

## **HOW DANGEROUS IS THE VIRUS?**

The infection is mild in most cases and is not life-threatening for most people. The virus can cause flu-like symptoms such as cough, fatigue and fever. If the course is severe, breathing problems or pneumonia may also occur. In particular, people with previous illnesses (e.g. heart disease, diabetes, severe overweight, asthma) can have severe disease courses, in some cases the disease is fatal.

#### HOW LIKELY ARE YOU TO GET THE VIRUS?

You can only become infected if you have had close personal contact with a person who is already infected with the virus. Close personal contact is e.g. B. a 15 minute conversation at a distance of less than 1.5 meters. There is also the possibility of getting infected in Germany, but there are strong regional differences. If you are or have been in areas where if many people are already infected, your risk of infection increases.

#### HOW IS THE TRANSMISSION ROU-TE?

The virus is transmitted primarily via droplet infection. This means that coughing up and sneezing into someone else's face leads to direct infection. But even during a conversation, sick and infected people excrete viruses in smaller amounts.

If the distance is too short and the patient stays too long, these can be inhaled by other people or through the mucous membranes of Infection of eyes and mouth.

## ARE TRANSMISSION PATHS OTHER THAN DROPLET INFECTION POSSIBLE?

There are currently no cases in which it has been proven that people have become infected with the novel coronavirus by other means, such as by eating contaminated food or by contacting contaminated objects. But: transmissions over surfaces that were previously contaminated with viruses are conceivable due to smear infections. However, due to the relatively low stability of corona viruses in the environment likely only in a short period of time after contamination.

#### WHAT SHOULD I DO IF I FEEL UNCOMFORTABLE?

If you have flu-like symptoms (fever, dry cough, loss of smell and taste), avoid unnecessary contacts and stay at home. If you need medical attention, contact Call your family doctor by phone. It is particularly important to register by phone if you suspect that you have contracted the new corona virus. Do not go to your family doctor without prior notice!

## HOW CAN YOU HELP TO REDUCE THE SPREAD OF THE CORONAVIRUS?

In general, keep a sufficient distance (at least 1.5 meters) from other people. This is especially true for contact with people who show symptoms of illness (e.g. fever, dry cough or fever).

Sneeze or cough in the crook of your arm or in a handkerchief - and then dispose of the handkerchief in a trash can with a lid. Keep your hands away from your face - avoid touching your mouth, eyes or nose with your hands.

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Wash your hands regularly with water and soap for a sufficient amount of time (at least 20 seconds) - especially after blowing your nose and sneezing. Observe the current official instructions (e.g. exit restrictions, Mouth and nose protection in buses and trains as well as when shopping).

## HOW CAN YOU PROTECT YOURSELF FROM INFEC-TION WITH THE VIRUS BY FOOD AND PRODUCTS (INCLUDING COSMETICS)?

Although transmission of the virus via contaminated food or imported products is unlikely, the general rules of everyday hygiene, such as regular hand washing and the hygiene rules when preparing food, should be observed when handling them. Corona viruses cannot multiply in food; for this they need a living animal or human host. There

the viruses are sensitive to heat, the risk of infection can be further reduced by heating food sufficiently.

Cosmetic products such as lipsticks or makeup should not be shared with several people, and creams from opened jars should only be used with thoroughly washed hands or a clean one Spatulas can be removed.

#### CAN IMPORTED GOODS FROM REGIONS WHERE THE DISEASE IS COMMON BE A SOURCE OF HUMAN INFECTION?

Based on the transmission routes determined so far and the relatively low environmental stability of corona viruses, it is currently unlikely that imported goods such as food, cosmetic Products or toys, tools, computers, clothing or shoes could be sources of infection with the novel corona virus. This assessment also applies after the recent publication on the survivability of the known corona viruses by scientists from the universities of Greifswald and Bochum.

