

THE *LANCET* COVID-19 COMMISSION
INDIA TASK FORCE

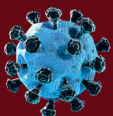
Reopening Schools After COVID-19 Closures

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The *Lancet* COVID-19 Commission

India Task Force



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The following report has been posted online by the Commission Secretariat, and has not been peer-reviewed or published in *The Lancet*, nor in any other journal. This reports intends to bring together expert views on key topics as the COVID-19 pandemic unfolds.

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The education sector has been hit hard by the COVID-19 pandemic. By April 2020, governments across 195 countries shut down schools in a pre-emptive effort to reduce transmission and protect their students, teachers, and staff, impacting the lives of almost 1.6 billion children, youth, and their families.¹ One estimate from The World Bank suggests that this generation of children could potentially lose an estimated USD 10 trillion globally in their life earnings.² This could potentially increase the Learning Poverty levels to 63% and drive countries even further off-track from achieving their Learning Poverty goals.^{3,4} The estimated economic loss for South Asia due to school closure is projected between USD 622 billion to USD 880 billion in its best and worst case scenario.⁵ These projected losses reflect potentially significant declines in the accumulation of skills due to both increased dropouts and lower test scores. As children with lower test scores are less likely to progress to higher levels, these losses will increase over time.⁶ In India alone, an estimated 1.4 million anganwadis (government-run child nutrition and early childhood education centres), 55,000 private pre-primaries, 1.5 million K-12 schools, 41,901 colleges and 1,028 universities have been sporadically shut for over 11 months, disrupting learning, and incurring economic losses estimated at over USD 400 billion in the country's future earnings.^{7,8}

SCHOOL CLOSURES HAVE DISRUPTED LEARNING, WIDENED GAPS, AFFECTED CHILDREN'S NUTRITION AND HEALTH

A year into the pandemic, we have documented evidence of the cost of COVID-19 related closures on children. Four main areas of concerns have emerged:

Widening learning inequities:

To deal with school closures, the education sector worldwide pivoted to online learning and digital resources. This immediately meant that access to learning was defined by access to the internet. Nationwide, only 24% of Indian households have access to an internet facility. A little over 15% of

rural households have access to internet services (as compared to 42% for urban households). The digital divide is stark across income. Of the poorest households, only 2.7% have access to a computer and 8.9% to internet facilities.⁹ Further, only 8% of households with members aged between five and 24 have both access to internet connectivity and digital devices, creating overnight, a learning schism that has lasted much of the academic year. Even at the institutional level, around 1.2 million government and 400,000 private budget schools are not equipped, monetarily and infrastructure-wise, to provide technology-based learning to children.¹⁰ Pratham's Annual State of Education Report (ASER) indicated that a mere 11% of students enrolled in private and government schools countrywide logged into online classes and 21.5% accessed one-way video recorded classes.¹¹

Learning losses, especially in early years:

UNESCO has listed "interrupted learning" among the top adverse consequences of COVID-19 school closures worldwide.¹² It estimates that COVID-19 led school closures caused worldwide learning losses estimated at two thirds of an academic year on average.¹³ The challenge compounds for India, where a four-state, 44 district study shows that 92% of primary school students have lost at least one language ability from the previous year whereas 82% of children on an average have lost at least one specific mathematical ability from the previous year.¹⁴ Children, especially the younger ones, have forgotten what they had learnt earlier and are not ready in terms of their foundational skills to tackle the challenges of a grade based curriculum and perform in the classroom. A 2020 study on the impact of earthquake led school closures in northern Pakistan showed estimated accumulated learning loss of 2 years when measured 4 years later, and these deficits could potentially lead the affected children to lose approximately 15% of their lifetime earnings through their adult life.¹⁵

In a country like India, with already low learning levels, these losses can be devastating, and can take a long time to reverse, especially in the early years

of schooling. Even more worryingly, if immediate steps are not taken to ensure a “remedial” period where children can catch-up on the learning that has been lost, they may continue to falter and fall behind as the school year resumes. This faltering will be more pronounced among those who come from already disadvantaged backgrounds, thus further accentuating existing inequalities.

