

# Steve's Meeting Notes

Wed, Aug 06, 2025 9:10AM 1:27:05

## SUMMARY KEYWORDS

vaccine harm, mortality ratio, frailty factor, conference mortality, healthy vaccine effect, cumulative deaths, exponential slope, selection bias, all-cause mortality, vaccine benefit, covid period, baseline period, adjusted deaths, hazard rate, empirical analysis





## SPEAKERS

Steve Kirsch, Speaker 1, Harvey Risch

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S

Steve Kirsch 00:41

You it was in your calendar

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Steve Kirsch 00:48

you'd asked me to send you A calendar link. I

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01:26

recording in Progress. I'm

O

02:41

In the In Which I'm

H

Harvey Risch 05:21

i can see you. I don't see me.

S

Steve Kirsch 05:26

Okay, alright, one second here notes, I hear

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05:34

you,

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Steve Kirsch 05:35

yeah, yeah, well, that's good. And you can see when you, when I, hopefully when I share my screen, you'll be able to see

Harvey Risch 05:40

me too. Yeah, oh, I know why. There we go.

Steve Kirsch 05:46

Technology. Hang

Harvey Risch 05:48

on one sec. I can get better light here.

Harvey Risch 05:59

So I tried calendar is on my the web server, version of my email server, but it wasn't there. I had the wrong one there. So anyway, here we are.

Steve Kirsch 06:10

Yeah, here we are. All right, let me i

06:41

Sorry.

Steve Kirsch 06:53

Okay, sorry about that. Let me, let's see. I'm gonna share my screen. Thank you for doing this. By the way, this is really important. How much time do you have?

07:10

45 minutes?

Steve Kirsch 07:11

Perfect. Okay,

Harvey Risch 07:15



Harvey Risch 07:15

I'm not sure I'll be able to help, but let's just go see what you say. Okay,



Steve Kirsch 07:18

so let me show you my spreadsheet.



Steve Kirsch 07:28

Okay, so you can see my my spreadsheet here, hopefully.



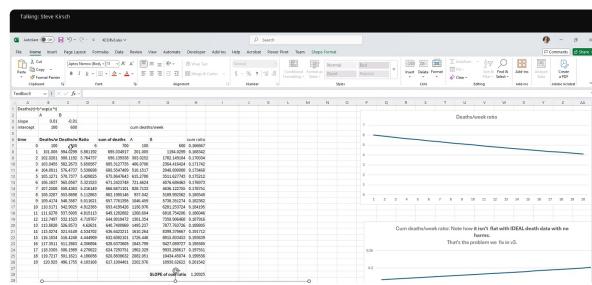
Harvey Risch 07:34

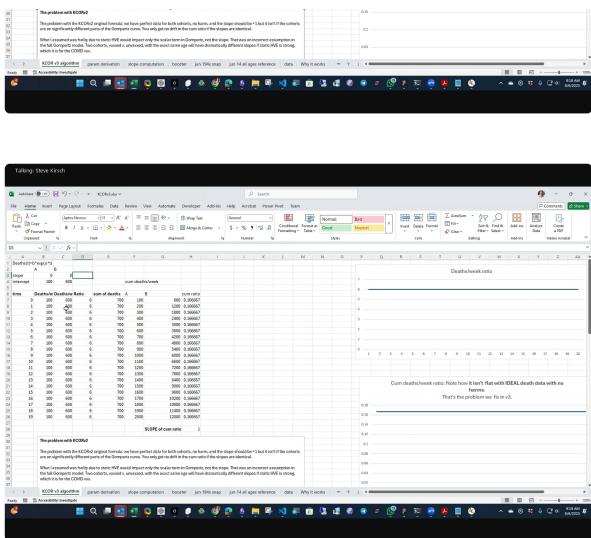
Okay, so where do these data come from?



Steve Kirsch 07:37

This is all simulated data for right now. Okay, so I'm just trying to explain the method. Okay, so I basically have deaths per week in two columns. I start with 100 and it goes up and have another one at 600 it goes down in this case. So this is the intercept. This is the starting point, 100 Okay, I'll make the slope zero. So, so we'll start with the easy case, okay, that basically at zero, it's not going to zero. Okay? Everybody's dying at 100 deaths a week. Everybody's dying 600 deaths a week. We have really simple thing. If I wanted to find out which intervention was better, I would simply add up all the deaths at the end of the day, divide by the ratio of the deaths, and I would be able to find out which, which is more, right? Hang on, so this is basically deaths per week. This is and then I have another one, A and B, which is cumulative, where I accumulate the deaths, and then I take the ratio of the accumulated and as you can see, the ratio is the same at the beginning and as as the end. This was the initial motivation is that people die at a at a certain rate and and what I would notice that people were dying along a straight line, more or less, more or less a straight line, right? It's really an exponential but, like I looked at the time series for people who got the the flu vaccine, right, and it's basically a straight line sloping downwards, because the average age of people is is old in the Medicare database I was looking at. So, but in this case, I'm just taking the very simple case, people die the same number of deaths per week. I have two different groups. I can basically to to take out the noise and basically provide an an integration here, let me, let me. So I understand





Harvey Risch 09:38  
you're averaging it. Yeah.

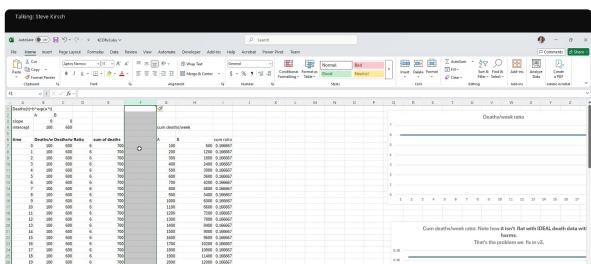
Steve Kirsch 09:40

Well, I'm not Yeah. Essentially, it effectively, cumulative

H Harvey Risch 09:45  
is an average. The

Steve Kirsch 09:46  
cumulative basically ta

cumulative basically takes out the noise, but it's the cumulative is an integration, right? The cumulative just integrates, yeah, adds it all up. Okay, so the point is that if you take the cumulative, you get rid of the noise, and you take the ratio, and the ratios will be relatively the same if you have constant deaths in cohorts A and B, yeah. Okay. So then if, let's say there is an exponential slope to it, like, we'll put in point o1 here, and we'll put in point, oh, one here, the same sort of thing happens, right? That everything works just great, yeah, because





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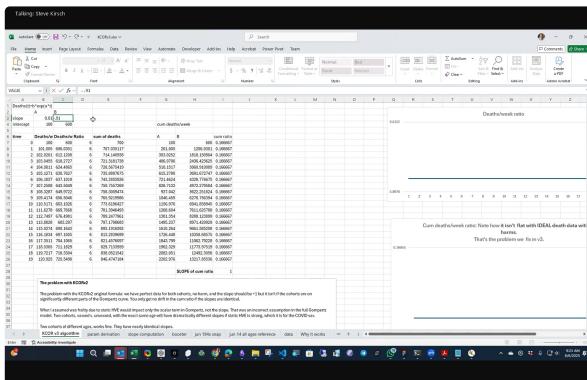
Harvey Risch 10:30

that's the b parameter that you got in your equation there, and so it cancels out. Yeah,

S

Steve Kirsch 10:34

it cancels out. Okay, so everybody but, but if you have different slopes, let's say one dies at a positive slope and the other one dies in a negative slope. Then you have this, this problem here, you know you can see that the the deaths per week is, this is pretty extreme, right? I put minus point nine one, that's why, sorry, let's go minus point oh, one. You need



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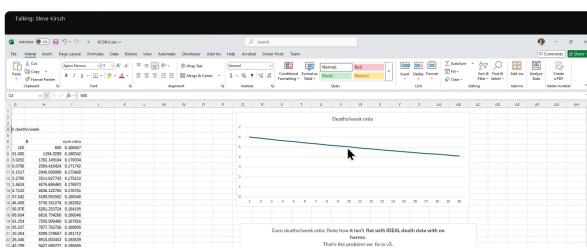
11:12

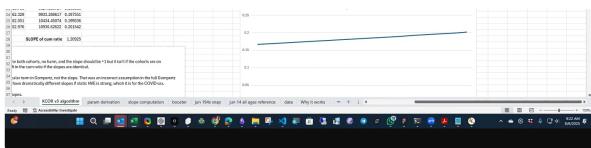
a minus

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Steve Kirsch 11:13

Yeah, I hate, I hate Excel. Let's see, no, it never corrects it correctly, okay, minus point, oh, one. Okay. So then if you look at it, here's the ratios, relatively straight line, and the cumulative goes up on a relatively straight line, you know? So it looks alright.





H Harvey Risch 11:41

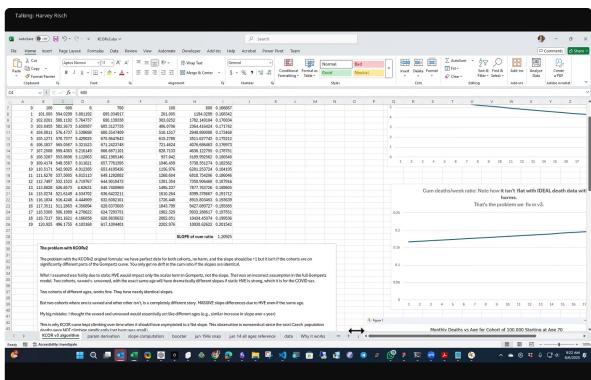
Hang on a second. Slide back to the left,

S Steve Kirsch 11:44

yeah.

H Harvey Risch 11:47

Let me look at the numbers again, so



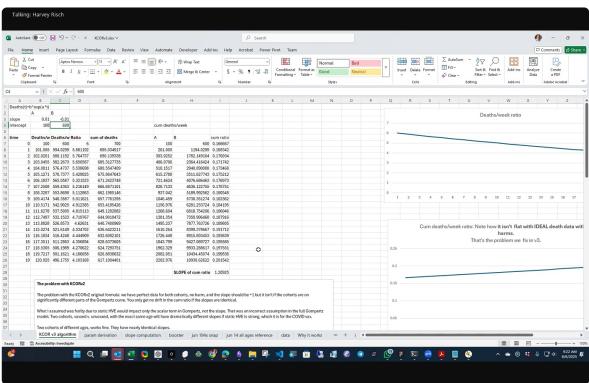
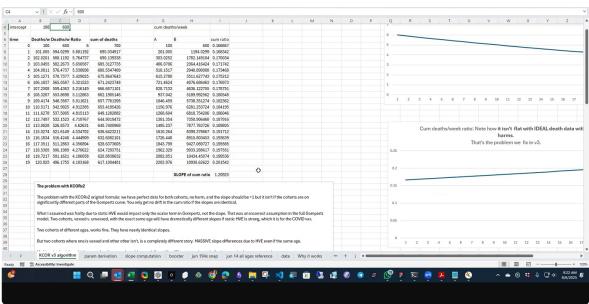
S Steve Kirsch 11:52

it slopes up, but it's a relatively

H Harvey Risch 11:54

strange so the this is Simpson's Paradox, that what you're doing is you can't take the cumulative numbers and use that ratio, because it obscures changing changing in the individual ratios. And those individual ratios can be different, and the the average at the end can be outside of the bounds of the in the ranges of the individual ratios. This is known as Simpson's Paradox, and this, I'm very familiar with





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Steve Kirsch 12:34

Simpsons paradox here, but the method doesn't use what I just did this, I'm just trying to illustrate the problem. All right, okay, so, so what I do is to account for this, to account for the fact that the slope of of this is different, is this is a different exponential. These are two different groups. These are different, two different cohorts, right? Okay, and you're familiar with conference mortality, right? No,

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Harvey Risch 13:02

just another functional, you know, distribution,

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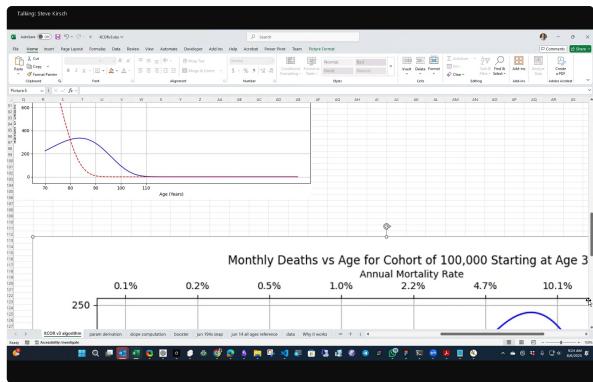
Steve Kirsch 13:07

okay, so, in fact, I need to add the basic conference curve to my plot here. So let's copy image to clipboard here, and, and I'll show you the Stan. So this is, this is the standard conference mortality curve. So for fixed cohorts, and I'm only dealing, I'm always dealing with fixed cohorts here. So, oh, by the way, I'm recording this just, just, yeah.

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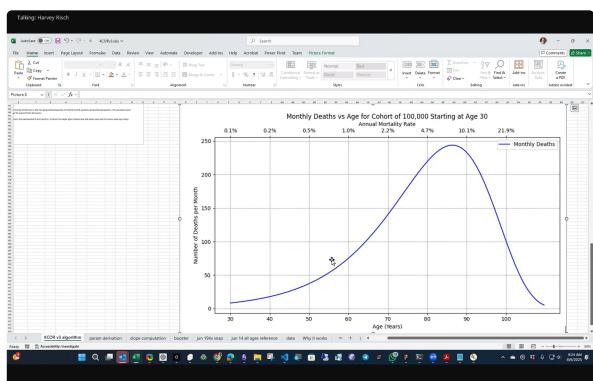
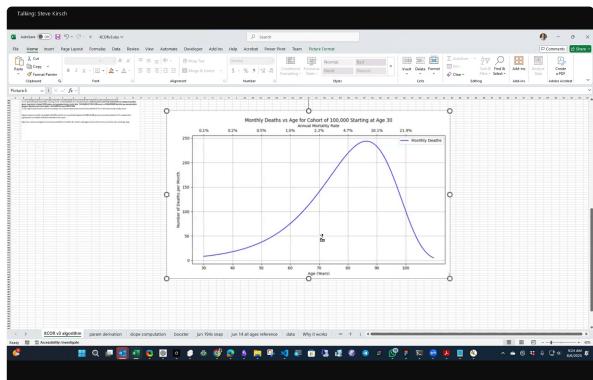
13:41

So, okay,



### S Steve Kirsch 13:42

okay, control, okay, sorry, this, that's a little bit too small. Okay, so this is the conference mortality curve. So this is a fixed cohort of 100,000 people starting at age 30. This is how they die over time. They die more and more and more over time you hit about age 86 and you have a peak of the curve, and then it goes down. It's kind of like a Weibull curve. Okay, that's how people die. So the point is, if I looked at 70 year olds. And I looked at 70, a fixed cohort of 70 year olds. They're going to die with increasing deaths per per week, because they're on this part of it, the conference curve, right? They have a slope. So the deaths per week slope will be this.



 Harvey Risch 14:38

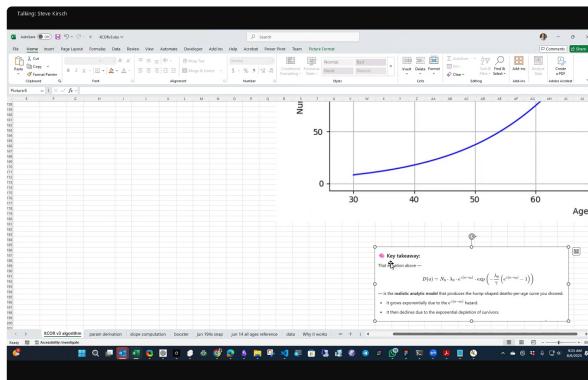
I'm confused about something. Okay, why does this curve turn down at all?

