Solthis
Solidarité Thérapeutique et Initiatives pour la Santé

Avril 2020

QUESTIONS & ANSWERS

COVID-19 DISEASE

This Q&A is based on current information and data that we have available internationally (sources: WHO, French Ministry of Health, Institut Pasteur). COVID-19 Disease caused by the SARS-CoV-2 virus is recent and new discoveries are being made every day. This Q&A will be updated as more is known about COVID-19, how it spreads and how it is affecting people worldwide.

The best way to protect yourself and others from COVID-19 is to wash your hands frequently, cover your mouth with the crease of your elbow or a tissue, and keep at least one meter away from anyone else.

I - General information on Covid-19 disease and SARS-CoV-2 virus

What is the Coronavirus COVID-19?

Coronaviruses are a large family of viruses, which cause illnesses ranging from the common cold (some seasonal viruses are Coronaviruses) to more severe illnesses such as MERS-COV or SARS .The virus identified in January 2020 in China is a new Coronavirus, named SARS-CoV-2. The disease caused by this coronavirus has been named COVID-19 by the World Health Organization - WHO. Since March 11, 2020, the WHO describes the global situation of COVID-19 as a pandemic; i.e. the epidemic is now global.

How did the first human case of SARS-Cov-2 infections occur ?

The first human cases of COVID-19 were identified in Wuhan City, China's Hubei Province in December 2019. The disease is believed to have originated from an animal (zoonosis) like many infectious diseases, but the origin has not been confirmed yet.

Has the virus mutated?

To date, there is no sufficiently robust scientific argument in this favour. Research continues today to gain a better understanding of the virus.

It should be remembered that the vast majority of virus mutations are neutral, and the rest are more often beneficial to humans than the reverse. Indeed, in the majority of epidemics, viruses evolve towards less dangerousness but more diffusion.

II - How is the coronavirus causing COVID-19 transmitted?

What is the incubation period of the disease?

The incubation period is the period between contamination and the appearance of the first symptoms. The incubation period for COVID-19 coronavirus is usually 3-5 days, however, it may extend up to 14 days. During this period, the subject may be contagious: he or she may carry the virus before the onset of symptoms or at the onset of weak signals.

What are the modes of transmission?

The disease is transmitted by droplets (secretions that are projected out of sight when talking, sneezing or coughing). It is therefore considered that close contact with a sick person is necessary to transmit the disease: same place of residence, direct contact within one meter when coughing, sneezing or talking in the absence of protective measures. One of the other preferred vectors of virus transmission is contact with hands soiled with droplets.

This is why barrier gestures and social distancing measures are essential to protect oneself from the disease.

Do I have to wear a mask to protect myself?

As there is a global shortage of masks, WHO advises that they should be used sparingly, with priority being given to health professionals and people with symptoms.

Nota bene: a mask is only effective if it is well positioned and changed at least every 6 hours. Precautions must be taken when putting it on, putting it back on and taking it off (wash your hands before each handling operation, and handle it as little as possible).

What do we know today about other potential transmission vectors?

WHO is reviewing ongoing research on how COVID-19 is spreading and will continue to communicate new findings.

Can I get COVID-19 from contact with a sick person's feces?

The risk of contracting COVID-19 through contact with the feces of an infected person appears to be low. Initial investigations suggest that the virus may be present in feces in some cases, but the outbreak is not primarily spready this way. However, since the risk exists, this is an additional reason to wash your hands regularly, after going to the toilet and before eating.

Can mosquitoes transmit the virus?

No there is no evidence of transmission of the virus through mosquitoes, or any other animal. The coronavirus COVID-19 is transmitted between humans via droplets.

What arrangements are made for religious ceremonies?

The virus remains on the body of a dead person. It is therefore necessary to protect the staff or families who will prepare the body for the funeral ceremony. The protections recommended by the WHO are: gloves, disposable waterproof gown, medical mask and eye protection.

If the family only wishes to see the body and not touch it, they can do so by using the usual precautions at all times, including hand hygiene. Give the family clear instructions not to touch or kiss the body.

Embalming is not recommended to avoid excessive handling of the body;

Adults over 60 years of age and immunocompromised people should not interact directly with the body.

Can you get the disease from water?

To date, there have been no reports of water contamination. This disease is human-to-human transmission through droplets (coughing, sneezing, soiled hands).

Are there any risks associated with pets (farm animals and pets)?

There is no evidence that a dog, cat or any pet can transmit COVID-19. In addition, passage of COVID-19 coronavirus from humans to other animal species appears unlikely.

Are there food-related risks?

On the basis of the available information, the passage of the Coronavirus COVID-19 from humans to other animal species seems at present unlikely, and the possible contamination of food of animal origin (FADO) from a COVID-19 infected animal is excluded. Raw or undercooked food does not present any particular risk of transmission of infection, provided that the usual good hygiene practices are followed in the handling and preparation of food.

Is the virus airborne?

No, the virus can't live in the air by itself. The coronavirus responsible for COVID-19 is transmitted by droplets, which are the respiratory secretions when an infected person coughs, sneezes, or speaks.

