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## **Sars-Cov-2 and Pregnancy: What are the Risks?**

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### **ABSTRACT**

Faced with the global coronavirus pandemic, pregnant women are part of the category of so-called fragile people. To date, there is little data to assess their sensitivity to the COVID-19 coronavirus. But it is known that pregnant women undergo immunological and physiological changes that can make them more sensitive and at greater risk of complications from viral respiratory infections. This was the case with previous episodes of coronavirus infections (Sars-CoV at the origin of the SARS epidemic in 2003 or MERS-Cov) <sup>1</sup> or other respiratory viral infections such as influenza or whooping cough , two diseases against which pregnant women must be vaccinated <sup>2</sup>.

**KEYWORDS:** Coronavirus, Pregnant, Transmission, Respiratory

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### **EDITORIAL**

Faced with the global coronavirus pandemic, pregnant women are part of the category of so-called fragile people. To date, there is little data to assess their sensitivity to the COVID-19 coronavirus. But it is known that pregnant women undergo immunological and physiological changes that can make them more sensitive and at greater risk of complications from viral respiratory infections. This was the case with previous episodes of coronavirus infections (Sars-CoV at the origin of the SARS epidemic in 2003 or MERS-Cov) <sup>1</sup> or other respiratory viral infections such as influenza or whooping cough , two diseases against which pregnant women must be vaccinated <sup>2</sup>.

As such and in the absence of a vaccine available against the new coronavirus, pregnant women are invited to follow with the greatest attention the prevention recommendations to avoid infections: wash their hands regularly with soap and water. for at least 20 seconds (or failing that with hydroalcoholic gel), avoid sick people, do not touch your face, cover your nose and mouth with a tissue or your elbow when you sneeze, clean your room and objects currents, avoid close contact and busy places <sup>3</sup>...

Today, transmission of the COVID-19 coronavirus occurs primarily through close contact with an infected person through respiratory droplets. Little is known about the possible transmission of infection from mother to fetus or

newborn by "vertical transmission" (before, during or after childbirth).<sup>4</sup>

Regarding other coronavirus infections (MERS-CoV and SARS-CoV), data are limited but no vertical transmission has been reported. There are, however, a few reported cases of newborns who test positive for COVID-19, but none have undergone a full medical evaluation, <sup>5,6</sup> so it is not known for sure how the infection occurred and how. it can be passed from mother to child<sup>7,8</sup>.

To date, the risks to the infant in the short and long term are not known with certainty. According to one study<sup>9,10</sup>, some children had specific symptoms (respiratory distress, cyanosis, gastric bleeding and death), but none tested positive for infection. Keeping the child with a sick mother does not seem recommended <sup>11,12</sup>.

In addition, data for other respiratory viral infections during pregnancy (coronavirus but also the influenza virus) have reported effects in particular low birth weight and premature delivery. In addition, having a cold or the flu with a high fever early in pregnancy can increase the risk of certain birth defects.<sup>13,14</sup>

The long-term effects are so far unknown, beyond the long-term effects associated with low birth weight and prematurity.

To date, no study has reported evidence of the presence of the virus in the breast milk of infected women.

## Sars-Cov-2 and Pregnancy: What are the Risks?

Regarding the new coronavirus, the tests carried out on the milk of 6 infected women were all negative<sup>4</sup>. Extrapolating to the SARS virus, testing the breast milk of a woman who recovered from Sars-Cov did not reveal the presence of virus, but antibodies against the virus<sup>13</sup>. Conversely, other cases showed no trace of virus or antibodies<sup>15</sup>.

Despite limited data, preliminary data and lessons from previous coronavirus outbreaks suggest that coronavirus-COVID-19 infection can have significant consequences in pregnant women. As such, looking for an ongoing pregnancy during the treatment could be useful. Rapid and effective management of possible respiratory distress must be able to be implemented for the monitoring of infected pregnant women.<sup>16</sup>

To date, according to the most recent publication of the American Journal of Obstetrics and Gynecology, mothers who are in good health, which are no longer susceptible to infection, are therefore encouraged to breastfeed<sup>12</sup>.

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