 Steve Kirsch 14:44

Because of depletion? So I can show you what the conference mortality looks like. So here's the copy image to clipboard here, and

 Harvey Risch 14:59

we can Well, it's, it's two competing exponentials. It's an exponential that's correct, modulated by an exponential decline that's correct,

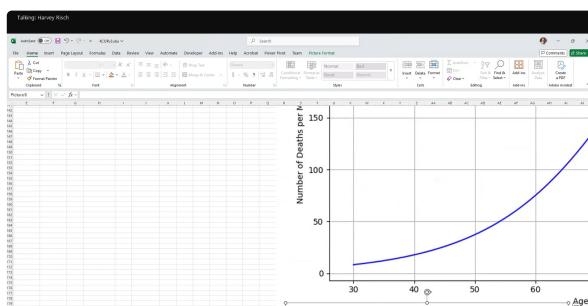


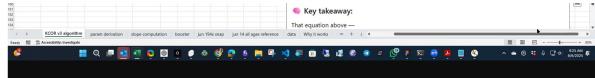
 Steve Kirsch 15:08

right? Because you can't keep it, can't keep going up and up, right? Because you run out of people. You know what? I'm

 Harvey Risch 15:17

one thing that I've done is that

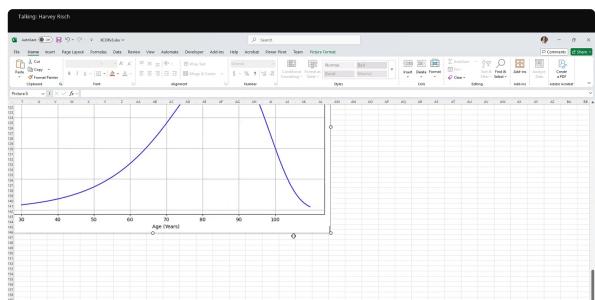
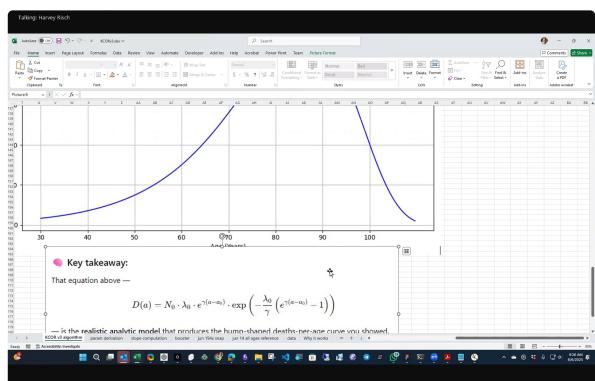
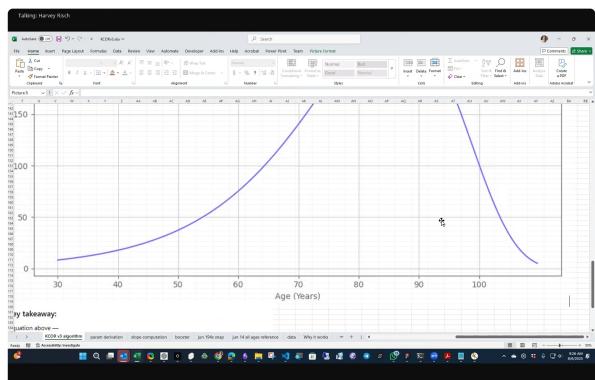


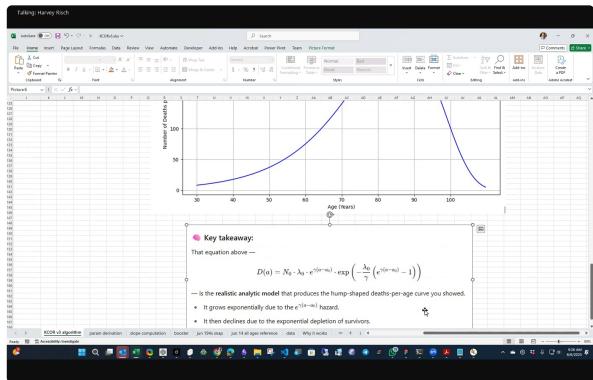
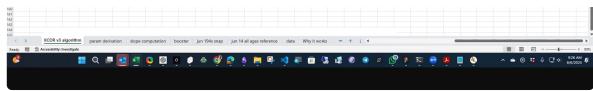


H

## Harvey Risch 15:28

the another way of doing this, which I did in the case of smoking and lung cancer, the risk of getting lung cancer by amount of dose of pack, years of smoking is, or time since, time since, I'm sorry, wrong, wrong example, this was Pancreatic cancer and diabetes diagnosis and time since the diabetes diabetes for the pancreatic cancer diagnosis. And I put that as log odds ratio equals beta dose e to the minus gamma parameter times beta time. So I'm modulating the coefficient by an exponential drop off. And it gives you something like this also that allows the risk to go to one over long time periods, which it obviously does, and it fit the data exceedingly well. And this was published in jmci some years ago. Yeah.





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**Steve Kirsch 16:33**

Okay, so anyway, we're dealing with deaths here, and this is the standard accepted deaths as a function of age.

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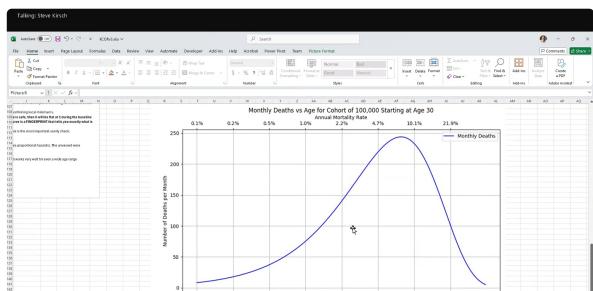
**Harvey Risch 16:44**

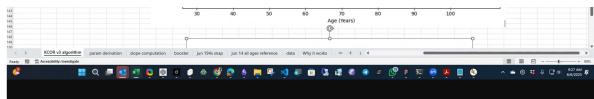
This is numbers of deaths rather than individual risk of death.

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**Steve Kirsch 16:47**

That's That's correct. This is not an individual risk. These are deaths per week, okay? This is number of deaths per month in this case, right? Okay, so what you notice is, if you're a seven year old, you're going to die with a slope that goes up. If you're at 85 or 86 years old, the deaths per week will be flat, you know, for about a year, and then I'll be less flat. It'll start to slope weekly down, and then as you become 90 year olds, it'll have a much stronger downward slope in terms of the deaths per week. So the deaths per week, you might have 100 deaths. Or in this case, you'll the first week would be 225 deaths for this group as they age. And then it's going to be 200 and, you know, 24 deaths the next day. And 200 you know. So the point is that this, the slope of this conference curve is essentially the slope of the if I plotted deaths per week for a nine year old, it's going to slope down.





H

Harvey Risch 17:48

So yeah, but I'm bothered by that, because this curve is a curve for a population, not for an individual.

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Steve Kirsch 17:57

No, it's for a fixed population, right? And so we're looking at but, but here I'm analyzing populations of large numbers of people,

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Harvey Risch 18:08

right? But it's a population that you're, you're drawing a conclusion from this curve, not if you're, you said, if you're a 90 year old, that that automatically shifts it to an individual. What I'm saying is a

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Steve Kirsch 18:19

group sorry, a group of 90 year olds will die on a per week basis with a with a negative slope.

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Harvey Risch 18:28

But no, that's not, that's not the issue you once you say a group, you're fixing the denominator the numbers. And that's not what

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Steve Kirsch 18:37

this is. What

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Harvey Risch 18:39

goes down is because there are way fewer 90 year olds, and this is conflating the number of people with their risks. You have to be very careful about separating the risk of dying from the population numbers of deaths, because the numbers of people at risk of dying has changed so dramatically.

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Steve Kirsch 19:00

Yeah. So this is, again, this is not plotting risk. This is plotting the number of deaths per month, right? But

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Harvey Risch 19:06

you have to be careful in your interpreting that. You're interpreting this by saying that if you're a 90 year old or if you're a group of 90 year olds, and I'm saying you can't do that because your group has changed. Your group of 90 year olds only got six people in it, whereas the group of 70 year olds had 150

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Steve Kirsch 19:24

Well, the group sizes are about we started with 100,000

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Harvey Risch 19:30

Well, I'm being relative, I'm just saying point, but that it's what's driving us down is the group size, not the risk. The risk is still going up

S

Steve Kirsch 19:41

the an individual, yes, the individual risk of a 90 year old is higher than the individual risk of an 80 year old. The risk is still going up. You're absolutely correct. Okay, here is the risk. The risk is right here, here's the annual mortality rate. It goes up to 10% and here it goes up to 20%

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Harvey Risch 20:02

right? Kids

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Steve Kirsch 20:03

down, down here that, you know, the risks are very low. But again, I'm not plotting risks here. I'm plotting deaths per week of a fixed cohort,

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Harvey Risch 20:13

right? I don't want, I don't want them to be interpreted as risks. That's my concern. I'm

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Steve Kirsch 20:18

not interpreting them as risks

H

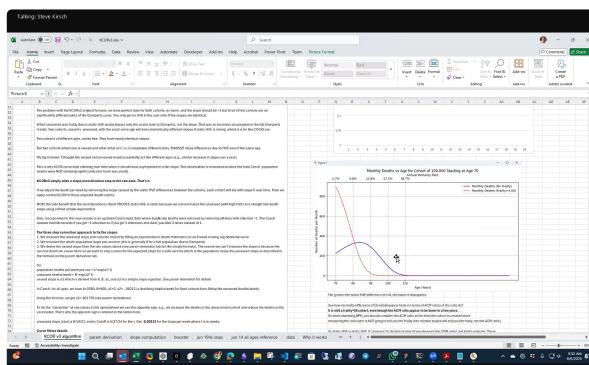
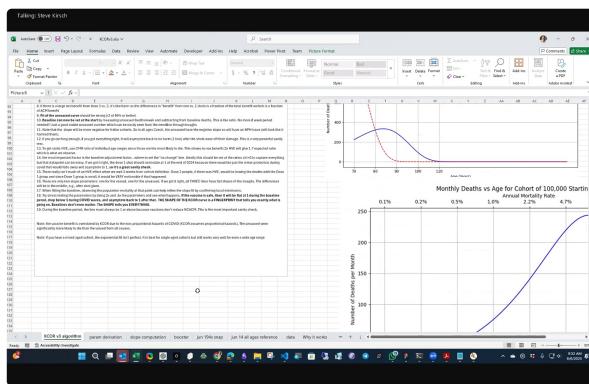
Harvey Risch 20:19

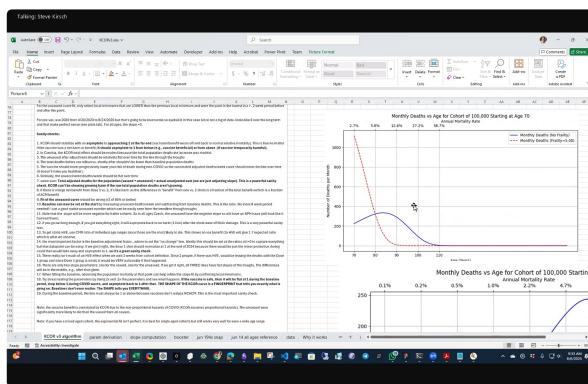
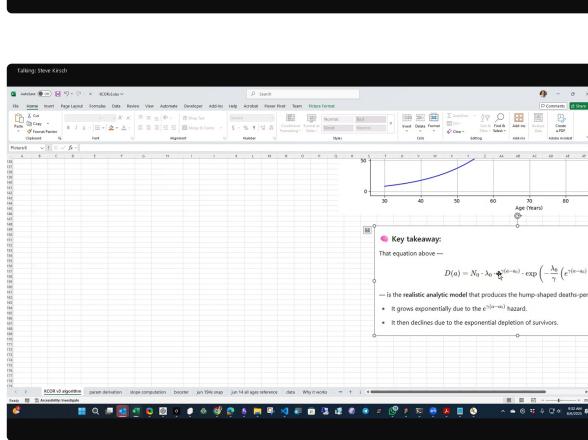
well. You have to be one. Has to be careful with with the language, as to how you refer to this.

S

Steve Kirsch 20:24

Okay, well, I being very careful here, 100,000 people, starting at age 30. This is how many people die on the first week, and then the next week, more people die per week, and the next week, more people die per week. And it got, gets up to 240 people dying per week at maximum, and this is with depletion, okay, and then fewer and fewer people die per week. So if you, if you plotted the deaths per week of any age, this shows you what the slope of the deaths per week will be, okay, okay, all right. This is very, you know, well accepted. So the point is that when I first started this, I said, Oh, well, look, if I deal with just cohorts under 85 years old, then the slope here, this line here, is fairly linear, and it's a fairly constant slope. So if I had a 70 year old, he's going to die, and compare it with a 75 year old, or someone who's less frail, or more frail, along this line, I said, Oh, these slopes look pretty darn similar. I think I can just use this very simplistic method here that I showed you earlier and just compare them, because their slopes will be similar. Okay, so that was my initial thinking. And then what I realized is that once you add frailty, which is this conference curve, like it? I think it's one of these. This may not, this may not show it n zero is your starting number. But the point there's, there's a frailty exponent here or not an exponent, a frailty factor. And I thought the frailty factor just moved the curve up, but it doesn't. So if you have a cohort of 100,000 people starting at age 70, and your your frailty factor is five, then





**H** Harvey Risch 22:41

which? Which factor is that in the equation?

**S** Steve Kirsch 22:44

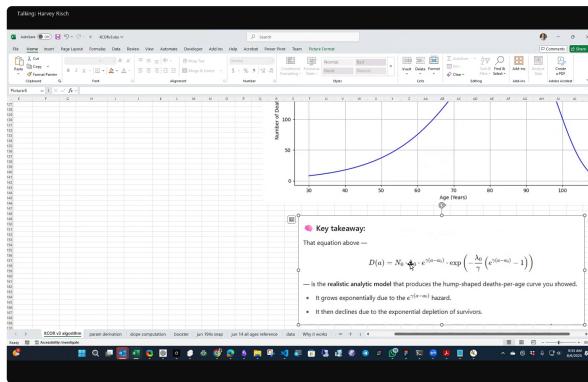
It's not shown in this particular thing, but the frailty would be just a multiplier here,

**H** Harvey Risch 22:52

if that's out in the front and you're talking about your

**S** Steve Kirsch 22:56

but it cancels, yeah, yeah, no, I think there's another. It must be also in there. I need to to that's a good point. Let me make a note of that that I need to show the the conference with frailty. But the point is that what it does, and I have code that does this, is it? Is it shifts the curve so I can do an interactive looks



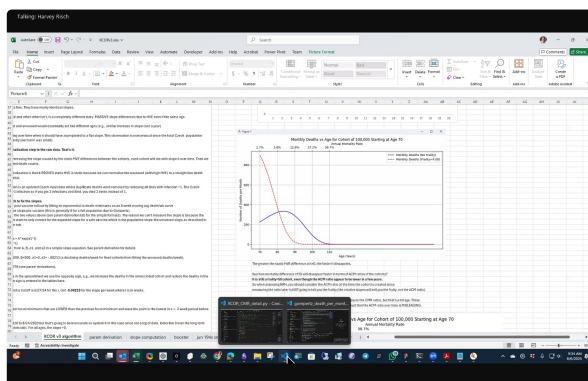
Harvey Risch 23:29

like it just moved the curve to the left,



Steve Kirsch 23:32

yeah? So essentially, let me, let me, let me. Just show you here it, let's go for frailty. So moving



Harvey Risch 23:42

it to the left just changes that gamma parameter.



