

# Promoting and supporting children's health and healthcare during COVID-19 – International Paediatric Association Position Statement

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The pandemic of COVID-19 disease caused by severe acute respiratory syndrome coronavirus and the risks it poses to families, communities and nations have led to massive social and economic consequences. While less likely to cause severe illness in healthy children or adolescents than adults, children can transmit the virus, and those under 1 year of age and with underlying comorbidities are at increased risk for more severe illness.<sup>1</sup>

This paper provides recommendations from the International Pediatric Association for children's health and healthcare during COVID-19 (box 1). The IPA highlights the health needs of children and outlines priorities for preserving newborn, child and adolescent health during the COVID-19 crisis and beyond, where social distancing and lockdowns threaten access to routine care and preventive services. Our primary focus is on maintaining systems of primary care for children; however, much of this paper is also applicable to specialty and subspecialty care. We provide guidance for paediatricians and paediatric societies in managing children's general health needs, routine preventive care and well-being during the current school and daycare closures, social distancing and quarantines. We recognise the need for specific strategies to reach those children and youth at greatest risk, including those in low-income and middle-income countries, as well as in fragile settings such as refugee camps. We address interim guidance on routine care and immunisation, preventing children from acquiring and transmitting infections, mitigating the consequences of social isolation and disruption of education, and ways paediatricians and children's services may organise remote delivery of care.

This paper does not attempt to provide definitive guidance for clinical management of children infected with or exposed to COVID-19, nor a comprehensive review of the evidence emerging about the virus and its effects. The science is evolving rapidly; current lay and technical guidance is available from the WHO (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>), the US Centres for Disease Control and Prevention (<https://www.cdc.gov/coronavirus/2019-nCoV/index.html>), the European Centre for Disease Prevention and Control (<https://www.ecdc.europa.eu/en/covid-19-pandemic>) and other competent bodies.

## COVID-19

Severe acute respiratory syndrome-coronavirus-2 is a newly identified, highly contagious pathogen that causes coronavirus 2019 disease (COVID-19).<sup>2</sup> It spreads quickly, primarily via droplets and fomites during close and unprotected contact. It can be spread by aerosol-generating procedures in healthcare settings and can persist on contaminated surfaces for several days.<sup>3</sup> Common symptoms in adults include fever, tiredness and a dry cough.<sup>2</sup> Children are less likely to present with these symptoms and may also have myalgias, nasal congestion, sore throat and diarrhoea.<sup>1,4</sup> Symptoms are often mild, and more than 85% of infected adults recover without incident, but the remainder may become seriously ill and some die. More severe symptoms include difficulty in breathing, pneumonia, acute respiratory distress syndrome, and heart and kidney failure.<sup>2</sup> Older people, those with underlying medical problems, and smokers and e-cigarette users are more likely to develop severe disease.<sup>2,5</sup>

Children are more likely to be asymptomatic shedders and are less likely to have severe disease than adults, although younger children and infants are more likely than older children to have severe disease.<sup>1,4</sup> Limited evidence to date suggests that maternal to newborn vertical transmission, while rare, may occur.<sup>6</sup> The WHO and other organisations note that there is no transmission of the virus through breast milk and advise preventing transmission by handwashing, cleaning the breast and using masks during breast feeding for covid-19-infected mothers.<sup>7</sup>

## PREVENTION OF COVID-19

Prevention of the spread of infection is of paramount importance to limit the burden of disease. Preventive measures to reduce transmission recommended by the WHO stress meticulous droplet and contact precautions, including enhanced hand hygiene, reduction of contacts among the general population (physical or social distancing) and isolation of patients with signs of the disease.<sup>8</sup> Children and adults with asymptomatic or presymptomatic infection may transmit the infection to other individuals; thus, families in areas with active infections should be advised to avoid contact other than with immediate family members and to avoid social contacts and group gatherings. All family members, including children, should wash their hands frequently with soap and water for at least



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### Box 1 International Paediatric Association recommendations for children's health and healthcare during COVID-19