Nutrition:

School closures have impacted children’s physical health, food security and malnutrition.¹⁶ Schools play an important role in the direct provision of health and nutrition services in the crucial first 8,000 days of a child’s life.¹⁷ Since the beginning of the pandemic, UNESCO estimates that nearly 370 million children across 50 countries did not receive a school meal and that globally an estimated 39 billion in-school meals have been missed due the pandemic led-school closures.¹⁸ An average of 4 out of 10 in-school meals have been missed by children around the world, and this number increases to as high as 9 out of 10 in some countries.¹⁹

India runs the world’s largest free school meals programme in the world (Mid-day Meal Programme), benefiting about 120 million children across 1.2 million schools across the country. Another 80 million young children are provided free of cost meals every day across the country’s 1.37 million anganwadi centres (AWCs).²⁰ The pandemic put an estimated 115 million children at the risk of severe malnutrition.²¹ In response, the Government of India accelerated its already existing Take-Home Ration (THR) scheme early on in the pandemic; encouraging the provision of monthly fortified rations to targeted children, instead of the regular hot cooked meals provided under the Mid-Day meal scheme.²² States were also expected to focus on Severe Acute Malnourished and Moderate Acute Malnourished children.²³ A recent OXFAM India, report however demonstrated, that approximately 35% children did not receive their mid-day meals. Of the remaining 65%, only 8% received cooked meals while 53% received dry rations and 4% received money in lieu of the MDM.²⁴ However, lack of standardization in THR distribution protocol

and differences in implementation strategies across geographies (for example, Telangana is providing hot cooked meals, Chhattisgarh, Haryana and Delhi are providing dry rations while Bihar is providing cash transfers) has led to disparities in the state-wise outcomes of the scheme.^{25,26,27} The pandemic has also led to the disruption of several supply chain units manufacturing raw materials for THRs along with affecting the transportation facilities leading to unprecedented delays in the relief distribution. There is also a lack of substantial evidence on migrant children who have returned to their home states where they might not be registered as beneficiaries along with children who have been forced to drop out of schools and forced into illegal labour, availing these schemes.²⁸

Mental and psychological wellbeing and safety:

The absence of a structured school led routine and peer interactions has not just disrupted the lives of children, but amplified the anxiety caused by the isolation, the fears of the disease and the loss of physical, intellectual, and social engagement.²⁹ Motivation levels in children have declined because of the inability to play outdoors (which also affects their physical health) and meet friends, and be in the classroom.³⁰ The ‘new-normal’ of , learning through a new medium, absence of sharing physical space with peers and extended home confinement primarily for children in urban households, can have a long-term negative effect on their overall psychological wellbeing.³¹ School closures also affect children’s safety, increasing their exposure to abuse.³² Gender-based violence, child marriage and early pregnancy especially affect girls and young women disproportionately making them more vulnerable.^{33,34,35,36} In India, lockdown has impacted the lives of 40 million children from poor families including children working on farms in rural areas and children of migrants and street children.³⁷ Lack of economic support at home and protection offered by schools, puts them at a high risk of violence, abuse and mental health issues.³⁸ ‘CHILDLINE 1098’ India in a recent report, announced that India saw a 50 % increase in the calls received on helpline for children, requesting protection from abuse and violence, since the lockdown began.³⁹ The report also indicated an increase in the calls reporting child labour, missing

and run-away children and rise in the number of homeless children.⁴⁰ The pandemic-generated livelihood crisis has led to a surge in the demand for cheap child labour and the number of children being pushed into illegal and 'hazardous' work⁴¹. Experts fear that this will set the country back by decades in its fight against the already sizeable problem.⁴² India has over 10 million children (5-14 years) and 23 million adolescents working across industries (2011 Census), and there are fears that school closures are beginning to push these numbers up.⁴³

As we turn the corner on this academic year, it is imperative that further disruption to the lives of children is minimized, while keeping them and their caregivers safe. The most important question that rises therefore, is the extent to which opening schools poses a risk to COVID-19 transmission, exposure to students and their families, and the teachers and staff.

