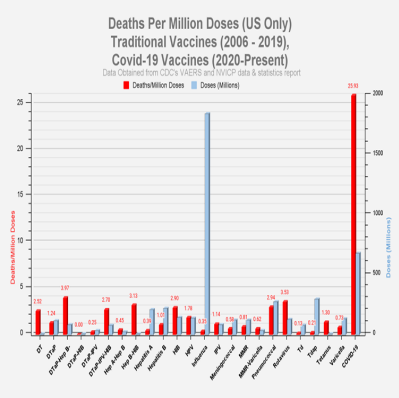


Paul Ehrlich Institute database on side effects of COVID-19 â??vaccinationsâ??

Description

A workshop report

In my last blog, I discussed the study by the Cologne working group led by Prof. Jan Rybniker. If the findings of immune training were only positive, then we would not be seeing so many serious side effects as a result of these interventions. But we are seeing them, in the side effect database of the Paul Ehrlich Institute (PEI). I had just finished evaluating the first part of the data that the PEI published publicly last summer, when the second part came out. I will therefore have to repeat the evaluation at some point, otherwise it will hardly be of sufficient scientific value. But I will report on my evaluation of the first part here. This is a workshop report; the data has not been published anywhere else.

The first part of the data set goes up to March 2023 and was published in summer 2024. It consists of 346,423 cases with a total of 1,346,530 side effects. Incidentally, the PEI refers to 340,282 cases with side effects, apparently from the same data set [1]. 56,432 side effects are categorised as â??severeâ??. If you take the time interval between the â??vaccinationâ?? date and the occurrence of the side effect, you get an average time difference of 3.8 days, with a median of one day. The longest interval between â??vaccinationâ?? and reporting of the side effect is 904 days. So there are clearly a number of very late-onset side effects. However, one fact made me very suspicious and sceptical: there are also negative (!!) difference figures. This would mean that the side effect report was submitted before the â??vaccinationâ?? date. This can only mean that the data has been extremely poorly curated, as this should have been prevented by good programming of the input mask. Therefore, in my opinion, these data are only very limitedly credible. (My colleague, who helped me put them in the right order, said, â??These data look as if my grandmother had coded them.â??) Unfortunately, we donâ??t have anything better.

Now another difficulty arises. The data is not categorised. There was no predefined category system from which the entrants could choose, e.g. diagnoses or disease entities such as â??deathâ??, â??myocarditisâ??, etc. Instead, the side effects were recorded as multiple free text entries. This means that anyone could choose their own terminology as they saw fit.

This meant that I had to fish out the category â??deathâ?? that I was interested in from these entries by searching for all possible types of death that were mentioned (â??death, sudden death, cardiac death, brain death, sudden brain deathâ??); in doing so, I excluded other mentions where the word â??deathâ?? occurs, namely â??fear of death, anxiety about death, near-death experience, foetal deathâ??; all of these were also mentioned.

In this database, 1,445 deaths appear among the 346,423 cases, meaning that a total of 0.42% of all side effects are deaths and 2.5% of all serious side effects are deaths. If you take the data provided by the website â??Our World in Dataâ?? (OWID) on the number of COVID-19 vaccinations in Germany, the proportion of the population vaccinated and the population of Germany at the time the data was reported (i.e. at the end of March 2023), you can estimate that this is approximately one death per 100,000 vaccinations. This is most likely several orders of magnitude too low. In our analysis of side effect data from different countries, we saw that reporting morale in Germany ranks in the bottom fifth of all European countries (see the graph in the publication) [2]. At that time, in mid-2021, there was also about one death per 100,000 vaccinations in the German database, if I remember correctly. In the Dutch database, there were four deaths per 100,000 vaccinations; in the US database â?? see below â?? there are three deaths per 100,000 vaccinations. Presumably, this is still too low because these databases, as passive systems, severely underestimate the true figures; we know this.

â??Underreportingâ?? in passive pharmacovigilance databases

A systematic review by Hazell and Shakir from 2006 compiled a total of 37 studies that investigated so-called â??underreportingâ?? [3]. This refers to the problem that passive databases such as the PEI database only record a fraction of the actual side effects, precisely because, for example, many doctors do not report them or do not see the connections. The 37 studies examined by Hazell and Shakir report that authors carried out a separate estimate, e.g. by actively surveying doctors about all possible side effects and preparations, and compared this with the entries in the relevant database. They found that, on average, 98% of all side effects did *not* appear in the databases. To put it another way, out of 100 random side effects that people experience from any medical intervention and that should be considered a direct result of that intervention, only 2 are visible in the databases.