#### Prevention and treatment

- ▶ Most children with covid-19 disease without predisposing disease or impaired immune response have a mild disease course and may be isolated at home. Those with more severe disease should be treated in facilities skilled at providing care for children. Particular precautions should be taken to protect infants below 1 year of age.
- ▶ In paediatric care settings, precautions should be taken to minimise risk of severe acute respiratory syndrome (SARS)-CoV-2 transmission. WHO recommendations for droplet and contact precautions should be followed meticulously, including risk screening prior to and at entry to clinical sites, separation of children at low and high risk, healthcare worker use of protective mouth and nose coverings and protective clothing, meticulous handwashing with soap or sanitiser, and frequent disinfectant use. WHO recommendations for covid-19-infected mothers to breast feed safely, handwash, clean the breast and use masks should also be followed.
- ▶ In areas with a high incidence of new SARS-CoV-2 infections, paediatricians should encourage families with children to stay at home to reduce social contact for the whole family as much as possible, to enhance personal hygiene by regular and thorough handwashing, to cover coughing with an elbow rather than hands; and to avoid touching the face.
- ▶ Paediatric societies should work closely with public health authorities to provide accurate information and advice to physicians and the public about prevention, testing and treatment strategies; about family, parenting and education during public health emergencies; and about health systems and facility recommendations to minimise the spread of infection. This should include strategies to reach special populations at increased risk, address disparities in access across national and regional populations, and ensure efforts to provide essential newborn care and universal primary care are maintained.
  - Regional and national paediatric organisations should provide accurate information and links to the WHO and other reputable resources to help healthcare professionals and the general public avoid sham therapies and false reports.
  - All stakeholders should be encouraged to use the term 'physical distancing' rather than 'social distancing' to emphasise the importance of reducing spread while recognising the value of social proximity and psychological support.
- ▶ Development of vaccines and therapies for covid-19 should include studies of treatment and prevention efficacy in children of all ages in addition to adults and should be made readily available to children when ready for delivery at scale.

#### Vaccines

- ▶ All children should continue to be vaccinated as per their usual schedule with all relevant antigens whenever possible.
  - The decision to maintain or suspend routine immunisation services should consider local mandates for physical distancing and health systems responses, the status and anticipated status of local covid-19 transmission (eg, no cases and sporadic, cluster or community transmission),

Continued

### Box 1 Continued

and factors affecting routine immunisations, including population demographics and migration patterns.

- ▶ Paediatric societies should work with the WHO, UNICEF, National Immunisation Technical Advisory Groups and governments in monitoring delayed and interrupted vaccination and suggest plans for achieving targets, depending on their local and national situations.
  - Vaccine-preventable disease surveillance should be maintained and reinforced to enable early detection and management of cases and, where feasible, to contribute to covid-19 surveillance.
  - Catch-up campaigns should be planned with special attention to populations in need of routine immunisation against diseases such as measles, yellow fever and diphtheria.
- ▶ Immunisation planning should include effective communication strategies and engagement with stakeholders and communities to allay concerns and enhance, maintain or re-establish community demand for vaccinations.

#### Telemedicine

- ▶ Paediatric societies should advocate for policies to encourage and facilitate telemedicine or teleconsulting service delivery to meet families' needs during the pandemic with strategies to address disparities in access to telemedicine, and to balance increased access with avoiding harm from missed diagnoses or from limitations in patient and clinician comfort or from available technology.

20s, or use hand sanitiser. Family members with symptoms of fever or cough should stay home, with as much separation from other family members as possible.<sup>8</sup>

The most vulnerable groups of the population are advised to stay at home for as long as there is a high risk of infection. These include transplant recipients and people with leukaemia or lymphoma, on immunosuppression therapy, with severe respiratory conditions including cystic fibrosis or asthma, or with diseases or inborn errors of metabolism.<sup>8</sup> Children and adults are also at increased risk of infections in densely crowded conditions such as in refugee camps and jails or detention centres; in families living in extreme poverty, without basic water, sanitation and hygiene resources; and in countries with limited access to health services. Support from donor governments and others will be needed to strengthen health systems and to implement strategies to prevent transmission in low-income and middle-income countries, as well as in fragile settings.<sup>9</sup>

The WHO and government health agencies have published guidelines to help prevent transmission to health workers and patients in healthcare settings.<sup>8 10 11</sup> Healthcare settings should adhere strictly to hygiene and precautionary measures to avoid close contact between patients and should avoid droplet exposure through use of personal protective equipment (PPE). Patients with symptoms of respiratory infection or known covid-19 contacts should be isolated and separated from children without symptoms. Limitations on visitors and accompanying persons and physical distancing between patients are also recommended.

Healthcare professionals with symptoms should stay home and seek diagnostic testing if available because covid-19 among staff members can contribute to rapid spreading of virus. Healthcare professionals are at increased risk of becoming infected; thus, strategies to ensure availability, safe procedures and proper use

of PPE are essential. The epidemic has overwhelmed the capacity of many healthcare systems and has led to shifting of resources from children to adult services and to delaying or cancelling elective procedures for all ages.