CAN SCHOOLS OPEN SAFELY? REVIEWING THE EPIDEMIOLOGICAL DATA GLOBALLY

On the question of transmission, while data are still preliminary, it appears that there is relatively little impact of school opening on population wide transmission rates. Recent evidence from modelling studies indicate that school closures alone would avoid only 2–4% of deaths, a percentage much smaller than other strategies of social distancing.⁴⁴ Data from countries which reopened schools or did not shut them in the first place, indicates low community transmission rates of less than 1 new case per day per 100,000 people.⁴⁵ Countries like Taiwan, Austria, Belgium, Finland and Singapore have not recorded a spike in case numbers after reopening their schools albeit with slow lifting of restrictions and taking extra safety measures in classrooms. Nor have case numbers increased in Denmark, which reopened schools in early April and May, while maintaining social distancing protocols.⁴⁶ Netherlands opened all its schools in full capacity and full-day teaching in June while exempting children who are high risk or have family members at high risk, but no uptick in the cases have been recorded through schools.⁴⁷ Similar results were found in a recent study of schools in New York City that showed no increase in relative

incidence of COVID-19 in schools as compared to the general population.⁴⁸

The second question is the risk to students. Current evidence suggests lower incidence of a symptomatic disease and especially of a severe one in the young population. Although outbreaks in schools have been reported, there is little evidence on the transmission dynamics in school settings.⁴⁹ COVID-19 outbreaks in high schools in France, Israel, and New Zealand did not spread to nearby elementary schools, which suggests a possibility of low susceptibility and/or infectiousness among children.⁵⁰ Evidence from documented cases in schools indicated poor trends in child-to-child transmission in schools indicating that relevant prevention strategies can potentially be effective in preventing transmission in the school setting.⁵¹ In Sweden, where preschools and primary schools were open throughout the pandemic period, while the overall epidemic has been reported to be severe, there has been no increase in the numbers of hospitalized children hospitalized children due to COVID-19.⁵²

Evolving evidence, although limited, also suggests an increase in the COVID-19 susceptibility with age⁵³. Modelling studies indicate adults aged 20 or older demonstrate almost twice the susceptibility to infections as compared to people under 20 years.⁵⁴ Children 9 years or younger have demonstrated lower seroprevalence and susceptibility as compared to children aged 10-14 years.^{55,56} Studies also indicate much lower infections in children under the age of 10, under the same conditions of exposure to infected household members, as compared to adults and adolescents.⁵⁷

While the infection and susceptibility rates are seemingly low for young children, the threat to teachers still remains. School reopening measures cannot be complete without ensuring safety of teachers from the increased risk of exposure. A recent study from the UK indicated that COVID-19 infection rates are 1.9 times higher among teachers, teaching assistants and school staff.⁵⁸ The data indicates that while in October 2020, 0.9% teachers were infected with COVID-19, the number rose to 1% in December and has been rising ever since. The rates are higher (3 times) for teachers, and other staff, in primary schools

as compared to secondary and high schools.⁵⁹ Another report found that transmission within teachers was more common in schools than within students.⁶⁰ Data from Sweden linked case-based data for the period 15 March-19 October 2020 with occupational registries and found that preschool, primary school and secondary school teachers were not at an increased risk of being diagnosed with COVID-19 compared with other occupational groups. However, they did find an increased risk among principals for all school levels.⁶¹ Studies from the US also indicate high level of infections and transmission rates in teachers.⁶² Evidence from elementary schools in Georgia reported that transmission from teachers resulted in about half of 31 school-related cases while Germany reported a three times higher transmission rate with an educator as the index patient as compared to a student.^{63,64} Most cases across studies, however, corresponded to the lack of social distancing measures and absence or improper wearing of masks in both students and teachers.

Low susceptibility to infection in younger students, decreased student to community transmissions, and escalated threat to teachers and school staff in absence of COVID appropriate behaviour together presents a strong case for reopening schools but with extra precautionary measures in place, to ensure mental and physical well-being of children along with the safety of teachers and school staff. While susceptibility to infection is higher amongst older children, they are more receptive to instructions and can be encouraged to practise COVID-19 appropriate behaviour, wear masks and practise social distancing through a range of recommendations and tools provided by WHO and UNICEF.^{65,66}

