

Demand for public information and scientific inquiry concerning mortality and illness following Covid-19 vaccinations

At the beginning of 2021, the Covid vaccines were issued with the best of intentions. This 2 page document summarizes selected findings from an increasing body of evidence casting concerns related to the vaccines. The information is based on scientific studies and official statistics from recent months:

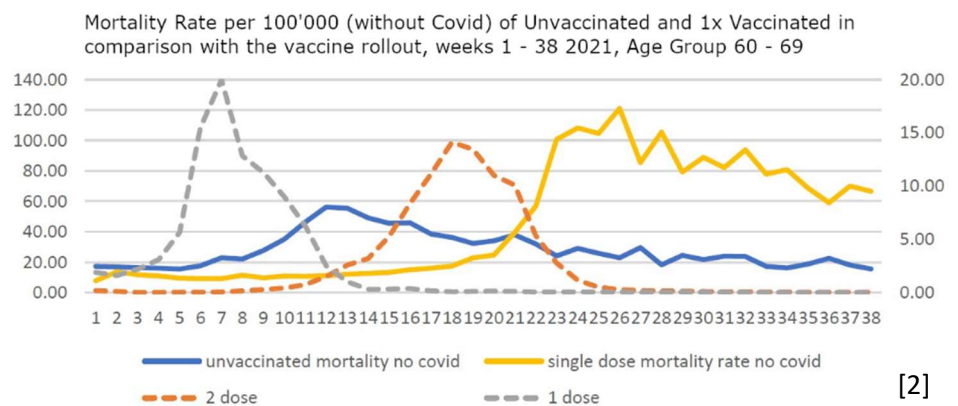
1) Higher all-cause mortality with increasing vaccination coverage in the US & Europe

Columbia University researchers analysed general mortality across various regions and age groups following vaccination campaigns. It was concluded that the lethal effects of vaccinations are massively underestimated, and that for most sections of the population the risks posed by vaccination is greater than the risk of contracting Covid. The study estimates at least 146,000 vaccine deaths in the US alone from February to August 2021 [1].

2) Waves of deaths following vaccinations

British scientists have analysed mortality rates in England across three age groups (all over 60 years old) in relation to the time period in which these groups were vaccinated. For each group a significant wave of deaths was found to have occurred following vaccination [2]. It is striking that the wave of deaths after the campaign for the first vaccination

dose affected the unvaccinated, while the wave after the second dose campaign involved those who were vaccinated once. Since the researchers used mortality figures with Covid deaths already subtracted, waves of Covid infections can be ruled out as a cause of these deaths. For the researchers, the only plausible explanation is that in England, as is the case for many other countries, the vaccination status of individuals is systematically delayed to reflect the protective effect of the vaccines kicking in. Specifically, people are respectively classified as unvaccinated for the first 14 days following their first vaccine dose, and as 1x vaccinated for 14 days following the second injection. Therefore, the observed waves of deaths very likely coincide with and involve those who received their first and second vaccine doses. The authors offer as a possible explanation that the vaccination is known to weaken the immune system for a short time. Since a weakened immune system also increases the possibility of a severe course of Covid, the scientists looked at Covid mortality as a next step. In their analysis, among other things, they corrected for the above-mentioned time-delay in the classification of vaccination status, so that the increased vulnerability post-vaccination was not attributed to unvaccinated people. As a result, the protective effect of the vaccine could no longer be observed [2]. Other researchers have pointed out similar findings: The data from one of the largest and most cited field studies that shows a high effectiveness of the vaccination [3] was reviewed by a US statistics expert, and found to contain significant distortions [4].



[2]

3) Increase in cardiovascular and neurological diseases

Risk markers for heart inflammation were demonstrated to have increased more than twofold for a period of at least 2.5 months following vaccination. Circulation, a medical journal, stated that this effect could explain the "observations of increased thrombosis, myocardial insufficiency and other cardiovascular events" [5]. In a subsequent correction, this sentence was removed because it suggests a causal relationship, despite the study not involving a control group. However, as the study observed changes in 566 patients before and after vaccination, and as increases of this magnitude were

unprecedented over the eight years of clinical records in this clinic [6], the observations remain worrying. Consistent with these clinical observations, there was a marked increase in emergency cardiovascular and neurological hospitalisations immediately following vaccination campaigns in Germany (see graph [7]). Although most countries have not published official data on this matter, there have been world-wide press reports starting from the summer of 2021 pointing to an unexplained increase in heart attacks and other emergency hospitalisations [8, 9, 10, 11, 12].

4) Excess mortality

Over the last few months an excess mortality in Europe has been observed for all age groups from 15 to 75 [13]. In November Spain reported an excess mortality of 12%, and in early December Great Britain reported figures of 13%, France of 9%, Germany of 32%, Austria of 42%, and Switzerland of 27% [14], of which only a small part can be attributed to Covid. If they report about it at all, newspapers speak of these figures as puzzling [15, 16, 17], and governments offer vague and unconvincing conjectures as to the possible cause [18]. It is worth considering that we are seeing this inexplicable excess mortality in the same year that a completely novel medical intervention was administered to a large part of the population.

5) Immune deficiency and increase in cancer

The University of Stockholm found adverse effects of the spike proteins, such as those brought about by the virus as well as by the vaccination, on the immune system [19]. In the case of natural infections, exposure to the spike proteins only happens once, leading to a long-term [20] immunity which is 13x more robust compared to double vaccination [21]. Additionally, a recent study shows profound immune system impairments from vaccination [22]. Given these findings, the need for frequent boosters is highly questionable. In this context, it is noteworthy that the excess mortality has risen in concert with booster campaigns. Further studies report a reduced immune response against others pathogens following vaccination [23], as well as an unexpectedly rapid progression of cancer [24].

6) Pathologists speak of a high number of undetected vaccine-induced death cases

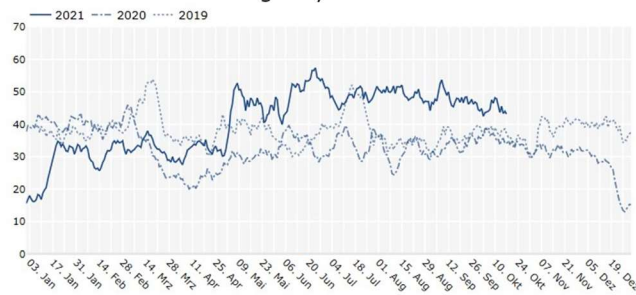
Pathologists who have studied post-vaccination deaths find that in 28% - 40% of cases there is a probable link to the vaccination and call for further investigation [25, 26].

