

A. General part

Studies of Covid-19 lethality

Stanford professor John Ioannidis published an [overview of Covid-19 antibody studies](#). According to his analysis, the lethality of Covid19 (IFR) is below 0.16% in most countries and regions. Ioannidis found an upper limit of 0.40% for three hotspots.

In its [latest report](#), the US health authority CDC reduced the Covid19 lethality (IFR) to 0.26% (best estimate). Even this value may still be seen as an upper limit, since the CDC conservatively assumes 35% asymptomatic cases, while most studies indicate [50 to 80%](#) asymptomatic cases.

At the end of May, however, Swiss immunologists led by Professor Onur Boyman published what is probably the [most important study](#) on Covid19 lethality to date. This preprint study comes to the conclusion that the usual antibody tests that measure antibodies in the blood (IgG and IgM) can recognize **at most one fifth** of all Covid19 infections.

The reason for this discrepancy is that in most people the new coronavirus is already neutralized by antibodies on the mucous membrane (IgA) or by cellular immunity (T-cells). In most of these cases, no symptoms or only mild symptoms develop.

This means that the new coronavirus is probably much more common than previously thought and the lethality per infection is up to five times lower than previously assumed. The real lethality could thus be **well below 0.1%** and hence in the range of strong seasonal influenza.

In fact, several studies have now shown that up to 60% of all people already have a certain [cellular immunity](#) to Covid-19, which was acquired through contact with previous coronaviruses (common cold viruses). Children in particular often come into contact with such coronaviruses, which could help explain their insensitivity to Covid19.

The new Swiss study may also explain why antibody studies even in **hotspots** like New York or Madrid found infection rates of [at most about 20%](#), as this would correspond to an actual rate of nearly 100%. In many regions, the actual prevalence might already be well [over 50%](#) and thus in the range of herd immunity.

Should the Swiss study be confirmed, the assessment of Oxford epidemiologist Prof. **Sunetra Gupta** would apply, who predicted early on that Covid-19 is very widespread and its lethality [below 0.1%](#).

Despite the comparatively low **lethality** of Covid-19 (deaths per infection), the **mortality** (deaths per population) can still be increased regionally and in the short term if the virus spreads rapidly and reaches high risk groups, especially patients in nursing homes, as indeed happened in several hotspots (see below).

Due to its rather low lethality, Covid-19 falls at most into level 2 of the five-level [pandemic plan](#) developed by US health authorities. For this level, only the **“voluntary isolation of sick people”** is to be applied, while further measures such as face masks, school closings, distance rules, contact tracing, vaccinations and lockdowns of entire societies are not recommended.

Regarding **contact tracing**, a WHO study on influenza pandemics from 2019 also came to the conclusion that from a medical point of view this is [“under no circumstances recommended”](#), since it is not expedient for easily communicable and generally mild respiratory diseases.

It is sometimes argued that the rather low lethality was not known at the beginning of the pandemic. This is not entirely true, as data from South Korea, the cruise ships and even from Italy already [showed in March](#) that the risk to the general population is rather low.

Many health authorities also knew this, as [leaked emails from Denmark](#) in mid-March show: “The Danish Health Authority continues to consider that Covid-19 cannot be described as a generally dangerous disease, as it does not have either a usually serious course or a high mortality rate.”

Some media nevertheless continue to calculate an allegedly much higher Covid19 lethality rate of sometimes over 1% by simply [dividing](#) deaths by “infections”, without taking into account the age and risk distribution, which is absolutely crucial especially for Covid19.

The latest data from the European mortality monitoring [Euromomo](#) shows that several countries such as France, Italy and Spain are already entering a **below-average mortality**. The reason for this is that the average age of Covid19 deaths was very high and fewer people than usual are now dying in this age group.

See also: [Studies on Covid-19 lethality](#)

Example: Death rate per age group in Massachusetts, USA ([source](#))

The role of nursing homes

Nursing homes played an [absolute key role](#) in the Covid 19 pandemic. In most countries, one to two thirds of all Covid19 deaths occurred in nursing homes, and [up to 80%](#) in Canada and some US states. Even in Sweden, which did not impose a lockdown, [75% of deaths](#) occurred in nursing facilities.

