-Only Final year students returned to school
Italy & Ireland	-Schools will be closed until September
UK	-Primary School (year 1 and 6) in June and later the other levels. -Secondary levels (year 10&12) since they have exams.
Portugal	 -11th and 12th (national examination) opened on May 18 in - 1st of June for kindergarten.

Table 1 Reopening of school level in different European countries.

D- Solutions to Ameliorate the Current Situation:

Given that inequalities are grounded in children from their early stages of development, this in turn reinforces the need for public health to keep fighting against these inequalities (Marmot report: WHO report). Therefore, what can be done now to improve the situation and not to let it deteriorate much more?

- a. Food Support: School is one of the most important places for the nutrition of children, therefore finding alternatives in order to secure an adequate supply of food is necessary such as free meal distribution, community contribution for buying healthy food for those in need, and if possible open school canteen for children's families which in fact has less social exposure than regular support centres.
- b. Tackling the digital divide in schooling: Network and equipment sharing: Major inequalities experienced during this pandemic were related to technology. For starters, digital integration is as important as having access to water and electricity, therefore urgent solutions must be created for students to facilitate internet access as well as interface devices. Borrowing old computers from companies and distributing them to students might help alleviate the problem. Another example could be the development of a new APP for tablet sharing, creating innovative ways for achieving learning skills, mental health support to parents and students, continuous contact of teachers and parents, and developing original approach: local network to help children. Finally, use of alternative sources of media such as podcast, radio, and television might also help in the learning process.
- c. The role of Schools of Public Health in Europe: For starters, and most importantly, by integrating learning from the current COVID-19 pandemic with in depth training in all modules (epidemiology, biostatistics, infectious diseases, Social sciences) to better comprehend this crisis's impacts among children. On a research level, develop studies on children and implement new prevention programs in order to improve their quality of life. Finally, and most importantly educating future teachers, especially those who want to become primary and secondary teachers, on safety measures in order to prevent the emergence of the virus again.
- d. *Involving children in decision making:* There's a new reality that children are going to be faced with after this pandemic, therefore it is imperative to engage children in the response and recovery decisions and the fight against COVID-19. Children should be an essential asset in promoting health within their society through integrating health related topics into various school subjects. For example, in science they can cover the study of viruses and mode of transmission and how to control and prevent it from spreading. In social studies, they can cover the history of the pandemic, the secondary effects and how they can contribute to the eradication of COVID-19 or any other infectious diseases (flu, enteric viruses, etc...).

Countries	Safety Actions	Social distance
Germany	Various measures according to regulations adopted by the ministries of federal states such as: -Mandatory to wear masks when entering and leaving the school campus. -Frequent hand washing	Various measures in Federal states and based on head masters' decisions such as: -Student group sizes are halved and are taught on different days. Being taught directly half-time is balanced with using directed learning tasks.
France	 Mask are compulsory for children older than 12 as well as teachers. Frequent hand washing and use of sanitizers. 	-10 students in preschool and 15 in primary level per class.
Nether- lands	 Some wear masks and others are using plastic shields on desks Hand-sanitising facilities and frequent hand washing 	 -school class and time cut in half (long distance learning Is still being practiced) -Desks are moved further apart -Markings are being taped on the floor. -Children (13 to 18 years) are allowed to practice sports supervised with 1.5 meters apart
Denmark	-Using outdoors for teaching -Frequent hand Washing	 -Each desk is 2 meters apart. -A max of 10 children are allowed per class and are supervised by one teacher. -Same group of children can have lunch and playtime together
UK	 -Frequent hand washing. -Ensure clean surfaces where children touch. -One-way circulation & outdoor teaching 	 -No more than 15 students per class with one teacher. -Tables or seating positions should be 2 meters apart.
Portugal	 Prior testing (kindergarten, workers) depending on the municipality. Disinfection of schools by army or trained workers. 	- Half students per room. -Distance between tables

Table 2 Country examples of distancing measures in schools in Europe

Special situations:

a. Outbreaks in Schools

-Each school should be encouraged to report possible outbreaks to their local public health service for early investigation and support.

-Particular care should be taken where there are students with long-term physical underlying conditions that may make COVID-19 more severe.

