



EPA/UNEPSA QUICK FACT SHEET - PEDIATRIC VIEW UPDATE ON THE CURRENT CORONAVIRUS PANDEMIC 23 MARCH 2020

On March 12, 2020, WHO announced the outbreak caused by COVID-19, a pandemic. Since its first appearing in Germany on January 20, 2020, reported by NEJM, Europe faced a rapid spread and escalation of COVID-19, and it is currently at the center of this pandemic. Other regions of the globe (North America, South America and Middle East) are currently experiencing a rapid virus dissemination and escalation of asymptomatic and symptomatic cases.

Summary

Global outbreak situation as of March 23: 184 countries, areas or territories with cases; 270.000 confirmed cases; 11.500 confirmed deaths. In Europe, confirmed cases are 135.000 and 6000 the confirmed death (WHO data).

Symptoms

The most common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. These symptoms are usually mild and begin gradually. Some people become infected but do not develop any symptoms and don't feel unwell. Most people (about 80%) recover from the disease without needing special treatment. Around 1 out of every 6 people who gets COVID-19 becomes seriously ill and develops difficulty breathing. Common signs of disease include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties with pneumonia, severe acute respiratory syndrome, and kidney failure. Older people, and those with underlying medical problems like high blood pressure, heart problems or diabetes, are more likely to develop serious illness. People with fever, cough and difficulty breathing should seek medical attention.

COVID-19 Incubation period

WHO reports that most estimates of the incubation period for COVID-19 range from 1-14 days, most commonly around five days. These estimates will be updated as more data become available.

Coronavirus infection in children

Children seem rarely infected. A comprehensive study of the COVID-19 infection in Chinese children (Dong Y et al. Pediatrics, 2020) shows that over 2145 total cases over 90% were asymptomatic, mild or moderate, with only one death reported, due to lethality of the infection - defined as the number of deaths divided by the total of cases - which is <0.05% for those under 18 years of age. The report is consistent with those from Europe. On March 19, the Italian Society of pediatrics issued a report from Italy, which is currently the European country most severely hit by the epidemic, showing that only 330 cases of COVID-19 infected children are reported in this country, mostly >6 year old individuals showing mild symptoms.

COVID-19 and pregnancy

According to the CDC, there is insufficient data at this time to know whether pregnant women are at increased risk for adverse health outcomes if infected by the novel coronavirus as compared to non-pregnant people. A WHO-China Joint Mission investigation of 147 pregnant women in China with suspected or confirmed COVID-19 found that 8% had severe disease and 1% were in critical condition (14% severe, 6% critical for the overall population). In a small study of pregnant women in Wuhan, China, the clinical characteristics and severity of COVID-19 also appeared similar between pregnant and non-pregnant women. That said, the American College of Obstetricians and Gynecologists (ACOG) issued a statement that "pregnant women may be at higher risk of severe illness, morbidity, or mortality compared with the general population," likely due to physiologic changes that happen during pregnancy, and because pregnancy constitutes a state of relative immunosuppression as compared to non-pregnancy.

COVID-19 transmission during pregnancy and breastfeeding

Data are also lacking about whether pregnant women infected by the novel coronavirus can pass it to their fetuses across the placenta during pregnancy, called "vertical transmission." , Current data exclude this possibility. Several small studies of pregnant women infected with the novel coronavirus found no evidence of vertical transmission, as none of their infants tested positive at birth, and the virus was not detected in samples of the amniotic fluid, umbilical cord blood or placental tissue (Zhu et al. 2020; Chen et al. 2020; Chen et al. 2020; Zhang et al. 2020; Li et al. 2020). However, a few cases of newborns infected by the novel coronavirus have been reported, and it remains unclear if they were infected before, during or after delivery (Qiao, 2020; Murphy, 2020). There is no evidence to date to suggest the novel coronavirus can pass to infants through breast-milk. To this regard, the US CDC has issued precautionary guidance for women with suspected or confirmed COVID-19 who are also breastfeeding.

Adverse health outcomes have been found in infants born to mothers affected by COVID-19, including respiratory distress, premature labor, and even death. However, it is unclear whether these adverse outcomes are related or not to the COVID-19 infection in their mothers. Meanwhile, guidance published by the Royal College of Obstetricians and Gynecologists (RCOG) suggests there is no data yet linking COVID-19 with an increased risk of pregnancy loss. As for maternal outcomes, some initial evidence indicates outcomes are

similar between women with and without COVID-19, however other studies show symptom severity in pregnancy varies from asymptomatic to life-threatening. As the outbreak continues, more data on maternal and neonatal outcomes will likely come forward.

Getting ready to contrast the epidemic in Europe

The European Centre for Disease Prevention and Control (ECDC) has activated its highest alert level. This involves getting clinical sites and diagnostics labs ready to deal with cases on European soil and researchers from various institutions discuss the research questions including the best treatment strategies for patients. Sharing and aligning activities at European and international level in the area of public health emergency preparedness adds value to the efforts of single countries to strengthen their capacities and ensure coordinated and effective support when faced with cross-border health threats.

What to do

All governments worldwide have applied restriction measures. Clinicians should be vigilant for international travelers who show respiratory symptoms and take infection-control precautions with people who may be infected. They should collect nasopharyngeal, nasal, throat swab and lower respiratory tract specimens from these patients and consider saving urine, stool, serum and respiratory pathology specimen. However, all individuals showing symptom suggesting a coronavirus infection must be tested. Clinicians should notify infection control, state and local health departments immediately and report to the local National Institutes of Health.

The use of protective masks

1. Remember, a mask should only be used by health workers, care takers, and individuals with respiratory symptoms, such as fever and cough.
2. Before touching the mask, clean hands with an alcohol-based hand rub or soap and water
3. Take the mask and inspect it for tears or holes.
4. Orient which side is the top side (where the metal strip is).
5. Ensure the proper side of the mask faces outwards (the coloured side).
6. Place the mask to your face. Pinch the metal strip or stiff edge of the mask so it moulds to the shape of your nose.
7. Pull down the mask's bottom so it covers your mouth and your chin.
8. After use, take off the mask; remove the elastic loops from behind the ears while keeping the mask away from your face and clothes, to avoid touching potentially contaminated surfaces of the mask.
9. Discard the mask in a closed bin immediately after use.
10. Perform hand hygiene after touching or discarding the mask – Use alcohol-based hand rub or, if visibly soiled, wash your hands with soap and water.