It is all the more worrying that some authorities have obliged their nursing homes to admit Covid patients from the clinics, which has almost always resulted in numerous new infections and deaths. This happened in [northern Italy](#), England and the heavily affected US states of [New York](#), New Jersey and [Pennsylvania](#).

It is also known from northern Italy that the widespread fear of the virus and the announced lockdown of the country led to the flight of the predominantly Eastern European nurses, which [further accelerated](#) the breakdown of elderly care.

In the United States, [at least 42% of](#) all Covid19 deaths are accounted for by 0.6% of the population living in nursing homes. Nursing homes require targeted protection and do not benefit from a general lockdown of society as a whole.

It is well known that even common corona viruses (cold viruses) can be very dangerous for people in nursing homes. Stanford professor John Ioannidis pointed out already in mid-March that coronaviruses may have a case [mortality rate of up to 8%](#) in nursing homes.

In addition, it is often not clear whether these people really died from Covid-19 or from weeks of stress and total isolation. For example, there were approximately 30,000 additional deaths in English nursing homes, but in only 10,000 cases, Covid19 is noted [on the death certificate](#).

In April alone, around [10,000 additional dementia patients](#) without corona infection died in England and Wales due to weeks of isolation. Investigations into the situation in nursing homes have been [initiated](#) or [requested](#) in several countries.

Nursing home deaths, absolute and percentage ([LTCCovid](#))

The role of hospitals

The second central factor regarding infections and deaths, in addition to the nursing homes, are the hospitals themselves. A [case study in Wuhan](#) already showed that around 41% of hospitalized Covid patients had in fact contracted Covid in the hospital itself.

Contagion in hospitals also played a [decisive role](#) in northern Italy, Spain, England and other regions that were severely affected, meaning that the clinics themselves became the main place of transmission of Covid19 to already weakened people (so-called nosocomial infection) – an issue that had already been [observed](#) during the SARS outbreak from 2003.

Based on current knowledge, those countries that managed to avoid outbreaks of infection in nursing homes and hospitals had comparatively few deaths. The general lockdown of society, however, played no role or even a counterproductive role (see below).

An additional factor is the sometimes fatal medical mistreatment of Covid patients with aggressive drugs or invasive ventilation, the risks of which experts [have been warning about](#) for months. In the US, for example, there have been questionable [financial incentives](#) to connect Covid patients to ventilators, a practice that is now [being investigated](#) in several states.

See also: [An undercover nurse reporting from the ‘epicenter’ in New York City](#) (Video)

The clinical picture of Covid-19

The well-known Hamburg medical examiner Professor Klaus Püschel presented his [study](#) (English) on the first 12 of 190 detailed corona autopsies at a [press conference](#) (German).

Professor Püschel again emphasized that Covid-19 “is not nearly as threatening as was initially suspected”. The danger was “too much influenced by media images”. The media had focused on severe individual cases and fueled panic with “completely wrong messages”. Covid-19 is not a “killer virus” and the call for new medicine or vaccines is “driven by fear, not facts.”

The specific cause of death of the examined cases was pneumonia, but in about 50% of the cases there were venous thrombosis in the legs, which can lead to fatal pulmonary embolism. The kidneys and heart muscle were also partially affected. Professor Püschel therefore recommends the preventive administration of blood-thinning medication for serious Covid cases.

With regard to thrombosis and pulmonary embolism, Professor Püschel – like other experts before – emphasized that a “lockdown” with quarantine at home was “exactly the wrong measure”, since the lack of exercise itself promotes thrombosis. Indeed, US specialists have already been [warning](#) of this risk after even Covid-negative [people](#) developed [unexpected](#) thrombosis.

Many media again misinterpreted the autopsy findings and spoke of Covid-19 as a particularly dangerous disease which, unlike influenza, is said to lead to thrombosis and pulmonary embolism. This is not true, however: it has been [known](#) for 50 years that even severe influenza can [greatly increase the risk](#) of thrombosis and embolism and can affect the [heart muscle](#) and other organs. Even the recommendation regarding preventive blood thinner for severe influenza has been around [for 50 years](#) already.

