

EPHI, National Data Management Center for health (NDMC)
Quick update on COVID-19, 023

This update summarizes	Ethiopia's COVID-19 situation update
	Global and regional burden of COVID 19
	COVID-19, unemployment, and suicide
	The socio-economic implication of COVID-19 pandemic in resource constraints settings
	COVID-19 in Children and the role of School Setting
	Consideration school-related public health measures in the context of COVID-19

Ethiopia's COVID-19 situation update

As of September 17, 2020 there were a total of 66,224 COVID-19 cases and 1,045 deaths across the country. Compared to the cases and deaths reported a week ago, the cumulative cases have increased by 5% and cumulative deaths by 6%. So far 26,665 cases have recovered from COVID-19 (Fig 1). Of the 38,782 active cases, 270 are critical. The total number of tests stands at 1,165,640 showing a 4% increase compared to last week.

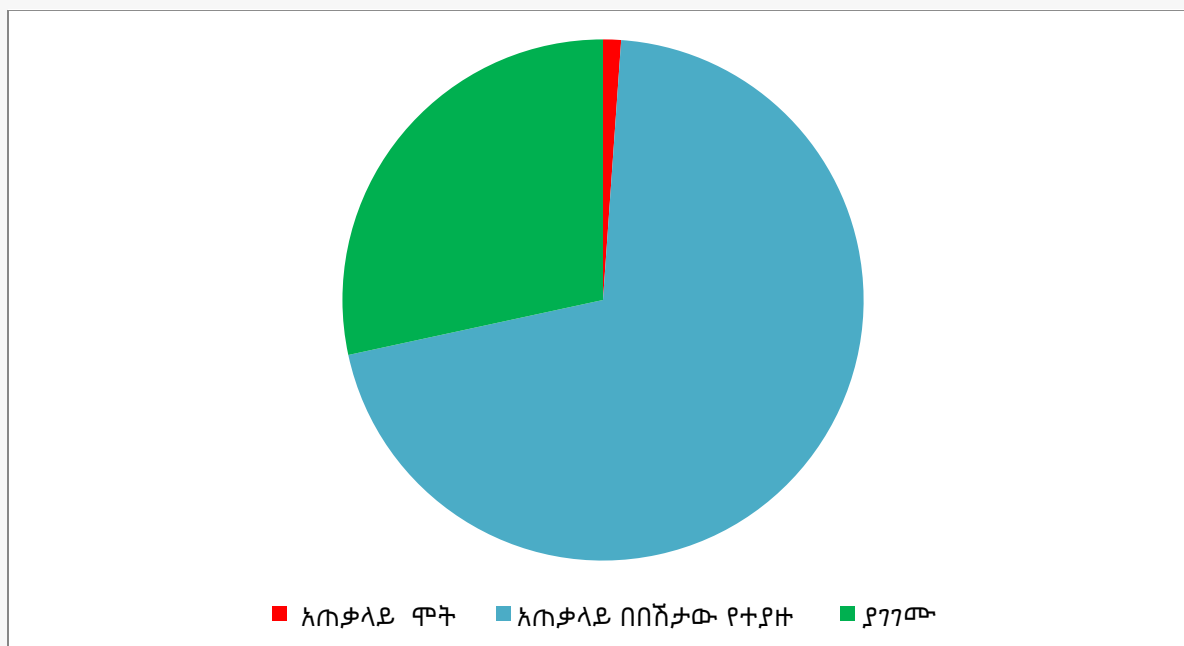


Fig. 1. Showing cumulative cases, recoveries and death as of September 17, 2020.