The â??small townâ?? of the deceased

For our question, this would mean that for every 2 deaths recorded in the PEIâ??s side effect database, we can expect 98 deaths that are not recorded. Even if we assume that there may be greater sensitivity in the case of Covid-19 and use a very conservative factor of 10, rather than 49, to estimate the â??trueâ?? rate of deaths associated with Covid-19 â??vaccinations,â?? we would arrive at a minimum of 14,000 deaths caused by these products. Applying the 98% non-reporting rate strictly, we would arrive at approximately 70,000 deaths. This is, in fact, the â??small townâ?? of deaths that my colleagues Bhakdi and Hockertz predicted at the beginning of the vaccination campaign.

Products and associated deaths

I was interested in whether these deaths were evenly distributed across vaccine products and batches. They are not. I approached the problem in two ways.

First, one can simply tabulate the number of deaths per vaccine product and calculate a simple chi-square statistic. Such an analysis checks how high the expected number of cases per table column is, compares it with the empirically given number, and calculates whether there is a deviation that is above chance. This is the case. Here is the table; the chi-square statistic (corrected for small cells, of course) is highly significant. Please note: These

are the original entries. â??Corona vaccineâ?? was simply not broken down further by those who entered the data, but it is likely to refer to Comirnaty. In brackets after the number of deaths, I have indicated the percentage standardised figure calculated for the total number of vaccinations in the row (I have omitted the remaining percentages as they are self-explanatory). This makes it easy to visually compare which cells are outliers by comparing the percentages in brackets in the â??Deathsâ?? column and using 0.42% as the average.

Product	No deaths	Deaths	Total reports
Comirnaty	209,934	1,061 (0.5%)	210,995
Vaxzevria	54,354	136 (0.25%)	54,490
Spikevax	63,933	109 (0.17%)	64,042
Corona vaccine (unspecified)	1,908	85 (4.3%)	1,993
Jcovden	12,075	34 (0.3%)	12,109
Comirnaty Original/Omicron BA.1	227	2 (0.9%)	229
Comirnaty Original/Omicron BA.4-5	1,256	12 (0.95%)	1,268
Spikevax bivalent Original/Omicron BA.1	40	0	40
Spikevax bivalent Original/Omicron BA.4-5	18	0	18
Nuvaxovid	978	0	978
Valneva	6	0	6
Comirnaty/Omicron XBB.1.5	249	6 (2.35%)	255
Total	**344,978**	**1,445 (0.42%)**	**346,423**

Table 1 â?? Deaths per vaccine product â?? Source: PEI side effect database up to and including the end of March 2023; case numbers, (%)

This table clearly shows that the Comirnaty vaccines in particular deviate significantly from the average. I also include the â??Corona vaccineâ?? in this category, which stands out with 4.3%, while the AstraZeneca vaccine â??Vaxzevriaâ?? and the Moderna preparation Spikevax have a lower percentage of deaths than the average. This could, of course, also be due to the fact that these substances were used less frequently. What is striking is that the Comirnaty Omicron variants are associated with significantly more deaths. But caution is advised: this is a univariate analysis. It does not take into account that these substances were also used differently depending on age and grouping. This changes in a multivariate analysis, which also takes these other variables into account. However, as I am not sure whether this multivariate analysis is reliable, I am not reporting it here.

Batches and associated deaths

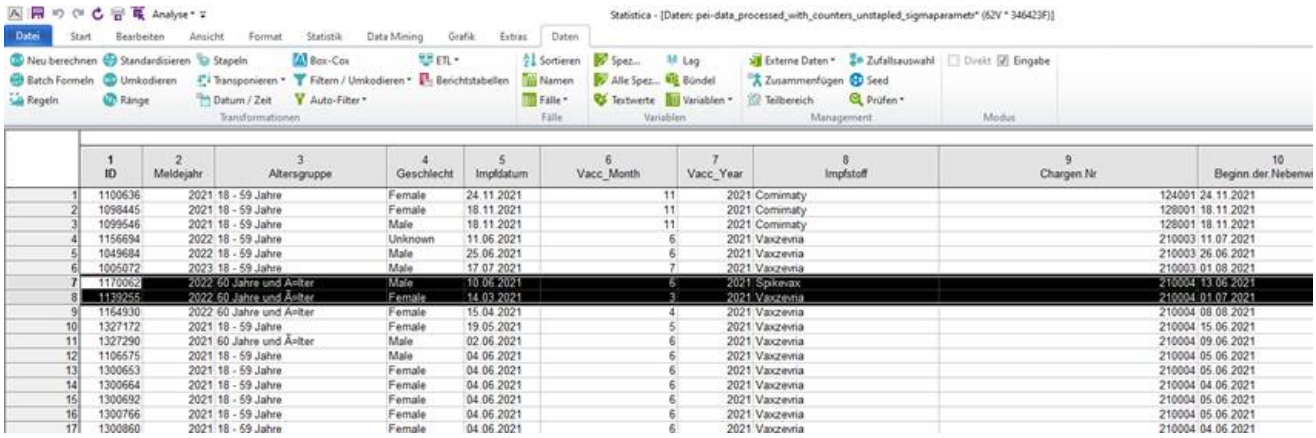
What struck me about the batches made me wonder. Normally, one would assume that a â??batchâ?? is a subcategory of a product. This would mean that batch numbers or designations only appear on one product. This is *not* the case. I have seen quite a few cases where *the same batch designation was used for products from different manufacturers*. Think about that for a moment! So if I notice that a particular batch number is associated with problems more often than usual, I wouldnâ??t even be able to determine who is responsible!