### THERAPEUTIC AND PREVENTIVE AGENTS

Current treatment for COVID-19 is supportive care. While home-based care is preferable for children with mild–moderate signs, more severely ill children should be hospitalised and monitored and assessed for other sources of infection, even if they are suspected or confirmed to have covid-19 infection. Additional guidance for management of severe acute respiratory disease is available from the WHO.<sup>11</sup>

Numerous trials for treatment and prevention or postexposure prophylaxis are under way, but evidence on effective treatments is not yet available; thus, use of specific drugs should be under medical and regulatory supervision to establish safety and efficacy. Paediatric organisations should advocate for rapid inclusion of children in clinical trials once promising initial individual therapies are in efficacy trials. Similarly, there are clinical trials under way to develop covid-19 vaccines. Paediatric organisations should support GAVI: the Vaccine Alliance, the WHO, the UNICEF and others working to plan adequate scale-up of production and delivery. Advocacy is needed to encourage vaccine efficacy trials to include people of all ages, children with special needs and others who are especially at risk.

### Avoiding rumors and sham treatment

In times of crisis, rumours and false stories shared via social media can go viral and create disinformation.<sup>12</sup> Paediatricians and other clinicians should be cautious about starting therapies based on news or social media reports, and should rely on trusted sources of evidence-based information and share those with the families in their care. Major medical journals have accelerated rapid reviews and publication schedules, relaxing embargo policies and making all COVID-19-related content available freely online without paywall or subscription barriers.<sup>13</sup>

It is equally important that families be aware that many sham remedies have been promoted to the public. Many sham treatments have been widely disseminated on social media. Some have been shown to be harmful; none have been proven effective at prevention or treatment and thus should not be recommended.<sup>14</sup> These include, for example, drinking warm water, saline or garlic gargles, drinking lemon juice with honey or black seeds, use of specific homeopathic or alternative medicines, and drinking specific alcoholic drinks.<sup>14</sup>

### Vaccines and other essential services during covid-19

The WHO has issued guidance for immunisation activities and for maintaining essential health services during an outbreak, identifying immunisation as a core health service that should be prioritised and safeguarded during the epidemic.<sup>8</sup>

As detailed by WHO's Strategic Advisory Group of Experts on Immunisation, mass vaccination campaigns should be temporarily postponed to follow recommendations on physical distancing and ensure delivery of immunisations does not contribute to COVID-19 spread.<sup>15</sup> However, planning and catch-up efforts should be addressed rapidly, with attention to preventive strategies for vulnerable populations at increased risk of morbidity and mortality from outbreak-prone diseases.<sup>15</sup>

Similarly, essential nutritional interventions, access to healthy foods and other strategies to prevent maternal, newborn and child mortality and to maintain care systems should be maintained as much as possible during the emergency response, and modifications and delays should be explicitly planned and managed to safely maintain essential service and healthcare delivery. Immunisation and other delivery strategies in clinical settings should be adapted and conducted under safe conditions, without undue risk to health workers, caregivers or the community.<sup>8</sup>

### CARE DELIVERY AND TELEMEDICINE

The WHO and others have also issued recommendations on maintaining children's well-child visits during the pandemic.<sup>8</sup> Physical distancing requirements may disrupt routine care, and many parents are afraid to leave their homes or do not want to take their child to a clinic where sick children might be present. Families commonly pass information to their paediatrician over the phone, by email or by social media applications. Expansion of more formal telemedicine protocols can help address continuity of care during covid-19, although with some limitations due to disparities in internet access and language or cultural barriers to alternate care modalities.

Telemedicine facilitates use of alternatives to face-to-face encounters and may include online visits, live video conversations, store and forward technology, mobile health applications and messaging through text or email.<sup>16 17</sup> Telemedicine is a useful tool for long-distance clinical care and can be used for education, counselling parents and health management.<sup>16</sup> With appropriate attention and caution for issues of patient safety, confidentiality and accountability for missed diagnoses, telemedicine can be an effective way to help patients during the covid-19 pandemic.<sup>17 18</sup> The *British Medical Journal* and the American Academy of Paediatrics (AAP) have offered guidance on structuring practice for teleconsulting<sup>19</sup> and telemedicine<sup>20</sup> during the pandemic. Paediatric societies should advocate for immediate legal, regulatory and reimbursement system actions to facilitate integrating telemedicine for routine well, acute and chronic paediatric care while supporting social distancing and other changes designed to prevent the spread of COVID-19.<sup>18</sup>