-Residential schools will need strong surveillance attention and early support.

b. Responding to local lockdown scenarios.

Schools in more deprived areas are more likely to be affected by localised lockdowns given the links to deprivation and health inequalities. There should be close links with each local education department and local public health department to assess if the local schools need to be closed or restricted in their opening or procedures during local outbreaks. School nurses or other public health professionals should be actively involved in supporting the school teachers and children. Additional procedures, like masks and extra distancing might be needed. Schools should be encouraged to support local investigations, contact-tracing, and testing, in a child-friendly and safe way with full engagement of parent and school governors. Any vulnerable children who would be further disadvantaged by the digital divide should be given full access to teacher time, ITC equipment and internet connectivity to better enable learning. Disadvantaged schoolchildren's access to food and other types of material support should not be worsened.

c. Safeguarding Children

Schools have safeguarding responsibilities and in each local area the mix of risks may be different. Schools should be alert to any possible worsening of risks during the pandemic and have strong systems for identifying and responding to support children and families. Further training of teaching staff in assessment of pandemic psychological impacts and in early psychological interventions, should be considered.

Physical and emotional maltreatment
Gender- based violence
Mental health and psychosocial distress
Child labour
Unaccompanied and separated children
Social exclusion

SOLUTIONS TO HELP AMELIORATE INEQUALITIES AMONG CHILDREN CAUSED BY COVID-19

FOOD SUPPORT

- Community contribution to buy and distribute food for those in need.
- Reopening of school canteens to provide necessary food for children and their families.



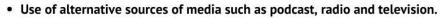


ADEQUATE TRAINING FOR BETTER ONLINE LEARNING

- Nationwide training programs for teacher, parents and students.
- Grouping teachers with the same subject to share content and strategies.
- Assisting parents in developing a particular routine for their daily studies with their children.

NETWORK & EQUIPMENT SHARING

- Borrowing old computers from companies and distributing them to students.
- Development of a new APP for tablet sharing, creating innovative ways for achieving learning skills, promoting mental health support to parents and students, continuous contact of teachers and parents.





INVOLVING CHILDREN IN DECISION MAKING



- Children can be an essential asset in promoting health into their society through integrating health related topics into various school subjects.
- In science: study the cycle of the virus, its mode of transmission, how to control and prevent it from spreading.
- In social studies: study the pandemic history, the secondary effects and how to contribute to its eradication or other infectious diseases (Flu, enteric, viruses, etc...).

THE ROLE OF THE SCHOOL OF PUBLIC HEALTH

- Integrating COVID-19 pandemic with in-depth training in all modules (epidemiology, biostats, infectious diseases, social sciences) to better comprehend this crisis.
- Educating teachers, especially those who want to become primary and secondary teachers on safety measures in order to prevent the re-emergence of the virus.







MANDATORY PROTECTIVE MEASURES FOR SCHOOL REOPENING



Safety Actions

Promote healthy hygiene practices by teaching and reinforcing hand washing, covering coughs and sneezes, and avoid face touching.

Place supplies of gel dispensers in toilets, classroom and at the school's entrance/exit.

Sanitize and disinfect frequently touched surfaces such as toilets, and door handles.

Adequate ventilator functioning and increase of outdoor air circulation.

Provide adequate supply of masks for teachers, staff, and students.



Limit gatherings, events, and activities while finding alternatives to balance children's pedagogic needs.

Barrier gesture training for teachers and staff to communicate, with repeated explanations to children.

Consider routes to school and local transport arrangements to limit risks in commuting to school.

Create small groups of the same children and keep the same assigned teacher with the same group.

Ensure a minimum of one meter between classroom tables.





Help children adapt to this new learning environment and manage any overwhelming feelings by providing clear factual information about COVID.

Attention needed to limit particular activities such as singing, shouting, playing wind instruments that could spread respiratory viruses.

Tackle social stigma and discriminatory behavior by teaching kids about misconception, rumors, and misinformation

Normalize messages about fear, anxiety and self-care strategies for students and teachers.



Monitoring

Advise **daily check ups** prior to arriving to school

Advise to **stay at home** if the individual or any of their family members is sick

If Someone gets sick

Separate them in a defined area, ask parents to **transport them** back home or send them to a nearby hospital if severely ill.

