

Prevention of coronavirus infection (Covid-19) in early childhood development (ECD) programmes

Frequently asked questions (FAQs)

Release date: 19 August 2020

What is the risk of COVID-19 illness and disease transmission in young children (1-5 years)? How does this compare to older children, adolescents and adults?

- Young children biologically contain SARS-CoV-2 (coronavirus) better than adults, are less likely to get sick if infected, have milder disease, are unlikely to die from COVID-19, and are probably less infectious than adults. Serious illness due to COVID-19 is seen infrequently in children, although there have been rare cases of critical illness or death.
- In South Africa and globally, fewer cases of COVID-19 have been reported in children (aged 0-18 years) compared with adults. Although children comprise 35% of the South African population, recent data show that only 7.4% of all cases of COVID-19 in South Africa were among children, and they accounted for 3.2% of all admissions (as of 25 July 2020).
- The frequency of COVID-19 disease is lower in young children (1 to 5 years) compared to older children and adults.

How does COVID-19 present in young children (to assist adults to identify and act on them)?

- COVID-19 symptoms are milder in children than in adults; about 90% of children who test positive for the disease have mild symptoms or none at all.
- About half of all children with COVID-19 present with a fever or a cough. One quarter have a sore throat or a throat infection. Some children (15%) may have a runny or blocked nose. One in ten children has diarrhoea, or nausea and vomiting.
- However, a child with any of the above symptoms is more likely to have another viral or bacterial illness rather than COVID-19.

What measures can early childhood development programmes undertake to prevent COVID-19?

- Educate all staff about COVID-19 prevention. This includes appropriate and frequent hand hygiene, respiratory (cough) hygiene, physical distancing, face mask use, symptoms of COVID-19 and what to do if anyone feels sick.
- Children should also be educated on basic principles of prevention in appropriate child-friendly ways.
- To reduce the risk of exposure, ECD programmes should maintain consistent groups or cohorts of children, teachers, carers and related workers, and should take steps to avoid mixing groups or cohorts of children, teachers, carers, and workers to the extent possible.

- Assess what can be done to limit the risk of exposure or direct physical contact during play, in playgrounds, and in changing rooms.
- Create a schedule for frequent hand hygiene for young children, and provide sufficient soap and clean water at the facility entrances and throughout the facility.
- Schedule regular cleaning (at least 2-3 times daily) of the facility environment, including toilets, with water and soap, detergent or disinfectant. Clean and disinfect frequently touched surfaces such as door handles, doorframes, desks, toys, light switches, play equipment, and teaching aids used by children.
- Larger ECD programmes can also be innovative and stagger starting and finishing times as well as break times to limit all children arriving and leaving at the same time.

How can hand hygiene best be practised?

- Wash hands often with soap and water.
- Wash hands for at least 20 seconds. Children can help keep track of time by singing a song which takes about 20 seconds to finish (such as singing the Happy Birthday song twice).
- Children should wash their hands after using the bathroom, sneezing, coughing or blowing their nose, before eating (even snacks) and immediately after coming inside from playing outdoors.
- If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 70% alcohol.
- Supervise young children when they use hand sanitizer to prevent swallowing alcohol.
- If a child is refusing to wash their hands or becoming very upset when asked to do so, it might help to give them a small reward, such as a sticker, to celebrate each time they wash their hands. Compliment them for doing a really good job while washing their hands. It also helps when carers set an example by washing their own hands frequently. Encourage parents to do the same at home and to include handwashing in children's' play activities such as washing dolls' hands.

ECD programmes in resource-poor settings will not be able to afford paper towels for use after hand-washing? What alternative is there?

- The most hygienic way to dry hands is with paper or cloth towels. Drying with paper towels or cloth towels removes even more germs than washing alone, as the friction of drying reduces the germ count even further.
- The alternative to paper is a cloth towel. However, if a cloth towel is used, every child must have his or her own towel and spot to hang it. It also needs to be washed regularly - at least weekly.
- In the absence of paper towels, air drying (shaking hands in the air to dry) may be used. However, unless hands are completely dry, it facilitates an environment in which organisms can flourish. Moist hands touching a doorknob on the way out of a public bathroom, for instance, significantly increases the risk of making clean hands germ-covered again.

Is it necessary to disinfect children/adults' shoes on entry?