EPHI and FMOH COVID 19 response highlights of the week

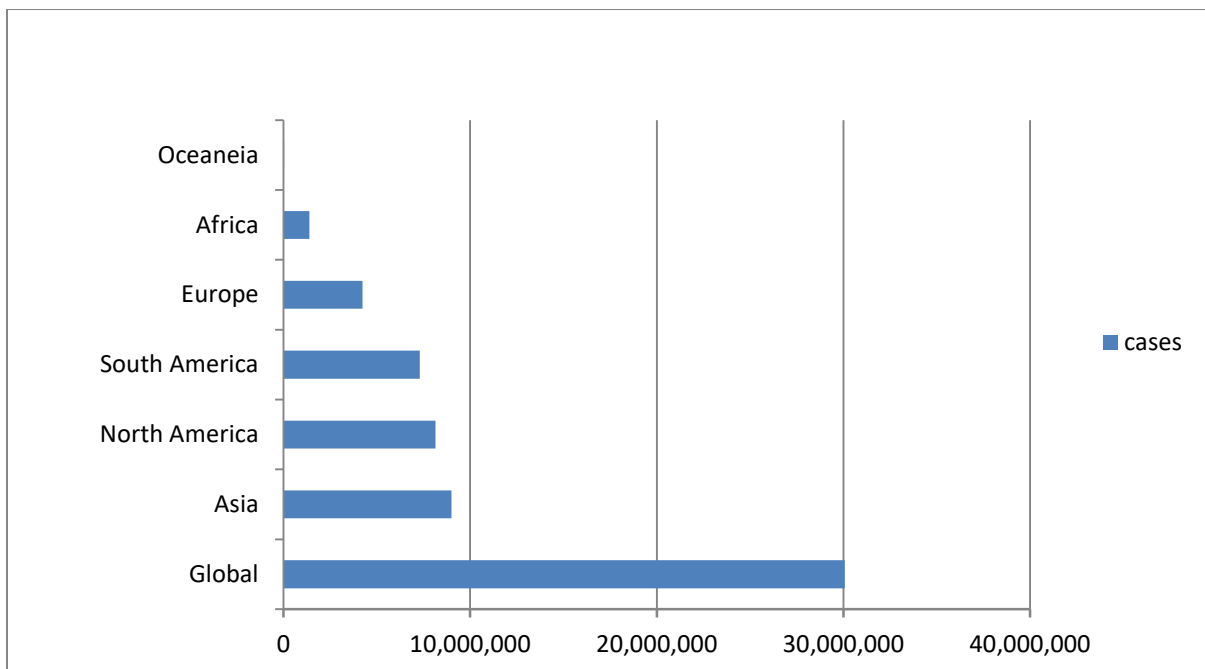
- Since Home Based Isolation and Care (HBIC) have started in Ethiopia, a total 15,089 COVID-19 confirmed cases have been followed as of September 17, 2020. Of which, 8235 recovered and 6875 cases are currently on follow up. Three COVID-19 related deaths have been reported 119 cases have been transferred to treatment centers while, 139 cases have been transferred from treatment centers to HBIC.
- On September 14, 2020, 3 days basic infection prevention and control (IPC) training started in Addis Ababa for 15 health professionals to be deployed as IPC technical advisors for regions

References

- www.covid19.et/covid-19/
- Public Health Emergency Operations Centers (PHEOC), Ethiopia
- https://twitter.com/lia_tadesse

Global and regional burden of COVID-19

- Globally the total number of cases is extended to 30,069,586 as of September 17, 2020. A total of 21,823,599 cases recovered and 945,781 people died since the beginning of the outbreak. Globally, in a week time, from September 10 to 17, 2020, COVID-19 cases increased by 7.18% and deaths by 4.08%. Asia is the leading in terms of cases followed by North and South America. North America leads the number of deaths followed by South America and Europe (Fig 2).



