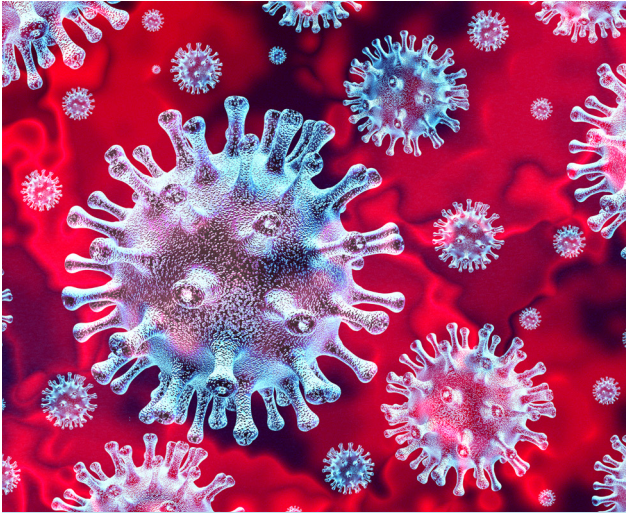


Hygiene measures for infections with the new corona virus (SARS-CoV-2)



SARS-CoV-2 – corona virus

SARS-CoV-2 is a corona virus newly discovered in 2019, which belongs to line B of the beta corona viruses. It is an enveloped virus. The virus appeared in the city of Wuhan (China) in late 2019. The SARS-CoV-2 virus genome was fully sequenced in January 2020. SARS-CoV-2 causes the disease called COVID-19 (Corona virus disease 2019).

Special features of the novel corona virus

What is the novel corona virus?

The new pathogen belongs to the corona virus strain. It is known that the new pathogen is a beta coronavirus. The sequence of genes corresponds to that of the SARS virus and all corona viruses.

Where does the new corona virus come from?

The virus probably comes from wild animals. Accordingly, there were first transmissions from animals to humans, then transmissions from human to human. However, no direct transition from animals to humans is assumed, but an for now unidentified intermediate host.

Incubation period

The incubation period from infection to the onset of the first symptoms is on average about 3 days. Hospitalization usually takes place after another 4 to 5 days. However, the incubation period is subject to large inter-individual fluctuations, so that a period of 2 to 14 days is possible. It is very similar to SARS. The viruses can be passed on already during the incubation period, i.e. before the onset of symptoms. However, there is no clear evidence of this.

Duration of contagiousness

It is believed that the time from infection to onset can be up to 14 days.

Transmission

According to the current state of knowledge, the transfer can be effected via

- Droplets
- Contact, e.g. with body secretions and
- Excrements

take place. It is not clear whether transmission also occurs by touching contaminated surfaces and objects.

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Symptoms

A SARS-CoV-2 infection is initially noticeable due to unspecific general symptoms.

The following symptoms can occur, among others:

- Fever
- Dry cough
- Muscle pains
- Severe breathing difficulties
- Lung infection



Diagnostics and therapy

Diagnostics

Specific diagnostics must be carried out for:

- Persons with respiratory symptoms - regardless of their severity - and contact with a confirmed case of SARS-CoV-2
- Persons with a fulfilled clinical picture and stay in a risk area 14 days before the start of the disease



Laboratory:

The virus can be detected directly using a diagnostic test. The sample material should be taken from both the upper and lower airways. A single negative virus detection does not rule out the infection. If the progression is severe, multiple tests are recommended.



Therapy

No specific therapy is currently available (January 2020). Therapy is therefore purely symptomatic. However, existing antiviral drugs are being examined.

Measures

Recommendations of the Robert Koch Institute (RKI) for hygiene measures in patients with confirmed infection by SARS-CoV-2:

a) Spatial accommodation:

- Single accommodation in an isolation room with its own bathroom.
- The use of an isolation room with airlock/anteroom is generally preferred.
- If a ventilation and air-conditioning system is operated in the patient rooms, via which it is possible for air to spread to other rooms, this must be turned off.
- Visitors must be kept to a minimum and instructed on personal safety measures.