I wondered for a while how something like this could happen. The only way this is possible is if the manufacturerâ??s original deliveries, including the labels, are packed into new boxes or distribution systems, which in turn are given different identifiers. The key was provided by a colleague, who said: The distribution of the vaccines was in the hands of the German Armed Forces, who delivered and collected them. At first, I couldnâ??t believe it, but then I saw the second part of Robert Cibisâ??s film about coronavirus, and it became

clear to me. The film can be viewed free of charge on a website run by the MWGFD (thanks to sponsor Marcel Jahnke and his media company Chow Media). The documentary shows how the distribution was carried out by the German Armed Forces.

In plain language: the manufacturers may have delivered something. The German Armed Forces repackaged it and assigned new numbers. There is no other explanation for this chaos. Anyone who looks at the PEI database and sorts by batch numbers will see this immediately. Because I assume that most people find this completely unbelievable, here are two screenshots of my data mask to prove it. I sorted the data by batch number and vaccine product. Figure 1 shows the screenshot from the top; in the two data sets with the black mark under Variable 9, Batch Number, you can see the same number for two different products (Spikevax and Vaxzevria).

Fig. 1 â?? Screenshot of the PEI side effect database, sorted by batch number and vaccine, first data sets:



	1 ID	2 Meldejahr	3 Altersgruppe	4 Geschlecht	5 Impfdatum	6 Vacc_Month	7 Vacc_Year	8 Impfstoff	9 Chargen.Nr	10 Beginn.der.Nebenw
1	1100636	2021	18 - 59 Jahre	Female	24.11.2021	11	2021	Comirnaty	124001	24.11.2021
2	1098445	2021	18 - 59 Jahre	Female	18.11.2021	11	2021	Comirnaty	128001	18.11.2021
3	1099546	2021	18 - 59 Jahre	Male	18.11.2021	11	2021	Comirnaty	128001	18.11.2021
4	1156694	2022	18 - 59 Jahre	Unknown	11.06.2021	6	2021	Vaxzevria	210003	11.07.2021
5	1049684	2022	18 - 59 Jahre	Male	25.06.2021	6	2021	Vaxzevria	210003	26.06.2021
6	1005072	2023	18 - 59 Jahre	Male	17.07.2021	7	2021	Vaxzevria	210003	01.08.2021
7	1170062	2022	60 Jahre und Ã¤lter	Male	10.06.2021	6	2021	Spikevax	210004	13.06.2021
8	1139255	2022	60 Jahre und Ã¤lter	Female	14.03.2021	3	2021	Vaxzevria	210004	01.07.2021
9	1164930	2022	60 Jahre und Ã¤lter	Female	15.04.2021	4	2021	Vaxzevria	210004	08.08.2021
10	1327172	2021	18 - 59 Jahre	Female	19.05.2021	5	2021	Vaxzevria	210004	15.06.2021
11	1327290	2021	60 Jahre und Ã¤lter	Male	02.06.2021	6	2021	Vaxzevria	210004	09.06.2021
12	1106575	2021	18 - 59 Jahre	Male	04.06.2021	6	2021	Vaxzevria	210004	05.06.2021
13	1300653	2021	18 - 59 Jahre	Female	04.06.2021	6	2021	Vaxzevria	210004	05.06.2021
14	1300664	2021	18 - 59 Jahre	Female	04.06.2021	6	2021	Vaxzevria	210004	04.06.2021
15	1300692	2021	18 - 59 Jahre	Female	04.06.2021	6	2021	Vaxzevria	210004	05.06.2021
16	1300766	2021	18 - 59 Jahre	Female	04.06.2021	6	2021	Vaxzevria	210004	05.06.2021
17	1300860	2021	18 - 59 Jahre	Female	04.06.2021	6	2021	Vaxzevria	210004	04.06.2021

Fig. 2 â?? Screenshot of the PEI side effect database, sorted by batch number, note data sets 96,374 and following:

	1 ID	2 Meldejahr	3 Altersgruppe	4 Geschlecht	5 Impfdatum	6 Vacc_Month	7 Vacc_Year	8 Impfstoff	9 Chargen.Nr
96367	1304957	2021		Male	30.06.2021	6	2021	Vaxzevria	ABW9941
96368	1305437	2021	60 Jahre und Ã¤lter	Female	30.06.2021	6	2021	Vaxzevria	ABW9941
96369	1107282	2021	60 Jahre und Ã¤lter	Male	07.07.2021	7	2021	Vaxzevria	ABW9941
96370	1327361	2021	18 - 59 Jahre	Male	08.07.2021	7	2021	Vaxzevria	ABW9941
96371	1001507	2023	60 Jahre und Ã¤lter	Male	17.07.2021	7	2021	Vaxzevria	ABW9941
96372	1021498	2022	60 Jahre und Ã¤lter	Male	01.08.2021	8	2021	Vaxzevria	ABW9941
96373	1107976	2021	60 Jahre und Ã¤lter	Female				Vaxzevria	ABW9941
96374	1345339	2021	60 Jahre und Ã¤lter	Male	26.05.2021	5	2021	Comirnaty	ABX3519
96375	1166408	2022	60 Jahre und Ã¤lter	Male	26.05.2021	5	2021	Corona Impfstoff	ABX3519
96376	1261871	2021	60 Jahre und Ã¤lter	Female	27.05.2021	5	2021	Corona Impfstoff	ABX3519
96377	1054084	2022	18 - 59 Jahre	Male	01.06.2021	6	2021	Jcovden	ABX3519
96378	1325181	2021	18 - 59 Jahre	Female	20.03.2021	3	2021	Vaxzevria	ABX3519
96379	1106454	2021	18 - 59 Jahre	Male	24.05.2021	5	2021	Vaxzevria	ABX3519
96380	1299541	2021	60 Jahre und Ã¤lter	Male	24.05.2021	5	2021	Vaxzevria	ABX3519
96381	1050571	2022	18 - 59 Jahre	Female	25.05.2021	5	2021	Vaxzevria	ABX3519

I have deliberately not marked these data sets. You can see the number of the data set on the far left. Note 96,374 and the following. You can see that the batch number ABX3519 was assigned to Comirnaty, then to â??Corona vaccineâ?? (presumably also Comirnaty), then to Jcovden, and finally to Vaxzevria. It seems to me that someone has been very creative with the randomisation box.

I have also done the same tabular analysis here as above for the vaccines. I am not reproducing that table because it contains 420 lines. But the univariate analysis shows clear significance. This means that the batches are associated with deaths at different rates. Only the manufacturers will know why. It may be that they were of varying quality, that some batches did not contain any vaccine at all and were placebo batches. It may be that some were administered incorrectly. It may be that some were heavily contaminated. There are a multitude of possible reasons.

I tried to get to the bottom of this oddity and used an exploratory statistical tool called the Chi-Square Automatic Interaction Detector (CHAID). This is a purely exploratory tool that helps to bring order to large amounts of data. It sorts table rows into those that are related to each other and separates them from the others by performing iterative Chi^2 analyses, maximising the differences. When you do this, you see that a clear order tree emerges. To understand this, you need to know that I coded the data so that deaths were coded as â??+1â?? and no deaths as â??-1â?? (this is also because certain linear models are easier to calculate with this type of â??sigma parameterisationâ??, as it is called). Below in Figure 3, I show the decision tree for the batch numbers:

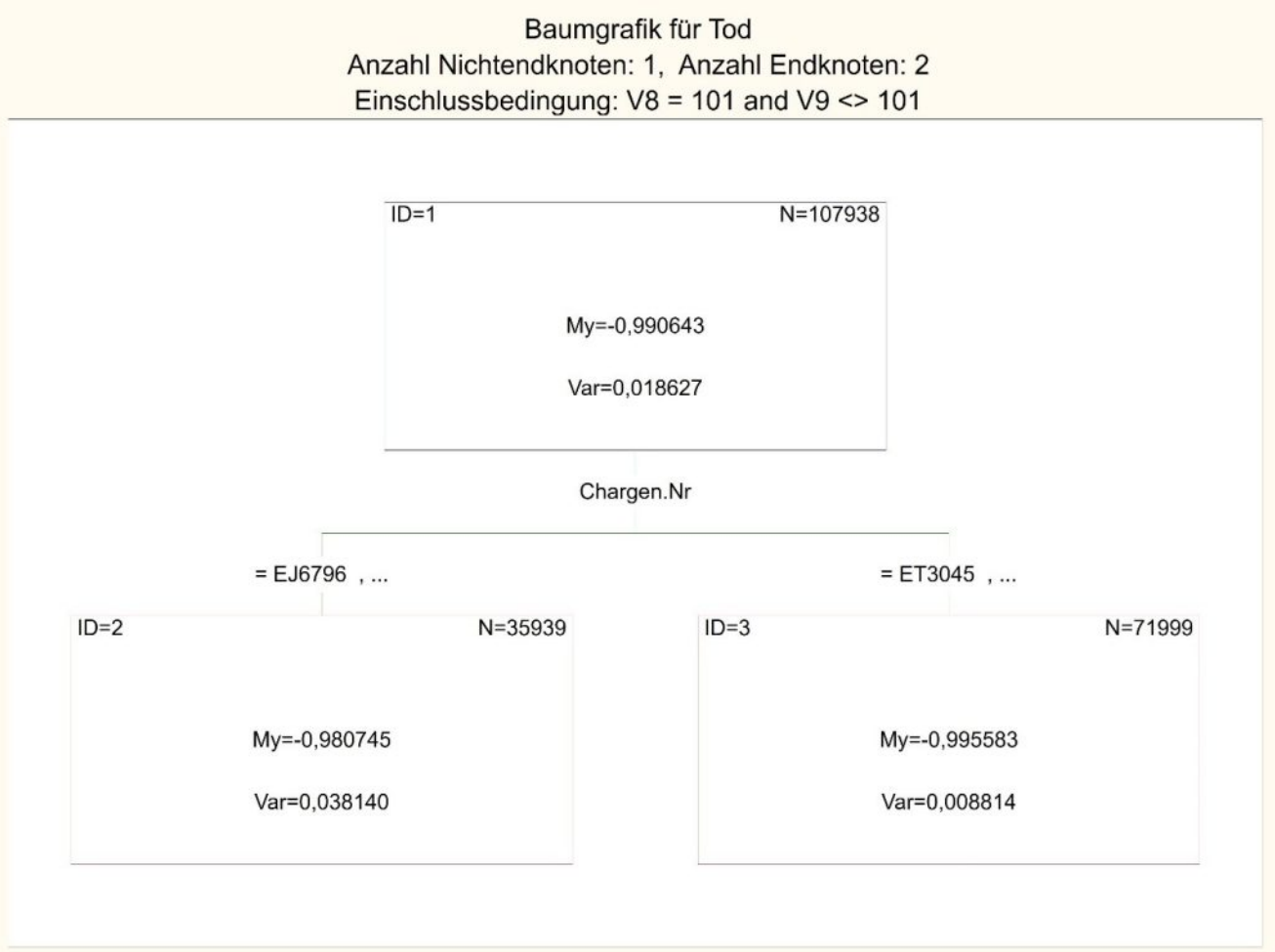


Figure 3 â?? Decision tree from your CHAID analysis, which analyses batch numbers to determine whether they are more likely to be associated with deaths

The â??Myâ?? shown here is a statistical parameter for the mean value, which summarises how much the cases in this group deviate from an expected value. It should be noted that I have chosen the parameterisation so that â??-1â?? means no death and â??+1â?? means death. The closer a group is to -1, the fewer deaths there are, and vice versa. It is clear to see here that the overall mean value of -0.990643 (top frame) is close to -1 and therefore â??no deathâ??, because deaths are relatively rare in the entire database. This is now divided into batch numbers in the second level, and there is only one division here: batches that are more strongly associated with death (those on the left) and those that are less strongly associated with death (those on the right). The variables themselves cannot be seen here; they have to be gathered from the statistics output. I have done this below. The batch numbers that are more strongly associated with death are as follows:

EJ6796, EL1491, EJ6795, 34396TB, SCVT5, 1E024A, FP1972, ER7812, SCUE1, ACB9929, ER9470, EP2163, EP9598, EK9788, ACB7737, 1F034A, EJ6788, SCTJ2, 1H049A, SDHP9, EJ6789, 1C007A, SCRM8, 1F1027A,

SDEH4, 1D020A, 1F1021A, SCTN4, SCRW2, ACC1336, 1H048A, 30891TB, SCTD6, ER9480, 31043TB, SCVC6, 1D012A, 1D014A, EX3599, EL8723, SCWF3, SCRP9, 1F1023A, EW8904, EJ6797, EM0477, 34523TB, EW2239

The programme only allows 200 categories to be analysed at a time, so I repeated this for the rest of the data, but did not find any pattern there.

The booster programme â?? a death programme?

I also used the same method to examine the time series. Surprisingly, you can see that more deaths occur after 2022 than before. This is surprising because you would think that the elderly and sick were vaccinated first, and if the vaccine was so dangerous, then this should have been particularly noticeable at the beginning. The Cologne study discussed in the last blog may help here: it demonstrated a sensitisation of the immune system with repeated â??vaccinationâ??. Could this also lead to an increased risk of an autoimmune disease? The data suggests so.

Below, in Figure 4, I present a CHAID analysis that analysed deaths by month and year. It is important to understand that I do not specify the order for the analysis, only the two variables of interest, the year and the month. The system then analyses the correlations. We can see that they exist.