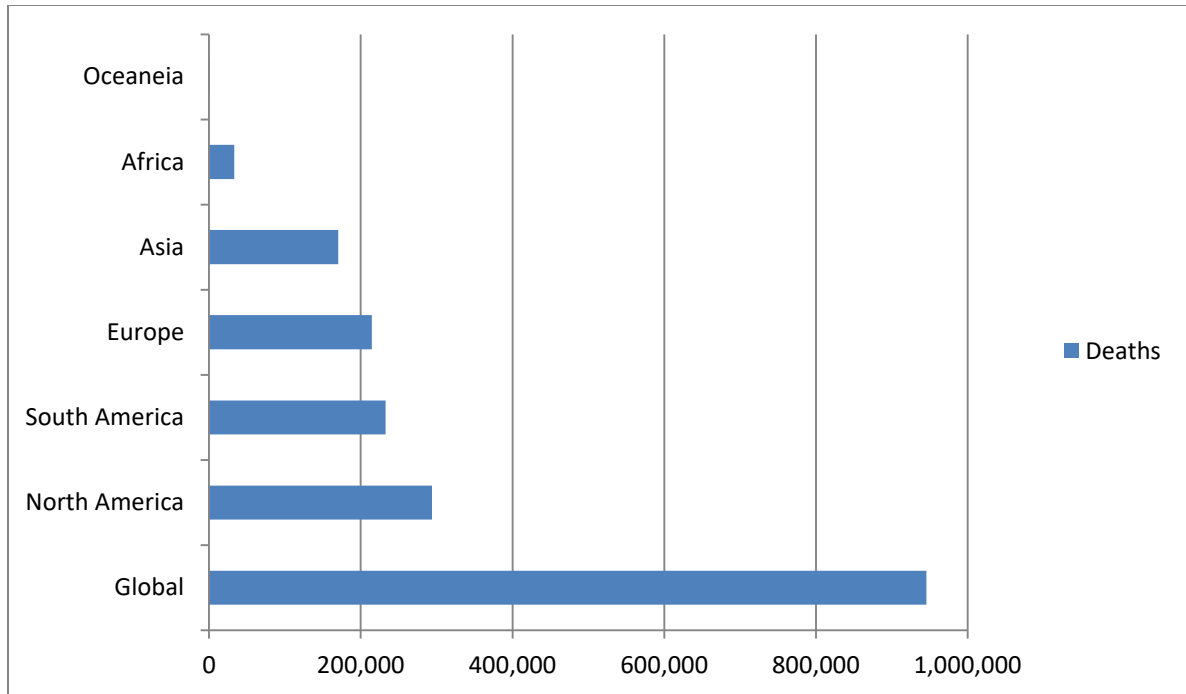


Fig 2. Global cases (top) and deaths (bottom) reported as of September 17, 2020.

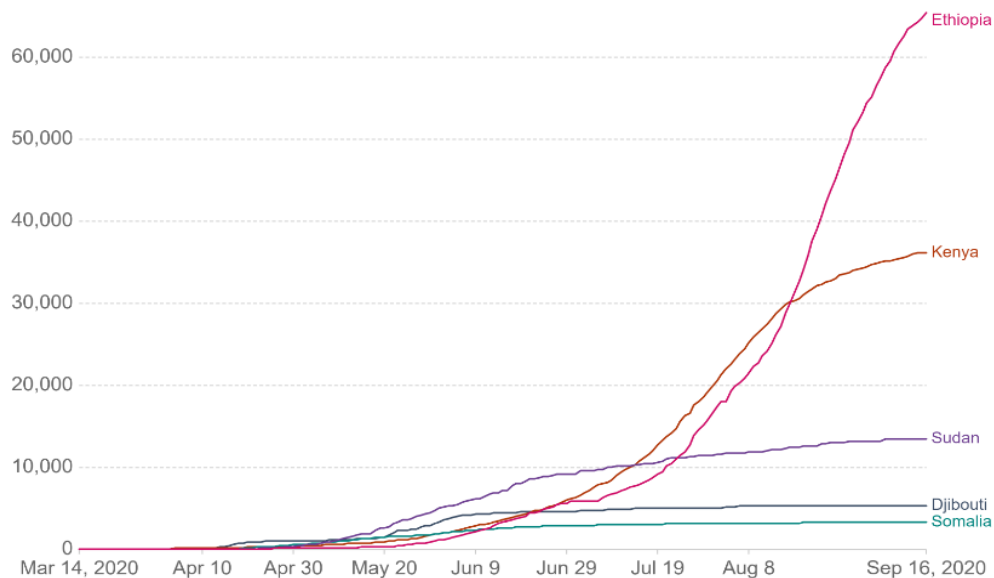
- USA has recorded the highest number of cases (6,828,301 cases, 201,348 deaths) that accounts 22.7% of the total global cases and carried 21.3% of global deaths as of September 17, 2020.
- India became the 2nd in terms of cases following USA. The number of cases in India has increase in a week time by 14.6% (4,470,166 to 5,122,846) and deaths by 10.83% (75, 119 to 83,257).
- The number of cases in Brazil has increased by 5.3% (4,199,332 to 4,421,686) and deaths by 4.29% (128,653 to 134,174) in a week time.
- Russia has continued reporting the highest number of cases in Europe, with 1,085,281 cases.
- Peru ranked 5th in the world with 744,400 cases in a week time.
- The line share of Africa to the global COVID-19 pandemic has still been low (only 4.6% of the global cases and 3.5% of deaths as of September 17, 2020). However, within the continent the number of cases has increased by 3.9% in a week time (from 1,328,282 to 1,380,233 cases). Similarly, the total number of deaths in Africa has increased from 31,964 to 33,308 showing a 4.03% increase in a week time. Total recoveries stand at 1,131,194.
- South Africa ranked 8th worldwide in terms of cases and leading in the continent with 653,444 cases and 15,705 deaths. Egypt (101,500 cases, 5,696 deaths), Morocco (92,016 cases, 1,686 deaths), Ethiopia (66,224 cases, 1,045 deaths), and (Nigeria (56,604 cases, 1,091 deaths) are the four most leading countries next to South Africa in reporting COVID-19 cases in the continent as of September 17, 2020. (See table below).