- The likelihood of COVID-19 being spread on shoes and infecting individuals is very low. However, the virus has been found on the soles of health workers exiting COVID-19 intensive care units.
- As a precautionary measure, particularly in facilities where infants crawl or play on floors, consider leaving shoes at the entrance of classrooms or designated areas.

Is there clear guidance on the use of masks for younger children?

- No, there is not. Various experts have provided contradictory guidance. There is little research about the benefits and risks of wearing a face mask in children aged 2 to 5 years.
- Use of masks in children younger than two years is discouraged because of the possible risk of suffocation.
- Based on first principles of infection prevention, our opinion is that a child older than two years should wear a cloth face mask to prevent disease transmission. Cloth face coverings can be safely worn by all children aged 2 years and older, including the vast majority of children with special health conditions.
- Having a correct sized, well-fitting mask is critical to its acceptability, as well as its ability to prevent infection, in children.
- As mask-wearing becomes routine and reinforced by adults and peers, children learn to follow directions. Parents and teachers can make a game of this, wear funky coloured masks and also put masks on teddy bears and dolls, for instance, to encourage co-operation.
- Nevertheless, it is recognised that children between 2 and 5 years may cope poorly with wearing a mask, regularly touching or removing it, reducing any benefit. If a child or group of children refuse to wear masks, this should be accepted and tolerated, with greater attention to attempting to retain physical distancing.
- However, even physical distancing may be difficult to maintain in young children. The assumption in planning policy has to be that young children will not comply with either physical distancing rules or mask-wearing behaviour.
- There is no data on the consequences of young children not wearing masks or physical distancing at ECD programmes.
- There are no reports of major COVID-19 outbreaks at ECD programmes that remained opened or have reopened during the COVID-19 pandemic.

Are plastic shield masks better than face masks?

- Use of plastic shield masks has not been well studied in young children. Its routine use is unnecessary, although not discouraged, recognising that it might have the same limitations as face masks.
- Plastic shields are not a substitute for face masks. When masks and shields are used in combination, some additional benefit may accrue.

Does face mask-wearing pose a risk to breathing, and does it have other negative consequences on children?

- There is no evidence that face mask-wearing affects the breathing of children (for example, carbon dioxide retention or oxygen deficiency).
- The prolonged use of masks can be uncomfortable, but the vast majority of children aged 2 or older can safely wear a face covering for extended periods.
- Masks should not affect a child's ability to focus or learn.

Since young children learn so much from observing the facial expressions of their carers or teachers, would it be permissible for carers or teachers to remove their masks when engaging with a small group of children if the group and teacher remained constant?

- Preventive measures at ECD programmes are best directed at supervising adults since they are most likely to infect children and other adults. Face mask-wearing is mandatory for carers, teachers and staff.
- Physical distancing is the single best preventive intervention, with a one-meter separation being the minimum. Virus spread reduces the further the person is away. The maximum transmission distance for the virus through respiratory spread is about 4 meters.
- Thus, while the teacher or caregiver may consider removing the mask if situated a distance greater than four meters from children, the danger is that this behaviour might result in inconsistent use of the mask (forgetting to put the mask back on when approaching a child), increasing transmission risk.
- Alternatively, if teachers are situated at a distance more than two meters from children during lessons, they can use a face shield (clear plastic shield that covers the forehead, extends below the chin, and wraps around the sides of the face) for short periods so that children can see their faces.

What are the 'minimum requirements' on mask-wearing for staff in ECD programmes?

- ECD staff should always wear masks, particularly when visiting the staff room, toilet or any other place where contact with an adult is likely.

Can staff and children temporarily remove their face covering?

- Staff and children may remove their face covering temporarily to engage in activities that make wearing a face mask difficult, provided that physical distancing is maintained to the extent feasible:
 - When eating or drinking.
 - When participating in physical activity
 - When engaged in other activities (e.g., playing a music instrument) that would make it difficult or impractical to wear a face-covering.
 - During activities such as swimming, where a face-covering will get wet.
 - When alone in a room or outside.

What about children donning other protective gear?

- There is no need for children to routinely put on aprons, gloves or other protective gear.

Is it necessary or advisable that adult staff wear protective gloves?

- This would only be necessary if handling possibly contaminated material, such as tissues or discarded masks.
- Touching a child would not be a reason to wear gloves.
- Hand washing after a touch interaction with a child is advisable.
- In some instances, routine use of gloves may increase the risk of spread, since they may collect the virus, and reduce handwashing.