Discussion and Conclusion

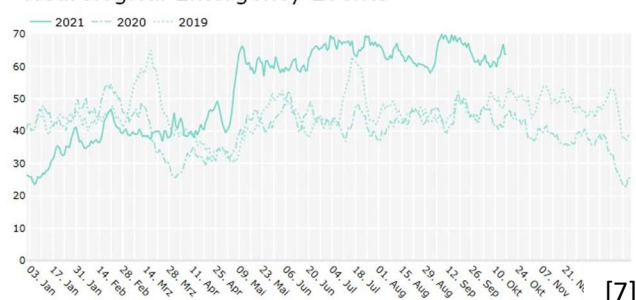
In this paper, the many studies that come out in favor of vaccination are not presented, since they are already well known. In contrast, the aim of this document is to point out that there are significant and well-founded indications that the safety and effectiveness of the vaccinations is highly questionable, that the scientific discourse is anything but conclusive and that there are reasonable doubts concerning the validity of efficacy studies [4].

The lack of communication of the latest scientific findings to the general public, along with the ongoing, unconditional promotion of vaccinations, up to and including mandatory vaccinations, appears negligent considering the latest findings. In addition to a public information campaign aimed at promoting voluntary and informed vaccination decisions, there is an urgent need for more comprehensive efforts to raise awareness about the short- and long-term safety effects of the vaccines.

Cardiovascular Emergency Events



Neurological Emergency Events



[7]

Further Thoughts

If there is any truth to the increased mortality following vaccination...

1) How could this have remained undiscovered for so long?

- Mortality due to vaccination remained unnoticeable for a long time - in the US study the death rate due to vaccination from February to August was reported to be 0.04% [1], that is one in every 2,500 people (which still represents a greater risk than Covid for most people). The causes of death appear to be well known and inconspicuous, such as heart attacks and strokes. Numerous reports from social media channels about sudden deaths following vaccination were not taken seriously, and autopsies were not performed [26, 26c].
- Mortality only became increasingly noticeable towards the autumn. However, since no serious effect was perceived immediately following the vaccination campaigns in the summer, vaccinations were not suspected to be a cause of death, despite the fact that excess mortality in many countries either began or considerably rose following the roll-out of the booster vaccines. However, this development is too recent for there to be scientific assessments regarding correlations.

2) Why were (and are) the hospitals overflowing with unvaccinated people?

The question arises as to what extent this is based on a distortion of the facts:

- The studies from the US and Great Britain, using different data sets, consistently show an increased mortality (Covid and non-Covid) in the weeks following vaccination campaigns. After surviving the first few weeks, a protective effect sets in that lasts for about 3.5 months [1]. In the period directly following vaccination, however, the immune system is weakened to such an extent that the protective effect would need to last for at least 22 months in order to compensate for the previous vulnerable phase [1a]. In this phase, not only increased deaths, but also an increased rate of Covid infections can be observed [4a].
- It is exactly during this time period of increased case numbers and mortality, up to 14 days following the second injection, that vaccinated people are classified in the statistics as unvaccinated [27, 28].
- Official data from England [29] as well as an increasing body of research by journalists [30, 31, 32] show that approx. 50-60% of Covid patients were actually hospitalised due to other reasons, and that Covid was only a secondary diagnosis. A secondary diagnosis could even have been given without symptoms, since appropriate measures are required in any case due to the necessary isolation.
- In some data sets, the vaccination status of a majority of the patients was unknown, and these individuals were subsequently simply classified as unvaccinated [33, 34].

3) How can the contradictions to studies that show high vaccine effectiveness be explained?

This would have to be looked at in detail for each study. Some possible explanations are:

- Since a person is only partially protected for up to 14 days following their second vaccination, this person is excluded from comparative studies on vaccination protection during this period [28, 35]. As has been mentioned several times, this represents a period of high immunological vulnerability (including to Covid) and mortality, which is not compensated for by the subsequent protection afforded by the vaccine [1, 1a]. Moreover, a significant increase in Covid cases occurs following the first vaccine dose [4a].
- Distortions as described in reference [4]. Although the author only reviews the data from the study by Dagan et al. [3], he also posits with reference to another study that similar distortions could have played a role [4b].

The Authors

The authors of this demand have concluded that they wish to remain anonymous for several reasons. First of all, because the matter should be in the foreground - the scientific findings. These go back to the respective publications which the authors have only summarized. They do not want to divert attention from the content, as it easily happens when (un)known names and (missing) titles are given. Furthermore, they want to be protected from public attention and unwanted contact.

References

with more detailed information

Many of the scientific sources are currently published only as preprints. Anyone familiar with scientific work knows that this is normal due to the topicality of the studies as well as the duration of the scientific publication process.

- [1] S. Pantazatos, H. Seligmann (2021)
COVID vaccination and age-stratified all-cause mortality risk. DOI:[10.13140/RG.2.2.28257.43366](https://doi.org/10.13140/RG.2.2.28257.43366)
https://www.researchgate.net/publication/355581860_COVID_vaccination_and_age-stratified_all-cause_mortality_risk

The authors report a 20 times higher mortality than had been recorded in the U.S. adverse event reporting system VAERS, which is in accordance with the known low reporting rates.

Source that the low reporting rates are a known and proven phenomenon:

R. Lazarus, M. Klompas (2011). Harvard Pilgrim Health Care Report:
Electronic Support for Public Health–Vaccine Adverse Event Reporting System (ESP:VAERS)
<https://digital.ahrq.gov/sites/default/files/docs/publication/r18hs017045-lazarus-final-report-2011.pdf>

- On page 6, paragraph 3 ("results"), it is stated that, in general, between 1% and 13% of serious adverse drug reactions and less than 1% of vaccine adverse reactions are reported.

The study is primarily based on correlations. Nevertheless, causal conclusions between vaccination and death rates are permissible and obvious, as stated by the authors on page 37 (of the currently available version of the preprint) under "*Why our results evidence a causal link (not just an association) between vaccination and mortality risk*". Here, 3 of their reasons are given: 1) The correlations were calculated with a time lag, i.e. vaccinations predicted later deaths. In cases where a time lag is involved, causal inferences are permissible. 2) The results show that deaths coincide time-wise with mass vaccinations in the respective age groups. 3) The authors obtain almost exactly the same results for the U.S. as an analysis of vaccine-related death rates calculated on a completely independent data base and with a different methodology, which was estimated based on reported deaths in the U.S. VAERS (vaccine adverse events reporting system) database, including the known low reporting rates (see above) and other factors. The surprisingly high agreement between the completely independent approaches suggests a high validity.