Steve Kirsch 23:47

Yeah, it's not quite moving it to the left, but you'll see,



```
## Load required packages
library(mortality)
library(ggplot2)

## Set working directory
setwd("C:/Users/.../Desktop/")

## Read in mortality data
mortality_1950_2010 = read.csv("mortality_1950_2010.csv", header=TRUE)

## Set cohort starting at age 20
mortality_1950_2010$age_start = 20
mortality_1950_2010$age_end = 100
mortality_1950_2010$age_mid = (mortality_1950_2010$age_start + mortality_1950_2010$age_end)/2

## Set frailty factor
frailty = 1.0

## Calculate monthly mortality rates
mortality_1950_2010$monthly_mortality_rate = mortality_1950_2010$deaths / ((mortality_1950_2010$age_end - mortality_1950_2010$age_start) * 12)

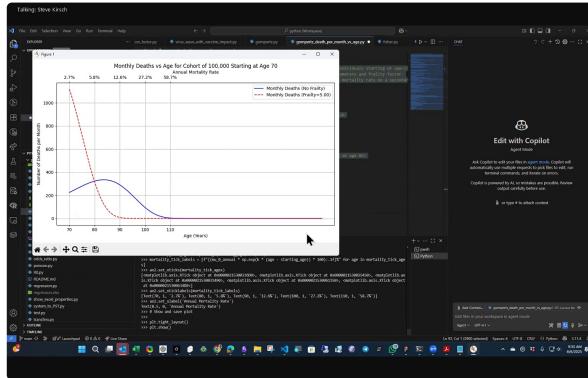
## Add frailty factor
mortality_1950_2010$monthly_mortality_rate_frailty = mortality_1950_2010$monthly_mortality_rate * frailty
```

H Harvey Risch 23:51

well, it is. If you started at age 20 with a frailty factor, you'd see that,

S Steve Kirsch 23:57

yeah. But people, people acquire frailty over time, and so let's do 1.5 frailty crap. Okay, 1.5 and show you this here. Okay, and this is frailty five. Okay, so this is frailty 1.5 you

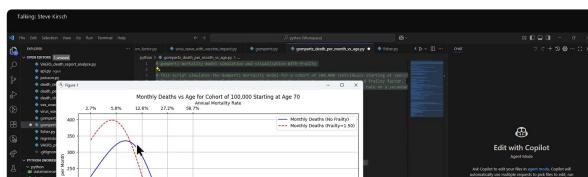


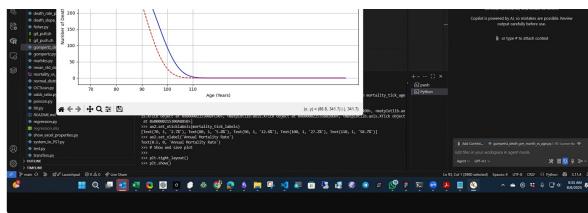
H Harvey Risch 24:26

can see, say, you move the curve to the left. That was important. Yeah,

S Steve Kirsch 24:29

exactly. So the greater this frailty is, the more it will move the curve. So this is age 70 with a frailty of 1.5 so 225, times one point, 1.5 shows, okay, we move the frailty here. And what it will do is we'll, we'll essentially shift the curve to the left. It





H Harvey Risch 24:50

also makes the curve narrower, yeah. And so, because the numbers run out at a different rate, right? So, and because the numbers have to sum to 100,000 that's why, if it's narrower, it has to be taller.

S Steve Kirsch 25:02

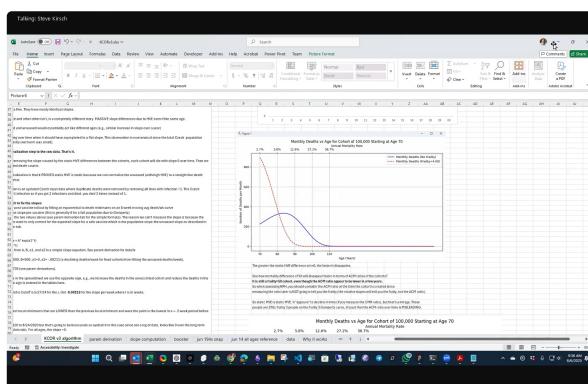
Yeah, so, but, but the key point here is that, even so, with frailty 1.5 you'll notice that if I looked at a 70 year old and a 70 year old and I compared the cohorts, that the slopes are similar, they're not identical, but they're similar, right? Uh,

H Harvey Risch 25:23

right? The frailty one is deeper because, yeah,

S Steve Kirsch 25:26

I get that. I get that. But they're, they're roughly similar, okay, okay, so, so let me show you what happens if you go so this is, this is frailty four. And you can see that this one has an upward slope like it was before. But at frailty four, this is clearly a downward slope



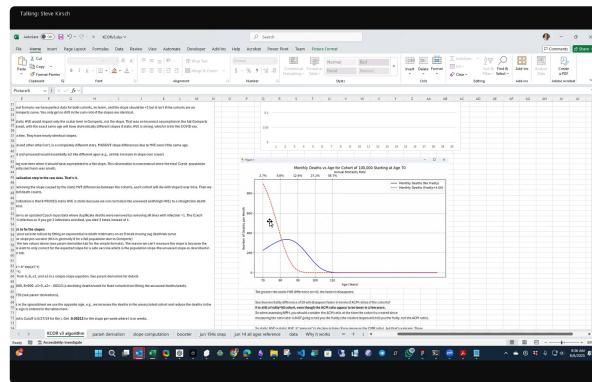
H Harvey Risch 25:48

at this point because you've edited out the part to the left where it was going up, like the blue line,

S

Steve Kirsch 25:55

yeah. Well, I didn't edit it out. I just said, let's start with age 70 and frailty of four, because I wanted to set the frailty factor at a specific age, because people acquire frailties as they grow older when they're 16,



H

Harvey Risch 26:12

but I'm missing something here. Okay, Gompers, the conference equation is basically including frailty, increasing frailty as a reason why individual risk increases. If there were no frailty, then it would just be the same risk the whole time and the and that, wouldn't you understand, people would just continue to die at the same rate that that the it's the increasing frailty that gives the peak in the conference.

S

Steve Kirsch 26:46

No, no, no, no, that's incorrect. So this is with frailty equal to one, okay, this is what you get with frailty equal to one,

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Harvey Risch 26:56

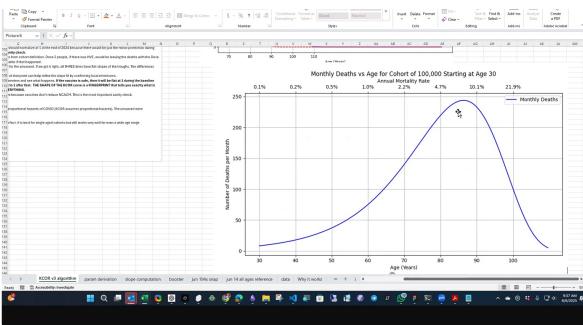
right?

S

Steve Kirsch 26:57

Okay, so when you, when you get, when you put frailty equal to three, the curve, sort of shifts to the left. What





H Harvey Risch 27:05

if you have frailty equal to zero?

S Steve Kirsch 27:09

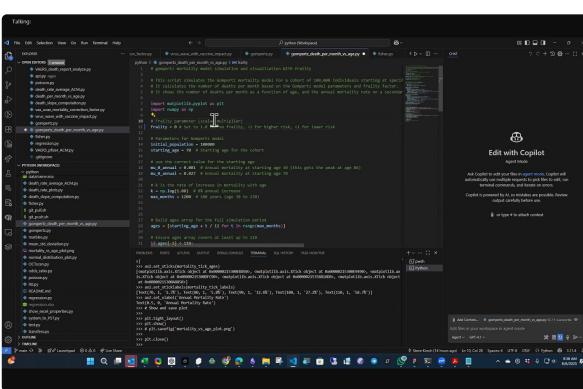
Well, that's, that'd be interesting. I'm not sure that's an interesting because people, people are only more frail than the average. They're not zero frailty. I mean, no,

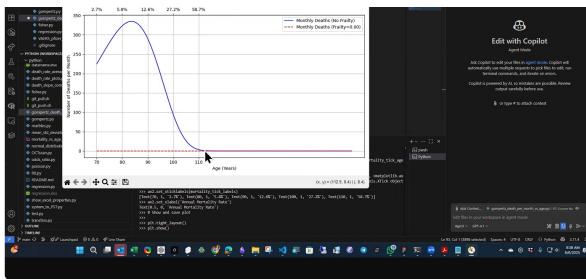
H Harvey Risch 27:22

frailty is a parameter in a model.

S Steve Kirsch 27:24

Well, fine, I'll plot it for you. Okay, so we'll put we'll plot it against frailty equal to zero so you can compare them. Okay, that's frailty zero. Okay, the this is frailty zero. You probably didn't want zero. You probably wanted a smaller number. No,





H Harvey Risch 27:55

it's fine. It's just that you're the y axis is too big. It needs to spread it out. Yeah,

S Steve Kirsch 28:01

okay. Well, here, how about frailty? Would you go for like point two? No,

H Harvey Risch 28:06

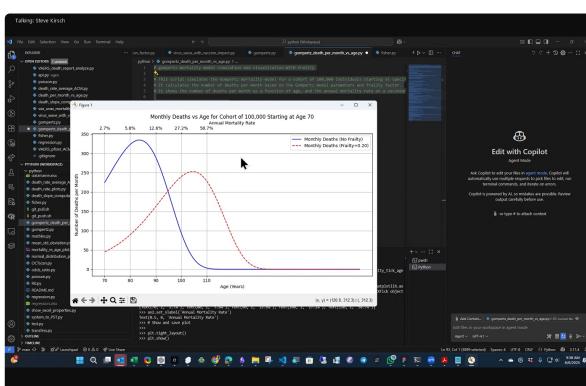
because he's still going to get a peak, but it just be, it'll just be later. Okay,

S Steve Kirsch 28:10

well, let's look at it. Okay, so this is so frailty point two shifts it the other way, right?

28:18

Okay, so I'm



S Steve Kirsch 28:22

not sure, I'm not sure what that means physically. But if you're, if you're less frail, you're, you're, you're not going to die, you're, you're hard here basically, and you're, so you're going

you're, you're not going to die, you're, you're hard here, basically, and you're, so you're going to die later, right? Yes, okay, so this is what this shows you're, if I compared two groups, one with lower frailty, because they're super healthy weight lifting jocks that exercise. They're going to die less, but then their peak will be shifted out. They're going to die at a older age. Well, as long as

H Harvey Risch 28:55

you're not Hulk Hogan, that's right,

S Steve Kirsch 28:57

yeah. Well, he died at a fairly old age,

H Harvey Risch 29:00

71 or something, not that.

S Steve Kirsch 29:02

Yeah, yeah, exactly. Okay. So the point, the point is that I was comparing people with higher frailty than normal. And so what I noticed was that the conference curve slopes were different. Okay, yeah, so

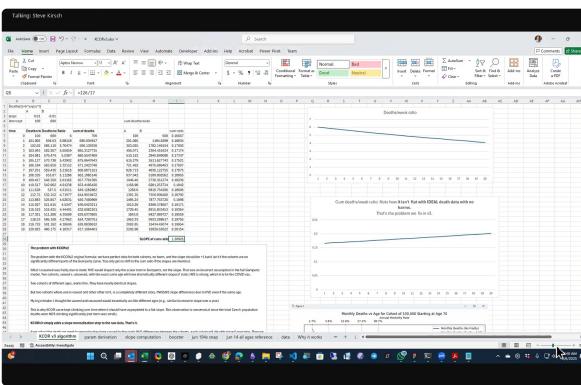
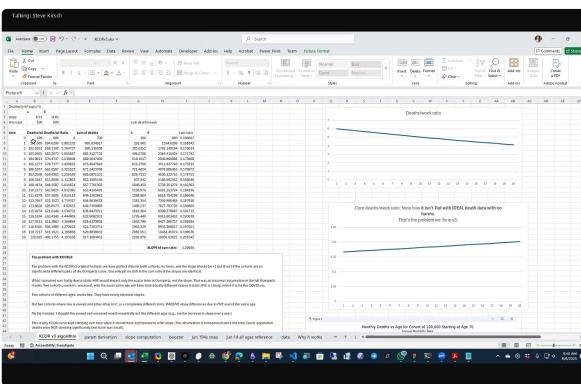
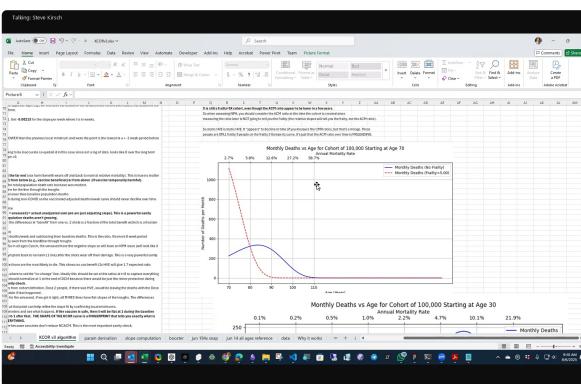
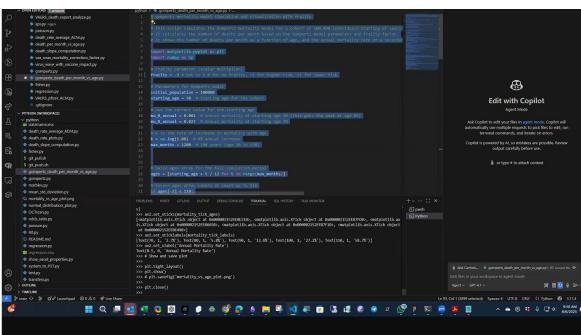
H Harvey Risch 29:26

that's shown there also on that graph,

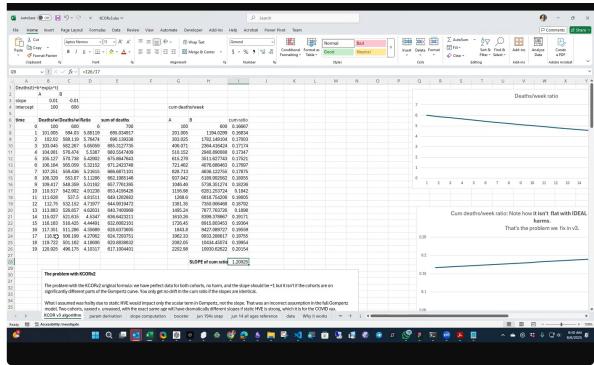
S Steve Kirsch 29:28

right? Okay, so I so my assumption that they were the same is only good if you have a small frailty difference, if you have a large frailty difference, then the slopes are completely different. Okay, so then I said, Great. So now to compare the cohorts, I'm going to instead, I'm so I have these, these cohorts, and my model shows, oh, gosh, you know, here's a 20% signal, right? Let me make this a little bit bigger, so here's the slope of the QM ratio. It basically says, Hey, got a 20% signal. But these two groups are simply dying at their own rate. This guy's dying at a perfect rate, perfect exponential for him. This guy is dying at a perfect exponential for him. And there's no vaccine. There's no virus that's affecting any any of these groups. These these groups, are basically dying at their own exponential rate. This could be completely different. This could be minus point, oh, three, for example. And I would detect a false signal of 44%





Taking: Steve's death



Harvey Risch 30:45

yes, but you haven't addressed why they're dying at different rates.



Steve Kirsch 30:48

Okay, the reason that they're dying at different rates is because and they could be the same age, the reason is called selection bias, and when people opt to go get vaccinated, the people who declined to be vaccinated have a mortality rate that is many times higher than the people who vaccinate. And so there



Harvey Risch 31:15

that turns out to be problematic, because it depends on which country you're talking about



Steve Kirsch 31:23

exactly,



Harvey Risch 31:23

because in Hungary and Czech Republic, it was the opposite, you know? Oh, really, yes, it's normally referred to as the healthy vaccine bias. That's correct. It turns out that in those central European countries that it was people who were sick or who were afraid of dying who went and got vaccinated first.