Africa	September 10		September 17	
	Cases	Death	Cases	Deaths
South Africa	642,431	15,168	653,444	15,705
Egypt	100,403	5,577	101,500	5,696
Morocco	77,878	1,453	92,016	1,686
Ethiopia	61,700	966	66,224	1,045
Nigeria	55,632	1,070	56,604	1,091

- In East African, COVID-19 cases and deaths have shown fast progress. In a week time, COVID-19 cases and deaths increased by 5% and 6% in Ethiopia and by 2.4% and 4.4% in Kenya. As of September 17, 2020, Ethiopia and Kenya are the major drivers of the COVID 19 burden in east African countries. The epidemic appears plateauing in Sudan showing only 0.7% cases and 0.4% deaths and in Djibouti 0.1% cases and zero deaths. Similarly, 0.6 cases and 0.1 deaths reported in Somalia in a week time.

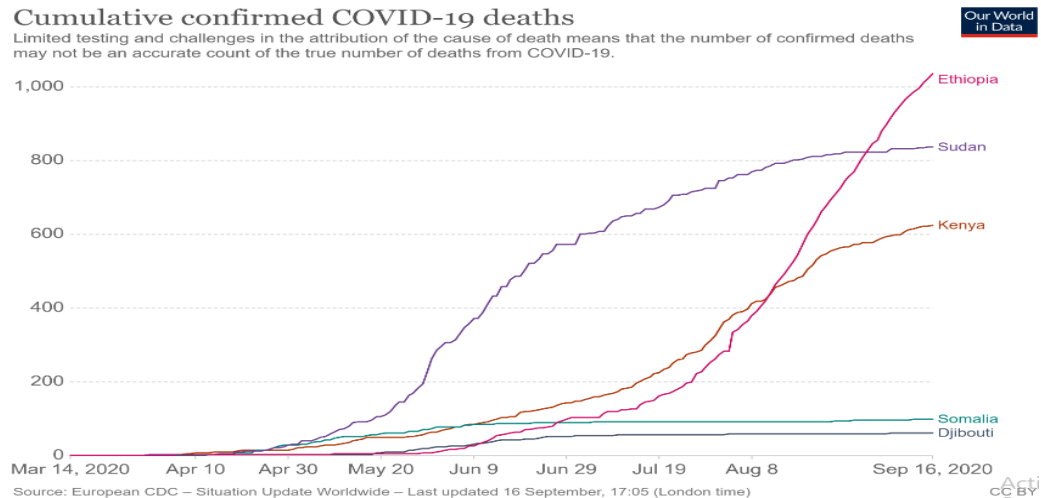
Cumulative confirmed COVID-19 cases

The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.