Source of the VAERS analysis:

J. Rose, M. Crawford (2021).
Estimating the number of COVID vaccine deaths in America
https://downloads.regulations.gov/CDC-2021-0089-0024/attachment_1.pdf

In the abstract (the first paragraph) of the study, there is a sentence that may be surprising, and will be briefly addressed: "Notably, adult vaccination increased ulterior mortality of unvaccinated young (<18, US; <15, Europe)." To understand this oddity, a look should be taken at the study

protocol of the Pfizer pivotal trial. Starting on page 67, the protocol describes that side effects may also occur in people who have contact (through inhalation or skin contact) with vaccinated participants in the study. Source reference:

Study protocol of the Pfizer pivotal trial:

A Phase 1/2/3, Placebo-Controlled, Randomized, Observer-Blind, Dose-Finding Study to Evaluate the Safety, Tolerability, Immunogenicity, and Efficacy of Sars-Cov-2 Rna Vaccine Candidates Against Covid-19 in Healthy Individuals

https://cdn.pfizer.com/pfizercom/2020-11/C4591001_Clinical_Protocol_Nov2020.pdf

What is the relationship between the higher mortality observed initially (weeks 0-5) and the lower mortality observed later (weeks 6-20) after vaccination?

First, it should be noted that the authors state that mortality tends to rise again above the mortality rate of the unvaccinated in the group of vaccinated persons after the 20 weeks in which a protective effect of vaccination is detected, which may indicate delayed side effects. Ignoring such later side effects, Seligmann came to the conclusion that the risk of vaccination would balance out the initial period of increased mortality provided stable and high protection against Covid for at least 22 months (see last paragraph on page 1 of the source listed below), which it obviously doesn't:

Waning of the protective effect:

E. Levin, Y. Lustig, C. Cohen, R. Fluss, V. Indenbaum, S. Amit et al. (2021).

Waning Immune Humoral Response to BNT162b2 Covid-19 Vaccine over 6 Months

<https://www.nejm.org/doi/pdf/10.1056/NEJMoa2114583?articleTools=true>

[1a]

H. Seligmann (2021).

Expert evaluation on adverse effects of the Pfizer-COVID-19 vaccination

https://www.researchgate.net/publication/351441506_Expert_evaluation_on_adverse_effects_of_the_Pfizer-COVID-19_vaccination

[2]

M. Neil, N. Fenton, J. Guetzkow, S. McLachlan (2021).

Latest statistics on England mortality data suggest systematic miscategorisation of vaccine status and uncertain effectiveness of Covid-19 vaccination. DOI:10.13140/RG.2.2.14176.20483

https://www.researchgate.net/publication/356756711_Latest_statistics_on_England_mortality_data_suggest_systematic_miscategorisation_of_vaccine_status_and_uncertain_effectiveness_of_Covid-19_vaccination

- Mortality waves after vaccination doses incl. graph: starting page 9.
- Disappearance of protective effect: starting page 14, result graphs see page 16:
In evaluating the Covid mortality of vaccinated versus unvaccinated, the authors on the one hand correct the misclassification of vaccination status. On the other hand, they account for the fact that it is not the vaccination status at the time of death that is decisive, which is on average three weeks after infection, but that the vaccination status at the time of infection is, since the body's ability to defend itself in the first period largely determines the outcome.

Could biases also have played a role in Pfizer's pivotal study?

In the table on page 9 of the approval study, it can be seen that of the approximately 18,000 participants per group, Covid infection was detected in 162 people in the control group and in 8 people in the vaccinated group within the observation period of 2 months.

From a report of the U.S. Food and Drug Administration (FDA), which contains further information on the approval, it can be seen from table 2, page 18, that various persons from the original sample of 21,800 persons per group were excluded from further study participation and not included in the evaluation, e.g., because they had become infected with Covid before the start of the study. The last line lists subjects who were excluded because of "other protocol deviations in the period up to 14 days after the 2nd dose." The report does not clarify what "other protocol

deviations" are. In the study protocol (a study protocol lays out the details of a planned scientific procedure prior to the start of a study), protocol deviations are listed several times as "as determined by the clinician" (e.g., in the table at 9.3 on page 101 of the study protocol). Thus, the definition seems to have been left to the individual study leaders in the field. With regard to these deviations, it is striking that they occurred 5 times more often in the vaccinated group than in the control group, which makes it extremely unlikely that these are random effects (in figures: 311 vs. 61 persons => 250 persons more). Thus, the 161 Covid-infected individuals of the unvaccinated are contrasted not only with 8 Covid-infected vaccinated individuals, but also with an additional 250 individuals who were disproportionately excluded from further study participation due to unreported reasons. It would be desirable that the reasons for the high exclusion rate were disclosed.

Pivotal trial:

F. Polack, S. Thomas, N. Kitchin, J. Absalon, A. Gurtman, S. Lockhart et. al (2020)
Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine.
<https://www.nejm.org/doi/full/10.1056/NEJMoa2034577>

Report with further information:

Food and Drug Administration, Vaccines and Related Biological Products Advisory Committee
FDA Briefing Document, Pfizer-BioNTech COVID-19 Vaccine, December 10, 2020
<https://www.fda.gov/media/144245/download>

Study protocol of the Pfizer pivotal trial:

A Phase 1/2/3, Placebo-Controlled, Randomized, Observer-Blind, Dose-Finding Study to Evaluate the Safety, Tolerability, Immunogenicity, and Efficacy of Sars-Cov-2 Rna Vaccine Candidates Against Covid-19 in Healthy Individuals
https://cdn.pfizer.com/pfizercom/2020-11/C4591001_Clinical_Protocol_Nov2020.pdf

- [3] N. Dagan, N. Barda, E. Kepten, O. Miron, S. Perchik, M. Katz, M. Hernan et al. (2021).
BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting
<https://www.nejm.org/doi/full/10.1056/NEJMoa2101765>

This study is one of the first and largest to evaluate the effect of vaccination in "real life". Accordingly, it received great attention and was widely cited.

For details on reasonable doubt about the validity of the results, see next source.

8 of the 10 authors of the study state that they either currently are or have been sponsored by Pfizer for other academic work within the last 3 years.

- [4] M. Reeder (2021). Use of a null assumption to re-analyze data collected through a rolling cohort subject to selection bias due to informative censoring. DOI: 10.5281/zenodo.5243901
<https://zenodo.org/record/5243901#.Yc022d-xMaE>

The study reanalyzes the above-mentioned study by Dagan et al. but goes on to state that similar biases may have played a role in some other efficacy studies as well.

The abstract of the study is not easy to understand at first. In order to understand what the bias is, several pieces of information need to be conveyed:

1) In the Dagan et al. study (source above), a key finding is based on the fact that 32 people in the control group and 9 in the vaccinated group died of Covid, suggesting a 72% protection against fatal courses.