The virus does not circulate in the air on its own but can reach a nearby person (less than a meter away) or attach itself to a surface soiled by droplets, such as hands or tissues. This is why it is important to respect barrier gestures and social distancing measures.

How long can Covid-19 live on a surface?

Under conditions conducive to its survival, the virus could survive, in the form of traces, for several days on a surface. However, just because a small amount of virus survives does not mean that it is enough to infect a person who touches that surface. In fact, after a few hours, the vast majority of the virus dies and is probably no longer contagious.

As a reminder, the high transmissibility of the COVID-19 Coronavirus is not related to its survival on surfaces, but to its transmission when coughing, sneezing, talking or through droplets expelled and transmitted by hands. This is why it is important to respect barrier gestures and social distancing measures.

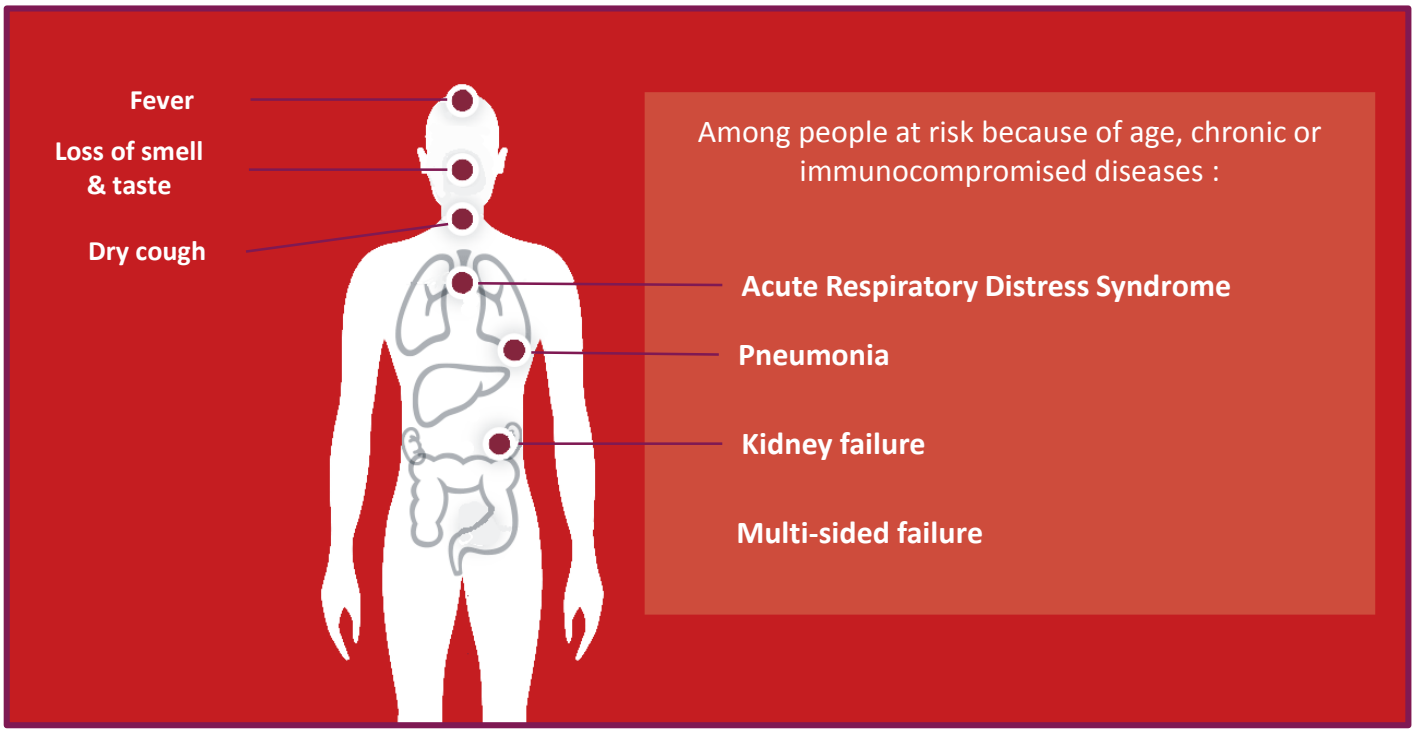
III - What are the symptoms of COVID-19?

Some people, although infected, have no symptoms and feel fine. We do not yet know the proportion of people in this situation, but it may be significant.

The main symptoms **are fever or a feeling of fever**, **dry cough and tiredness**. Some patients have **pain** (especially muscle pain), **nasal congestion, runny nose, sore throat or diarrhea**. These symptoms are usually mild and appear gradually.

Sudden loss of smell (anosmia) without nasal obstruction and **total loss of taste** are also symptoms that have been observed in some people, often isolated in a mild form.

In people developing more severe forms (around 1 out of every 6 people), **breathing difficulties** (dyspnea) are found, which can lead to hospitalization in intensive care and death.



