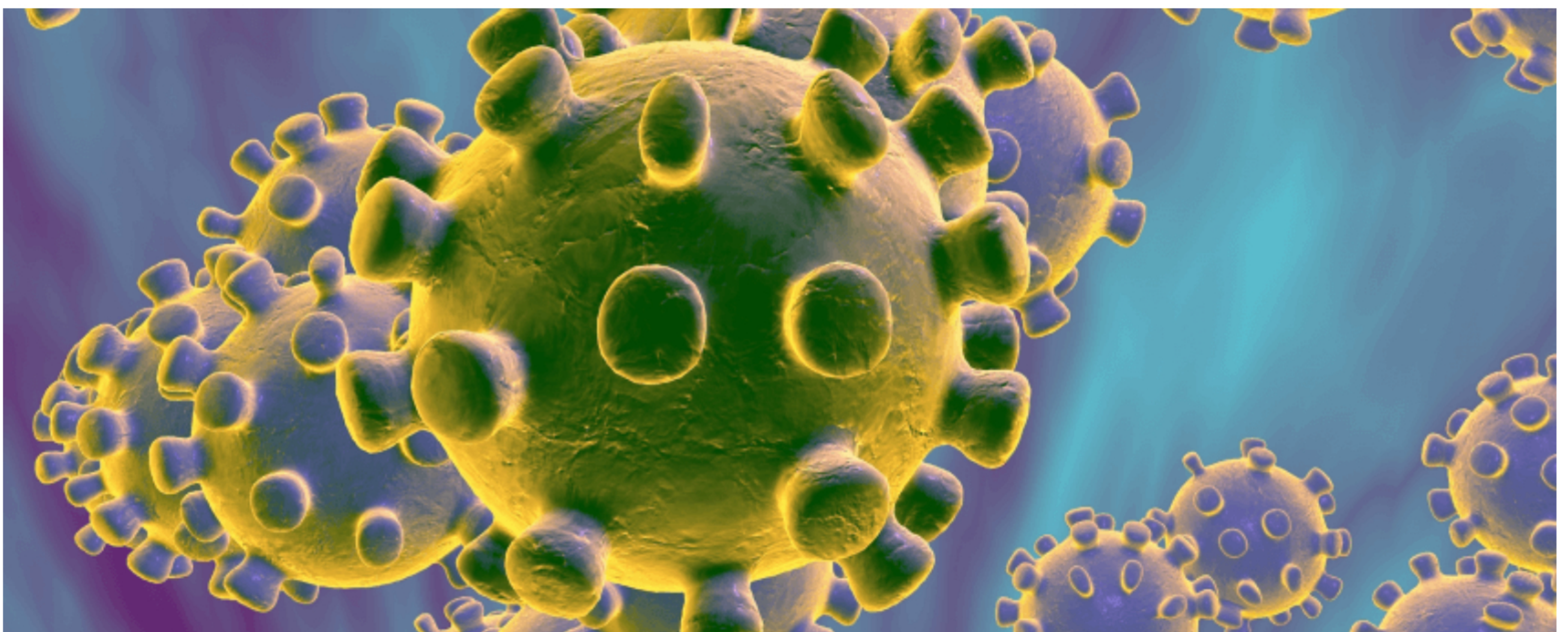


Coronavirus

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Coronavirus

WHAT IS THE CORONAVIRUS?

Coronaviruses are ring-shaped, enveloped RNA viruses of the family *Coronaviridae*. With all probability, they are zoonotic pathogens that are primarily transmitted from infected animals to humans. Two coronaviruses cause more serious diseases than others: MERS-CoV (trigger of Middle East Respiratory Syndrome) and SARS-CoV (trigger of Severe Acute Respiratory Syndrome). These coronaviruses have been discovered only recently. The MERS-CoV was discovered in 2012 and the SARS-CoV in 2003. MERS diseases occur mainly in countries in the Middle East, particularly in Saudi Arabia. The only known patients in Germany were infected with the pathogen while travelling. In late 2019/early 2020, a novel coronavirus was identified in several patients in Wuhan, China.

HOW IS THE CORONAVIRUS TRANSMITTED?


The main transmission routes are direct contact with infected animals and by eating infected food. The actual host of the pathogen is unknown, but researchers are certain that bats are frequently infected with coronaviruses. A wave of infections in China in 2002 and 2003 was most likely triggered by civet cats that had been infected by bats. The civets were later sold as food. Another possible transmission route could be droplet infection.

WHAT ARE THE SYMPTOMS OF THE DISEASE?

Both strains of the coronavirus are responsible for serious respiratory diseases. The incubation period is a few days, but up to two weeks at most. The disease is more severe in patients with weakened immune systems.

SIGNIFICANCE FOR INFECTIONS IN HOSPITALS AND IN THE OUTPATIENT SECTOR

For suspected cases of MERS, staff should carry out extended basic hygiene with additional protection of the respiratory tract (respirator face mask, at least FFP 2). Protective goggles should be worn in situations where spraying of blood, secretions or excrements is probable.

 ID 4113 hygiene measures apply to treatment of patients with SARS. It is imperative that people with the disease be isolated. Ideally, the isolation room should have an anteroom or an airlock function. The number of contact persons should be kept as limited as possible. In the patient's room, staff must wear protective gowns, disposable gloves, disposable caps or hairnets, safety goggles, waterproof disposable apron and respirator face mask (protection level FFP2 or FFP3). After leaving the patient room, disposable gloves must be disposed of in a container that closes securely. Hand sanitation or disinfection must be carried out following contact with the patient as well as after contact with materials containing pathogens, after taking off gloves and before leaving the airlock or the anteroom. All surfaces close to the patient must also be disinfected regularly. Covers that can be wipe-disinfected should be used for the patient's bed and mattress.

SURVIVAL TIME OF PATHOGENS ON INANIMATE SURFACES

Three hours; SARS between 72 und 96 hours.

DISINFECTANT EFFECTIVENESS FOR PREVENTION

The required spectrum of activity against coronaviruses is: limited virucidal.