2) It is important to understand that the control and vaccinated groups were not fixed throughout the duration of the study, but that individuals were matched with each other on a 1:1 basis (vaccinated-unvaccinated) and that these matched pairs constituted the vaccinated and unvaccinated groups. If one of the individuals dropped out of their group, the individual assigned to them automatically dropped out of the study as well, unless a new individual could be assigned to them.

3) Also, vaccination status was not fixed: Many individuals (44%) of the unvaccinated had themselves vaccinated during the course of the study, and thus dropped out of the study, as did

their vaccinated counterparts. Only in one third of the cases could new unvaccinated persons be assigned to the vaccinated participants.

4) If individuals of the control group caught Covid, they were not eligible for vaccination for the duration of their symptoms, according to official recommendations.

5) The study had a very short duration of 44 days only.

The following paragraph explains what the bias is based on:

“A direct example (...) provides guidance if one considers two opposite scenarios (...). 1) Suppose a person is matched into the unvaccinated group on (calendar) Day 5, experiences Covid-19 symptoms on Day 9, and dies 18 days later on Day 27. In this case, the individual would have been restricted from receiving the vaccine, and hence from rolling out of the unvaccinated cohort, from Days 9 through 26. Barring the extremely highly unlikely possibility that this person’s match in the vaccinated group happens to die sooner than Day 27, the outcome would be counted as a death in the unvaccinated group. 2) Now suppose that the same progression occurs for a person in the vaccinated group – joining the group by being vaccinated on (calendar) Day 5, experiencing symptoms on Day 9, and dying on Day 27. This death would only be counted if the person’s match remains unvaccinated over this period. [In this way] the restriction of the unvaccinated control from being vaccinated due to symptomatic Covid-19 leads to the potential for a significant bias in counting deaths.” (page 5 of the preprint, 2nd paragraph)

This bias applies in the same way to hospitalisations (page 34, end of 2nd paragraph).

Dagan et al. are aware of this bias and make corrections. But they report the corrections only in supplementary materials and give the uncorrected results in the main part (otherwise they would have had to report 49% instead of 72% protection against a fatal outcome, and that the protection was no longer significant after the corrections). Also, these corrections contain inconsistencies and circular reasoning (if you want to understand the details, read the analysis by Reeder following the quoted paragraph).

Reeder suggests several computational models to better address the bias, showing that the protective effect of vaccination against Covid is likely to be much lower than Dagan et al. report, and there is a high probability that there may be no protective effect (see page 25, top). Furthermore, he points out crucial intransparencies (page 7, 3rd paragraph; page 34, 3rd paragraph), and the fact that the data indicate that Dagan et al. only included vaccinated people if they didn’t have Covid symptoms, whereas this does not seem to have been a condition for participation in the control group (pg. 29, bottom).

[a]

On page 32, first paragraph, the author mentions 2 studies that show increased Covid case rates after the first vaccination administration.

[b]

On page 30, last paragraph, reference is made to another study in which the author suggests that similar biases may have played a role.

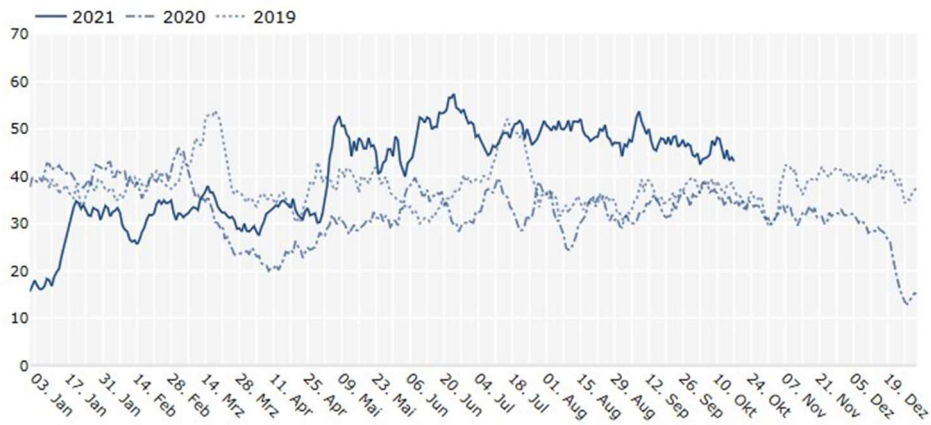
[5] Original version of the article, today only indirectly to be found in the correction commentary: S. Gundry (2021). Mrna COVID Vaccines Dramatically Increase Endothelial Inflammatory Markers and ACS Risk as Measured by the PULS Cardiac Test: a Warning. <https://doi.org/10.1161/CIR.0000000000001053>

[6] Current version of the article: S. Gundry (2021). Observational Findings of PULS Cardiac Test Findings for Inflammatory Markers in Patients Receiving mRNA Vaccines. https://www.ahajournals.org/doi/abs/10.1161/circ.144.suppl_1.10712

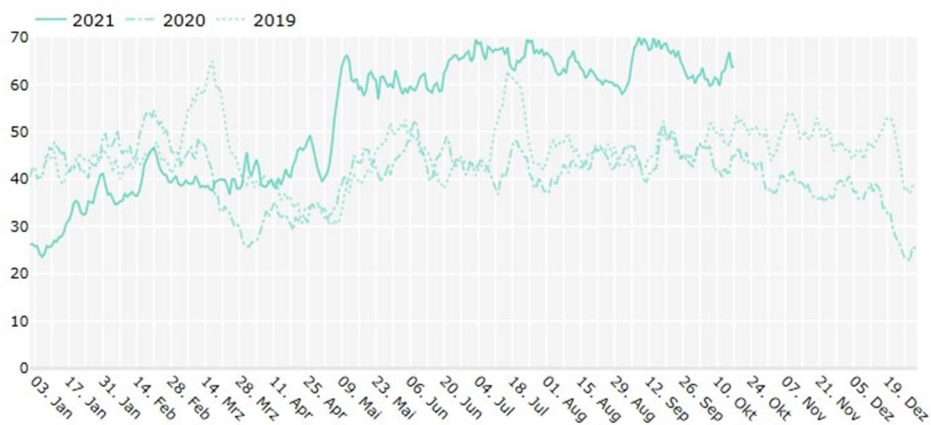
[7] Emergency Unit Situation Report of the Robert Koch Institute (German Centre for Disease Control) https://edoc.rki.de/bitstream/handle/176904/8877/SitRep_de_2021-10-20.pdf