Steve Kirsch 31:46

Okay, so in other words, what you're saying is that in the Czech Republic, you're saying that it's the unhealthy vaccine effect, that the people were dying, the people who got vaccinated were healthier, so they would have a

 Harvey Risch 32:05

less healthy the people who got vaccinated and were less

 Steve Kirsch 32:08

healthy, right? Okay, well, so the data doesn't confirm what you just said. So do you have a and there was just a peer reviewed paper that showed the opposite of what you just said,

 Harvey Risch 32:21

Are you sure that maybe was hungry? But I know that there was a paper that was discussing,

 Steve Kirsch 32:26

okay, but, but it is not to Czech Republic. I can guarantee you that

 Harvey Risch 32:29

could be but, but what I'm saying is that you can't automatically assume

 Steve Kirsch 32:34

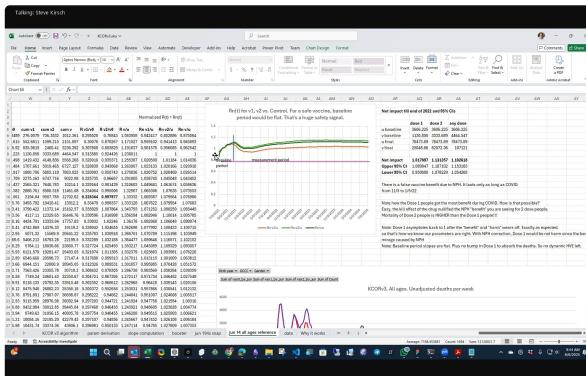
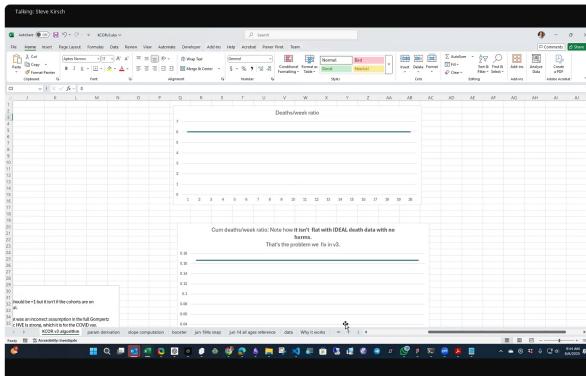
I don't. It's

 Harvey Risch 32:35

this difference. I don't vaccinate, effect. You can say that that I don't, I measure it there, but we don't know which direction, that's

 Steve Kirsch 32:42

right. We don't know which direction is. So that's why we measure it. And then what I do is I measure the slope for the vaccinated group, and I measure the slope for the unvaccinated group, and then I correct for the slope so that both cohorts are dying along a straight line. So essentially, I neutralize the slope back to zero for both cohorts, and then I can apply my methodology, where I take the cumulative deaths per week, I take the ratio, and I can plot that on a curve, and I can find out whether the cumulative deaths, I plot this, and then I say, Gee, is this going up or down? Okay, yeah, all right, so when I do that, I'll show you what happens when I do that. And let me show you the result of the division. So the result of the division is that I enroll the cohorts on a fixed date, in this case, 6/14, 2021, when there is no covid, and I take fixed cohorts and I enroll people based on their vaccination status, that they have Zero vaccines, one vaccine or two vaccines. Okay,



H

Harvey Risch 34:04

this is in the middle of covid. No.

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Steve Kirsch 34:06

This is when there's no covid. This baseline period is when there's no covid. So

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Harvey Risch 34:09

what's that period?

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Steve Kirsch 34:11

Well, this period is between seven, 520, 21 here, and let me magnify

H

Harvey Risch 34:16

it. Started in March of 2020, this

S

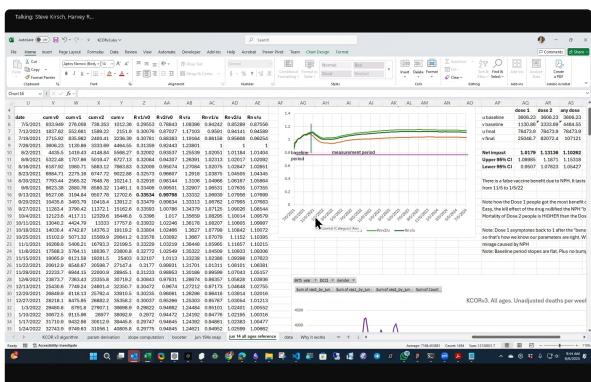
Steve Kirsch 34:19

is in the Czech Republic. Oh and,

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Harvey Risch 34:20

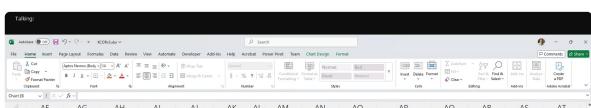
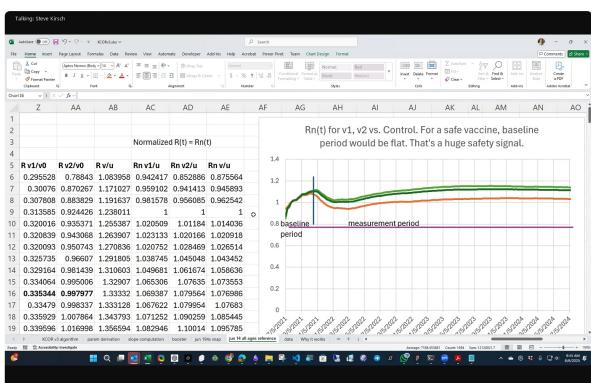
oh, okay, okay.

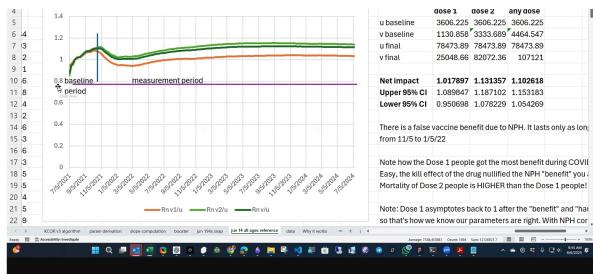


S

Steve Kirsch 34:23

So, so this baseline period is, is people got vaccinated over here to the left, okay, and, and, so I chose a point after people after the vaccine program was done, for most people, for most of the old people, who are the people who are most likely to die, okay? And then I have this baseline period, and this is to the left here. Is that the No covid period, right?





H

Harvey Risch 34:54

And which color is which? So the

S

Steve Kirsch 34:59

color is here. This is one dose we got, one dose of the vaccine. This is two doses is on top, and any doses in is in the middle.

H

Harvey Risch 35:14

Obviously the average I see. And this

S

Steve Kirsch 35:17

is, well, it's not the average, it's the it's the actual number computed.

H

Harvey Risch 35:22

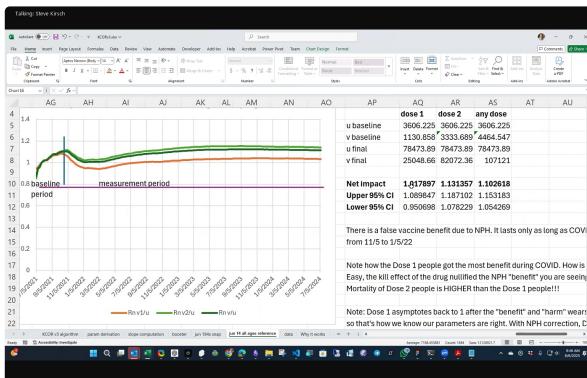
Okay, alright, so, and this is compared to

S

Steve Kirsch 35:27

unvaccinated, okay, right? It's vaccinated compared to unvaccinated, vaccinated too, compared to unvaccinated, vaccinated with any dose, compared to the unvaccinated. So I calculated it three different ways, and that's shown in the table here, dose one, dose two, or any dose. So you get the net impact is is relatively small, meaning it's a harmful impact. If you got one dose, if you got two doses, it's a statistically significant 13% increase over the unvaccinated and if you got any dose, it's a 10% statistically significant increase, 95% sea ice. Okay, so, but this here is very concerning, because in the baseline period when there's no covid, the vaccinated and unvaccinated should die comparably to each other. The fact that it's going up suggests you have a dangerous vaccine. Now, here is the covid period at this line here, because I stopped the baseline, because covid started, covid started. Look, there's a covid benefit. It's not really a covid benefit, but let's, let's say it looks like a covid benefit, okay? And has to do with non proportional hazards, because, like, you were a signer of the Great Barrington declaration, weren't you? No, oh, okay, well, so the Great Barrington declaration,

they said older people are much more likely to die of covid, you know. So if you have a mortality difference between a young kid and an old person of 100x it's 1,000x if you die, yeah, from covid. So, so it's essentially, you take your mortality difference between the two people, and you raise it to the 1.5 to get the covid effect added into it. So if you have a 10x if, let's say you have one person is four times more likely to die just normally, then their covid risk will be four times eight or four times two, sorry, which will be eight and they'll be much more likely to die from covid than you would think, just proportional to their age, or just before, okay, so this is actual this, this effect here is actually a total placebo effect, because the the healthy vaccine effect ratio for the people most likely to die is somewhere on the order of four or five. And so if you take five times the square root of five you get it's over 10, which means you have a 90% vaccine efficacy if you give someone a placebo shot just due to the healthy vaccine effect. This is why you see this, because we're not adjusting for non proportional hazards. It's all proportional hazards.



H

Harvey Risch 38:21

So if there is that large of magnitude of healthy vaccinated effect, which I'm not convinced of yet,

S

Steve Kirsch 38:28

oh, you know, but I can show you the data for that. That's easy. I

H

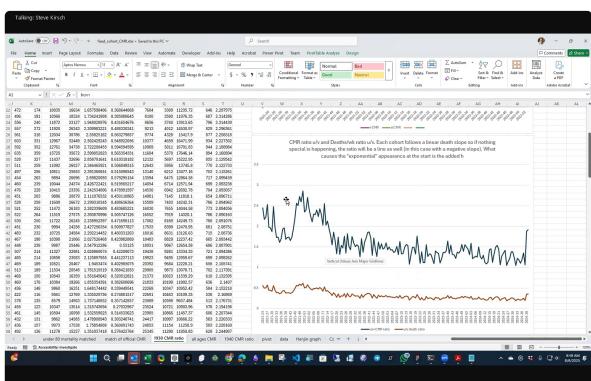
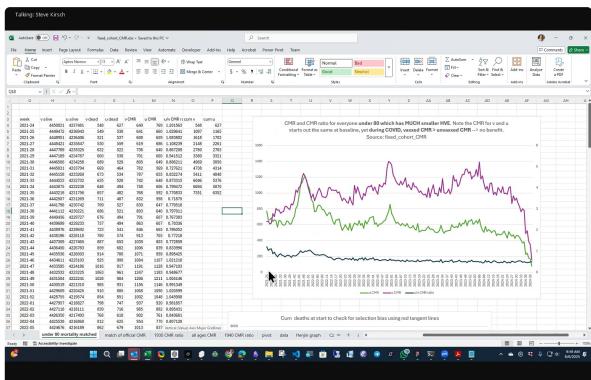
Harvey Risch 38:32

It's unclear because, oh,

S

Steve Kirsch 38:35

it's very clear. Here's here it is. Here's the CMR for everyone under 80. Bad example here, let me show you the 1930 CMR. So I'm this is for 1930s and here's the CMR ratio. This thing goes up to, you know, two and a half three times in this case. So what



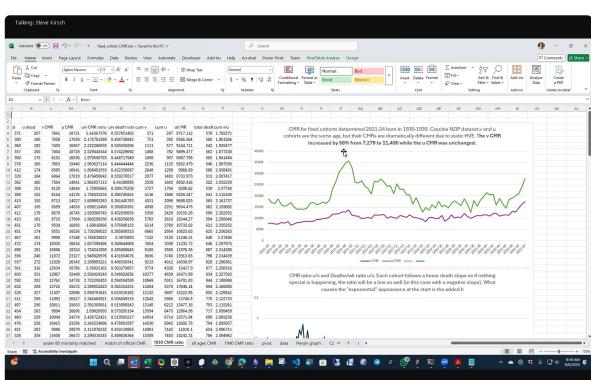
**Harvey Risch 38:58**

are we looking at here? This is



**Steve Kirsch 39:00**

the CMR ratio Vax versus unvaxed. This is the CMR for people born in 1930 to 1939



**Harvey Risch 39:00**



Harvey Risch 39:09

Yeah. But how are you talking about mortality ratio of the individual's propensity versus the effect of the vaccine you know on that?



Steve Kirsch 39:22

Well, the vaccine has some effect on it. So this is with the vaccine effect factored in. So it doesn't tell you. We can measure it. What we do is we measure the mortality ratio before covid, right in periods where there's no covid, and that's called the non covid all cause mortality, and we just measure the ratio of it.



Harvey Risch 39:46

Wait, how can you measure the mortality of people who are this



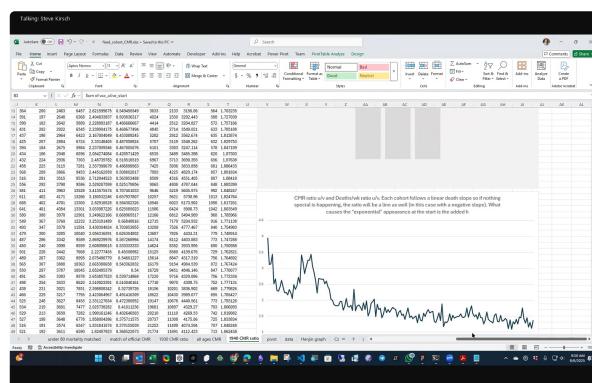
Steve Kirsch 39:51

is weekly mortality. Hang



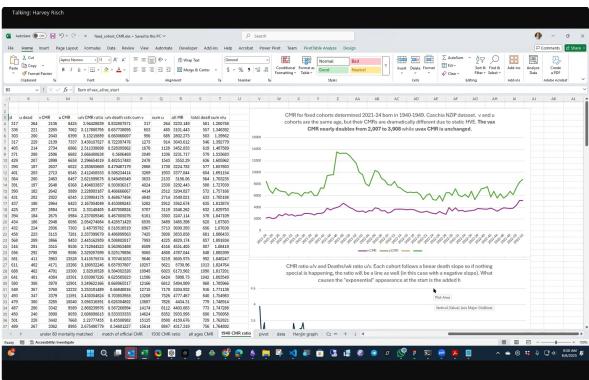
Harvey Risch 39:52

on a second. People who are vaccinated in 2021 How can you measure their mortality in 2018 because they had to live through to get to 2021, in order to have died. Then



Steve Kirsch 40:07

correct. So it's, I'm measuring their mortality ratio at the beginning of the period when I fixed the cohorts, I measure the ratio between 6000 or, sorry, 8000 this. This is born in 1940 to 49 Okay,



H

Harvey Risch 40:24

that's not what I'm driving at. So

S

Steve Kirsch 40:26

this is a four to one, I understand.

H

Harvey Risch 40:27

But you're taking the people who are vaccinated in the green line, and you're saying,

S

Steve Kirsch 40:34

no, no, no, no, sorry. People who are the green line is the unvaccinated, unvaccinated,

H

Harvey Risch 40:41

unvac unvaccinated, all right? And the it doesn't matter, the purple line is the vaccinated people, but they were only vaccinated starting and they

S

Steve Kirsch 40:50

just got vaccinated. Essentially, they just got vaccinated about five weeks ago.

H

Harvey Risch 40:55

Are they vaccinated at the left most point on the chart?

S

Steve Kirsch 40:58

They are. They're at this point here, they are vaccinated, right? Because otherwise we couldn't have we can't have vaccinated and unvaccinated. That's my point. So it's all right. So I'm only taking people after they've been vaccinated, because the cohorts are only defined after they've been vaccinated. That's my

H Harvey Risch 41:13

point, right? Good, okay, so now we're going forward from there. How do you know that the mortality that you're seeing from that time point is related to who got vaccinated, as opposed to the effect of the vaccines.

S Steve Kirsch 41:26

Well, the the effect of the VA. So first of all, the unvaccinated will not be affected by the vaccines. Okay, because the vaccine, I'd say,

H Harvey Risch 41:37

but we're talking about relative. Why the green line is above the purple line,

S Steve Kirsch 41:41

right? Well, so this is the green line here, which is the unvaccinated, and you can see that their mortality fell a little bit, but it's basically flat. Okay, the vaccinated here took the vaccine, and their mortality went up a little bit, okay, because they took the vaccine. Had they not taken the vaccine, their mortality would have been, would be less. But

H Harvey Risch 42:04

I'm no, I'm still, there's two parts of the mortality here. There's the effect of the vaccine on the mortality, yeah, the effect of who took the vaccine, that's right, on mortality and and I don't see that you can separate

S Steve Kirsch 42:20

I'm not, I'm not trying to separate them. I'm absolutely not trying to separate you

H Harvey Risch 42:25

said that we're going to look at the health vaccine effect, yeah, which is only the one part of it,

S

Steve Kirsch 42:31

okay? But maybe, maybe, if I, if I describe the whole thing, you'll understand why this doesn't matter, okay? Because I'm never using this ratio. Okay, this is just to show you what's going on. I don't use it because you can't separate out the what the mortality would have been versus what it is. Sorry. In other words, you can't, you can't separate out the mortality of the vaccinated group versus the mortality of the vaccinated group with the vaccine, okay, right? You can't separate that out, and I don't try to, okay, but what I do do is I say, Oh, I know what the mortality rate of the population was back here before they got vaccinated, and I know what the mortality of the unvaccinated group is, and I can see that it's sloping down, which means they're more frail. And they're more frail because they have a higher CMR, okay, but I can calculate the slope then to normalize the unvaccinated and because I know the slope of the population before they got the shot was zero. And I know that the slope of the unvaccinated, I can calculate what the slope of the vaccinated should be. If the vaccine is, you know what it should be, right? With no vaccine effect. So I don't try to measure this. I basically calculate it from the pre population slope for, sorry, pre vaccine slope, and then I take the the slope that I calculate from the from the deaths. I'm

H

Harvey Risch 44:11

still not clear. So you're saying up to week 40 or so in 2021 this is

S

Steve Kirsch 44:18

week 24

H

Harvey Risch 44:20

right? Yeah. But week 40 is, is what I'm talking about. Okay?