CAN SCHOOLS OPEN SAFELY? EMERGING EVIDENCE FROM THE INDIAN EXPERIENCE

The Government of India permitted states to reopen schools in phases and issued SOPs starting in October 2020.⁶⁷ States have been given the authority to decide the timing and manner of the reopening, depending on their local COVID-19 situation, following official guidelines. The decision of which grades to open first, has also been left to the discretion of the states. In most states, schools for senior secondary, high school

and intermediate students have been opened first, given upcoming board exams. Bihar and Uttarakhand reopened their schools for classes 6-12, Odisha, Tamil Nadu and Delhi opened for class 9-11 while Uttar Pradesh has allowed primary grade children (classes 1-5) to come to school first. Classroom attendance is voluntary and dependent on parental discretion and consent. States have issued additional SOPs, adapting the central government framework to the local COVID-19 situation. The guidelines are comprehensive and include protocols for health, hygiene and safety, learning with physical distancing and promoting emotional well-being of students and teachers. For students who choose not to go back to school, the Education Ministry had released guidelines on digital education titled 'PRAGYATA' to help children learn and attend classes through synchronous and asynchronous learning methods.⁶⁸ These guidelines focus on collaborative learning in small groups and creative projects, to help children not lose complete touch with their academic curriculum. For schools and households that do not have the infrastructure for digital learning, synchronous lessons are being delivered over phones through WhatsApp, SMS and audio calls, and through radio and TV channels. The Ministry also released an alternative academic calendar for schools, designed to cater to the need of all children including children with special needs and covers experiential learning activities such as Arts Education, Physical Exercises and pre-vocational skills along with the school-based subjects.⁶⁹ A separate set of Learning Enhancement Guidelines were also designed for students who lack or have limited access to digital learning tools.^{70,71}

States have taken different approaches to social and physical distancing. Some states are designing school schedules to limit the number of students in any classroom on a particular day. This is particularly important in cases where classes are routinely overcrowded, increasing the risk of contagion. Schools in Bihar, Haryana, Jharkhand and Uttar Pradesh have implemented alternate day attendance to limit transmission. Similar strategy has been adopted by several countries like Switzerland, Finland and Belgium where schools have instructed students to come in on alternate days so that half the desks in classrooms are left empty to make distancing easier.⁷²

Schools are also advised to ensure physical distancing in classrooms, with an adequate gap between children- a significant challenge, especially in urban schools with space constraints and overcrowding. In India, Mizoram has restructured the seating plan in the classrooms to ensure adequate gaps between students. Apart from alternate days and changed seating arrangements, other strategies like time shifts have also been deployed worldwide like so that the same class of students is spread out over a longer time frame.

Experience with consistent mask wearing, hand washing, and PPE access also varies across the country. Lack of access to usable water makes frequent handwashing impractical for a vast number of people in India.⁷³ With only 44% population in the country living with access to piped water, households often depend on public water sources such as public taps and wells at a significant distance from their homes.⁷⁴ The scarcity of soap and water in low-income households has also been reported in pre-pandemic years in a report by a National Family Health Survey (2015-2016).⁷⁵ Infrequent or intermittent water supply, shared sanitation facilities and prioritizing limited supply of water for cooking food and drinking water, exacerbates the challenge of frequent hand washing and hygiene recommendations associated with COVID-19 guidelines.^{76,77} Despite the SOPs, many schools also face shortages of PPE and sanitizers; they lack access to rapid testing, and are unable to manage overcrowding in classrooms.

Parental reluctance to send children to school has increased due to episodic reports of increases in COVID cases after school reopening across several states.⁷⁸ Documented, systematic data is extremely limited, but incidents in Haryana and Andhra Pradesh show localized increases. 54 students between the age group of 16-18 years tested positive in a hostel in Haryana's Karnal district, from a total sample of 390 students and staff members.⁷⁹ In Andhra Pradesh 575 students and 829 teachers tested positive within a week of restarting all school for grades 9-11. According to the statistics provided by the state education department, 3.93 lakh students from standard 9-10 and over 99,000 thousand attended the educational institutions in total.^{80,81} In Punjab 452

students and 271 teachers tested positive from a total sample of 64,574 across 1,392 schools within a 13-day period in February 2021.⁸² In Maharashtra's Washim district, a hostel break out led to 229 students from a total sample of 327 testing positive.^{83,84} So far, much of the evidence is anecdotal, yet each episode points to the trade-offs involved in opening schools.