➤ Graph see page 4

Cardiovascular Emergency Events

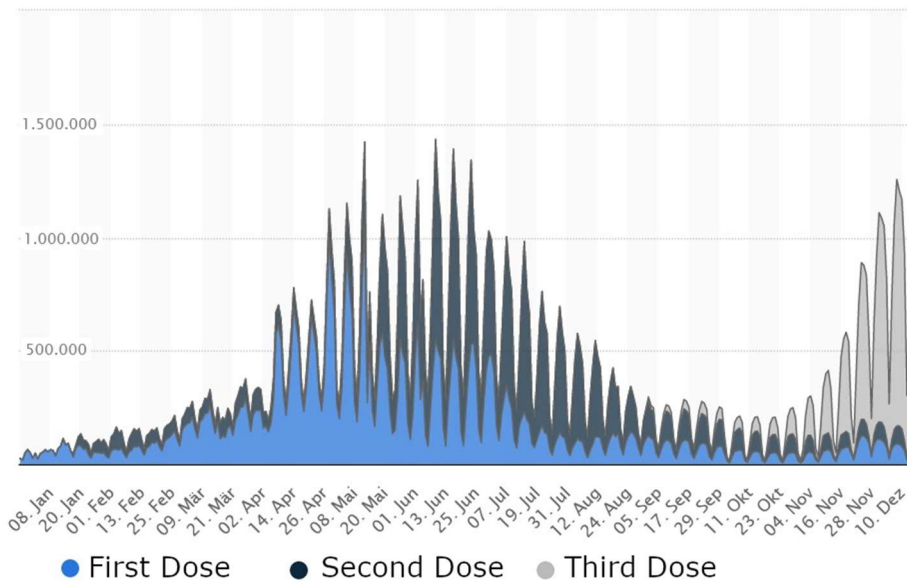


Neurological Emergency Events



In comparison, the temporal course of vaccination administrations to the German population should be considered:

Number of Vaccinations



Source of this graph:

Statista.com (based on data of the Robert-Koch-Institut, the German Centre for Disease Control):
<https://de.statista.com/statistik/daten/studie/1195129/umfrage/taegliche-impfungen-gegen-das-coronavirus-in-deutschland-seit-beginn-der-impfkampagne/#professional>

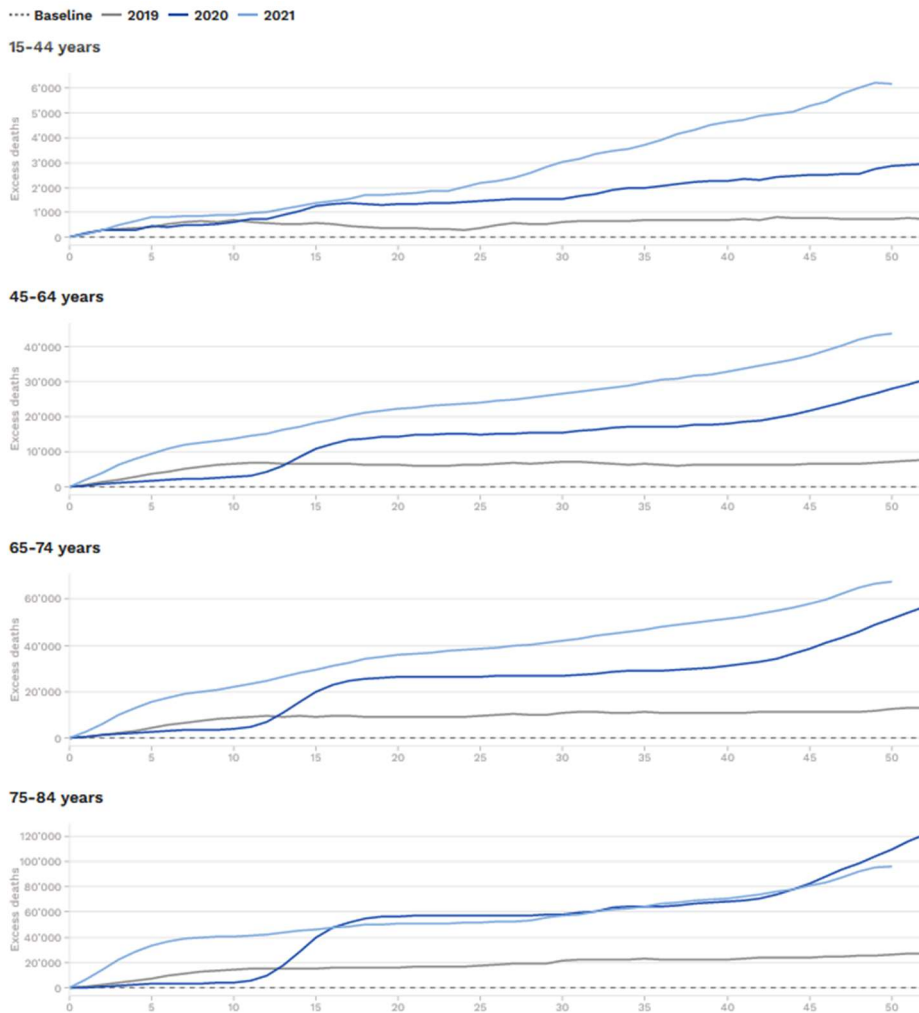
A "fact check" regarding these graphs shall not be withheld:

A. Reisin, Tagesschau Faktenfinder, 16.12.2021

<https://www.tagesschau.de/faktenfinder/notaufnahmen-impfnebenwirkungen-101.html>

While it is certainly true that the graphs are based on relatively small numbers of cases and should therefore be taken with caution, the second part of the statement seems dodgy: Supposedly, the striking increase in numbers resulted from a change of how emergency cases were coded in a single, participating hospital. This seems highly unlikely given the 40% increase in cardiovascular emergency admissions and 60% increase in neurological emergency admissions.

- [8] N. Toth, 14.10.2021
Svergies Radio (Swedish Radio)
Increase of critically ill in the emergency unit - no one knows why: 'Record month' (translated from Swedish: Ökning av svårt sjuka på akuten – ingen vet varför: "Rekordmånad")
<https://sverigesradio.se/artikel/okning-av-svart-sjuka-pa-akuten-ingen-vet-varfor-rekordmanad>
- [9] H. Puttick, 30.9.2021
The Times
Mystery rise in heart attacks from blocked arteries
<https://www.thetimes.co.uk/article/mystery-rise-in-heart-attacks-from-blocked-arteries-m253drmf>
- [10] A. Schiavone, 18.12.21
Express
Ex footballer demands inquiry into mystery heart problems spike 'Going through roof!'
<https://www.express.co.uk/news/uk/1537763/heart-problem-Christian-Eriksen-Matt-Le-Tissier-football-aguero-vaccine-vn>
- [11] K. Wells, 29.10.2021
KHN, Michigan Radio
ERs [emergency rooms] Are Swamped With Seriously Ill Patients, Although Many Don't Have Covid
<https://khn.org/news/article/hospital-emergency-rooms-swamped-seriously-ill-non-Covid-patients/>
- [12] Y. Afshan, 30.10.2021
The Hindu
Heart attacks among youngsters on the rise
<https://www.thehindu.com/news/cities/bangalore/heart-attacks-among-youngsters-on-the-rise/article37244462.ece>
- [13] European Mortality Monitoring
Note: The European Mortality Monitoring receives its data directly from the authorities of the participating countries:
<https://www.euromomo.eu/about-us/partners/>
- Short, written note on excess mortality:
<https://www.euromomo.eu/bulletins/2021-49/>
- Additionally, see these graphs: <https://www.euromomo.eu/graphs-and-maps/> - scroll down:



Since January 2022, the year 2019 is no longer displayed. To see the graphs including 2019, you have to resort to a web archive: <https://web.archive.org>

Enter the link from above:
<https://www.euromomo.eu/graphs-and-maps/>
 and choose a date at the end of 2021.