## CAN CORONA VIRUSES SURVIVE OUTSIDE OF HU-MAN OR ANIMAL ORGANISMS ON SOLID AND DRY SURFACES AND REMAIN INFECTIOUS?

The stability of corona viruses in the environment depends on many factors such as Temperature, humidity, sun exposure and nature of the Surface as well as the specific virus strain and the amount of virus. in the In general, human corona viruses are not particularly stable on dry surfaces. As a rule, the inactivation takes place in dried Condition within hours to a few days. For the novel coronavirus SARS-CoV-2, first laboratory tests by an American working group show that it can take up to 3 hours after severe contamination as an aerosol, up to 4 hours on copper surfaces, up to 24 hours remain infectious on cardboard and up to 2-3 days on stainless steel and plastic can. Studies by Prof. Streeck in Heinsberg and the surrounding area have shown that in no case has a virus concentration been found on surfaces that would have been able to infect humans. This means that the stability of the coronavirus SARS-CoV-2 determined in the laboratory is significantly lower than that of many other pathogens, e.g. B. various non-enveloped viruses or bacterial spores. The stability mentioned in the study was determined in the laboratory under optimal conditions and with high virus concentrations. In practice, it can be expected that the stability due to additional factors such. B. daylight, fluctuating temperature and humidity as well as lower contamination levels, is less than determined in the laboratory study.

### CAN DOCKERS, FREIGHT FORWARDERS WORKING WITH CONTAINERS OR EMPLOYEES WHO PROCESS SEMI-FINISHED PRODUCTS, COMPONENTS OR OTHER PREFABRICATED PRODUCTS IMPORTED FROM CHINA BECOME INFECTED WITH THE NOVEL PATHOGEN?

Due to the low environmental stability of coronaviruses, transmission of the pathogen via these routes appears unlikely in most cases. The Federal Institute for Occupational Safety and Health and the Committee for Biological Agents are responsible for assessing possible risks of infectious agents at the workplace.

## CAN THE NOVEL CORONAVIRUS SARS-COV-2 IN CANTEENS AND OTHER COMMUNITY CATERING ESTABLISHMENTS VIA DISHES AND CUTLERY ARE TRANSFERRED?

Basically, coronaviruses can get on cutlery

THE POOL CHEFS COMPANION or crockery by directly sneezing or coughing an infected person and survive for a while on these solid surfaces. A smear infection appears possible if the virus is transmitted to the mucous membranes of the mouth and throat or to the eyes via cutlery or hands. To date, however, the BfR is not aware of any infections with SARS-CoV-2 via this transmission path.

## IS THE VIRUS INACTIVATED BY WASHING IT BY HAND OR IN THE DISHWASHER?

As enveloped viruses, whose genetic material is encased in a fat layer (lipid layer), coronaviruses are sensitive to fat-dissolving substances such as alcohols and surfactants, which are contained in soaps and dishwashing detergents as fat-dissolvers. Although no specific data are available for SARS-CoV-2, it is very likely that these substances will damage the virus surface and inactivate the virus. This is especially true when the dishes are cleaned in the dishwasher at 60 degrees Celsius and dried at over 80 ° C.

#### CAN CORONA VIRUSES SURVIVE ON TEXTILES?

BfR currently has no information on the survival of the SARS-CoV-2 virus on textiles or in the washing machine. As enveloped viruses, whose genetic material is encased in a fat layer (lipid layer), coronaviruses are generally sensitive to fat-dissolving substances such as surfactants, which are contained in detergents as fat-dissolvers. In normal everyday life, people in private households can do their laundry as usual

to wash. Clothes, bed linen, underwear, towels, washcloths etc. from sick people and textiles that have come into contact with infectious body fluids should be washed at a temperature of at least 60 ° C in the washing machine with a detergent and dried thoroughly. When handling the laundry of sick people, direct contact of the skin and clothing with contaminated materials should be avoided, the laundry should not be shaken and then the hands should be washed thoroughly.

#### CAN MOUTH-NOSE PROTECTION PREVENT THE TRANSMISSION OF CORONAVIRUSES?

The Robert Koch Institute answers when it makes sense to wear mouth and nose protection in public to protect against the new coronavirus. Accordingly, it is not so much for self-protection, but rather to prevent infected and sick people from spreading the virus uninhibited.