S

Steve Kirsch 44:24

Week 40, yeah, week week 40 is covid, right? Covid starts.

H

Harvey Risch 44:28

So before that, you're saying that is the baseline

S

Steve Kirsch 44:34

mortality. This is, this is non covid. And I can just, just look at the and I'll show you this. Let me get off. Let

H

...

— — — — —

H

Harvey Risch 44:43

me just make an observation here first. Okay, what's interesting about this is, you're saying that covid didn't occur in Czech Republic until no

S

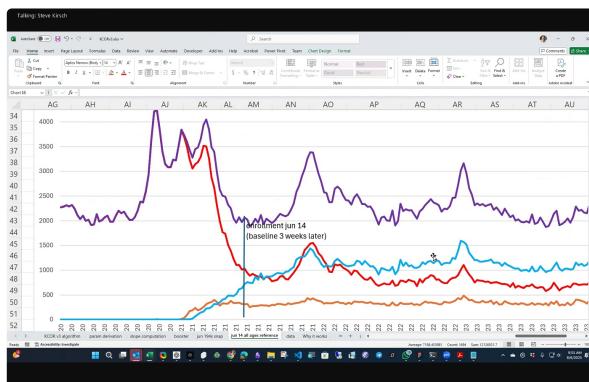
Steve Kirsch 44:54

covid. Covid occurred much earlier. I can show you. Let me show you the full graph. Okay, so, let me show you the So, this is the full graph. Let me it zoomed in too

H

Harvey Risch 45:08

much I see. So the red there is, is, so this is



S

Steve Kirsch 45:11

pre covid. See, it's flat at 2000 Okay. Who is ALL Huh? Who's

H

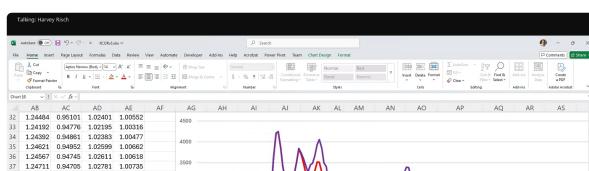
Harvey Risch 45:18

the purple people?

S

Steve Kirsch 45:19

This is all ages.



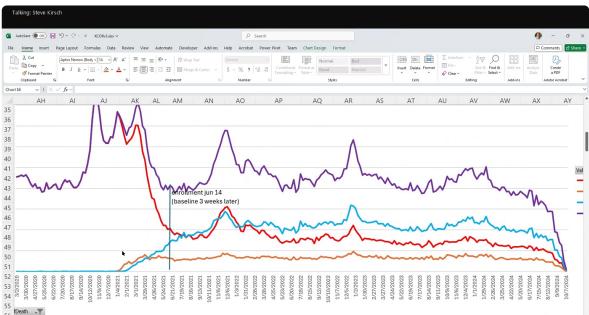
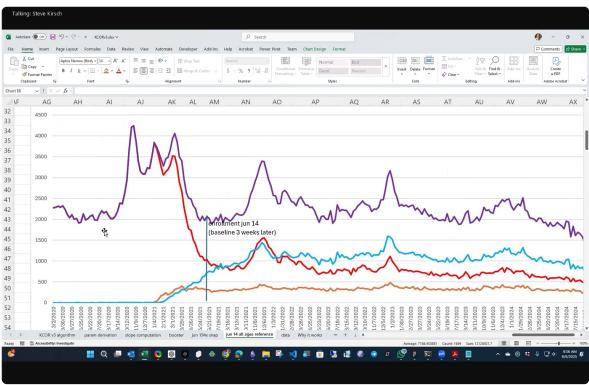


## H Harvey Risch 45:24

This is all so each one of those lines is just a different

## S Steve Kirsch 45:27

age group. No, this is this is all this. This line is all ages. This is everybody. There are 2000 just a week. Is a different age group, no, no, no. But what are the other groups? Okay, so the they're based on the vaccination status. See, nobody got vaccinated here, right? I mean, the vaccination status is, everybody is unvaccinated here. This is, and actually this is the whole population, right? And then the vaccinations, the unvaccinated group. It overlaps it right here. What's the red line? Okay, the red line is unvaccinated because vaccination started the first week of of 2021 right, right. So before that, everybody's unvaccinated. So the red line and the purple line are on top of each other. You can barely see the red line, right? Okay, so now they start separating, because now we start vaccinating people with one dose and two doses, right? So this is one dose people, is is orange, and this is two dose people as of this enrollment date of June 14.





H Harvey Risch 46:42

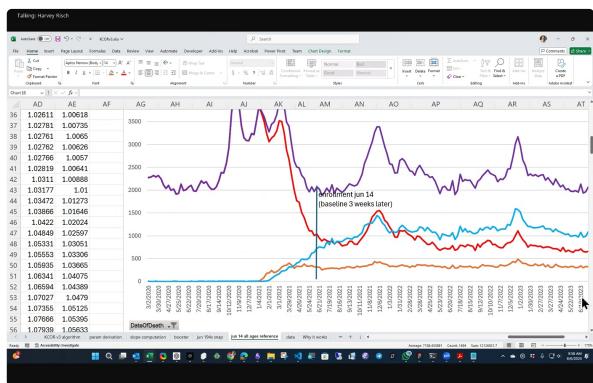
All right, let me think about this for a moment. So the red line is, this

S Steve Kirsch 46:46

is the Enroll. We enroll everybody in the cohorts to define whether they're unvaccinated, two vaccines or one vaccine as of the enrollment date of June 14, which is after covid, but after people. So people got started getting to be vaccinated here, and then we define the cohorts here after a bunch of people got vaccinated, like 80% of the old people got vaccinated, and we defined your cohort based on your vaccination status as of June 14.

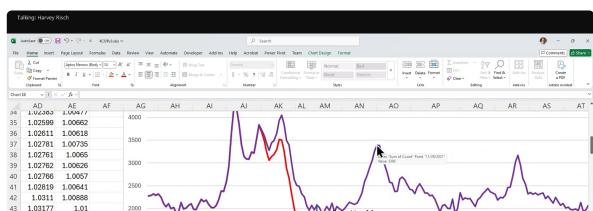
H Harvey Risch 47:19

All right, so I'm looking at this as an epidemiologist and making sense of it to say that what's happening here is you have pre delta covid in the more or less horizontal part of the first left, most part of the purple line there, where it's around 4243 on your whatever that those Excel row numbers are all right around 2020 200 in that period. And then delta hits mid 2020, later. There. It's more like September for them,



S Steve Kirsch 47:58

yeah. More like November. Well, I mean, it starts. It started up here, and this week is, no,





H Harvey Risch 48:05

I'm looking at

S Steve Kirsch 48:07

the peak over

H Harvey Risch 48:08

now, the end of, no, end of October.

S Steve Kirsch 48:12

Well, the Yeah, that the peak here is,

H Harvey Risch 48:17

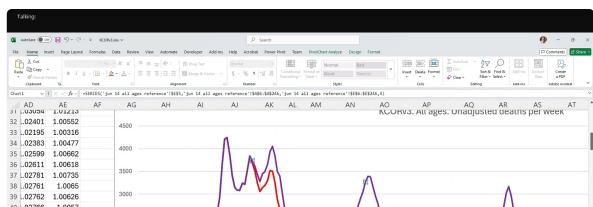
oh, this is mortality. Okay, fine. So that'll be two weeks.

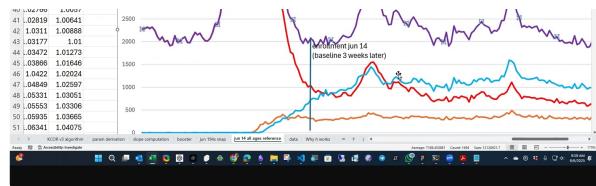
S Steve Kirsch 48:20

That's, this is deaths per week. I'm always dealing with this per week, right?

H Harvey Risch 48:24

So that, so that's two because covid deaths for two weeks after infection. So, so that's this all aligns early fall, and then, so that's the first peak, and then you have Omicron. So the deaths go up only because there are so many more cases. Yeah,



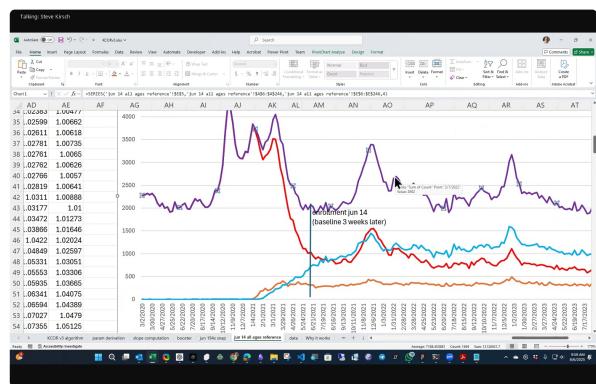


S Steve Kirsch 48:46

omicron was, was, was fewer, fewer total deaths.

H Harvey Risch 48:49

But anyway, so that's why the red line is declining dramatically, starting March of 2021, because Omicron is going away and



S Steve Kirsch 49:00

this, well, this red line declines here because alpha. This is alpha here, right? This is in January. This is January, for January, February, February, March. This is Alpha,

H Harvey Risch 49:11

okay, that's, that's an Omicron. No.

S Steve Kirsch 49:16

Omicron is out here. No, omicron.

H Harvey Risch 49:21

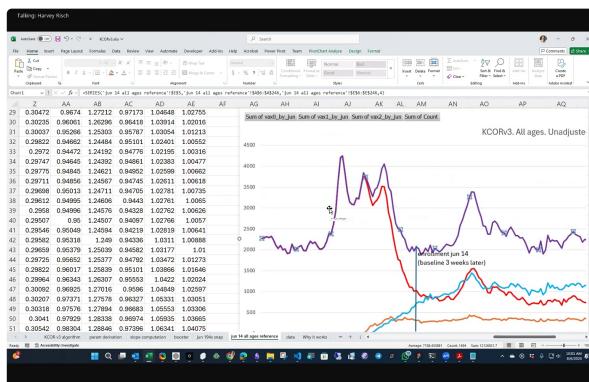
Hang on. Do I have this backwards? Yes,

S Steve Kirsch 49:25  
alpha, delta, right? 2021,

H Harvey Risch 49:29  
June, June, 2021. Is Delta. You're right. In January of 2022, is Omicron, right?

S Steve Kirsch 49:37  
Okay, so the point is, people got vaccinated, people the groups change sizes. This is why everybody's going for the VAX, that's that's going to die. This is why the mortality, the deaths, go down, but the total deaths, of course, remain constant. Because all we're doing with these curves is just changing the groups. And as we change the groups and we fix the mortality, you can see that the total deaths don't change very much, right? It's just, it's just, we're just selecting, we're just, we're just taking these people, the 2000 people a week that are dying, and we're putting them into categories based on their status as of June 14. So we can track the individual categories and see what happens. Okay, so then we have the dose two people, the dose one people, the unvaccinated people, and the total here. Okay, so

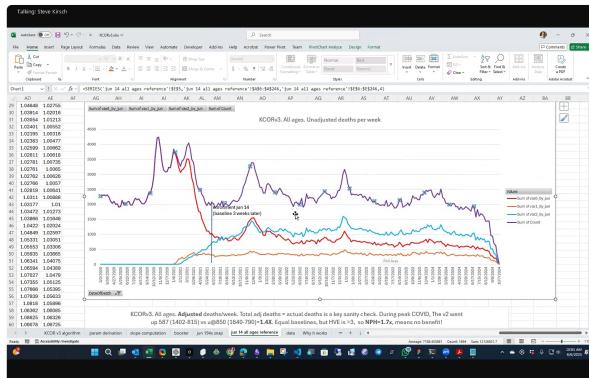
H Harvey Risch 50:39  
these curves then have to they involve the relative numbers of people in each category, not just the risks, because these are deaths per week.



S Steve Kirsch 50:52  
These are deaths per week. We're not dealing with risk here. We're only dealing with deaths per week. So

H Harvey Risch 50:57

the fact that the orange line is so much lower is because there were relatively few people with just one dose. That's



S Steve Kirsch 51:03

correct, because at this point, most people got their second dose

H Harvey Risch 51:07

right.

S Steve Kirsch 51:08

Okay, and there were fewer people in this this is all ages, so there were actually more people in the unvaccinated. Well, I don't know that there are more people. We could go and take a look at that on my other spreadsheet. But the point is that the number of deaths per week was higher for the people who were unvaccinated, because there are a lot of them, and because they are more frail, because they were the people left behind. And in the Czech Republic, the people who were unvaccinated were the more frail people. So we have, essentially, it's all going to be dominated by the old people. So most of the unfrail Old people got the VAX, and so there are fewer deaths, even though, if we looked at a particular cohort, like people like seven year olds, 80% would be vaccinated, 20% would be unvaccinated, but the 20% have a four times higher frailty

S Speaker 1 52:08

than everybody. Today, we have some shocking news that made the headlines a few weeks ago, but we're going to dig a bit more. We actually have Masako ganaha on the stream today. She's actually a part of the Japanese group, United citizen.

S Steve Kirsch 52:25

Okay, what's going on here? Are you hearing this? They're

S Speaker 1 52:28

actually, oh, over 20 million official vaccination records in Japan. And I

H Harvey Risch 52:35

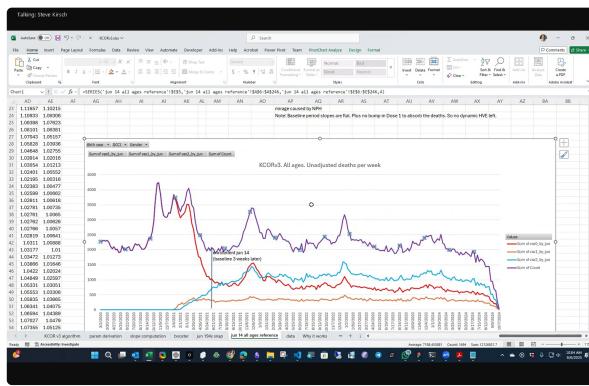
was going to show you this, but I don't know why it's playing on my Hang on a second.

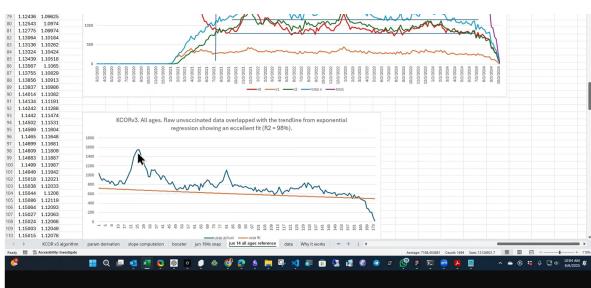
52:41

And it really does just show what we

S Steve Kirsch 52:45

there. Okay, thank you. Sorry, yeah, so, so, anyway, so this is these are how the groups die. So you'll notice that the unvaccinated slope downwards over time, and you see the vaccinated slope upwards, and that's because the vaccinated have are more likely to die. They're less healthy, so they're on, they're advanced on the conference curve to a negative slope. And that's why this, they keep dying at a at fewer and fewer deaths per week, because they're advanced on the conference curve, whereas these people are less advanced on the conference curve. Okay, so if I'm going to compare these two for my ratio up here, I need to first normalize these curves. And so I take the unvaccinated and I do an exponential trend line, and I get a 98% R squared fitting the minimums, and I actually fit it against a smooth version, an eight week moving average version of this curve, and I put a line through the bottoms, because these peaks are like covid peaks and other peaks, and I'm interested in the troughs, so





Harvey Risch 54:17

I don't so why that? You would just fit an average of those values and let the piece go up and the troughs go down.