According to the Institut Pasteur scheme

The benign forms are the most frequent (80% of cases) and evolve over a few days towards recovery without needing special treatment.

Some people will present serious forms of the disease either right away or after a few days (often 7 days) of evolution of an initially benign form. These serious forms (20% of cases), which mainly result in respiratory difficulties, will require conventional hospitalization and oxygen therapy (15% of cases) or, for the most serious forms, hospitalization in intensive care (5% of cases).

It is therefore advisable for any patient who is diagnosed with a potential CoV-2 SARS infection, even a mild one, to have a second medical chech-up between J6 and J8 to control the potential progression to a more severe form.

After recovering from coronavirus, is one immune or is it possible to get sick a second time?

After encountering a virus, our body develops immune defences called antibodies, allowing it to defend itself against it. Although we are still at an early stage to decide on this issue, in the opinion of scientists the initial data seems reassuring, as to date no really confirmed cases of re-contamination seem to have occurred.

IV- Who are the people at risk?

People with fever, cough and difficulty breathing should seek medical attention.

While we still need to learn more about how COVID-19 affects individuals, to date, the elderly and those with other diseases (such as high blood pressure, lung disease, cancer, diabetes or heart disease) appear to be severely affected more often than others.
It is also considered by analogy with influenza that overweight people are at greater risk of severe forms of the disease.

Pregnant women are generally vulnerable and require a great deal of attention. However, initial information on the impact of the coronavirus on pregnant women and the fetus is reassuring. In particular, vertical intrauterine transmission has not been described. However, per-partum transmission has been described (i.e. potentially also via droplets). As a precautionary measure, pregnant **women from the third trimester onwards should be considered at risk.**

Can children get the virus and get sick?

Cases of infections have been described in children but very few severe cases have been reported.
For reasons that are not yet fully elucidated (cross-immunity with other viruses, receptors through which coronaviruses cling to the less expressed respiratory epithelium or different immune response**), children therefore appear to be protected against the disease.**

Nevertheless, as with other diseases, it is **the youngest children (< 1 year old)** who would be most at risk of severe forms. **Immunocompromised children** (cancer, HIV infection in treatment failure, treatment of an autoimmune disease) are theoretically at risk and even if no cases have been described in this population, the precautionary principle should be applied to them.

Moreover, **the initial data go against their possible role in the transmission of the virus as healthy carriers** (as for many infections and which is one of the arguments for school closures) because they seem to be less infected (even healthy carriers) compared to the rest of the population and most of the infections described occurred in a family cluster context.

V- What are the current treatments?

Self-medication should be avoided. The use of any medication must be carried out within the framework of a medical prescription.

Beginner's forms: simple symptomatic treatment (paracetamol, hydration).

Severe forms: oxygen therapy

Is there a vaccine?

There is no vaccine to prevent the disease COVID-19 at this time. Many laboratories are working on developing vaccines, but they are not expected to be available for several months.

Taking anti-inflammatory drugs (ibuprofen ...) could be a factor in aggravating the infection.

In general, self-medication with anti-inflammatory drugs should be avoided in the case of infectious diseases. In addition, it appears that non-steroidal anti-inflammatory drugs may be a factor in aggravating the infection. Thus, in the case of COVID-19 coronavirus infection, paracetamol is recommended..

Is chloroquine really a miracle cure for coronavirus?

At this stage, the efficacy of chloroquine in the treatment of COVID-19 infection has not been scientifically demonstrated. In vitro results (in laboratory experiments) show some efficiency, but we do not yet have evidence of its clinical activity. It should be remembered that this efficiency in the laboratory had already been found for other coronaviruses or other viruses, but that this effect has never been found in the clinic on patients.

The recommendation is not to use this treatment in the absence of a recommendation, except in serious cases in hospital, by collegial decision of the physicians, and under strict supervision.

Refrain from prescribing in the general population and for non-severe forms in the absence of any evidence at this time.

Side effects (especially cardiac) can be severe and are more frequent with chloroquine (formerly used in malaria) than with hydroxychloroquine. To date, several people in France and the USA have died or died in a very serious condition (resuscitation) after taking hydroxychloroquine or chloroquine derivatives for the prevention or treatment of COVID 19 without medical advice.

What are the current avenues for treatment against COVID-19?

Worldwide, at the beginning of April more than 230 trials are in progress or will start very soon to find curative and preventive treatments and vaccines. A major clinical trial has started at the European level to evaluate several treatments. This trial, called DISCOVERY, aims at evaluating the efficiency and safety of four experimental therapeutic strategies that could have an effect against COVID-19. The trial plans to include more than 3000 patients at the European level. There are therefore many potential therapeutic approaches, but their efficiency and safety must be demonstrated. For the moment, none are favored and no specific treatment has been validated.

Are antibiotics effective in preventing or treating COVID-19?

No, antibiotics do not work against viruses, they only work on bacterial infections. Since COVID-19 is caused by a virus, antibiotics do not work. Antibiotics should not be used as means of preventing or treating COVID-19. They should only be used on medical prescription to treat bacterial infection.