How can we promote physical distancing with young children and keep children at least one meter apart?

- Younger children may find it more difficult to adhere to physical distancing.
- Implement small group activities and encourage individual play or activities. For example, if the class has eight children, break into two small groups, and designate space in the classroom for individual play.
- Physically rearrange the room to promote individual child play.
- Large rooms could be divided into two “rooms” with a barrier to keep children in their assigned area.
- Keep non-mobile infants separate from mobile children and implement small group, focused activities with this younger group.
- Consider using unconventional, but safe spaces i.e., common areas with enough space to accommodate a small group, if they are large enough.
- Move lessons outdoors or ventilate rooms as much as possible.
- At nap time, ensure that children’s naptime mats (or cribs) are spaced out as much as possible, ideally at least one meter apart. Consider placing children head to toe to further reduce the potential for viral spread.
- Feed children in the class area. If meals must be provided in a lunchroom, stagger meal times, arrange tables to ensure that there are at least two meters of space between groups in the lunchroom, and clean and disinfect tables between lunch shifts.
- Stagger breaks, such as allowing only one group or cohort of children outside at a time.

The concept of ‘social bubbles’ is popular in other parts of the world, placing small groups of children and a staff member consistently together. Is this approach advisable?

- Keeping the same small group of children together throughout the day, with consistent staff, will help reduce potential exposures and may prevent an entire programme from shutting down if exposure does occur.

What other safety measures should be considered?

- Alternate drop off and pick up times for each small group to avoid a large number of people congregating outside or in front of the building.
- Restrict outside visitors and volunteers.
- Encourage respiratory (cough) and hand hygiene and physical distancing measures in transportation such as minibuses and provide tips for caregivers and parents on a safe commute to and from ECD programme facilities, including those using public transport.

- Ideally, the windows of a minibus or group transport vehicle should be kept open. One child per seat and at least one meter apart from the next child is the minimum standard.
- Ensure that ECD programme entry immunisation checks are in place. Remind caregivers and parents of the importance of ensuring their children are up to date with all eligible vaccinations.
- While children will be spending time with more children and adults as they return to the ECD programme, exposure to children and adults outside of the programme should be minimised by the parent(s) or caregiver(s) to decrease disease acquisition risk, e.g. a child visiting or playing with friends after returning home from the ECD programme.

How can the possibility of a sick child or adult entering or remaining in the facility be reduced?

- Enforce a policy of “staying at home if unwell” for children, teachers, carers and staff with symptoms.
- Ensure children who have had significant contact with (exposure to) a COVID-19 case stay home (quarantine) for 14 days.
- Significant exposure to an infected person is defined as having been within 1.5 meters of the person for longer than 15 minutes while that person was not wearing a mask.
- Establish procedures for children or staff who have symptoms of COVID-19 or are feeling unwell in any way to be sent home or isolated from others.
- Communicate to staff the importance of being vigilant for symptoms.
- Establish procedures to ensure children and staff who come to the ECD programme sick, or become sick while at the facility, are sent home as soon as possible.
- Keep sick children and staff separate from well children and staff until they are fetched to be taken home.
- Plan to have an isolation room or area (such as a cot in a corner of the classroom) that can be used to isolate a sick child.

In the event of a child or adult testing positive is it necessary to close the class/group or the whole ECD programme?

- This is a difficult question for which there is no simple or evidence-based answer. In most instances, closing an entire ECD programme is unnecessary, particularly if there several classes in the programme.
- There is no simple guidance as to when to close an ECD programme class, but having more than one person (adult or child) in a class or group (i.e. two or more persons) diagnosed COVID-19 positive would raise concern.

What disinfection practices are needed if COVID-19 is confirmed in a child or staff member?

- Close off areas used by the person who is sick.
- Clean and disinfect all areas used by the person who is sick, such as the classroom(s), office, bathrooms, and common areas.

- Open outside doors and windows to increase air circulation in these areas.
- Wait up to 24 hours, or as long as possible, before cleaning or disinfecting to allow respiratory droplets to settle before cleaning and disinfecting.
- Continue routine cleaning and disinfection thereafter.
- If more than 7 days have passed since the person who is sick visited or used the facility, additional cleaning and disinfection are not necessary.

When is deep cleaning necessary?