S

Steve Kirsch 54:24

So the reason that I don't fit an average is because I'm trying to get the baseline mortality of the cohort right. So imagine we had a covid wave here, a covid wave here, a covid wave here, and, you know, it would totally distort things.

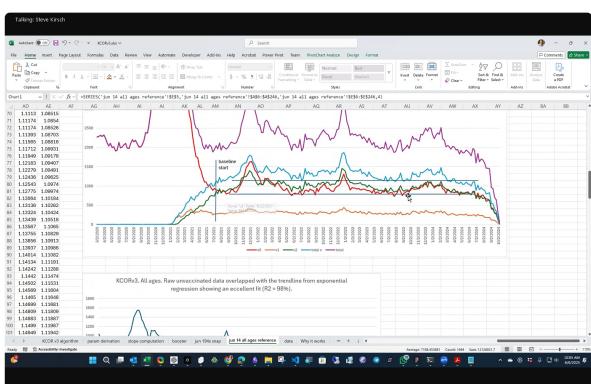
Harvey Risch 54:43

But on the other hand, you know, there was covid occurring in between the peaks, quite a bit, it was still covid. And Right

S

Steve Kirsch 54·52

right. So I'm basically trying to pick the places where there's less covid, yeah, where there's not covid. Now, in practice, it actually works out, believe it or not, this 97-98% R squared works out. And when I apply the normalization that I just showed you, you have flat mortality going through the whole period, and things look pretty straight, okay? And, yeah, okay. And



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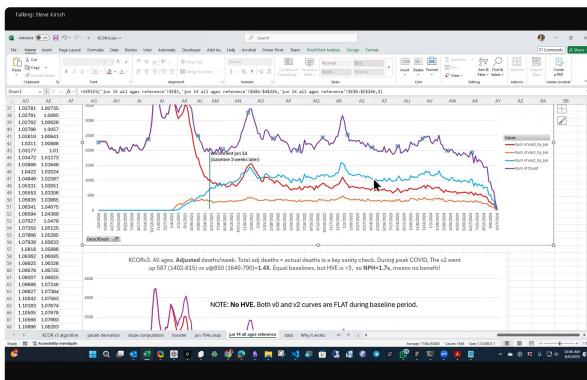
Harvey Risch 55:26

honestly, that's, that's what you're doing for, for those particular curves. Okay, fine, okay,

S

Steve Kirsch 55:32

so this is adjusted deaths, so you can see it's a flat line, whereas here it was not a flat line, okay, the deaths here are much higher than the deaths down here, whereas here it's they. Oh, I



H

Harvey Risch 55:45

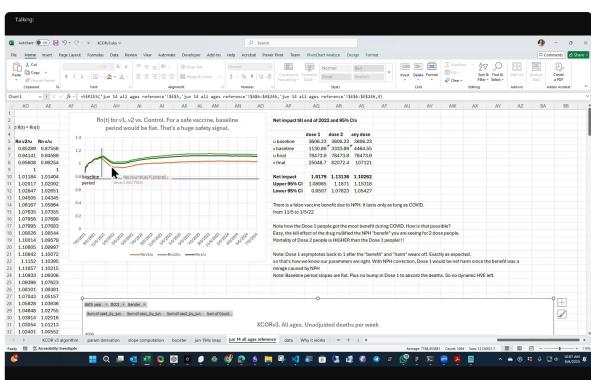
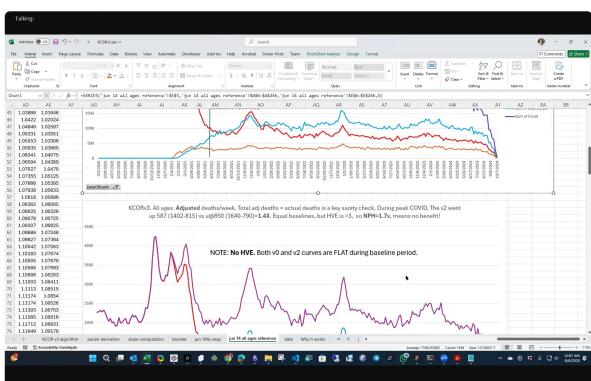
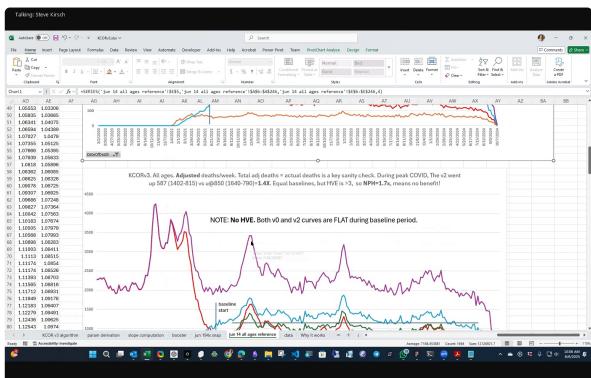
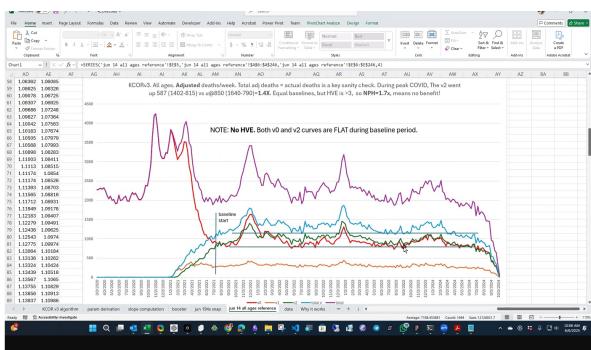
see. So you have adjusted those colored lines.

S

Steve Kirsch 55:47

I adjusted the unvaccinated, okay, and then I derived mathematically the adjustment factor for the vaccinated, and I adjusted them. Then what I did is I totaled up the adjusted curves for I adjusted this guy, this guy, this guy, which, which, and the the vaccinated sum to this which is the sum of the vaccinated. And then I added my adjusted guys. And you can see that this guy is slightly below and this guy is slightly above here, and you can see that this guy is slightly below, and this guy slightly above, and this guy, like is right on the line here, same thing. So my adjustments, which I did, met which I did, from curve fitting this one then applied it to the other guy. Basically said, great, we've canceled it out so that look, it's flat line mortality for this and flat line mortality for the unvaccinated. Okay, then I just apply the cumulative odds ratio, and I plot it, and I get something that looks like this, which says, Oh my gosh. During the baseline period where it should have been flat, we have a vaccine harm. Then there's this supposed benefit from from the covid shots. But look the unvac, the dose one people got more benefit than the dose two people. How could dose one people get more of a benefit? Well, it's because it's a dangerous vaccine, and so people who got one dose didn't get the higher mortality than the two dose people got. So they got the same effective benefit, which was nothing, and they ended up with low one higher mortality.







Harvey Risch 57:51

So why is the mortality for a few months there below one?

S

Steve Kirsch 57:41

Ah, that's because the baseline should be set right here. And I'm being very conservative to set the baseline for one, meaning no effect here, but you see the right baseline is actually down here, okay, but I don't want to get criticized, but you're correct. You're absolutely correct. So the correct baseline for no effect is down here at the start of this, because it should never be going up during the baseline period. At the baseline period, there's no covid, right? So the ratios are the same. The reason it goes up here is vaccine harm. So the baseline is actually right here. Do you want me to draw it for you to see it. It's right, but, okay, yeah,

H

Harvey Risch 58:23

but I don't understand why you saying there's no covid. This is mid 2021, when

S

Steve Kirsch 58:28

this this period here to the left of this line, there's no covid. This is the No covid period in the Czech Republic. So left of this line,

H

Harvey Risch 58:40

why were they vaccinating in that period? If, if there was no

S

Steve Kirsch 58:43

vaccinated in the period over here after alpha, okay, that's when they've actually,

H

Harvey Risch 58:51

I'm totally confused. You just showed me other graphs that well into 2020, and the and the vaccine starting on on January of 2021, right?

S

Steve Kirsch 59:02

This starts on 75 to 2021. Starts after this. Starts this graph up here, starts at this line here,

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Harvey Risch 59:14

yeah, but the purple line is showing covid back to January to March 2020,

S

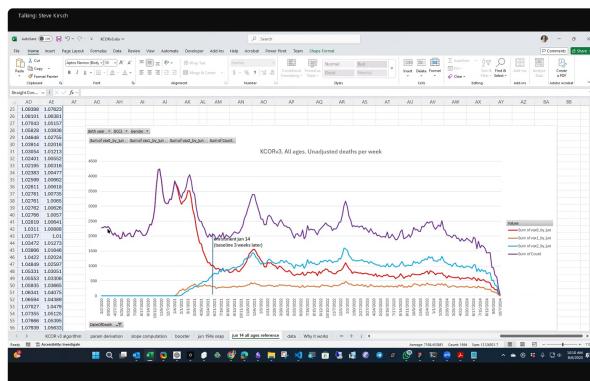
Steve Kirsch 59:19

correct. Okay, so what's your question? Well,

H

Harvey Risch 59:21

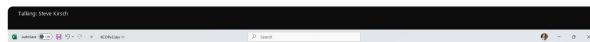
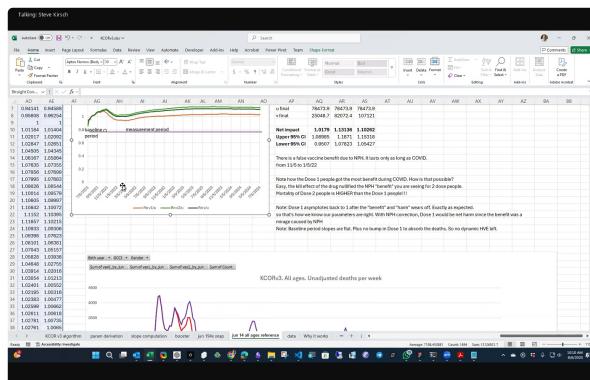
there was covid there. Why are you saying on the other one that there was no covid Before the the vertical line?

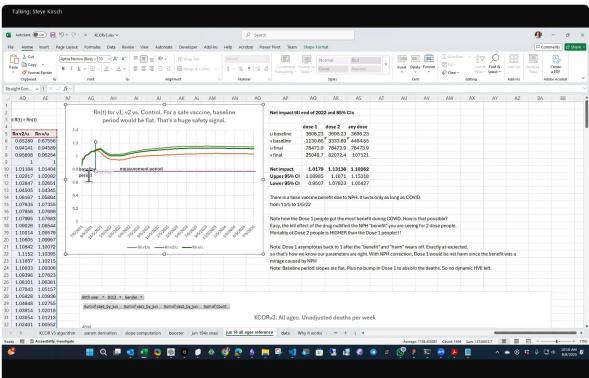
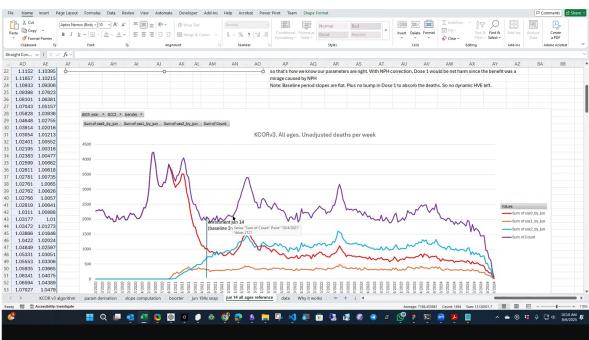


S

Steve Kirsch 59:27

Because the period that I'm talking about here. So look, so there's no covid between this line here and this, this point here, which was 10 for 2021, okay, and this is nine. This baseline period should be like, right here, okay, there is, think this is about right. I changed that the numbers on this. But here, okay, to the left of this line, there's no covid. Covid started around here. That's why there's a covid differential. If you got them,





H

Harvey Risch 1:00:11

you're not, you're not explaining Okay, away my confusion. Okay. Bottom one shows there was covid happening in the population from January of from March of 2020, correct. There's covert there,

S

Steve Kirsch 1:00:25

there's covert there, absolutely right. Here. Okay, right. So this is, this is January, right. There's covid here, January. This guy starts in July of 2021, okay, go

H

Harvey Risch 1:00:38

back to down below.

S

Steve Kirsch 1:00:40

Okay, July

H

Harvey Risch 1:00:40

of 2021.

S

Steve Kirsch 1:00:43

Is, is basically here.

H

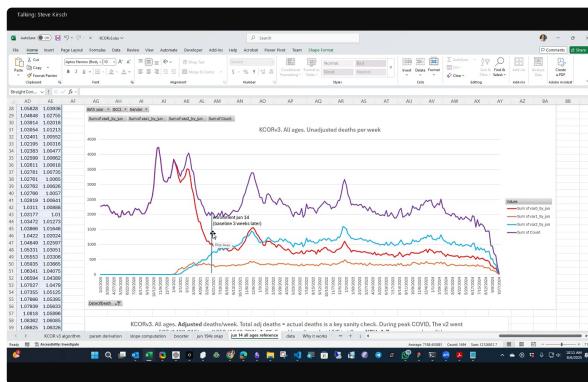
Harvey Risch 1:00:47

So covid is still going on. Oh,

S

Steve Kirsch 1:00:49

let's see. Let's see what's going on here. This is the enrollment point, okay, and this is when I start accumulating. Is 75 which is three weeks after the enrollment point. So this line here, this is at I take this line here for the enrollment, and then I wait three weeks, and then I draw this graph. I understand that there's so there's no covid in this period here to the left of this line. But okay, it's going to be this party here.



♂

1:01:18

Usually

S

Steve Kirsch 1:01:19

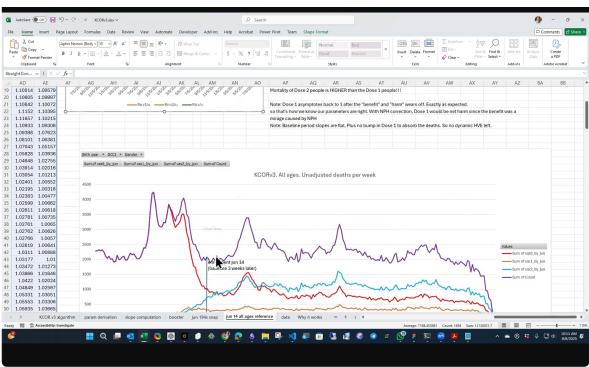
it's the state here. Just,

H

Harvey Risch 1:01:20

but there's covid happening in there. There





S Steve Kirsch 1:01:23

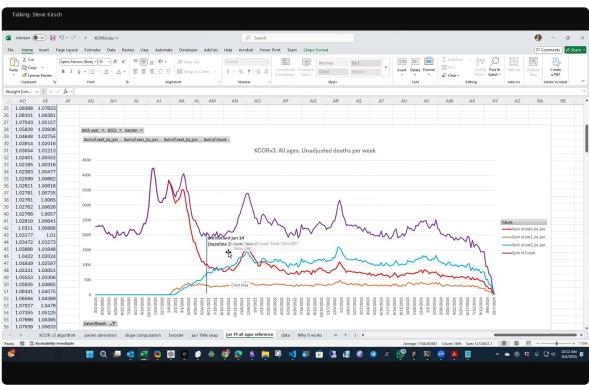
is where, course

H Harvey Risch 1:01:24

there is okay, covid happening continuously, the whole time.

S Steve Kirsch 1:01:28

No, no, no, but it's, it's, it's, this is okay. Well, maybe, maybe I'm wrong. Okay, let me here. Let me show you what our world and do you trust our world of data?



H Harvey Risch 1:01:41

Somewhat, okay.