Global epidemiological data shows that several countries have been able to bring children back into classrooms in a safe manner. Yet, this ability depends on the state of the pandemic as much as it does on fidelity to norms of safety and hygiene. The Indian experience shows a wide degree of heterogeneity with a mixed record of managing physical opening of schools in the midst of COVID-19.

At the same time, we are beginning to understand the costs of keeping schools closed in terms of learning outcomes, and the mental and physical well-being of children; and in particular the disproportionate consequences faced by children from disadvantaged social and economic backgrounds. As a society, our first responsibility should be to bring back children to school in the safest manner possible. Targeted action planning, training and capacity building of teachers, support staff and AWAs, and community awareness around sending children to school and vaccine hesitancy should be built to ensure to level the playing field for all children.

RECOMMENDATIONS:

In the lead up to the new academic year, with COVID-19 cases rising rapidly in several parts of the country, schools face multiple challenges of managing student and parent expectations, keeping school staff and children safe, and looking after the physical and emotional well-being of their students. We recommend the following 10 steps to resume in-person learning; based on global experience as well as the lessons learnt from the last six months of partial school openings in India. We recognize that as COVID cases rise, opening schools in high case load districts will be difficult. However, we believe that these steps can help plan for a safe reopening as and when caseloads reduce, with a goal to open across the country by July 2021.

PREREQUISITES FOR REOPENING:

1. Vaccinate school teachers and assisting staff on a priority basis

School teachers and staff (school support staff and schoolbus drivers) should receive priority vaccinations ahead of the next academic year. Anganwadi workers (AWWs) are already designated as frontline health workers and are eligible for priority vaccinations. School teachers and staff should be included in this group on an urgent basis, prioritizing primary school teachers and assisting staff followed by secondary and senior secondary teachers and support staff. This group which comprises approximately 9 million school teachers (6 million primary, 3 million upper primary, secondary and higher secondary teachers, public and private) faces the greatest risk of infection and would need protection first for three reasons: first, as an incentive to return to the classroom, second, to protect students and parents from infection; and third, to reduce parental anxiety and reluctance to send children to school.^{85,86} Reopening schools without vaccinating teachers and school staff puts them at a high risk of contracting the disease. In classrooms it is harder for teachers to practise social distancing. Additionally, we do not yet have firm evidence on the viral load carrying and transmitting capacity of children. Finally, inadequate access to PPE and sanitizers exposes teachers to greater risks. Quick, prioritized vaccination of school staff would allow for opening schools while minimizing risks to them before the next academic year.

There is no safe vaccine for children yet, though trials have taken place in different parts of the world. We expect that a safe COVID-19 vaccine for children will be available widely by 2022. In its absence, it is even more critical for teachers and staff to be vaccinated so that children can return to school without losing more months of schooling.

2. Build in back-up capacity to cope with COVID-19 cases amongst the teaching and administration staff

We encourage schools to actively build capacity and redundancies into the teaching and administrative

staff to cope with sudden and prolonged absences of teachers who may fall ill with COVID-19. Such redundancies will help minimize the disruption for the school and for the particular cohort of students affected, especially as students are getting back to regular school. Voluntary teaching groups such as Teach for India can also be leveraged to engage large pool of teachers including retired professionals to enable adequate student-teacher ratio.

This is also important from a safety and transmission limiting perspective, giving those teachers that are ill with COVID-19 adequate time to isolate and recover without affecting the class schedules more than necessary. We recognize that this imposes additional costs on schools, and encourage the state governments to support schools (public and private) in building a pool of instructors that can support frontline teachers.

3. Adhere to Government SOPs with an emphasis on distancing, masks, sanitization

The Government of India and various state governments have issued detailed SOPs for COVID-19 safe protocols, based on WHO guidelines. We endorse these protocols, and call attention to three sets of issues.