- Never. Deep cleaning is different from regular cleaning because it reaches deep grime and dirt. It covers areas which are not traditionally covered by a regular clean, e.g. behind kitchen appliances such as an oven, cleaning the grime that builds up. COVID-19 does not lurk in these areas.

Should temperature screening (with expensive non-contact thermometers) be a requirement? If so, would screening on arrival, once a day, be sufficient?

- Use of expensive non-contact thermometers is unnecessary, as they often fail to detect body temperature accurately.
- Further, the value of routine temperature screening is being questioned. Most infected children and many adults with COVID-19 disease will be asymptomatic, i.e. they will not have a fever or any other sign.
- Once a day screening on arrival is sufficient.
- It is probably better to get a history of fever or a high temperature being observed at home than doing an actual temperature on arrival.
- If a history of fever is present, or the person claims to be feverish, the use of an ordinary thermometer is acceptable to confirm a high temperature. After thermometer use, it can be cleaned with an alcohol wipe or disinfectant sprayed on a cotton swab.

If a staff member needs to make physical contact with a child who is hurt and needs comforting, what is permissible and safe?

- Staff need to be close to children when providing care or comfort.
- Maintain masking.
- Touching a child would not be a reason to wear gloves. Hand washing before and after a touch interaction with a child is advisable.

Can you acquire COVID-19 from touching a surface or object?

- A person can get COVID-19 by touching a surface or object that has the virus on it and then touching their mouth, nose, or possibly their eyes. However, this is not the main way the virus spreads.
- It is uncertain how long the virus that causes COVID-19 survives on surfaces, but it seems to behave like other coronaviruses. Studies suggest that coronaviruses may persist on surfaces for a few hours or up to several days. This may vary under different conditions (e.g. type of surface, temperature or humidity of the environment).
- If a surface is possibly infected, clean it with simple disinfectant to kill the virus.
- Experiments have found the virus to be detectable on average on:

- Paper for up to 30 minutes.
- Tissue paper for up to 30 minutes.
- Wood for up to a day.
- Cloth for up to a day.
- Glass for up to two days.
- Banknotes for up to two days.
- Stainless steel for up to four days.
- Plastic for up to four days
- The inner layer of a mask for up to four days
- The outer layer of a mask for up to seven days

Many ECD programmes use a small notebook for daily communication between parent and ECD staff. Is there a risk of transferring the virus from the facility to the home, or the other way round?

- Notebooks or children's books, like other paper-based materials, are not considered high risk for transmission and do not need additional cleaning or disinfection procedures.
- The notebook could be placed within a plastic cover that could be disinfected.

Outdoor play equipment such as wooden or metal climbing frames, swings, plastic slides. Should these be cordoned off?

- Yes, since infected children touching these surfaces may transmit the virus to others.
- Alternatively, cleaning of the surfaces after individual child use may allow continued use, but this is unlikely to be feasible in most settings.

Are there recommendations on the use and cleaning or disinfecting of soft toys; toys made of wood, plastic, metal etc.?

- Cleaning and disinfecting are different. Cleaning removes germs, dirt, and other impurities using soap and water. Disinfecting kills germs using chemicals.
- Toys are unlikely to transmit COVID-19, however, if a facility would like to reduce the risk, consider:
 - Toys that cannot be cleaned and sanitised should not be provided.
 - Be mindful of items more likely to be placed in a child's mouth, like play food, dishes, and utensils.
 - Toys that children have placed in their mouths or that are otherwise contaminated by body secretions or excretions should be set aside until they are cleaned by hand by a person wearing gloves.
 - Washing with soapy water is the ideal method for cleaning toys.
 - Alternatively, clean with water and detergent, rinse, sanitize with a disinfectant, rinse again, and air-dry.
 - Some toys may also be cleaned in a mechanical dishwasher.
 - Machine washable cloth toys should be used by one individual at a time or should not be used at all. These toys should be laundered before being used by another child.

- Do not share toys with other groups of infants or toddlers, unless they are washed and sanitized before being moved from one group to the other.
- Set aside toys that need to be cleaned. Place in a dishpan with soapy water or put in a separate container marked for “soiled toys.” Keep the dishpan and water out of reach from children to prevent the risk of drowning.
- Try to have enough toys so that the toys can be rotated through cleanings.

The South African Paediatric Association is a professional society representing paediatricians in the public and private sector in South Africa.

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