S Steve Kirsch 1:01:43

Well, I mean, the all cause mortality data shows that there's no covid. I like

H

Harvey Risch 1:01:48

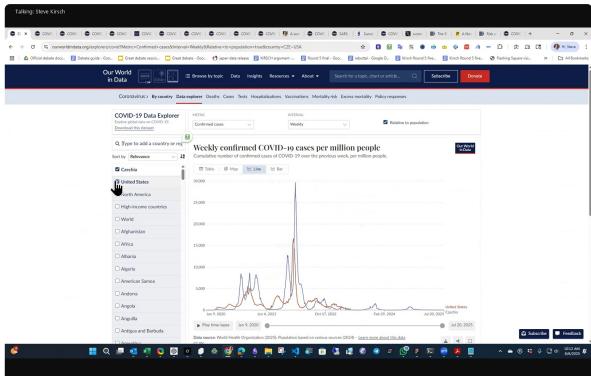
world ometers better. But anyway,



S

Steve Kirsch 1:01:50

okay, but here's the, here's, here's the Czech Republic. And let's, let's make it simple. Let's take the United States off. Okay, see this? See this period right here? Yeah, this whole, this is, this is, well,



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Harvey Risch 1:02:04

it's low, but it's, but it's not zero, okay, well, it's,

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Steve Kirsch 1:02:10

it's 79 cases, yeah, it's not zero per

H

Harvey Risch 1:02:13



day, year,

S Steve Kirsch 1:02:15

but this is, you know, when you compare that to 7000 Okay, I understand 78 is two orders of magnitude lower.

H Harvey Risch 1:02:27

I understand. Okay,

S Steve Kirsch 1:02:27

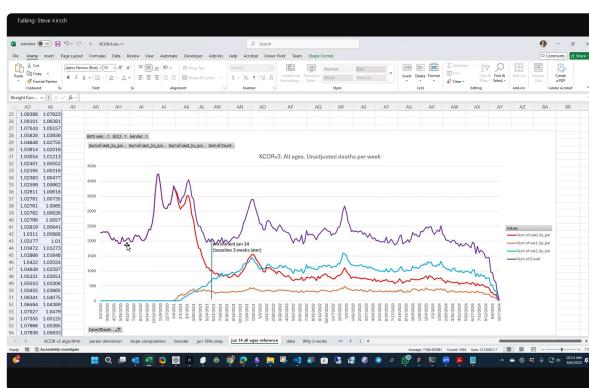
so you're correct. There's never, there's never a time of zero covid, okay, there's still seven deaths a day over here, right? And there's, there's 19 deaths a day over here, right? Okay, all right. So when I say no covid, what I mean is, is, is basically fairly, you know, relatively low covid, such that it's not

H Harvey Risch 1:02:50

the covid trough or something like that. Yeah. Okay, fine,

S Steve Kirsch 1:02:55

the right. So, so, so this is the covid trough. And as you can see, the mortality is the same in the covid trough, the all cost mortality is the same. This is everybody is dying at the same rate here in the covid trough, right? Versus the pre covid period here, before there was covid.



H Harvey Risch 1:03:19

No, that's another covid trough,

S Steve Kirsch 1:03:21

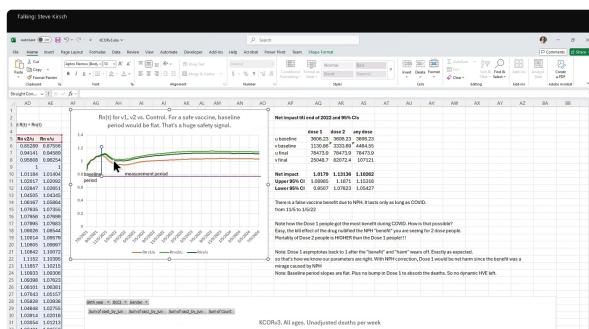
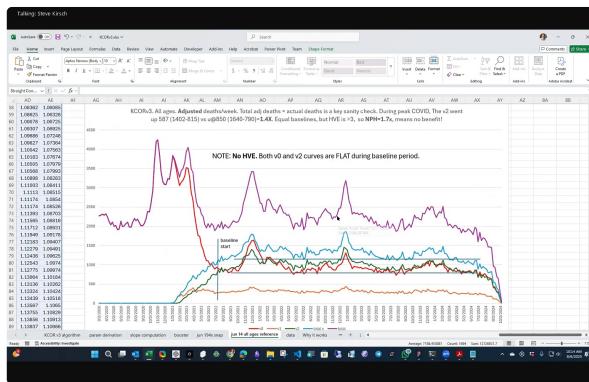
okay, but fine. The covid trough, okay, but the troughs are about the same, yeah, okay, all right, so, um, so now that I've got a norm, now I've got, this is unadjusted deaths, and then this is the adjusted does the totals are the same? Yeah.

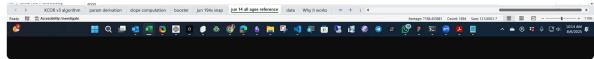
H Harvey Risch 1:03:40

And

S Steve Kirsch 1:03:41

then I take the adjusted deaths, and I just basically take the ratio of the cumulative deaths, so I'm basically integrating under the curve here, and I'm taking the ratio of the integrals, just like you would if you were looking at two investment managers, okay? And then I find this very interesting situation where, oh, look it. The vaccinated are dying relative to the unvaccinated during this baseline period where there's no covid That should not happen. And then look, there's this vaccine benefit when covid happens at the end of the enrollment period. Look, there's this marvelous vaccine benefit. But if it was really a vaccine benefit and there was no harm, then people who got two shots would be lower than people who got one shot. So, oh, now





H Harvey Risch 1:04:27

you're talking about individual risk. Not, not, not.

S Steve Kirsch 1:04:33

I'm not talking about individual risk. I'm talking about group risk, yeah, but and they're all, they're normalized to the same point, but they're not

H Harvey Risch 1:04:43

normalized to the same denominator of people. Yeah,

S Steve Kirsch 1:04:45

yes, they are. I've normalized them here. That's part of the thing. So I not only took the ratio, but then I normalized it so that in the baseline period that they would all normalize to one. And this, I normalized them to one here so that I could compare them after I've normalized them. So what?

H Harvey Risch 1:05:04

So now you've converted. Now I've

S Steve Kirsch 1:05:06

taken this to

H Harvey Risch 1:05:07

individuals rather than population mortality. Now,

S Steve Kirsch 1:05:12

well, I'm never looking at in any individuals. I'm just looking at groups and I'm normalized. You

H Harvey Risch 1:05:18

have to make the groups the same size, no,

S

Steve Kirsch 1:05:20

but that's effectively what I do here with the normalization. I say, Okay, let's normalize the ratio to one, because I'm not going to make the groups the same size. I'm just going to divide the desks in the two groups and make it one and adjust it. I'm just, I'm I'm just the groups aren't the same deaths per week, I'm going to adjust them so that this this number and the dose one and dose two people are on top of each other for the purposes of accumulation.

H

Harvey Risch 1:05:56

Okay, so now we have the question of why didn't dose one people get dose two?

S

Steve Kirsch 1:06:03

Oh, well, the reason dose one people don't get dose two is because sometimes they die before they can get dose two, and other times they choose not to get dose two for who knows, whatever reason

H

Harvey Risch 1:06:18

they became symptomatic but didn't die.

S

Steve Kirsch 1:06:21

They had adverse Yeah, they could have had adverse event. They could have had a lot of things, but the point is that those people, or they

H

Harvey Risch 1:06:28

got covid,

S

Steve Kirsch 1:06:30

or they got covid, right? Okay, and so the point is that these people were actually better off. They had lower mortality. So it's not that, it's not like they're the sick people out of the group. They're actually the people who died less. But if the if the covid vaccine actually worked, then these guys would be lower than these guys. And so

H

Harvey Risch 1:06:55

what? So why don't you? Alright, so all of this is heuristic, okay, that you've done. I'm not saying it's wrong or right. I'm saying it's heuristic. Heuristic. Why don't you, given that you see

Saying it's wrong or right. I'm saying it's heuristic. Heuristic. Why don't you, given that you see this effect? Why don't you go and actually calculate the risks per individual or per 100 individuals, the mortality rates or mortality risks in one dose people versus two or more dose people? Because you're saying that the two doses should be more beneficial than one dose, right? And you've already selected out the healthy vaccine effect, because now everybody's vaccinated and so now, and if anything, that the people who don't take a second dose do it because of negative reasons, negative experiences of some sort, for the one dose. So that's biased in the opposite direction. And then, therefore, if you have a clear signal in the risks, the showing that the two doses has higher mortality risk per individual than the one dose, you've got a much clearer, much more defensible argument about this.

 Steve Kirsch 1:08:06

Okay, well, I've done the risks by vaccinated versus unvaccinated. I can go back and I can do that on a per dose basis.

 Harvey Risch 1:08:15

Do it on one versus two or more. Yeah.

 Steve Kirsch 1:08:18

And then people will argue, well, there are two dose people are different than one dose people, and you haven't proved anything,

 Harvey Risch 1:08:24

yeah, but that's, you know, that's a much flimsier argument than saying those people are different than no dose people, yeah,

 Steve Kirsch 1:08:31

yeah. Okay, so let me do that.

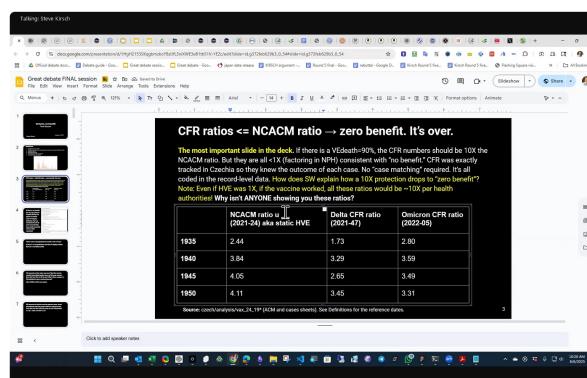
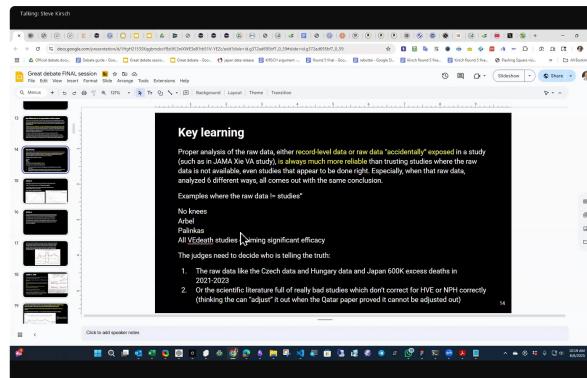
 Harvey Risch 1:08:40

The reason I'm saying is that this is a lot of very complicated stuff that makes sense to technical people like us, but is not going to be persuasive and heuristic and so on. Whereas, if you do an empirical analysis that's very simple, A versus B, you know, and look same thing, you have a much stronger case.

 Steve Kirsch 1:09:02

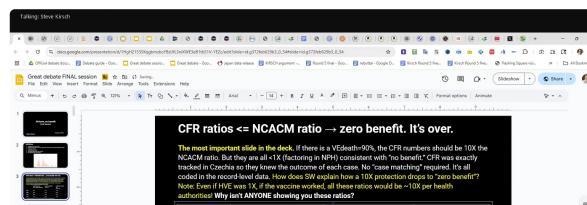
Okay, so, so let me just show you what. What I found here is I took people with at least at

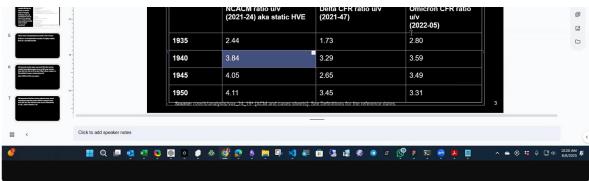
Okay, so, so let me just show you what. What I found here is I took people with it both at various times, and I looked at the ratio their non covid, all cause mortality, ratio of p of the vaccinated versus unvaccinated, okay, okay. And this is u, u over v, okay, there you go. So this is the so called static hve effect. So if you're 1950 it's 4x and you know. And then I took the ratio for Delta, the case fatality rate ratio between the unvaxed versus vaxed, and then I did the same thing here, unvaxed versus Vax for the case fatality rate. And what I found was that the



## Steve Kirsch 1:10:16

if you looked at, you know, for example, gee, you're four times more likely to die normally, but for delta, you're only 2.6 times more likely to die if you're unvaccinated. So it should have been if the vaccine did nothing. This, this 2.65 this should have been like 4.05 right? And this should have been like four, but if the vaccine was 10x effective, this should be 40, and this should be 40. So the point is that the vaccine didn't do shit. It didn't protect anybody.





H Harvey Risch 1:10:50

Well, that might be true, but as I said, this is heuristic and complicated. What what you need to do is start with something that makes plausibility sense to everybody by just calculating, for example, the risks of two dose people for individual mortality, risk of two dose people versus one dose people, yeah,

S Steve Kirsch 1:11:10

okay,

H Harvey Risch 1:11:10

the same way you can you compared Pfizer and moderna,

S Steve Kirsch 1:11:14

yep, okay,

H Harvey Risch 1:11:15

in the check data, that's much more believable. It doesn't give you a baseline, but it tells you one of them is pretty bad, you know, if not both, here you can show that, if you have a counter plausibility thing, that the two dose, so

S Steve Kirsch 1:11:30

you like the dose, you know, the relative risk of the of two dose versus one dose, yeah, for a given age,

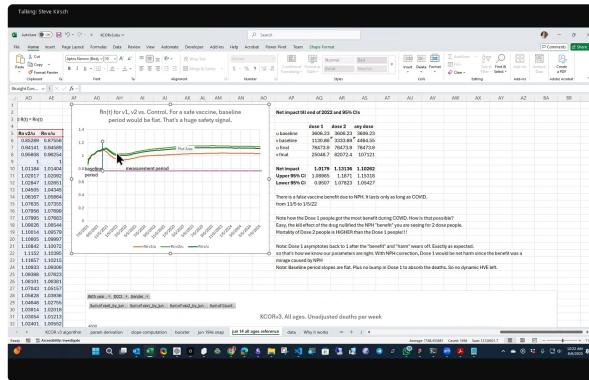
H Harvey Risch 1:11:38

yeah, exactly

S Steve Kirsch 1:11:39

of dying. Yeah. Okay, so great, I can, I can easily get that. Okay. So back to our chart here. So

the So, the point is that what this means is that that this is really a mirage, okay, but you can see that the the deaths go up over time here, and then it flat lines, right? And it's, and it'll, it'll flatline, and this will asymptote back to one. Because, unless you're so what it looks like here is the mortality. When you get the shot, your mortality increases relative to the unvaxed and then stays flat over time. It goes down, it goes down a bit, right? Okay, but this is, you know, the point is that these curves are extremely plausible. And if you're if you only got one shot, then you got some harm here. You got some harm here you it's got some supposed benefit, but you asymptote back to to one, which is what you expect, right? Less, less intervention, more likely to asymptote back to normal after the intervention.



H

Harvey Risch 1:12:52

Well, to epidemiologically speaking, we don't actually know this, because cardiovascular diseases in cancer haven't had enough time.

S

Steve Kirsch 1:13:00

No, I know that. I know that, but that's why it's, it's, it's, it's relatively still elevated, saying that you're, you're worse off your baseline was probably down here. You're worse off if you got one shot. Yeah, and it, I have some

H

Harvey Risch 1:13:13

data I want to show you in a minute. So, okay, all right, so,

S

Steve Kirsch 1:13:18

so then look at the so I did it for 1940 just so we could get a very discrete age range. And the same thing happens,

H

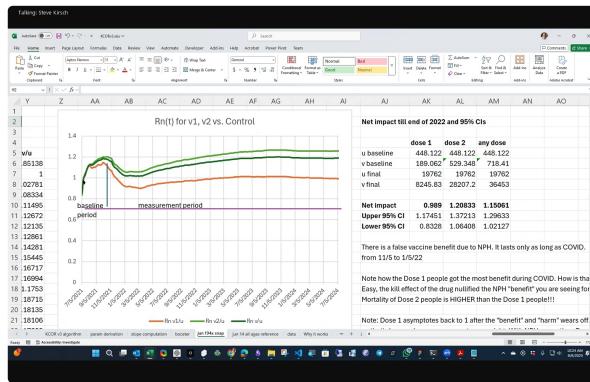
Harvey Risch 1:13:30

yeah

year,

## S Steve Kirsch 1:13:31

asymptotes to one you got more shots. Look at your harm going up, relatively unvaccinated here, yeah, and it goes up and then it sort of plateaus. So your harm is done over this period of here, which is what you saw, the levy study.

