Course of SARS-CoV-2 infection and diagnostic possibilities

**Incubation**
- Usually 5 days (1–14 days)
- Latency period: 2–3 days
- Infected, but not contagious

**Latency period**
- 2–6 days
- Still no symptoms, but already contagious

**Infectiousness**
- 8–9 days
- Symptoms and contagious

**PCR-Test**
- 3–7 days
- Usually 20 days (up to 60 days)

**Antigen test**

**Antibody test**

Graphic: Referat Biologische Sicherheit and PR & Communication, Goethe University. Source: RKI, pictogram content: partly Shutterstock.

**Diagnostic possibilities**

**PCR test:** The test time alone for this highly sensitive, molecular system (real-time PCR) is about four to five hours and must be carried out in a diagnostics laboratory. The time between sample collection and results can be one to two days. The most reliable way to detect an acute infection is the direct detection of the RNA (=genome) of the SARS-CoV-2 pathogen.

**Antigen test:** SARS-CoV-2 can also be diagnosed by the direct detection of viral protein, but with low sensitivity and specificity. The rapid test can deliver a result in 15 minutes without laboratory diagnostics.

A negative result means that the person is not infectious at that point in time, but an infection may still be present.

**Antibody test:** Antibodies are produced by the immune system upon contact with SARS-CoV-2, but to varying degrees depending on the symptoms experienced. The test must be carried out in a diagnostics laboratory and the time between sample collection and the results takes two to three days.

An acute infection cannot be detected.