### Caring for children and families and clinicians

Many families are struggling with children being out of school or parents being out of work during the pandemic. Children and adolescents may be stressed, and may not have the emotional or psychological resources to cope with the many changes occurring.<sup>21</sup> Fear of exposure and self-quarantine or social distancing strategies create anxiety and uncertainty, at the same time impacting social support systems. Changes in family work and income may lead to food and housing instability, interpersonal violence, unintentional injury, child abuse or other adverse childhood events, especially for those who are most vulnerable.<sup>21</sup> The WHO, UNICEF and others have developed guidance for families, and paediatricians can help support families who are stressed to help them address changing parenting needs and ways to explain the pandemic to their children.<sup>21–23</sup> Other resources include AAP's positive parenting<sup>24</sup> and the Inter-agency Network for Education in Emergencies COVID-19 site.<sup>25</sup>

Healthcare workers face additional stressors because of the danger of infection, shortages of PPE, fear of bringing infection home, witnessing coworkers becoming ill and having to make



## Box 2 Resource links on COVID-19 and child health

- ▶ COVID-19 page on the International Pediatric Association website: <https://ipa-world.org/covid-19-news-and-updates.php>
- ▶ WHO covid resource pages: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- ▶ UNESCO: <https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures>
- ▶ European Centres for Disease Control: <https://www.ecdc.europa.eu/en/coronavirus>
- ▶ US Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>
- ▶ Société Française de Pédiatrie: <https://www.sfpediatrie.com>
- ▶ Asociación Latinoamericana de Pediatría: <https://alape.org>
- ▶ Canadian Paediatric Society: <https://www.cps.ca/en/tools-outils/covid-19-information-and-resources-for-paediatricians>
- ▶ American Academy of Paediatrics: <https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections>
- ▶ Indian Academy of Paediatrics: [www.iapindia.org](http://www.iapindia.org)
- ▶ European Society for Paediatric Research: <https://www.espr.eu/news/news-detail/COVID-19-Resources-from-Pediatric-Research/177>
- ▶ REACTing Research and Action: <https://reacting.inserm.fr/literature-review/>
- ▶ UK Royal College of Paediatrics and Child Health guidance for paediatric services: <https://www.rcpch.ac.uk/resources/covid-19-guidance-paediatric-services>
- ▶ Resource materials from the Coalition of Centres in Global Child Health: <https://www.gchcoalition.com/covid-19.html>
- ▶ Covid-19 information for paediatric surgeons: <https://www.baps.org.uk/professionals/covid-19-information-for-paediatric-surgeons/>
- ▶ German Society for Paediatrics Coronavirus Information: <https://www.dgkj.de/fachinformationen-corona-virus>
- ▶ International Society for Paediatric and Adolescent Diabetes: <https://www.ispad.org/news/494473/COVID-19-and-Children-with-Diabetes.htm>

decisions about scarce resources. Professional societies should identify and disseminate recommendations to help manage these stressors through attention to self-care, use of cognitive coping strategies, and encouraging efforts to maintain social networks and support. Numerous regional and national paediatric societies have issued recommendations (selected links are included in box 2); all national paediatric societies should provide or link to resources to help their members and families identify reliable information sources during the epidemic.

### INTERNATIONAL PEDIATRIC ASSOCIATION (IPA) RECOMMENDATIONS

The IPA is a membership organisation of 169 paediatric societies, which includes 144 national paediatric societies, 10 regional paediatric societies and 13 international paediatric specialty societies. The IPA believes that every child should be accorded the right to the highest attainable standard of health and the opportunity to grow, develop and fulfil their potential. IPA is a collaborating organisation of the WHO and advocates for child health as the voice of paediatric professional organisations at WHO's Partnership for Maternal and Child Health and the UNICEF.

IPA calls on our member paediatric societies to address children's health and healthcare during the covid-19 pandemic. Primary care and hospital resources for children and youth must be maintained during the epidemic, both to ensure ongoing child and adolescent health priorities are addressed and to provide services for children with more severe covid-19 disease. National paediatric societies should provide appropriate evidence-based resources to help their members and families navigate reliable information during the epidemic; these should be updated as emerging evidence is incorporated into the WHO's guidance. IPA strongly encourages communication and exchange of technical guidance among regional and national paediatric societies, as well as close collaboration in research and in exchange of experiences. Regional and national paediatric societies are also urged to make covid-19-related materials available freely on their websites. To facilitate this, we have established a COVID-19 page on the IPA Website<sup>26</sup> (<https://ipa-world.org/covid-19-news-and-updates.php>) and will periodically update links to resource materials and recommendations on that site.

IPA encourages all paediatric societies to identify and disseminate recommendations and provide or link to resources to help our societies and their members identify and use reliable information, and to help the families of the children we care for get the care they need.

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