

## Clinical manifestations of COVID-19 in children

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Several questions are asked to InfoVac-France regarding the clinical manifestations of COVID-19. French experience in recent weeks shows that, apart from very evocative chest CT images in severe forms of the disease and complete and abrupt anosmia and ageusia, **the clinical signs in adults and children are varied and non-specific**. It should be noted that while we are probably close to the epidemic peak, in adults 70% of the PCRs performed are negative and in children this rate is around 90%. **These rates underline that a significant proportion of subjects for whom the diagnosis is evoked have another disease**. Almost all the reported cases are secondary cases, in the context of a familial contamination, the disease of adults preceding those of children.

Before considering the clinical manifestations, it should be noted **that the majority of children and adults are asymptomatic or pauci-symptomatic, and that basic hygiene measures are therefore necessary in consultation for all patients**: surgical mask, scrupulous hygiene of hands, cleaning objects and surfaces, questioning of our habits: nose washing, aspiration, throat swabs...

In outpatient **settings, all of the following symptoms and clinical signs may be absent or predominant, isolated or associated**:

- Respiratory signs: rhinorrhea, nasal obstruction, cough, tachypnea,
- Dysphagia
- Fever of varying intensity and accompanying signs of fever (chills, aches, headaches, asthenia, irritability, anorexia, poor peripheral hemodynamics). These signs are sometimes present even without fever,
- Digestive disorders including diarrhea,
- Nonspecific eruption, sometimes reported conjunctivitis
- Neurological signs

**The clinical diagnosis of COVID-19 is therefore very “random”.**

- **It becomes certain** when the **PCR is positive** or the **chest CT images are very evocative** or in case of **anosmia and/or brutal and complete ageusia**.
- It is **highly likely** when the previous **symptoms** have occurred in **close (often familial) contact** with a positive patient and with a compatible delay.
- - In all other cases, only suspicion of COVID-19 will be considered.

This is not without major practical consequences. A patient whose diagnosis of COVID-19 is certain must be considered immune and protected, which is not the case for others.

### Anosmia and Ageusia

During a rhinopharyngitis, it is not rare to find that patients perceive odors and tastes less well. What is described in COVID-19 is really different: patients without rhinorrhea or nasal obstruction, who have symptoms (total loss of taste and smell) of sudden and embarrassing onset. Beware of the NOCEBO effect.

### Newborns and infants under 3 months of age

In recent weeks, in a cohort of hospitalized patients in several French paediatric wards, infants less than 3 months represented a significant proportion. The clinical picture was often that of an isolated fever, with no respiratory signs. This fever was usually “poorly tolerated” with children often irritable, whiny, hypotonic evoking neurological forms. Note that C reactive protein and blood count were normal but that the chest CT when performed was often abnormal.

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