Germany is one of the few countries that openly report excess mortality in percentages:

Statistisches Bundesamt (Federal Office of Statistics)
https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/12/PD21_574_126.html
 tables: «wöchentliche Sterbefallzahlen» (weekly death rates) and «monatliche Sterbefallzahlen» (monthly death rates)

[14] Our World in Data
 see the graphs below that can be found with this link:
<https://ourworldindata.org/grapher/excess-mortality-p-scores-average-baseline?time=2021-05-02..latest®ion=Europe&country=DEU~CHE~ESP~FRA~GBR~ITA~NLD~AUT>

The graph may need to be adjusted to resemble the one below. Countries and the period of interest can be selected. It should be noted that the values of the last weeks usually increase later due to a delay in reporting. Move the mouse over the graph to see the values displayed in numbers.

It should also be kept in mind that the increase in the curves does not correspond to the normal increase in mortality in the winter. Since excess mortality is calculated based on the same calendar weeks of previous years, the course of the year does not play a role in excess mortality, but only other, extraordinary factors, such as major natural disasters, or periods of extreme heat or cold.

The reliability of the data basis at "Our World in Data" has not been fully elicited for this document. The figures should therefore be viewed with caution and, if interested, cross-checked with government agencies in individual countries. However, it is credible that a serious approach stands behind the data, even if they may differ in detail from official agencies. However, this is normal within certain limits due to differences in survey and evaluation procedures.

Excess mortality: Deaths from all causes compared to average over previous years



The percentage difference between the reported number of weekly or monthly deaths in 2020–2021 and the average number of deaths in the same period over the years 2015–2019. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.



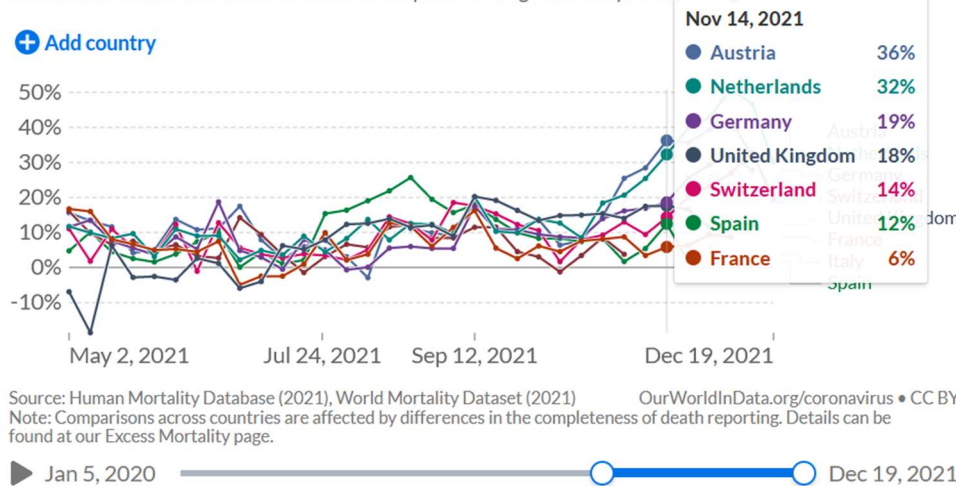
Note: For Germany, the figure differs from that of the Federal Office of Statistics because the Federal Office’s calculations are based on comparison with the average of the 5 previous years, whereas this chart compares with the average of the 5 years before the pandemic. However, both sources show a high excess mortality.

Since no current data was available for Spain, this graph shows the Spanish figures for November:

Excess mortality: Deaths from all causes compared to average over previous years



The percentage difference between the reported number of weekly or monthly deaths in 2020–2021 and the average number of deaths in the same period over the years 2015–2019. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.



[15] Die Welt, 29.12.21.
 «Die rätselhafte Übersterblichkeit im Herbst» (Mysterious autumn excess mortality).
<https://www.welt.de/wissenschaft/plus235925374/Uebersterblichkeit-wegen-Corona-Warum-starben-im-Herbst-so-viele-Menschen-in-Deutschland.html>

[16] Der Standard, 2.12.2021

«Weniger Covid-19-Opfer als letzten Herbst, aber höhere Übersterblichkeit. Dass es gegenüber dem Vorjahr um ein Drittel weniger Covid-19-Todesfälle gibt, zugleich aber eine wöchentliche Übersterblichkeit im dreistelligen Bereich, lässt auch Experten rätseln.»
("Fewer Covid 19 victims than last fall, but higher excess mortality. The fact that there are one-third fewer Covid 19 deaths than last year, but at the same time a weekly excess mortality rate of hundreds, leaves experts puzzled.")
<https://www.derstandard.at/story/2000131577990/weniger-Covid-opfer-als-letzten-herbst-aber-hoehere-uebersterblichkeit>

- [17] La Razon, 6.12.2021
«El exceso de mortalidad en España que desconcierta a los expertos ¿Si no es culpa del coronavirus, qué es?» ("The high mortality rate in Spain baffles experts. If the coronavirus is not to blame, what is?")
<https://www.larazon.es/salud/20211206/tbkb5ze2zfmvgpmde4gyupemq.html>
- [18] Deutsches Statistisches Bundesamt (German Federal Office of Statistics)
https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/12/PD21_574_126.html

Under the heading "Reported COVID-19 deaths only partially explain increase," ("Gemeldete COVID-19-Todesfälle erklären den Anstieg nur zum Teil") three conjectures for excess mortality are expressed:

- 1) Undetected COVID-19 cases. While this might still have been possible in the spring of 2020, with the current intensive testing, including PCR testing on every hospital admission, this seems an unlikely explanation, especially since the "deaths involving Covid-19" definition implies that official Covid death numbers tend to be larger than deaths caused by Covid.
- 2) Temporal shift of the last year's flu epidemic. This would be a valid explanation if the last winter had been particularly mild climate- and infection-wise, with few deaths and vulnerable people surviving more often than usual. However, since mortality was not lower last winter, but rather the same or higher, depending on the country, this explanation is not plausible.
- 3) Consequence of postponed surgery and screening. Postponement of surgery occurred almost exclusively in the spring of 2020; it does not make sense that this would lead to a marked increase in excess mortality a year and a half later. Similarly, hesitant behavior with regard to preventive medical care would hardly be reflected so suddenly in a striking increase of deaths, but should show up evenly.