There are different types of mouth-nose protection ("community masks", mouth-nose protection, filtering half masks). The Federal Institute for provides information on the different products and mask types Medicines and medical devices and the Federal Institute for Occupational Safety and Health and occupational medicine.

#### CAN CORONA VIRUSES BE TRANSMITTED BY TOU-CHING SURFACES SUCH AS CASH, CARD TERMI-NALS, DOORKNOBS, SMARTPHONES, HANDLES ON SHOPPING TROLLEYS, PACKAGING OR BAGS?

To date, the BfR is not aware of any infections with SARS-CoV-2 via this transmission path. Basically, coronaviruses can get on surfaces by directly sneezing or coughing an infected person and survive for a while. A smear infection of another person appears possible if the virus spreads over your hands shortly afterwards the mucous membranes of the mouth and throat or the eyes is transmitted. In order to protect yourself from virus transmission over contaminated surfaces, it is important to follow the general rules of everyday hygiene such as regular hand washing and keeping hands away from the face.

#### CAN CORONA VIRUSES BE TRANSMITTED OVER BA-KED GOODS OR FRESH FRUITS AND VEGETABLES?

So far, the BfR is not aware of any infections with SARS-CoV-2 via these transmission routes. Basically, corona viruses can get on baked goods, fruit or vegetables by directly sneezing or coughing an infected person. However, they cannot multiply in or on food; for this they need a living animal or human host. A smear infection of another person only appears then possible if the virus is spread to the mucous membranes of the mouth and throat or eyes shortly after contamination via the hands or the food itself.

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In order to protect yourself against virus transmission, it is fundamentally important to observe the general rules of everyday hygiene such as regular hand washing and keeping your hands away from your face. In retail, baked goods are usually protected by a splash guard on the counter or at the selfservice stands from sneezing and coughing Customers protected, which minimizes the risk of contamination. When preparing fruit and vegetables, the general hygiene rules should be observed, which include thorough washing of the food and frequent hand washing during processing.

## CAN CORONA VIRUSES BE TRANSMITTED THROUGH MEAT PRODUCTS?

DSo far, the BfR is not infected with SARS-CoV-2 via this Transmission route known. Farm animals used for meat production are, according to the current state of knowledge, not with SARS-CoV-2 infectable and cannot transmit the virus to humans in this way. Basically, coronaviruses can be caused by sneezing or coughing directly infected person on sausage and meat. You can be in or do not multiply on food; you need one live animal or human host. A smear infection of a Another person only appears possible if the virus is shortly after contamination through the hands or the food itself to the mucous membranes of the mouth and throat or the eyes becomes. As a rule, meat and meat products are protected by a splash guard Protected at the counter from sneezing and coughing by customers, which makes the Risk of contamination is minimized. In order to protect yourself against virus transmission, it is fundamentally important to observe the general rules of everyday hygiene such as regular hand washing and keeping your hands away from your face. Furthermore, meat and poultry should generally - also to protect against possible other pathogens - be heated sufficiently and evenly before consumption.

### CAN CORONA VIRUSES BE TRANSMITTED THROUGH MILK FROM COWS THAT MAY HAVE BEEN FED CONTAMINATED FEED?

According to the current state of knowledge, the transmission of SARS-Cov-2 via milk is, like for other foods, unlikely. To date, the BfR is not aware of any infections with SARS-CoV-2 via this transmission path. The Friedrich-Loeffler-Institut and the Robert Koch-Institut are so far not aware of any information from China or other countries affected by SARS-CoV-2 that indicate a special role close of feed for pets and farm animals. So far, there is no evidence that feed is a vehicle for coronaviruses.

## CAN USERS OF E-CIGARETTES BECOME INFECTED WITH THE CORONA VIRUS IF THEY SHARE THE MOUTHPIECE WITH OTHER PEOPLE?

Coronaviruses can be transferred to the mouthpiece by an infected person when vaping an e-cigarette and survive there for a while. An indirect contact infection of another person is possible if the virus gets on the mucous membranes of the mouth. To minimize this risk, e-cigarettes should not be shared with others. The same applies to conventional cigarettes, cigars and pipes.

