## Fourteenth Meeting of the Technical Advisory Group (TAG) of Experts on Educational Institutions and COVID-19
### October 21st, 2021 13:00-14:30

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<th>Time</th>
<th>Session</th>
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<td>Welcome</td>
<td>Reminder and Update on Action points agreed from 13th TAG – UNESCO on behalf of the co-chairs</td>
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<td>Adoption of agenda</td>
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<td>13:05– 13:10</td>
<td>Declarations of Interest – WHO</td>
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<td>13:10 – 13:50</td>
<td>Proper masking and its effectiveness as a mitigation strategy to prevent secondary transmission in schools</td>
<td>Presentation by Danny Benjamin, MD MPH Ph.D. and Kanecia Obie Zimmerman, MD MPH, Duke University School of Medicine, USA</td>
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<td>Brief update on the process to update the Advice on the use of masks for children in the community in the context of COVID-19</td>
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<td>13:50  -14:15</td>
<td>Update from the 3rd round of the survey (UNESCO/WB/UNICEF/OECD)</td>
<td>Presentation by UNESCO-UIS (TBC)</td>
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<td>14:15- 14:25</td>
<td>Update on the one stop-shop website on COVID-19 and educational institutions</td>
<td>By Fiona Russell, Murdoch Children's Research Institute and Anne-marie Labouche, WHO</td>
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<td>14:25 – 14:30</td>
<td>Wrap up and reminder of date of next meeting (16 December, from 1pm to 2:30pm CET, TBC)</td>
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1. Reminder and Update on Action points agreed from 13th TAG

- One action item highlighted during the last TAG meeting relates to testing issues: It has been referred to a newly established working group (WG) that was also agreed and which met yesterday for the first time. The primary aim of this WG is to consider the update of the Inter-agency steering committee interim guidance on COVID and Schools, with a timeline for the work briefly shared. That same WG will also be asked to consider other options around testing issues.

2. Approval of the agenda

- Agenda approved.

3. Proper masking and its effectiveness as a mitigation strategy to prevent secondary transmission in schools

Presentation by Danny Benjamin, MD MPH Ph.D. and Kanecia Obie Zimmerman, MD MPH, Duke University School of Medicine, USA (see slides/presentation)

- Presentation on universal masking as a mitigation strategy to prevent spread of SARS-CoV-2 in K-12 schools

- As schools have developed very different versions of quarantine and different versions of who is a close contact, they were faced with the following:

  - In 2020 (based in part on the CDC’s use of 6 feet; and our desire to compare ourselves to other countries), we started to publish and emphasize a co-primary endpoint: the ratio of:

    - Primary infections (acquired outside of schools) to
    - Secondary infections (acquired at school)

  - The ratio of primary to secondary infections accounts for very common differences
    - In sample size (school districts of 500,000, 164,000, 1,700 students, single schools, etc.
    - In community rates of <50/100,000/7 days to >1,000/100,000/7days
    - In quarantine practices

  - The ratio of primary to secondary infections has been
    - ~20 for ancestral variant if universal masking,
    - ~10-15 for delta variant if universal masking (>10 is “success”)
    - ~5 if “voluntary” masking
Data show that schools without mask requirements were 3.5 X more likely to have COVID-19 outbreaks compared with schools that started the year with mask requirements.

The Delta variant spreads easily in indoor spaces when people are unmasked and unvaccinated.

- **Interpretation of results:**
  - Masking with >90% fidelity (mask over nose, mouth and chin at all times except eating and drinking), substantially reduces within school transmissions of COVID-19.
  - Masking is the central intervention in school communities that want to minimize COVID-19 spread, AND
  - Large investments in ventilation, testing, and distancing were not seen to be financially feasible in many contexts, and in the study presented, not supported by the community
  - Vaccination is either often unavailable, or there is low uptake by the community
  - Masking is an important intervention in any school community that wants to minimize COVID-19 spread that has a mix of vaccination rates, testing, and other mitigation strategies in place.

- **Discussion:**

**Question 1:** How can you ensure to monitor the consistency of mask wearing across the studied school districts? Are the children putting on their mask properly? What about the hand hygiene measures?

**Response:** We have had very close interactions with the school districts. Several districts made an investigation of how well people were actually masking. They monitored about 20% of the population every day, to see whether or not people wore their mask appropriately. They were able to document that even elementary school students were able to wear their mask appropriately and consistently (around 90% fidelity). In addition, school districts were able to tell us when people were actually not masking and were able to link that with secondary transmission.

Furthermore, in a follow-up project that we are doing this fall, we were able to identify school districts where school leaders, such as the school directors, do not necessarily believe in the efficiency of mask wearing. In these school districts, we were able to identify clusters. Whenever there is a cluster in one school, school districts’ senior staff go to that particular school for 3 weeks, to do random audits of what fractions of the staff, students and adults in the building are wearing masks. Their role is to make sure that all educational stakeholders wear their mask appropriately and consistently.