Source: European CDC – Situation Update Worldwide – Last updated 16 September, 17:05 (London time)





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COVID-19, unemployment, and suicide

- The COVID-19 pandemic has led to the introduction of strong restrictive measures that are having a substantial effect on the global economy, including an increase in the unemployment rate worldwide.
- Modelled the effect of unemployment on suicide on the basis of global public data from 63 countries showed that suicide risk was elevated by 20–30% when associated with unemployment during 2000–2011 (including the 2008 economic crisis).
- This model is used to predict the effects of the currently expected rise in the unemployment rate on suicide rates. Close to 800,000 people die by suicide every year.
- The expected number of job losses due to COVID-19 showed 24.7 million jobs as a high scenario and 5.3 million jobs lost as a low scenario.
- In the high scenario, the worldwide unemployment rate would increase from 4.94% to 5.64%, which would be associated with an increase in suicides of 9570 per year.
- In the low scenario, the unemployment would increase to 5.09%, associated with an increase of about 2135 suicides.
- According to WHO, each suicide in a population is accompanied by more than 20 suicide attempts.
- Thus, the number of mentally distressed people who might seek help from mental health services can be expected to increase in the context of the COVID-19 pandemic.

- Data from the economic crisis of 2008 showed that the increase in suicides preceded the actual rise in the unemployment rate.
- We therefore expect an extra burden for our mental health system, and the medical community should prepare for this challenge from now.
- A study from Canada also indicates that a percentage point increase in unemployment was associated with a 1.0% increase in suicide between 2000 and 2018. Two scenarios were explored:
 - In the first scenario, the rise in unemployment rates resulted in a projected total of 418 excess suicides in 2020-2021 (suicide rate per 100,000: 11.6 in 2020).
 - In the second scenario, the projected suicide rates per 100,000 increased to 14.0 in 2020 and 13.6 in 2021, resulting in 2114 excess suicides in 2020-2021.
- These results indicate that suicide prevention in the context of COVID-19-related unemployment is a critical priority.
- Mental health providers should also raise awareness in politics and society that rising unemployment is associated with an increased number of suicides.
- The downsizing of the economy and the focus of the medical system on the COVID-19 pandemic can lead to unintended long-term problems for a vulnerable group on the fringes of society.
- It is also important that various services, such as hotlines and psychiatric services, remain able to respond appropriately

References

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2. Kawohl W, Nordt C. COVID-19, unemployment, and suicide. *Lancet Psychiatry.* 2020;7(5):389-390. Doi: [10.1016/S2215-0366\(20\)30141-3](https://doi.org/10.1016/S2215-0366(20)30141-3)

The socio-economic implication of COVID-19 pandemic in resource constraints settings

- The COVID-19 pandemic is more than a health crisis: it affects societies and economies. Though the impact of the pandemic may vary from place to place, it will utmost likely aggravate poverty and inequalities making achievement of SDGs more pressing in resource constraints setting.
- Measuring the effects of the COVID-19 catastrophe on societies, economies and other vulnerable groups is vital to inform and adapt the responses of governments to recover from the crisis.
- Social distancing, self-isolation and travel restrictions have led to a reduced workforce across all economic sectors and caused many jobs to be lost. Moreover, schools are no longer able to provide free school meals for children due to school closure.

- This also heightened fears of increasing levels of domestic violence, which includes physical, emotional and sexual abuse.
- Schools have closed, and the need for commodities and manufactured products has decreased. The prolonged effect of the school closure is yet to be determined but families could not go to work to look after their children and losing income as a direct result.
- The food sector is also facing increased demand due to panic-buying and stockpiling of food products.
- Without immediate socio-economic responses, universal suffering will escalate, threatening of lives and livelihoods for the coming couples of years.
- Immediate development responses in this crisis must be undertaken with an eye to the future. Development trajectories in the long-term will be affected by the choices countries make now and the support they receive.
- Countries experiencing extended conflict, frequent disasters or forced displacement will face a high burden due to the pandemic.

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COVID-19 in Children and the role of School Setting

- The role of children in SARS-CoV-2 transmission remains unclear, especially in the context of educational settings. Available evidence indicates that children most probably contract COVID-19 in their households or through contact with infected family members.
- The effect of school closures on the transmission of SARS-CoV-2 is largely unknown, but the effect of school closures on children's health and well-being has been well-documented and researched.
- There is a lack of scientific consensus about the impact of school closures and re-openings on community transmission of SARS-CoV-2. There are considerable concern about the indirect effect of school closures on students and parents.