First, the importance of ensuring physical distancing in classrooms. Other countries have followed a variety of approaches to ensure distancing. Germany, Australia and South Korea have introduced morning and afternoon shifts; Afghanistan, Brazil, Ecuador and Egypt have introduced staggered class schedules and break times and introduced smaller in person classes with reorganized student groups learning through blended methods^{87, 88}. Canada, Singapore and United Kingdom have institutionalized classroom bubbles to limit open student interaction and contain infections within bubbles.⁸⁹

We recognize that distancing and limiting class sizes is harder in densely crowded municipal schools, and may require a trade-off with hours of classroom instruction or staggered shifts of student cohorts. However it is an essential element of the strategy to keep schools safe and needs to be enforced strictly.

Second, a focus on continual sanitation protocols, as per Government SOPs. All countries that have reopened safely have focused on implementing continuous sanitation protocols. These include: sanitizing all educational materials and equipment multiple times a day (Denmark, Finland, South Korea), compulsory handwashing and hand sanitizing with sanitizers present in all classrooms (Netherlands, Canada), sanitizing of all sports equipment after every instance of use (Singapore, Denmark), and thorough cleaning of classrooms and bathrooms on a daily basis (Norway, Singapore, Taiwan). We strongly recommend that at the very least, sanitizers be present in all classrooms, and students trained to use them regularly. Where possible, contactless sanitizers can be installed to limit infections; all schools, especially in rural areas require adequate water and soap supply.⁹⁰ We also recommend age specific contextualized health education to children to make them more prepared and actively engage them in the process of containment of the disease.⁹¹

Third, a renewed emphasis on wearing masks and adequate PPE for school teachers and staff. As per WHO guidelines, all children above the age of 5 years are advised to wear masks properly, especially when inside classrooms. Teachers and other school staff have a special responsibility to lead by example, except in cases where teachers need to remove masks to be audible or perform their jobs. Emerging research points to aerosols as the primary mode of transmission for COVID-19. A teacher lecturing, emits an order of magnitude more aerosol than a person simply breathing in a room, which further builds motivation for the need of urgent teacher vaccination.^{92,93}

In such cases face shields and other PPE equipment should be used. Mask wearing should be mandatory within classrooms for all children older than 5 years. Local sourcing of masks and other PPE should be encouraged (through self-help groups in rural areas, for example). For children younger than 5 years, masks should be worn when social distancing and other safe behaviours are difficult to enforce, with the understanding that it may not be possible for them to wear masks continuously through the school day.

We recommend a detailed study of the experience of schools across India since October 2020 to understand the challenges in adhering to the Government SOPs, as well as to document best practices for widespread dissemination within the education sector.

4. Keep class rooms, buses, and other indoor spaces well ventilated

Well ventilated spaces are critical to minimize the spread of COVID-19. To this end, we strongly urge schools to ensure that all classrooms, other indoor spaces, are well ventilated, with open windows and continuous cross-ventilation. A recent report by The Lancet also recommended taking classes outdoor wherever possible (like some schools in Netherlands, United States and Denmark) and/or limiting the amount of time children spend in closed environments, and innovative use of spaces like the assembly/ sports hall (with proper ventilation measures) for teaching to ensure proper physical distancing.^{94,95} Exhaust fans and/or particulate air filters should be installed in classrooms to create negative pressure preventing the spread of the virus. Air conditioners (mostly available in high-cost private schools) should be avoided as much as possible. Similar strategies are needed for rethinking transportation as a part of healthy school reopening measures.^{96,97} School buses and other means of transport should keep their windows open at all times, provide for designated seating and proper sanitizing of the vehicle after each trip along with making it mandatory for children to wear masks while commuting through school or public transport.

5. Limit indoor group activities, but encourage outdoor group activities (with precautions)

Several school systems that have opened up have done so with restrictions on group activities (group lunches, indoor sports, creative activities). While schools need to individually decide on specifics, it is important to note the following: first, encourage outdoor physical activity amongst students for their physical and mental wellbeing; second, community activities are critical for social development, but to the extent possible, need to be shifted outdoors; third, creative activities (art, craft, dramatics, dance) are effective and important ways of building confidence

and self-worth in children, and schools should find ways to encourage such activities in safe and hygienic ways. We recognize that during peak summer months, high temperatures make it difficult to spend long periods of time outdoors and encourage schools to think creatively of how to avoid group activities indoors in these months. Further, dining halls and residential facilities have emerged as hubs of infections. Activities that involve congregations of large numbers of students in closed settings or close contact should be avoided.