Immediately notify local health officials, staff, and families with due confidentiality.

Close the contaminated area for the rest of the day and properly **disinfect** it before reopening.





References:

- 1- Selim L. et al. (2020), Characterisation of COVID-19 Pandemic in Paediatric Age Group: A T Systematic Review and Meta-Analysis.
- 2- Guo Y. et al. (2020), The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak an update on the status.
- 3- Henrik Salje, Cécile Tran Kiem, Noémie Lefrancq, Noémie Courtejoie, Paolo Bosetti, et al.. Estimating the burden of SARS-CoV-2 in France. 2020. ffpasteur-02548181f
- 4- Lauren Chadwick (2020), Explained: Inflammatory syndrome in children possibly linked to COVID-19 Euronews. Add full reference
- 5- Bi Q, Wu Y, Mei S, Ye C, Zou X, Zhang Z, et al. Epidemiology and Transmission of COVID-19 in Shenzhen China: Analysis of 391 cases and 1,286 of their close contacts. Infectious Diseases (except HIV/AIDS); 2020.https://doi.org/10.1101/2020.03.03.20028423.
- 6- Gudbjartsson DF, Helgason A, Jonsson H, Magnusson OT, Melsted P, Norddahl GL, et al. Spread of SARS-CoV-2 inthe Icelandic Population. N Engl J Med 2020
- 7- Xu Y, Li X, Zhu B, Liang H, Fang C, Gong Y, et al. Characteristics of pediatric SARS-CoV-2 infection and potential evidence for persistent fecal viral shedding. Nat Med 2020;26:502–5.
- 8- Ludvigsson. Systematic review of COVID-19 in children show milder cases and a better prognosis than adults. ActaPaediatr 2020. <u>https://doi.org/10.1111/apa.15270</u>
- 9- Interim Guidance for Administrators of US K-12 Schools and Child Care Programs: <u>https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/guidance-for-schools.html</u>
- 10- Guidance for Child Care Programs that Remain Open (April, 2020) <u>https://www.cdc.gov/</u> <u>coronavirus/2019-ncov/community/schools-childcare/guidance-for-childcare.html</u>
- 11- Actions for education and childcare settings to prepare for wider opening from 1 June 2020 <u>https://www.gov.uk/government/publications/actions-for-educational-and-childcare-settings-</u> <u>to-prepare-for-wider-opening-from-1-june-2020/actions-for-education-and-childcare-settings-</u> <u>to-prepare-for-wider-opening-from-1-june-2020</u>
- 12- COVID-19: IFRC, UNICEF and WHO issue guidance to protect children and support safe school operations. (March, 2020) <u>https://www.who.int/news-room/detail/10-03-2020-covid-19-ifrc-unicef-and-who-issue-guidance-to-protect-children-and-support-safe-school-operations</u>
- 13- Don't let children be the hidden victims of COVID-19 pandemic (April, 2020) https://www.unicef.org/ press-releases/dont-let-children-be-hidden-victims-covid-19-pandemic
- 14- <u>The Alliance for Child Protection in Humanitarian Action: Technical Note: Protection of Children</u> <u>during the Coronavirus Pandemic (v.1) UNICEF 2020.</u> <u>https://www.unicef.org/media/65991/file/Technical%20note:%20Protection%20of%20children</u> <u>%20during%20the%20coronavirus%20disease%202019%20(COVID-19)%20pandemic.pdf</u>
- 15- <u>https://www.unicef.org/reports/key-messages-and-actions-coronavirus-disease-covid-19-</u> prevention-and-control-schools
- 16- Rafanelli, A. (2020, May 5). Covid-19 Exposes Digital Divide in Healthcare. *Direct Relief*. <u>https://www.directrelief.org/2020/05/covid-19-exposes-digital-divide-in-healthcare/</u>
- 17- https://cs.unu.edu/news/news/digital-divide-covid-19.html
- 18- https://www.aspher.org/mask-use-children.html
- 19- Jiao W. et al, (June, 2020), *Behavioral and Emotional Disorders in Children during the COVID-19 Epidemic*. <u>https://www.jpeds.com/article/S0022-3476(20)30336-X/pdf</u>