- The impact of school closure on the health and wellbeing of children range from the interruption of learning and the exacerbation of disparities and mental health issues to an increased risk of domestic violence.
- Children are at increased risk of domestic violence during periods of school closure associated with health emergencies. With schools closed, children no longer have a safety net that can detect and report child abuse, as well as an external social network and the support for coping with abuse at home. Beyond short-term effects, child-abuse and neglect have long-term effects, including mental health disorders, sexually transmitted infections, unwanted pregnancies, and substance abuse.
- Furthermore, economic circumstances can jeopardize the return to school for children and young people who are under pressure to work and generate income for financially distressed families.
- Other health aspects, both physical and mental, also need consideration. For many students living in poverty, schools are not only a place for learning, but also for healthy eating, and therefore researchers warn that school closures will exacerbate food insecurity.
- Research has highlighted that the active social life that children aged 2-10 years have at school helps them to learn from peers and has a positive impact on their personality and sense of identity, while disruptions of close peer relationships have been associated with depression, guilt, and anger in children.
- School and extracurricular activities provide structure, meaning and a daily rhythm for children and youth. For those suffering from anxiety and depression, the loss of such activities can worsen symptoms and reinforce social withdrawal and feelings of hopelessness.
- Children with disabilities may be particularly affected as they can feel more isolated when schools and special services are closed and they have limited possibilities for digital communication. On the other hand, more time spent online increases the risk of cyber-bullying.
- When diagnosed with COVID-19, children are much less likely to be hospitalized or have fatal outcomes than adults. They are more likely to have a mild or asymptomatic infection, meaning that the infection may go undetected or undiagnosed.
- While very few significant outbreaks of COVID-19 in schools have been documented, they do occur, and may be difficult to detect due to the relative lack of symptoms in children.
- In general, the majority of countries reported slightly lower sero-prevalence in children than in adult groups, however these differences are small and uncertain. More specialized studies need to be performed with the focus on children to better understand infection and antibody dynamics.
- Investigations of cases identified in school settings suggest that child to child transmission in schools is uncommon and not the primary cause of SARS-CoV-2 infection in children whose onset of infection coincides with the period during which they are attending school, particularly in preschools and primary schools.

- If appropriate physical distancing and hygiene measures are applied, schools are unlikely to be more effective propagating environments than other occupational or leisure settings with similar densities of people.
- There is conflicting published evidence on the impact of school closure/re-opening on community transmission levels, although the evidence from contact tracing in schools, and observational data from a number of EU countries suggest that re-opening schools has not been associated with significant increases in community transmission.
- Available evidence also indicates that closures of childcare and educational institutions are unlikely to be an effective single control measure for community transmission of COVID-19 and such closures would be unlikely to provide significant additional protection of children's health, since most develop a very mild form of COVID-19, if any.
- Decisions on control measures in schools and school closures/openings should be consistent with decisions on other physical distancing and public health response measures.

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Consideration school-related public health measures in the context of COVID-19

- Countries around the world are taking broad public health and social measures (PHSM), including closure of schools, to prevent the spread COVID-19.
- It is necessary to consider for school operations, including openings, closures and re-openings and the measures needed to minimize the risk of COVID-19 to students and school staffs.

- At the forefront of all considerations and decisions should be the continuity of education for children for their overall well-being, health and safety. Nonetheless, all decisions will have implications for children, parents or caregivers, teachers and other staff and more broadly, their communities and societies.

General principles

- The principles underlying the considerations for school-related public health measures to prevent and minimize COVID-19 transmission in school settings are as follows:
 - Ensuring continuity of safe, adequate and appropriate educational and social learning and development of children.
 - Minimizing the risk of COVID-19 transmission within school and school-associated settings among children, teachers and other school staff.
 - Guarding against the potential for schools to act as amplifiers for transmission of COVID-19 within communities.
 - Ensuring school-related PHSM are integrated into and support the wider measures implemented at the community level.