6. Provide access to regular, on-site testing

Regular testing is an essential element of managing school safety. We recommend that all schools have access to regular, on-site testing facilities, with access to RT-PCR tests for all symptomatic cases. School staff should be tested routinely. Any staff or student showing symptoms (fever, sore throat, breathlessness) should be immediately tested and sent home. This requires, at a minimum, thermal screening at the school gates for all students, teachers, and staff on a daily basis.

MANAGING SCHOOLS DURING THE COVID-19 PANDEMIC

7. Open pre-primary and primary schools

With the Education ministry guidelines issued in September 2020 on reopening schools safely, states have started implementing a phase wise strategy to bring their children back to schools. Most states are gravitating towards opening the schools for middle and senior school children due to their upcoming board examinations, while states like Assam, Meghalaya, Haryana Karnataka, Kerala and Uttar Pradesh have opened or are preferring to open schools for primary grades first. Our recommendation is to continue the phase-wise approach to opening schools, with a priority for pre-primary and primary classes. There are two reasons for this: first, clinical and epidemiological data largely show that younger children play a smaller role in spreading the virus.^{98,99,100,101} Most children 1 to 18 years old experience mild or no illness from COVID-19 and are much less likely than adults to face severe consequences from

the infection.¹⁰² Limited emerging evidence suggests that susceptibility to infection also generally increases with age.¹⁰³ Given the same exposure to infected household members, children under the age of 10 seem to become infected less frequently than adults and older adolescents; studies of both household and community transmission find that children 9 or younger are also less susceptible than 10-to-14-year-olds¹⁰⁴. A recent study from South Korea of both household and non-household contacts suggests that infected children under 10 years of age are also less contagious than infected adults.¹⁰⁵

Second, younger children are less likely to learn or retain what they have learnt through remote teaching. Online learning may not give sufficient or appropriate opportunities to involve young children who need more interactions and hands-on activities to focus and learn compared to adult learners.¹⁰⁶ A review of the learning levels across grades in the US indicates that that COVID-19 school closures would slow the rate of literacy ability gain by 66% in kindergarten children in the absence of mitigating alternative educational strategies.¹⁰⁷ According to UNESCO, pre-primary education is the second worst affected level after tertiary education, with a projected 2.8% decline or 5 million less children attending schools in a post COVID-19 world. Globally around 5.2 million girls and 5.7 million boys are at the risk of dropping out leading to 0.27% of primary and 1.48% of secondary education students at high risk.¹⁰⁸

Several states have opened senior schools first because of the upcoming board exams. We recognize the importance of opening grades 10 and 12 but urge governments to recognize the significant long-term costs of keeping primary schools closed.

8. Follow protocols for sporadic, localized closures if COVID-19 indicators worsen

Uncertainty around COVID-19 transmission will continue for some time, especially in the context of new variants. We are already seeing a steep rise in COVID-19 cases in certain parts of the country. Decisions to close schools should be based on a composite set of epidemiological factors at the ward or block level.¹⁰⁹ We recommend that state officials determine thresholds based on a combination of the

trajectory of new cases (as measured by the 7-day moving average of new cases per 100,000 people), test positivity rates, and school-specific outbreak data to determine whether or not to open schools.

At the school level, clear protocols should be specified. In case of suspected infections, the child or adult should be asked to quarantine till test results. Additionally, it is recommended that any confirmed case of COVID-19 should require for the immediate cohort to be isolated for 2 weeks, while the premises are immediately sanitized. Secondary contacts should be tested on location.