**Question 2:** Can you tell us more about the compliance with masking on average across the school districts you have analysed? Have you seen any differences between age groups among children? Have you had the opportunity to correlate compliance with masks with circulation status as well?

**Response:** No major differences between children age groups. There are clearly some schools where the adults are not believing in COVID-19. One of the most important lessons we can provide from North Carolina is that half of these school districts submit data in real time on primary versus secondary infection. We only ask 5 questions: 1) primary infections in students; 2) primary infections in teachers and other school staff; 3) secondary infections in students; 4) secondary infections in school staff and 5) how many people did you quarantine? We receive a weekly report by each school district. This has been tremendous to allow us to say, ‘that school has got a problem’ for example. We are grappling right now with vaccinations rates in North Carolina, in the
12-17 years old age range, by county. As of 1 September, we range from 3% to 90% and everywhere in between. In the 90% counties, we are not seeing much COVID cases in their schools.

**Question 3:** From what you said, the difference is more on how schools enforced or schools believed in COVID, but what about the roles of individuals such as school teachers and parents in promoting the use of masks? Apart from mask wearing, could you please tell us more about mitigation measures such as hand washing, keeping distance and so on?

**Response:** We have done some focused groups of teachers in North Carolina and what their approach is with regard to the mitigation strategies. Teachers in North Carolina have been fairly supportive and strict implementing mitigation strategies, especially masking. We have an association of teachers at state level, which expressed fears and challenges. As a result, a system was put in place, through which teachers were able to report ‘on themselves’ or on fellow teachers who were not necessarily following the prevention measures. With regards to parents, obviously, it’s more difficult for us to get information, even in counties where parents may not necessarily support masking, the schools have still been very successful in implementing mitigation measures.

Children, at school, tend to follow the rules and do as they teachers ask them to act. Regarding the other question, the risk of transmission by child-to-child touching has been in our opinion low in our peer-review literature, so we have focused less in monitoring hand washing. You aslo asked about some contenders in our data. Certainly, there are different practices that are implemented by educational stakeholders. One consistently thing that has been implemented is the use of masking, some districts have used ventilation systems, some have done some screening testing interventions, but these strategies are much more minimal compared to the use of masks.

**Question 4:** Were you able to differentiate the impact of masking between elementary and secondary schools?, because our guidance at the moment indicates that transmissions for children aged 12+ is similar to the rest of the community, so we recommend masking and for children 6-12, it is not a ‘hard recommendation.’

**Response:** We recommend masking both for elementary and secondary school students. The reasons are the following: 1) During the pre-delta era, there was some data indicating that maybe younger children did not transmit as efficiently, but with the current delta variant, the transmissions via young kids are much higher than before with the ancestral variants. 2) If you cram 20 of them (i.e. young kids) in one room for several hours, they are going to infect each other. 3) In the USA right now, we can see the vaccination coming for the 5-11 years old children. It is a good thing to protect families where schools have implemented voluntary masking policies.

**Question 5:** Have there been any strong uptakes by the education sector to identify how to reach a high compliance in mask wearing? What sort of measures were put in place in classrooms or within the school to monitor mask-wearing fidelity?

**Response:** This is really related to leadership, starting with the school board, the school headmasters, teachers and so on. In the USA, there are 24 cameras on average per elementary school and up to 48 cameras per secondary school. We have had some very motivated super intendants who looked back though films in order to do some encouragement regarding mitigation strategies such as mask wearing. But that has been a very tiny fraction. We have also had a series of meetings with the super intendants in some schools, to go over their data, as they put their data in real time. All this monitoring system has been fully implemented with transparency.

**Question 6:** What is next?
Response: We hope that with vaccination rollouts across the world, the use of masks will not decrease. Data is crucial in that sense, to identify, in a school for example, where and when would it be appropriate to take off your mask. We very much encourage people to monitor data to see if, when masks are down, there is a surge in infections rates or not in a given school community.

Several of our studies are already published in the Journal of Paediatrics (please click here).

Question 7: Do you have schools with students with special needs in your district?

Response: Yes, we call them ‘adapted curriculum’ schools in North Carolina. Their masking compliance varies a lot, some have masking compliance approaching 90%, some report masking compliance close to 0%. We recommend for these schools using other mitigation strategies, such as appropriate ventilation systems for example, or to put more emphasis on testing.

Question 8: Have you looked on the impact of mask wearing on learning? Have you looked at the impact of masks on a longer term on the health of children?

Response: We have not systematically looked at potential obstacles in learning that would result from mask wearing. What we saw is that mental health has been a major issue among children. One of the reason of that surge in mental health issues is that students have not been able to socially interact with their peers by being in school.

Question 9: You mentioned that some counties might have different optimising functions, in terms of ‘when to wear masks’ and so on, because their level of acceptance is somehow different. I was wondering if and when, some of these districts that you are following, do decide to relax the masking option, are you also going to follow the measure these schools have implemented?