Considerations in decisions on school operations

- From a public health perspective, deciding to close or re-open schools should be guided by a risk-based approach, taking into consideration the epidemiology of COVID-19 at the local level, the capacity of educational institutions to adapt their system to operate safely; the impact of school closures on educational loss, equity, general health and wellbeing of children; and the range of other public health measures being implemented outside school.
- Decisions on full or partial closure or reopening should be taken at a local administrative level, based on the local level of transmission of COVID-19 and the local risk assessment, as well as how much the reopening of educational settings might increase transmission in the community. The shutting down educational facilities should only be considered when there are no other alternatives.
- Based on the best available data, COVID-19 appears to have a limited direct burden on children's health, accounting for about 8.5% of reported cases globally, and very few deaths. In contrast, school closures have clear negative impacts on child health, education and development, family income and the overall economy.
- National and local governments should consider prioritizing continuity of education by investing in comprehensive, multilayered measures to prevent introduction and further spread of COVID-19 in educational settings, while also limiting transmission in the wider community.

COVID-19 prevention and control measures

Physical distancing

- Physical distancing measures can be applied to individuals (in and outside classrooms) and through administrative measures that aim to keep groups apart (cohorting, staggering, alternating distance learning with presence in school, where possible, etc.).

Use of masks in school settings

- WHO and UNICEF recently issued advice on the use of masks for children in the community in the context of COVID-19.
- To operationalize this guidance for school settings, age categories should be aligned with the local educational structure. The use of masks by children and adolescents in schools should only be considered as one part of a comprehensive strategy to limit the spread of COVID-19.
- Schools should establish a system for waste management including disposal of used masks to reduce the risk of contaminated masks being disposed of in classrooms and playgrounds.

Ventilation

- Consider using natural ventilation, opening windows if possible and safe to do so.
- Ensure adequate ventilation and increase total airflow supply to occupied spaces, if possible.
- If heating, ventilation and air conditioning (HVAC) systems are used, they should be regularly inspected, maintained and cleaned.

Hygiene and daily practices at school

- Educate everyone in the school about prevention of COVID-19, including appropriate and frequent hand hygiene, respiratory etiquette, use of mask use, if recommended, symptoms of COVID-19 and what to do when one feel sick; offer regular updates as the pandemic evolves; counter rumors and misleading information through messaging and communication.
- Create a schedule for frequent hand hygiene, especially for young children, specifically at school arrival and at certain key moments of the school routine; provide sufficient soap and clean water or alcohol-based rub at school entrances and throughout the school and in classrooms where feasible; ensure physical distancing when students wait at hand hygiene/washing points using signage on the ground.
- Schedule regular cleaning of the school environment daily, including toilets, with water and soap/detergent and disinfectant; clean and disinfect frequently touched surfaces; elaborate checklists for schools' cleaners to ensure all daily hygiene tasks are accomplished and ensure provision of cleaning and protective supplies for cleaning staff such as personal protective equipment (PPE).

- Assess what can be done to limit risk of exposure, or direct physical contact, in physical education classes, sports, music or other physical activities and playgrounds, wet areas (shower/pool) and changing rooms, labs/computer labs, libraries, bathrooms and dining areas/cafeteria.
- Put in place respiratory and hand hygiene and physical distancing measures in transportation such as school buses. If possible, the bus windows should be kept open.

Screening and management of sick students, teachers and other school staff

- Enforce the policy of “staying at home if unwell” for students, teachers or school staff with potential COVID-19 infection and connect them with local healthcare providers for assessment, testing and care.
- Consider daily screening for history of fever or feeling feverish in the previous 24 hours upon entry into the building for all staff, students and visitors to identify persons who are sick.
- Ensure students who have been in contact with a COVID-19 case stay home for 14 days.
- To respond to school-based cases, prompt isolation of cases and contact tracing and quarantine of contacts should be implemented while maintaining confidentiality. This should also include:
 - Decontamination of relevant areas of schools; contact tracing and risk assessment before considering class or school closures. Depending on the national policy, consider isolation of a classroom or a group within a classroom if contact has been limited to specific groups rather than moving school closure.

Communication with parents, students, teachers and school staff

- Inclusive and early collaboration between the school and the community is a key to develop and implement necessary measures.
- Explain to the students the reason for school-related measures, including discussing the scientific considerations and highlighting the help they can get through schools (e.g. psychosocial support).

Remote learning

- Where children cannot attend classes in person, support should be given to ensure students have continued access to educational materials and technologies (internet, texting radio, radio, or television).

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