In case of multiple outbreaks, schools should plan for sudden, short-term closures in case of a localized outbreak within the school, or within the community, where they fall into a demarcated containment zone. Such planning would involve preparing for a temporary return to remote learning; lesson plans based on home-based activities and teaching; and modularity in curriculum roll out. Most importantly, it will require building flexibility into the teaching calendars to cope with unexpected closures. Finally, in case of containment zones or areas with high rate of infections, where school closure becomes a necessity, it should not be exercised as a single control measure, but should be matched with other physical distancing and public health response measures outside the school setting.¹¹⁰

Several countries have set up COVID-19 helplines and control rooms to support schools in managing a return to normal activity. We recommend that State governments make such resources available to all schools, especially those serving the poorest sections of our society. At their end, all anganwadis and schools should review their COVID-19 preparation on a weekly basis, with revisions to protocols based on the actual day-to-day experience.¹¹¹

9. Decide on school openings as part of an overall risk management approach

Through the last year of the pandemic, school openings followed opening up of several other institutions and sectors. We urge policy makers to consider school openings in conjunction with other sectors (offices, restaurants, shops, transportation

systems), and determine a sequencing of priorities based on a reduction in compounded risk of infection. Several countries took steps to close events and spaces for large public gatherings so that schools could open safely.¹¹² Where such measures were not taken, we saw examples of school openings correlate to rise in transmission rates.¹¹³

To this end we recommend the following:

First, that all events and organizations that lend themselves to large public gatherings in closed or confined spaces (potential super spreader events) be severely restricted or banned till adequate numbers of people have been vaccinated.

Second, that schools, especially pre-primary and primary schools be prioritized, based on transmission and incidence rates for the local area, which should be reviewed continuously.

Third, trade-offs on opening schools as compared to offices, markets, restaurants, etc. be determined based on not just COVID-19 infection rates, but on the costs of learning losses incurred by children. The relative risks of opening schools should be weighed against, both, the costs of prolonged school closures, and the relative risks and costs of opening other sectors of the economy.

LOOKING AHEAD

10. Building back the education sector

The world has never seen an educational crisis of this magnitude and from all indications, how to manage the return to schooling will be a critical part of mitigating the crisis from this lost year. One key result from the literature is that even shorter closures of 14 weeks can lead to losses that compound over time, rather than reduce.^{114,115} At this point, the most important step will be to recognize the size of the problem and put together the best available minds and resources to help children, especially the younger ones, return to the classroom and to learning after a lost year.

We recommend the following:

Learning losses

- Convene an expert group to study the extent of the learning loss challenge to recommend potential solutions to helping children overcome the year of lost learning, including potentially restructuring the curriculum to make up for the lost year.
- Create, with immediate effect, a bridge program over the summer break, that reinforces the fundamentals of reading, story-telling, group activities, and learning to learn rather than shifting immediately on curriculum-based teaching. By providing emotional and learning support to students, the school will be preparing children to be better equipped to learn by the time they return to the classrooms in July 2021.
- Introduce flexibility in academic calendars, in learning pedagogies, and in curriculum content to enable schools to adapt to uncertain and evolving circumstances; including a long-term move towards hybrid learning.
- Integrate health education and behaviour change into core curriculum so that children and teachers are better equipped to respond to the pandemic in their schools and communities.

Nutritional losses

- Reinstate meal programs (including nutritionally diversified breakfasts) as soon as possible to students in and outside school settings to address the nutritional deficiencies that have arisen during the pandemic.

Digital access

- Bridge the digital divide on a priority basis through a combination of actions, including, but not restricted to improving access to internet connectivity and devices to the poorest children in the system; finding inventive ways of partnering children from wealthier backgrounds and those from poorer backgrounds to share devices and to encourage peer-to-peer learning; and including the right to technology as part of the Right to Education.

Financial support

- Set up state-level committees to determine the need for financial rescue packages for private schools, especially in hard-hit urban areas, and make additional funds from the National Health Mission and the Sarva Shiksha Abhiyaan (SSA) and Rashtriya Madhyamik Shiksha Abhiyaan (RMSA) for the new expenses that schools need to incur. In this context, determine if the insurance scheme launched for front line workers can be extended to school teachers and staff

Tracking progress

- Set up a mechanism to track progress of schools from a safety and learning perspective through the upcoming academic year; document and share best practices and lessons learnt with a long-term view to build resilience and higher quality into the education system.

These recommendations are minimum guidelines to ensure that students return to schools safely. We recognize that there is no single blueprint to follow. As the pandemic evolves, school systems will need to keep pace and adapt. Global experience tells us that it is possible to open schools safely and that the costs of keeping schools shut are high. We owe it to our children to create safe spaces for them to return to classrooms to learn, play, discover, and grow.

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