Since the above website could be changed, the following press release is also included, which notes that Covid could only explain a third of the observed excess mortality in November:

Statistisches Bundesamt (Federal Office of Statistics)
Pressemitteilung vom 9. Dezember 2021 (Press Release of December, 9th, 2021)
https://www.destatis.de/DE/Presse/Pressekonferenzen/2021/corona/pm-563_21.pdf?blob=publicationFile

The headline as well as the first paragraphs of the document are misleading, since all Covid deaths of the entire year, including months without excess mortality, were included in these figures. It is only in the last paragraph of the first page that the excess mortality of the last months is discussed, stating that only one third of it can be explained by Covid. It should be kept in mind that all Covid cases were included in the calculation of this third, whereas it is known from 2020 that Covid replaced the winter flu wave in Germany and did not lead to any excess mortality. Therefore, Covid-independent excess mortality may even be higher.

Source that there was no excess mortality in Germany in 2020:

B. Kowall, F. Standl, F. Oesterling, B. Brune, M. Brinkmann, M. Dudda et al. (2021)
Excess mortality due to Covid-19? A comparison of total mortality in 2020 with total mortality in 2016 to 2019 in Germany, Sweden and Spain. PLOS ONE,
<https://doi.org/10.1371/journal.pone.0255540>

- [19] H. Jiang, Y. Mei (2021).

SARS-CoV-2 Spike Impairs DNA Damage Repair and Inhibits V(D)J Recombination In Vitro.
<https://doi.org/10.3390/v13102056>

The last sentence of the introductory paragraph reads: "Our findings reveal a potential molecular mechanism by which the spike protein might impede adaptive immunity and underscore the potential side effects of full-length spike-based vaccines." That the vaccines currently in use are full-length spike-based vaccines is described on page 8, sentence 2.

The last paragraph on page 1 of the study states that the DNA repair mechanism of cells damaged by the spike protein is an essential part of defense functions, and that the damage observed by the spike protein is associated with immune deficiency.

- [20] L. Abu-Raddad, H. Chemaitelly, R. Bertollini (2021).
Severity of SARS-CoV-2 Reinfections as Compared with Primary Infections.
<https://www.nejm.org/doi/full/10.1056/NEJMc2108120>

The study from Qatar observed the protection through natural immunity of all those who had recovered over the period of one year. The table on page 2 shows that only 1,300 of the country's more than 350,000 recovered people were found to be re-infected, and of these, only 4 had a severe outcome, all of which were reported as the weakest of three categories of severe outcomes. There were no deaths.

- [21] S. Gazit, R. Shlezinger, G. Perez, R. Lotan, A. Peretz, A. Ben-Tov (2021).
Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity:
Reinfections versus breakthrough infections.
<https://doi.org/10.1101/2021.08.24.21262415>

This study from Israel on natural immunity versus vaccination immunity is currently the largest study worldwide with 16'215 participants per group. The protection of natural immunity against symptomatic courses proved to be even 24x higher than the immunity of those vaccinated twice (8 versus 191), see page 12. The time span of the study was 6 months.

In the abstract of the study (page 3, last sentence under "Conclusions") it is noted that people who received a single booster vaccination after recovery were better protected against reinfection. One might infer from this that it makes sense to boost those who have recovered. In fact, however, irrelevant information is being examined here: Namely, whether recovered individuals become reinfected - that is, even asymptotically, or with mild symptoms. What is relevant, however, is the extent to which recovered basic immunity offers protection against severe courses. The study did not answer this question, because despite the enormous sample size, it is too small for this question. This is shown by the study from Qatar (see previous source): Out of more than 350,000 recovered persons, only 4 persons became infected again within one year and suffered a severe course – all of which were the mildest possible form of a severe course. Therefore, there is no practical benefit of booster vaccination for recovered persons, except perhaps for the very vulnerable.

- [22] S. Seneff, G. Nigh, A. Kyriakopoulos, P. McCullough (2021).
Innate Immune Suppression by SARS-CoV-2 mRNA Vaccinations: The role of G-quadruplexes, exosomes and microRNAs.
https://www.researchgate.net/publication/357994624_Innate_Immune_Suppression_by_SARS-CoV-2_mRNA_Vaccinations_The_role_of_G-quadruplexes_exosomes_and_microRNAs

An example for rising vaccination risks with every vaccine shot:

M. Patone, X. Mei, L. Handunnetthi, S. Dixon, F. Zaccardi, M. Shankar-Hari et al. (2021).
Risk of myocarditis following sequential COVID-19 vaccinations by age and sex.
<https://www.medrxiv.org/content/10.1101/2021.12.23.21268276v1>

- [23] F. Föhse, B. Geckin, G. Overheul, J. van de Maat, G. Kilic, O. Bulut (2021).
The BNT162b2 mRNA vaccine against SARS-CoV-2 reprograms both adaptive and innate immune responses.

<https://doi.org/10.1101/2021.05.03.21256520>

- [24] S. Goldman, D. Bron, T. Tousseyn, I. Vierasu, L. Dewispelaere, P. Heimann et al. (2021) Rapid Progression of Angioimmunoblastic T Cell Lymphoma Following BNT162b2 mRNA Vaccine Booster Shot: A Case Report
<https://www.frontiersin.org/articles/10.3389/fmed.2021.798095/full>
- [25] J. Schneider, L. Sottmann, A. Greinacher, M. Hagen, H. Kasper, C. Kuhnen et al. (2021). Postmortem investigation of fatalities following vaccination with COVID-19 vaccines
<https://link.springer.com/content/pdf/10.1007/s00414-021-02706-9.pdf>
- [26] Stuttgarter Zeitung, 1.8.2021
Heidelsberger Chef-Pathologe pocht auf mehr Obduktionen (Heidelberg chief pathologist demands more autopsies)
<https://www.stuttgarter-zeitung.de/inhalt.uni-heidelberg-chef-pathologe-geht-von-betraechtlicher-dunkelziffer-an-impftoten-aus.7f34a8e9-e2aa-4d39-8a67-bf7dd58ca0d5.html>

Regarding pathology and causes of death after vaccination, the following points should be noted:

- 1) Even these days, medically certified causes of death are frequently incorrect. This is true even for long-known diseases [a], although there has been a marked improvement over three decades in the identification of correct causes of death [b].
- 2) For deaths temporally related to vaccination, the cause of death is estimated without autopsy in the vast majority of cases [c], and a link to vaccination is generally not considered when there is a greater time lag.
- 3) Pathology can generally only resolve the causes of deaths in 60-70% of cases [d]. In addition, to be able to determine the harmful effect of a vaccination, the phenomenon must be in known connection with the vaccination - thus Schirmacher suspected connections with the vaccination in his autopsies for the cases where he found a heart muscle inflammation [c].
- 4) The vaccines currently in use are a completely new medical technology whose mode of action in the body is still hardly known. In case vaccination related deaths do occur, it is much more difficult for both physicians and pathologists to identify them than it already is under normal circumstances.
- 5) Wolf-Dieter Ludwig, Chairman of the Drug Commission of the German Medical Association, explained in an interview that the lipid nanoparticles the vaccines contain and which are known to be dangerous from animal experiments, could only be detected under the microscope if they formed larger aggregates. Otherwise, an electron microscope would be needed, but still the particles would only be found if one knew exactly where to look. [e]

[a] J. Waidhauser, B. Martin, M. Trepel, B. Märkl (2021).

Can low autopsy rates be increased? Yes, we can! Should post-mortem examinations in oncology be performed? Yes, we should! A postmortem analysis of oncological cases

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7969536/pdf/428_2020_Article_2884.pdf

[b] S. Schwander-Burger, H. Moch, J. Muntwyler, F. Salomon (2012).

Diagnostic errors in the new millennium: A follow-up autopsy study

<https://www.nature.com/articles/modpathol2011199.pdf>

[c] F. Jötten, 7.10.2021

Mehr Obduktionen erwünscht (More autopsies wanted)

https://www.beobachter.ch/gesundheit/medizin-krankheit/moegliche-todesfalle-wegen-Covid-19-impfung-mehr-obduktionen-erwünscht?utm_source=BEO+Newsletter&utm_campaign=b8cf7f5fa6-Beo+NL+MI+13102021&utm_medium=email&utm_term=0_1d31f5f40a-b8cf7f5fa6-93256921

[d] B. Madea, M. Rothschild (2010).

Ärztliche Leichenschau (Medical post-mortem)

<https://cfdn.aerzteblatt.de/pdf/107/33/m575.pdf?ts=12.08.2010+08%3A36%3A35>

[e] M. Frei, 18.10.2021

Rechtsmediziner finden Todesfälle nach Covid-19-Impfung (Forensic experts find deaths after Covid 19 vaccination)

<https://www.infosperber.ch/gesundheit/rechtsmediziner-finden-todesfaelle-nach-Covid-19-impfung-1/>

- [27] RKI Wochenbericht vom 6.1.22 (Weekly Report of the RKI [Robert-Koch-Institut, German Centre for Disease Control] January 6th 2022)
page 20, centre
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Situationsberichte/Wochenbericht/Wochenbericht_2022-01-06.pdf?__blob=publicationFile
=> please copy-paste the link into the browser, otherwise the second line is missing which makes it dysfunctional

- [28] M. Tenforde, W. Self, E. Naioti, A. Ginde, D. Douin, S. Olson et al. (2021).
Sustained Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Associated Hospitalisations Among Adults — United States, March–July 2021
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8389395/pdf/mm7034e2.pdf>

On page 1157, 2nd paragraph: Persons were considered fully vaccinated if at least 2 weeks had elapsed after the second vaccination before a person became ill, and persons with incomplete vaccination were excluded from the study. Since the study was commissioned by the U.S. Department of Health and Human Services (CDC), it can be assumed that the official data from the U.S. also list people as unvaccinated up to 14 days after vaccination.

- [29] Public Health England (2021).
SARS-CoV-2 variants of concern and variants under investigation in England
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009243/Technical_Briefing_20.pdf
=> please copy-paste the link into the browser, otherwise the second line is missing which makes it dysfunctional

In the table on page 18 and its footnotes on page 19, it can be seen that a distinction is made for the inpatient admissions between "exclusion" and "inclusion". According to the footnote, "exclusion" means that patients who tested positive upon admission (because they came to the hospital due to other complaints) were not counted. These account for 41% of patients (3,030 patients excluding those tested positive upon admission; 5,159 all Covid-positives).

- [30] T. Röhn, B. Stibi, 29.12.21
Die Welt
Wird schon stimmen, irgendwie ("Probably correct, by rough guess")
<https://www.welt.de/politik/deutschland/plus235870762/Hospitalisierungsinzidenz-Wird-schon-stimmen-irgendwie.html>

- [31] L. Ita, 7.1.22
Blick
Spitaleinweisungen wegen Corona sind tiefer als ausgewiesen ("Hospital admissions due to Covid are lower than reported")
https://www.blick.ch/schweiz/in-genf-ist-fast-die-haelfte-der-statistisch-ausgewiesenen-corona-patienten-aus-anderen-gruenden-im-spital-gelandet-und-erst-dort-positiv-getestet-warden-spitaleinweisungen-wegen-corona-sind-tiefer-als-ausgewiesen-id17125098.html?fbclid=IwAR3Z9XmTNQEv_CW9ZOpoFDM_gJTzvevTkCLIGM7lt4HrjdKdxTpo_9yglc

- [32] Bild-Zeitung, 27.12.21
Viele „Corona-Patienten“ NICHT wegen Corona in der Klinik (Many "Covid patients" NOT in hospital because of Covid)
<https://www.bild.de/bild-plus/politik/inland/politik-inland/viele-corona-patientennicht-wegen-corona-in-der-klinik-78649930,view=conversionToLogin.bild.html>

- [33] T. Lang, J. Lionello, 8.1.22
Weiter Wirbel um bayerische Inzidenz: Verzerrungen größer als behauptet (Further fuss about Bavarian incidence: Distortions are greater than claimed)
<https://www.nordbayern.de/region/weiter-wirbel-um-bayerische-inzidenz-verzerrungen-grosser-als-behauptet-1.11703993>
- [34] ZDF, Berlin direkt, 9.1.2022
Corona: Politik im Blindflug (Covid: Politics flying blind)
<https://www.zdf.de/politik/berlin-direkt/berlin-direkt-clip-1-500.html>
- [35] H. El Sahly, L. Baden, B. Essink, S. Doblecki-Lewis, J. Martin, E. Anderson (2021).
Efficacy of the mRNA-1273 SARS-CoV-2 Vaccine at Completion of Blinded Phase.
<https://www.nejm.org/doi/full/10.1056/NEJMoa2113017>

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Simply insert an entire text and then read it in English.

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