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b) Personnel measures:

- Trained personnel assigned to the care of these patients should be released from the care of other patients as far as possible. Define and limit the number of contact persons.
- Protective gown, disposable gloves, hood, tight-fitting respiratory mask (protection level FFP2 or FFP3), protective goggles and long-sleeved, waterproof disposable apron during appropriate nursing, diagnostic or therapeutic activities on the patient.

c) Procedure for the care of patients with confirmed infection:

- Implementation of basic hygiene measures and hand hygiene
- Observe the known indications for hand disinfection also in connection with changing gloves according to the 5 moments of hand hygiene
- Put on personal protective equipment before entering the patient room and protect against leave the lock/room there
- Disposable shoes or gowns before leaving the room or airlock in a dispose of closed container
- Hand disinfection after taking off the gloves and before leaving the room

At the time of writing this recommendation, there is not yet sufficient data on the duration of pathogen excretion in persons who are no longer symptomatic to provide a general conclusive recommendation to discontinue measures once the symptoms have subsided.



Further hygiene measures

- Daily wiping disinfection of the areas close to the patient
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- All medical devices in direct contact with the patient are to be used patient-related and must be disinfected after use. A central preparation is possible for transport in a closed, externally disinfected container. A thermal disinfection process should, if possible, be preferred
- Transport dishes in a closed container to the dishwasher and wash at $> 60^{\circ} \text{C}$
- Laundry / textiles can be subjected to a disinfecting laundry disinfection process according to the RKI list
- Use wipe-disinfectable covers for beds and mattresses.
- Disposal of waste contaminated with secretions or excretions in accordance with waste code 18 01 03 in accordance with LAGA guidelines
- Final disinfection is carried out with at least limited virucidal agents. Dispose of material that cannot be reprocessed
- When transporting patients, inform the target area / facility and the transport service
- After the ambulance:
 - Disinfect all contact surfaces
 - Carry out hand disinfection and washing



This catalog of measures does not claim to be complete!

Current information

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Disinfectants

- Use disinfectants with at least the spectrum of activity "limited virucidal"
- Follow the dosage and exposure times according to the manufacturer's instructions for the disinfectants used
- **Reuse of disinfected areas:**
Reuse of disinfected areas: According to the RKI recommendation, the area can be used again after all routine surface disinfection measures have been carried out as soon as it is visibly dry. In certain cases, the specified exposure time must be waited for before the area is used again.

The following Dürr System Hygiene products work against the new type of corona virus:

Instruments

- ID 212 / ID 212 forter Instrument disinfection
- ID 213 Instrument disinfection
- ID 215 Enzymatic instrument cleaner

Surfaces

- FD 300/ FD 300 top wipes Surface disinfection
- FD 312/ FD 312 wet wipes Surface disinfection*
- FD 322/ FD 322 premium wipes/ FD 322 top wipes Quick-acting disinfection
- FD 333/ FD 333 wipes Quick-acting disinfection
- FD 333 forte/ FD 333 forte premium wipes/FD 333 forte wipes Quick-acting disinfection
- FD 350 Disinfection wipes
- FD 366 sensitive/ FD 366 sensitive wipes/ FD 366 sensitive top wipes
for disinfection of sensitive surfaces

Skin and hands

- HD 410 Hand disinfection
- HD 412 essential Hand disinfection

Spezialbereiche

- Orotol plus Disinfection of suction systems
- Orotol ultra Disinfection of suction systems
- MD 520 Impression disinfection



Legal basis

Notification according to the Infection Protection Act (IfSG):

In Germany, according to the Infection Protection Act (Section 6), the occurrence of a threatening communicable disease must be reported to the responsible health authority. With effect from February 1, 2020, an ordinance was passed by the Federal Ministry of Health (authorization pursuant to Section 15 IfSG) to extend the reporting obligation. Accordingly, suspicion of illness, illness and death as well as laboratory chemical evidence of an acute infection with the novel corona virus must be reported. The suspicion must only be reported if the suspicion is based on both the clinical picture and a probable epidemiological connection. This Ordinance shall apply until 1 February 2021, unless otherwise decreed with the consent of the Federal Council.

*Use biocides with caution. Always read the label and product information before use.