## IS THERE AN EVIDENCE THAT TAKING HIGH-DOSE VITAMIN D SUPPLEMENVENT AN INFECTION WITH SARS-COV-2?

It is suggested on the Internet that the intake of (in some cases very high doses) vitamin D-containing food supplements before an infection with the corona virus SARS-CoV-2 or the triggering of the disease can protect COVID-19. Dietary supplements are not intended to cure or alleviate a disease. Dietary supplements are not medicinal products, but foods that can supplement normal nutrition. Above all, you have to be safe and have no side effects. An adequate supply of vitamin D is of course important for health. It is also scientifically recognized that vitamin D contributes to the normal functioning of the immune system.

THE POOL

However, this does not mean that preventive high-dose vitamin D supplements should be taken should take. Case reports indicate that taking very high levels of vitamin D supplements on your own without medical supervision can pose health risks. If a supplement with vitamin D is desired, taking into account further sources of vitamin D, additional daily intake of up to 20 micrograms (g) of vitamin D per day is in the form of Food supplements harmless to health. Higher doses, especially very high amounts, should be taken under medical supervision and taking into account the individual vitamin D status.

### CAN CORONA VIRUSES LEAD TO INFECTIONS BY TRANSMISSION VIA DRINKING VESSELS IN THE CA-TERING TRADE OR IN PUBLIC CATERING FACILITIES SUCH AS CANTEENS OR CAFETERIAS?

Such a chain of infection has so far not come to the attention of the BfR. With the current outbreak with SARS-CoV-2, the transmission path via the esophagus and the stomach plays according to the current state of the Know no role. The main transmission takes place via droplets, which arise during coughing and sneezing and are absorbed through the mucous membranes of the respiratory tract, and possibly of the eyes and mouth. Virus contamination of drinking vessels, such as drinking glasses, in the catering trade would have to occur through the use of an infected person, the virus reaching the glass via the hands or the saliva. A transfer to another person through mucous membrane contact with the glass could - theoretically - take place if such a vessel was not sufficiently cleaned in between.

However, infections with SARS-CoV-2 have so far not been detected worldwide via this transmission path. As enveloped viruses whose genetic material is encased in a fat layer (lipid layer), coronaviruses are sensitive to fat-dissolving substances such as alcohols and surfactants, which are contained in soaps and dishwashing detergents as fat-dissolvers. Although no specific data are available for SARS-CoV-2, it is highly likely that these substances will damage the virus surface and inactivate the virus. For the related SARS coronavirus, it could be shown in a laboratory study that treatment with a commercial detergent for 5 minutes at room temperature led to complete virus inactivation. Longer times and higher temperatures can increase the efficiency of virus inactivation. Cleaning drinking vessels in dishwashers or in glasswashers at 60 degrees Celsius or higher is therefore particularly efficient.

### ARE SPECIAL PRECAUTIONS REGARDING CROCKE-RY OR CUTLERY REQUIRED IN CLINIC FACILITIES AND ELDERLY CARE?

All usual measures and rules of conduct for protection against noroviruses or flu viruses in geriatric care facilities also help against the transmission of SARS-CoV-2.

# CAN YOU GET INFECTED WITH SARS-COV-2 FROM CONTAMINATED FROZEN FOODS?

So far, there are no indications of SARS-CoV-2 infection chains on food consumption, including frozen foods. The previously known corona viruses SARS and MERS are insensitive to cold and can remain infectious in the frozen state for up to 2 years at minus 20 degrees Celsius. Compliance with the general hygiene rules when preparing food should be observed.

## WHO CAN I CONTACT IF I HAVE FURTHER QUESTI-ONS?

Call your family doctor or call 116117 - the number of the emergency medical service - if you are concerned that they have been infected with the coronavirus. Here you will find a further selection of hotlines that provide information nationwide on the subject of coronavirus.

We would like to point out that we try to provide information and support as quickly and as well as possible, but we ask for your understanding that we cannot accept any legal liability for this information.

Sources: Federal Office for Risk Assessment (BFR), Federal Ministry of Health