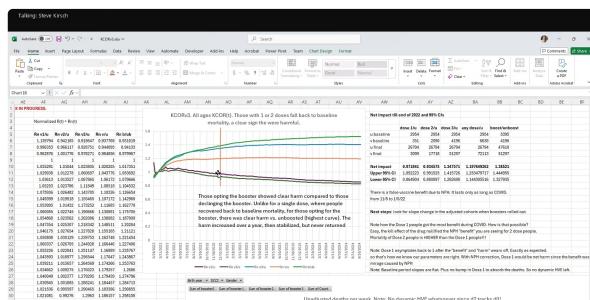


## H Harvey Risch 1:13:48

I'm probably, yeah, I think so levy

## S Steve Kirsch 1:13:50

a lot of post study, yeah. He said, Oh, you know, these vaccines harm you over the entire period. Yeah. So, so it's really, it's going up here, and then it plateaus. And then, then you have to live with it. And then your, you know, clots resolve, or whatever, and and it goes down. So very plausible. This is night. This is 1940s you know, this is a 20% increase. Now, if you look at the booster, what it shows is that, if so, these are the various booster curves. So this is dose one, dose two people, and this is vaccinated versus unvaccinated, and this one is dose three, and this is boosted versus unboosted. So you have all sorts of different comparisons here. So boosted versus unboosted is dramatic, right? You get that booster shot compared to anybody else you're in. It's it's out of sight. It's 34% at the end of





H

Harvey Risch 1:15:03

all. Right, so then 2012 we just said about comparing one dose versus two, then compare three or more versus two.

S

Steve Kirsch 1:15:12

This is, this is three versus Oh. You want to compare three versus two, yeah? Okay, well, I could add it, add a line to do that.

H

Harvey Risch 1:15:22

I'm talking about calculating the mortality risks, not the mortality numbers.

S

Steve Kirsch 1:15:31

Yeah, okay, so the mortality risk, as in the CMR risk, or as in as one no, the hazard like, hazard rate likely to die.

H

Harvey Risch 1:15:47

Yes. Okay, that's what we're talking about here. Two versus one, two.

S

Steve Kirsch 1:15:54

So the hazard rate at a specific end point, like one year later, or six months later, or what I mean, we could do it. We could basically do it three months later. Can I show

H

Harvey Risch 1:16:07

you my screen?

S

Steve Kirsch 1:16:09

Sure, so this is the whole thing, so that'll make sense to you. Let me

H

Harvey Risch 1:16:16

so you have to enable sharing.

S

Steve Kirsch 1:16:18

yeah, so here, so let me go here. Here should be good now. So do you like the method? I like

H

Harvey Risch 1:16:33

the method for heuristic purposes. That's what I said. Yeah, I don't you're gonna have you would have trouble publishing this as as science, because it's engineering that's heuristic work and give you an empirical answer, you know, to address something which is what I call engineering, as opposed to, I'm proving this statistically with statistical theorems and proofs, you know, and data that derive from that. Well, I mean,

S

Steve Kirsch 1:17:00

if I had a math stat derivation of the of this method, would that help?

H

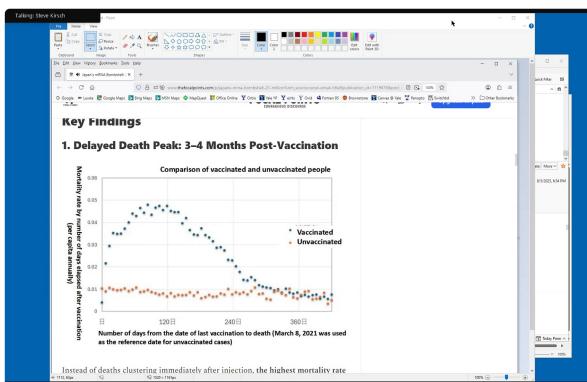
Harvey Risch 1:17:08

All right, so now let's see. So are you seeing,

S

Steve Kirsch 1:17:12

yeah, I see it this, yeah. So, so what you're saying is that what I've done is valid and the conclusions are valid, but that epidemiologists are going to have a hard time with it correct,



H

Harvey Risch 1:17:25

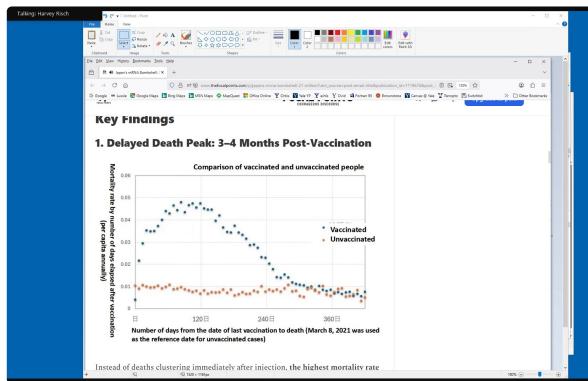
and and everybody, and doctors and everybody else, right, because

 Steve Kirsch 1:17:28

it's basically it doesn't fit their paradigm.

 1:17:30

That's right,



 Steve Kirsch 1:17:32

not because they're, they're,

 Harvey Risch 1:17:34

they're, they're normal

 Steve Kirsch 1:17:36

way of looking

 Harvey Risch 1:17:37

at population and science worldview,

 Steve Kirsch 1:17:41

right? Because they're but if this were like, validated with mass stat and published in the peer reviewed literature, then they'd suddenly accept it, right? No,

H

Harvey Risch 1:17:48

no. And the reason is because what you're doing is you're calculating all these averages and asserting that these are meaningful it's not that's not a proof of their meaningfulness. Okay, it's it's a plausibility argument that they're meaningful. You can calculate and prove equations all you want, but the question is, how accurately do they apply to particular data, and what is the meaning of that application? And that is a subjective scientific worldview that's not provable in the first place. That's why I'm talking about as this being heuristic, because you can't prove these kinds of things. You can only calculate them and claim that they're more or less useful, because you have an engineering background that says this is how I would normally do I count the

S

Steve Kirsch 1:18:35

deaths. I count the deaths Right,

H

Harvey Risch 1:18:37

right. But I'm saying that epidemiologists are interested in per person, mortality risks, the hazard ratio that you put it anyway, look on these Japan data. Yes,

S

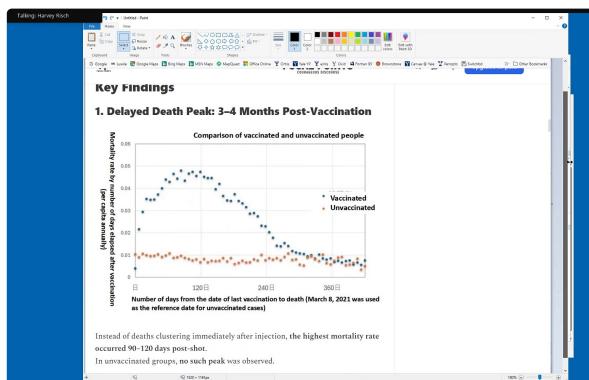
Steve Kirsch 1:18:47

I'm aware of that. Okay, so,

H

Harvey Risch 1:18:50

and the next one that I was going to get, except that the voice started speaking, shows it by different with different numbers of doses, and anyway, and shows that that is, this is a dramatic peak in mortality. However, it does seem to go back down by a year.



S

Steve Kirsch 1:19:15

Oh, because, yeah, because it's, I think it's a time it's basically a time series.

∅

1:19:25

Well, these are

S

Steve Kirsch 1:19:27

Yeah, so do you like that? Do you like that as a as a proof

H

Harvey Risch 1:19:32

this as a confirmation of consistent empirical data showing substantially increased risk, mortality, risk per person by among vaccinated than unvaccinated people over a year, right?

H

Harvey Risch 1:19:54

And let me just do one other thing, so,

S

Steve Kirsch 1:19:56

right, right, but that could, that could be age confounded too, right? This is a mortality rate, but for a whole for a whole population,

H

Harvey Risch 1:20:09

how do I get back to not sharing?

S

Steve Kirsch 1:20:12

You want to not share, you'd have to stop. You hit the Stop Sharing button. I

H

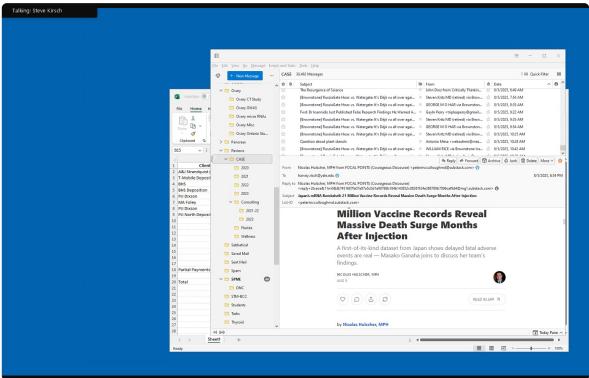
Harvey Risch 1:20:19

don't have a stop sharing button, you

S

Steve Kirsch 1:20:21

should in zoom. I have



H

Harvey Risch 1:20:25

all I have is a share.

S

Steve Kirsch 1:20:27

Okay, here, let me, let me flip that.

H

Harvey Risch 1:20:31

All right. Hang on a second. Do

S

Steve Kirsch 1:20:33

you want to share again or

H

Harvey Risch 1:20:38

so we hear. All right. I um,

H

Harvey Risch 1:20:45

what I'm going to do is I'm just going to get a capture this, so ignore the voice if it starts again.

O

1:20:58

Oops, I lost it. I'm here we are

H

Harvey Risch 1:21:12



Harvey Risch 1:21:12

now. I understand why, what happened before, and this goes here.



Harvey Risch 1:21:27

And now go back to screen. Share.



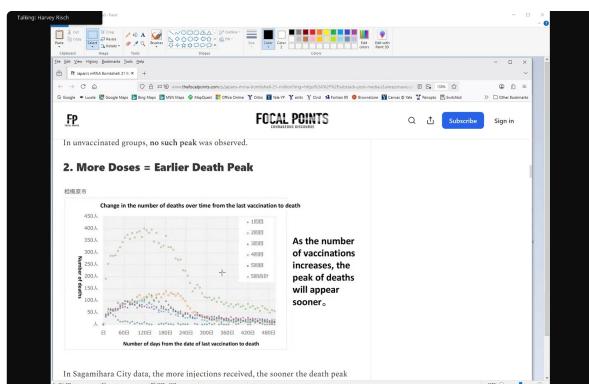
Harvey Risch 1:21:42

Okay, all right, so now here is not by number of vaccinations, okay, and these peaks change. It's hard for me to see the symbols. These round ones is five or more, more than five doses the red x's,



Steve Kirsch 1:22:09

yep, are Yeah, no, I've seen this and so on. And



Harvey Risch 1:22:18

so I think these, these are strong evidence. All right, so I'm done sharing.



Steve Kirsch 1:22:23

Okay, all right, so let me



1:22:27

here, there.



Steve Kirsch 1:22:29

 STEVE KIRSCH 1:22.29

Okay, great. So I have a time series. Let me, let me show you my time series here. But these are individual

 Harvey Risch 1:22:35

risks. This is more, you know, mortality per case fatality rate per per week. I think that they're calculating there,

 Steve Kirsch 1:22:45

yeah, so let me show you the anyway.

 Harvey Risch 1:22:55

I'm kind of running out of time here. Yeah, yeah.

 Steve Kirsch 1:23:03

Uh, here we go. So here's the time series. This is time since the shot. So here's the the flu vaccine. Time since the shot, mortality goes down, okay? It's an old age group. It's people who died in Medicare. All right, this is the pneumococcal vaccine. Same thing.

 Harvey Risch 1:23:26

You know, I don't see them yet. Oh,

 Steve Kirsch 1:23:30

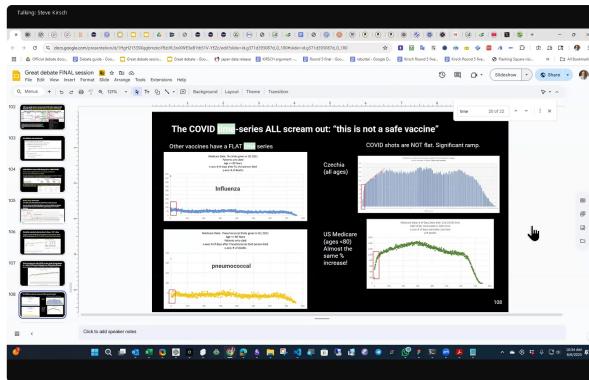
wait a minute. Did I what did I share? Do you see anything? No, oh, okay, let's go zoom here. Sorry, my mistake. All right, here share. All right. So,

 Harvey Risch 1:23:51

okay, I see, okay,

 Steve Kirsch 1:23:53

so let's go slideshow. All right, flu vaccine, straight line, yeah. Pneumococcal vaccine, straight line, down



H

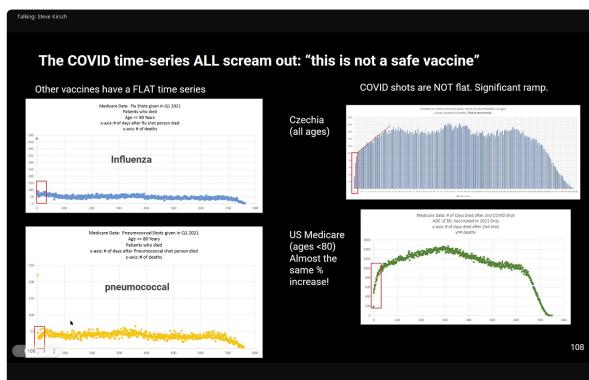
Harvey Risch 1:24:07

more or less for longer time periods.

S

Steve Kirsch 1:24:09

Look at the covid vaccine. This is the this is the dynamic hve and then look at this. This is what we saw in my graphs as well. But this is a time series. This is the number of deaths since the per week since the shot was given. So this should be flat. This thing should the graph should look like this, right? The shots are given. The graph is flat. For the covid vaccine, the shots are given, there's a healthy vaccine effect in the first three weeks here, because we don't vaccinate people who are about to die, right? But then you see this dramatic increase from 1000 to 1400 and then this thing dies off just because they they run out of time to die here because of when the time series was taken. So but for the check, you can see that it right. It rises quite dramatically, almost doubling or maybe doubling, and then it maintains the level. And then we just run out of time to die at the end. So this time series is equivalent to what the Japanese saw right here. Well, there



H

Harvey Risch 1:25:35

was a peak, you know, in the three to four months period.

 S Steve Kirsch 1:25:40

Well, the the these peaks, the these annual peaks, right? Because this is, this ends up being like December or so. So you can see, December, yes, there's a peak here. It goes up by this and this, yeah, but

 H Harvey Risch 1:25:53

their peak went up dramatically, way, way, order of magnitude bigger than these peaks.

 S Steve Kirsch 1:25:58

Well, if their peak went up dramatically, then this peak would be higher than that peak. And it's not,

 H Harvey Risch 1:26:05

I don't know. Well anyway, I've got to go. This is interesting. I think you have some good data here, but I would simplify it the way I suggested, to present it by vaccine dose.

 S Steve Kirsch 1:26:16

Okay, yeah. So basically, if you have this dose dependency where dose two had a higher hazard rate than dose one than your then you should be done? Yes, because the dose one and dose dose two people are just differ by which dose you got, not by well,

 H Harvey Risch 1:26:35

people who didn't get dose two are ones who had some negative outcome from dose one,

 S Steve Kirsch 1:26:41

right? So the dose one people should have higher mortality, right?

 H Harvey Risch 1:26:44

So, so dose one should have higher mortality, right, right?

 S Steve Kirsch 1:26:48

And so dose one, if does, one has lower mortality, then, then that's a huge safety signal. That's

right. Okay, cool, thank you.

H Harvey Risch 1:26:56

All right, good, good to talk to you. All

S

Steve Kirsch 1:26:58

right, thank you. Bye. You. Sorry. I'm.