Children and schools

Numerous studies [have now shown](#) that children hardly get Covid19 and do not or hardly transmit the virus, which was [already known](#) from the 2003 SARS outbreak. There was therefore [no medical reason](#) for the closure of schools at any time.

Accordingly, all those [countries](#) that reopened their schools in May saw [no increase](#) in cases of infection. Countries like Sweden, which never closed their primary schools anyway, had no problems with this either.

A preprint study by the German virologist Christian Drosten argued that the risk of infection from children is comparable to adults and schools should therefore remain closed. However, several researchers demonstrated [methodological errors](#) in the study. Drosten subsequently withdrew the recommendation regarding school closures.

In some schools, for example in France and Israel, alleged [“corona outbreaks”](#) are said to have occurred. However, it is likely that these are transmissions from teachers to schoolchildren that, to their dismay, are regularly tested, although they hardly show any symptoms and are themselves hardly or not at all contagious.

The British Kawasaki Disease Foundation again criticized the [dubious and lurid media coverage](#) of Kawasaki disease. In fact, there has been no significant increase in Kawasaki cases and no proven association with Covid-19. General inflammatory reactions in individual children are also known from other viral infections, but the number of cases reported so far is extremely low.

German medical associations [have also given the all-clear](#): Covid-19 is imperceptible or very mild in almost all children. Schools and daycare centers should therefore be opened immediately and without restrictions, ie there is no need for small groups, distance rules or masks.

Schoolchildren in France who have to play in boxes (May 15, 2020, [DailyMail](#))

On the effectiveness of masks

Regardless of the comparatively low lethality of Covid19 in the general population (see above), there is still [no scientific evidence](#) for the effectiveness of masks in healthy and asymptomatic people in everyday life.

A cross-country study by the University of East Anglia came to the conclusion that a mask requirement was of [no benefit](#) and could even increase the risk of infection.

Two US professors and experts in respiratory and infection protection from the University of Illinois explain [in an essay](#) that respiratory masks have no effect in everyday life, neither as self-protection nor to protect third parties (so-called source control). The widespread use of masks didn't prevent the outbreak in the Chinese city of Wuhan, either.

A study from April 2020 in the journal *Annals of Internal Medicine* [came to the conclusion](#) that neither fabric masks nor surgical masks can prevent the spread of the Covid19 virus by coughing.

An article in the *New England Journal of Medicine* from May 2020 also comes to the conclusion that respiratory masks offer [little or no protection](#) in everyday life. The call for a mask requirement is described as an “irrational fear reflex”.

A May 2020 meta-study on pandemic influenza published by the U.S. CDC [also found](#) that respirators had no effect.

The WHO moreover declared in June that truly “asymptomatic transmission” is in fact [“very rare”](#), as data from numerous countries showed. Some of the few confirmed cases were due to [direct body contact](#), i.e. shaking hands or kissing.

In Austria, the mask requirement in retail and catering will **be lifted again** from mid-June. A mask requirement was **never introduced** in Sweden because it “does not offer additional protection for the population”, as the health authority explained.

Numerous politicians, media people and police officers have already **been caught** putting on their respirators in a crowd especially for the **television cameras** or taking them off immediately when they **believed that** they were no longer being filmed.

In some cases there were **brutal police attacks** because a person allegedly “did not wear her mask properly”. In other cases, people with a disability who cannot and do not have to wear a mask, are **not allowed to enter** department stores .

Despite this evidence, a group called “**masks4all**”, which was founded by a “young leader” of the World Economic Forum (WEF) Davos, is advocating worldwide mask requirements. Several governments **and the WHO** appear to be responding to this campaign.

Many critics suspect that the masks are more likely to have a psychological or **political function** (“muzzle” or “visible sign of obedience”) and that wearing them frequently might even lead to additional health problems.

A study from Germany empirically showed that the introduction of face masks **had no effect** on infection rates (see graph). Only the city of Jena appeared to experience a strong decrease in infections, but Jena simultaneously introduced **very strict** quarantine regulations.

Introduction of face masks in German cities had no impact on infections (IZA)