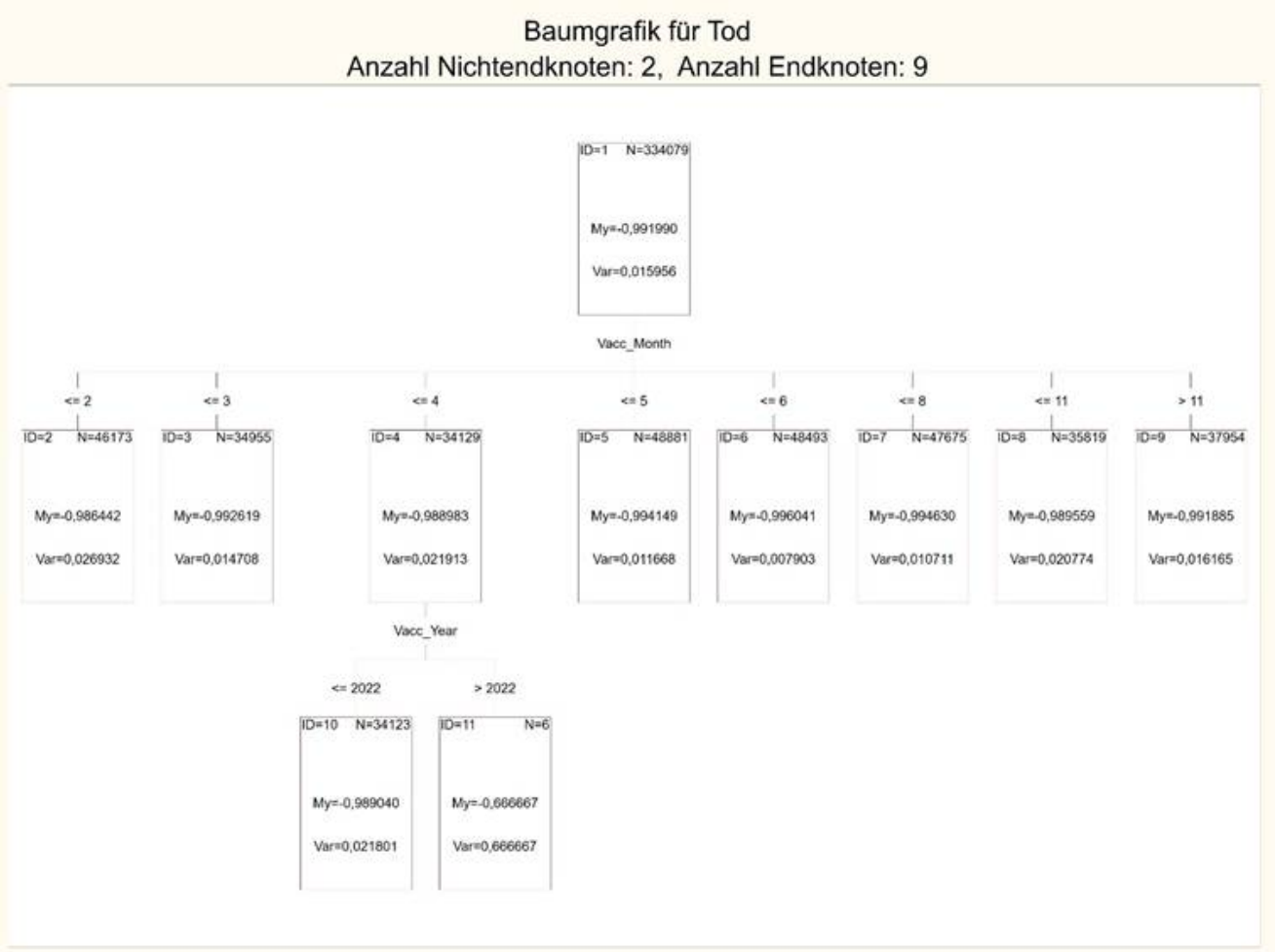


Figure 4 â?? CHAID analysis of years and months associated with more or fewer deaths. Clear increase after April 2022, bottom row, right box

It can be seen that the system first divides the data by month. In January and February, there are relatively more deaths (second row, first box). But then something strange happens: in April (second row, third box), there are significantly more deaths (the closer a number is to +1, the more deaths; -0.9888983 is greater, and therefore closer to +1, than -0.992619, for example). This is followed by a breakdown into years, which can be seen in the last row. There you can see that after April 2022, the difference is drastic. The figure drops to -0.666667. This is significantly lower than all other figures.

Was there something going on? â??Boosters are important! Get your booster! Itâ??s important to refresh your vaccine protection, because it wears off after 6 months. Corona hasnâ??t been defeated yet.â?? If I remember correctly, this is what was being said at around this time on all loudspeakers and channels.

This seems to me to be a clear indication that this refreshing and repeating of the â??vaccinationâ?? was and still is potentially dangerous.

I would like to report one last finding. I added up the number of symptoms reported per person, regardless of the type of symptom. This results in a symptom score per person. Overall, the vast majority of people reported fewer than 39 symptoms to the PEI database. However, there are a few outliers, namely a total of 85 cases. Some of these reported more than 100 symptoms. I have ignored these outliers (more precisely, the symptoms that exceeded the 39 symptoms that constituted the maximum in most cases, because these few cases would have required a lot of work in comparison to the total number and would have yielded little additional insight). On average, 2.8 symptoms were recorded, with a median of 2. Table 2 shows the average number of symptoms per vaccine, together with the 95% confidence intervals. These can be used to perform a visual significance test: whenever the confidence intervals do not overlap, there is a significant difference. Across all vaccines, they differ significantly from each other in terms of the number of symptoms.