Response: We had some schools that decided to stop requiring to wear masks in August, and that went so poorly for them that it only lasted seven business days, and they so an explosion of quarantine and of secondary transmissions. They put their masks right back on as a result.

Question 10: In the USA, we know that the flu season is upon us: are you thinking of perhaps extending this study to actually look at the upcoming flu season? Would you be able to identify if the flu prevalence could be lower in schools which implement mask-wearing effectively?

Response: Our speculation is that we will be able to identify that in counties that do promote mask compliance, the flu will be less prevalent that in counties/schools that do not apply mask wearing as a strict rule.

4. Brief update on the process to update the Advice on the use of masks for children in the community in the context of COVID-19

Presentation by Sarah Karmin, UNICEF

- In 2020 WHO and UNICEF released an Advice on the use of masks for children in the community in the context of COVID-19. While, the guidance is not especially intended for schools, it touches upon the use of masks for children. The guidance is divided per recommendations by age groups, from 0 to 5 years old; from 6 to 11; from 11+, etc. The guidance is currently being updated. In the past month, a UNICEF/WHO co-convened working
group has looked at some of the evidence. We could not find that much, and most of the data comes from the USA and Europe. After the review of that evidence, we are also hosting consultations with colleagues from the International Paediatrics Association, to represent the views and experiences from the low and middle-income countries: we had one consultation with Francophone Africa and another one in Latin America and the Caribbean. Next week, we will organise other consultations with Asia and the Pacific, the Eastern and Southern Africa and the MENA regions to get their insights about the practical implementation and the implementation considerations in their contexts as well as trying to review the policies from other countries. This will all be put together for a meeting on 5 November on the guidance development. Participating experts will review the evidence and look at the summary of the regional consultations. The recommendations will be adapted subsequently.

5. Update from the 3rd round of the survey (UNESCO/WB/UNICEF/OECD)

Presentation by Yifan Li, UNESCO-UIS

NB: Kindly note that due to connection difficulties, the UIL presentation was not able to completely finish. You can review the slides that shared along with this NFR. You may contact directly Dr. Li by email (yi.li@unesco.org), for any questions you may have.

<table>
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<th>Survey period</th>
<th>UIS/UNICEF/WB survey</th>
<th>OECD survey</th>
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<td>February 2021 - May 2021</td>
<td>January 2021 – March 2021</td>
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<tr>
<td>Languages</td>
<td>The Survey is administered in 5 languages: English, French, Spanish, Russian and Arabic</td>
<td>The Survey is administered in English</td>
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<tr>
<td>Instruments for data collection</td>
<td>Mobile friendly online survey platform and Word questionnaire that can be submitted by email, if needed.</td>
<td>Excel questionnaire</td>
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<td>Webpage</td>
<td><a href="http://covid19.uis.unesco.org/joint-covid-r3/">http://covid19.uis.unesco.org/joint-covid-r3/</a> Concept Note; link to online questionnaire; .rtf questionnaire; glossary; data</td>
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<td>Data Availability</td>
<td>Publicly available in Excel and STATA</td>
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<td>Coverage</td>
<td>In total, 143 countries responded to the questionnaire. 31 countries submitted responses to the OECD (“OECD survey”) and 112 countries responded to the UIS (“UIS survey”). 7 countries responded to both surveys.</td>
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- Mitigating learning loss:
  - **More countries have introduced remedial measures.** Nearly two-thirds of countries that did not report remedial measures in the last survey round did so this time around. Most were high- or upper-middle income countries.
  - **Remedial measures were significantly less likely at pre-primary levels.** One a third of lower-middle income countries are implementing this.
- **Remedial measures are often targeted.** At primary and lower secondary, they usually focus on students unable to access distance learning. At upper secondary, focus is on students facing national examinations.

- Even after schools reopen, some students may not return to school.
- Countries most commonly reported WASH modifications to encourage return to school.
- Financial incentives and reviewing/revising access policies were less frequently reported.

- Health measures implementation:
  - Almost all countries* have Ministry-endorsed health and hygiene guidelines.
  - There was an increase in the number of health and hygiene measures included with the guidelines, but complex activities still have lower rates of adoption.
  - Low-income countries are lagging significantly in implementing even the most basic measures.

- Teacher Vaccination:
  - Teachers are/will be a priority target for vaccination through national immunization measures or the COVAX initiative.
  - Governments should prioritize teachers for vaccination to safely reopen school.

- Education financing:
  - Education budgets have increased or remained stable at the onset of the COVID-19 crisis in 2020.
  - In 2021, more countries expect to increase their education budget.
  - Additional funding was more likely to come from additional government allocation in high-income countries, and external donor aid in low-income ones.
  - Critical to sustain investment in education, both domestic and from donors, in coming years.

- Links to data reports:

- Concluding remarks:
  - The Chair warmly thanked the speakers and all the TAG members who joined

> Date of the next 15th Global TAG meeting: 9 December from 13:00 to 14:30 CET (TBC)
> The 15th TAG meeting will be chaired by UNICEF