Vaccine	**Mean number of symptoms**	**95% confidence interval lower limit**	**95% confidence interval upper limit**
Comirnaty	2.63	2.62	2.65
Vaxzevria	3.38	3.36	3.41
Spikevax	2.88	2.85	2.90
Corona vaccine	2.89	2.76	3.02
Jcovden	2.97	2.92	3.02
Comirnaty Original/Omicron BA.1	3.46	3.11	3.81
Comirnaty Original/Omicron BA.4-5	3.49	3.33	3.66
Spikevax bivalent Original/Omicron BA.1	4.40	3.26	5.54
Spikevax bivalent Original/Omicron BA.4-5	3.67	2.18	5.15
Nuvaxovid	3.74	3.55	3.93
Valneva	3.0	1.01	4.99
Comirnaty/Omicron XBB.1.5	3.56	3.11	4.01

Table 3 â?? Mean number of symptoms per vaccine and 95% confidence interval

This table is easy to read: Comirnaty has the lowest number of reported symptoms per person, with a total of 2.63 symptoms on average. The true value is 95% likely to be between 2.62 and 2.65 symptoms. This means that all

other vaccines with more than 2.65 symptoms, which is all the others, have significantly more symptoms in their wake. If you want to know whether Valneva, with its 3.0 symptoms, differs significantly from Spikevax bivalent Omicron BA1, you take the upper confidence limit of Valneva, which is 4.99, and examine whether this is within or outside the confidence limits of Spikevax bivalent Omicron BA1. This vaccine does have significantly more symptoms, with an average of 4.40. However, because the confidence limits overlap with those of Valneva â?? 3.26, the lower limit of Spikevax lies between 1.01 and 4.99 of Valneva â?? they do not differ significantly. This is because the case numbers here are too small, so the uncertainty factor for estimating the confidence interval is too large. It can be seen that the Omicron variants of the vaccines in particular are associated with more symptoms.

These are the most important findings from my preliminary analysis. I will probably have to repeat them again in due course with the full data set. I will be in touch if there are any new developments. It may also be interesting to note that this analysis and its transcription into a blog article took roughly five days of work. It is difficult to understand why a taxpayer-funded institute with many well-paid and highly trained scientists has not published this information long ago. But perhaps I missed it because I am not on X, Telegram, BBC News or TikTok.

Comparison with other vaccines

Is this number of deaths associated with a vaccine in a pharmacovigilance database high or low? To answer this question, it is useful to compare the figures with those for other vaccines. This is not (or no longer) possible with the data from the Paul Ehrlich Institute. I pointed out some time ago that the PEI had taken the interactive form of the database off the internet, I think it was in spring 2022. The argument was that the database needed to be spruced up a bit, transferred to the European database and then made available again. The latter, I believe, never happened.

Therefore, I am sticking to VAERS, the Vaccine Adverse Effects Reporting System of the US Centres for Disease Control, which is kindly compiled visually on a weekly basis by a friendly team. Out of laziness, I am using the analysis I have saved. It is close to the date covered by the PEI data, namely May 2023, and is therefore comparable. It can be easily accessed at this link.

As you can see:

The number of deaths from the end of 2020 to May 2023 associated with Covid-19 â??vaccinesâ?? is 35,272, almost *three times higher* than those associated with *all other vaccines combined since records began in 1990*. This figure is 10,320. The website offers various presentations of the data. Perhaps the most informative is this one, which I have reproduced in Figure 5:

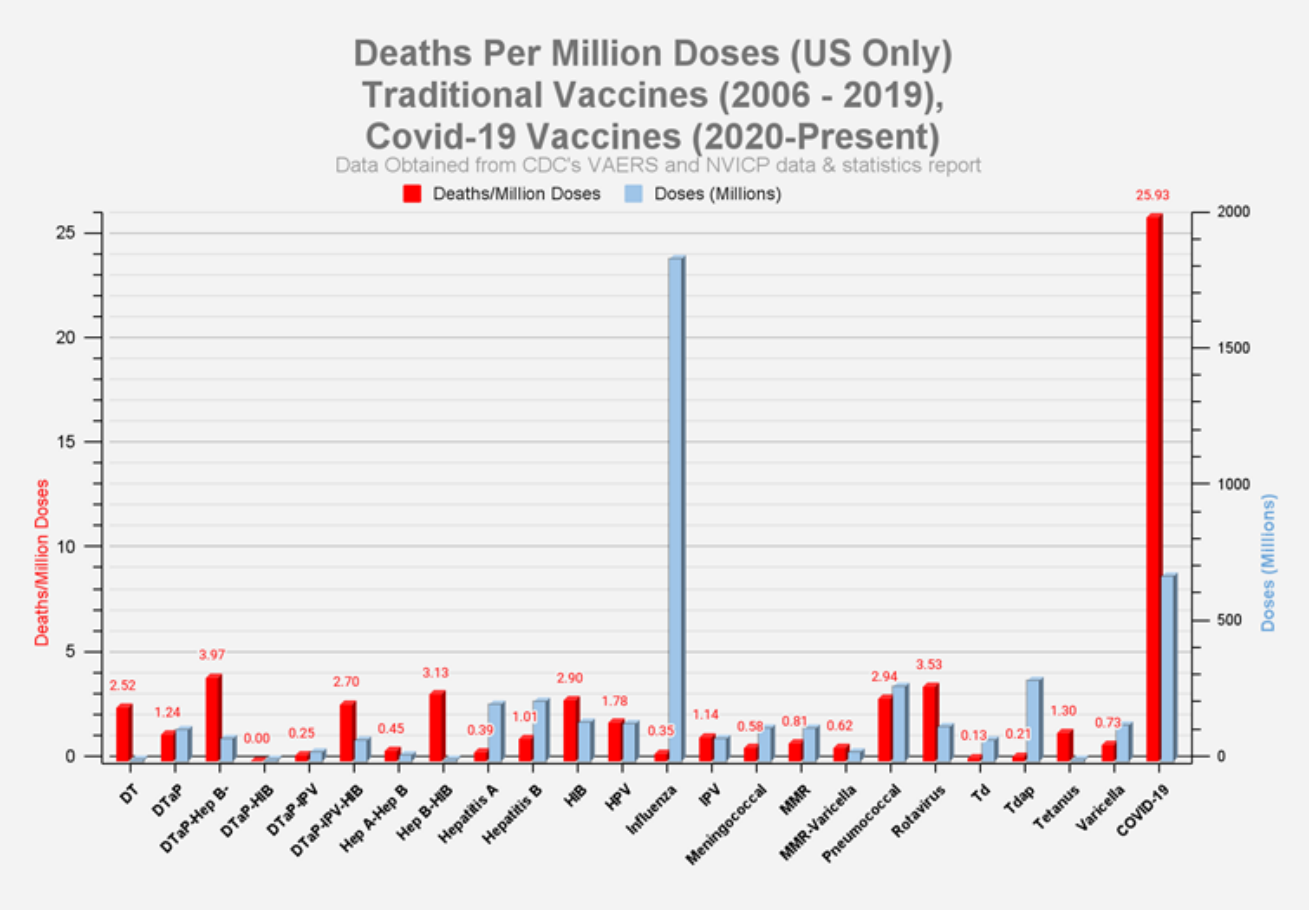


Figure 5 â?? Comparison of deaths from Covid-19 â??vaccinationsâ?? with those associated with all other vaccinations (according to)

The red bars are deaths standardised for vaccine doses, i.e. deaths per 1 million vaccine doses. The blue bars indicate the number of vaccine doses in a vaccination. On the right y-axis, in blue, is the number of vaccine doses in millions. On the left y-axis, in red, is the number of deaths per 1 million vaccine doses. It is very easy to see that the Covid-19 â??vaccinesâ?? have taken the cake and top the list, with nearly 26 deaths per 1 million vaccine doses. We recall that in the PEI database, there was approximately 1 death per 100,000 vaccinations, or 10 per million, which is about one-third of the number recorded by VAERS. This also shows once again that the PEI database significantly underestimates the true number, as even the VAERS database is well documented to be an underestimate.

This figure also shows that although significantly more flu vaccine has been distributed over the years, namely around 1.8 billion doses, the death rate of 0.35 per 1 million is significantly lower than for Covid-19 â??vaccinesâ??, of which just under 700 million doses had been distributed at the time. Nevertheless, these â??vaccinesâ?? are the clear front-runners.

So it is crystal clear: these â??vaccinesâ?? are not safe. Nor are they effective. What the Cologne study has revealed is a sensitisation of the immune system that can apparently derail into dangerous autoimmunity. And it does so much more frequently than with other vaccines, and therefore too often. How much longer do politicians intend to test our patience? How much longer do the public media, ten times smarter talk show hosts and lying health ministers want to take us for fools? When will this problem finally be addressed?

Sources and literature

1. Mentzer D, Oberle D, Sreit R, Weisser K, Keller-Stanislawski B. Sicherheitsprofil der COVID-19-Impfstoffe â?? Sachstandt 31.3.2023. Bulletin fÃ¼r Arzneimittelsicherheit. 2023;2:12-29.
2. Walach H, Klement RJ, Aukema W. The Safety of COVID-19 Vaccinations â?? Should We Rethink the Policy? Science, Public Health Policy, and the Law. 2021;3:87-99. doi: https://www.publichealthpolicyjournal.com/general-5.
3. Hazell L, Shakri SAW. Under-reporting of adverse drug reactions. A systematic review. Drug Safety. 2006;29(5):385-96.

Date Created
13.05.2025