From New York Times Opinion, this is the Ezra Klein Show.

Hey, it is Ezra. I am on book leave, but this week, taking a turn, the mic is David Walliswells. He is a Times Opinion writer. He's the author of The Uninhabitable Earth, Life After Warming. And I just think that over the past couple of years, not just his work on climate change and biodiversity loss.

but also his work particularly on COVID has been absolutely fantastic.

So I asked him to come on and do a couple shows around these themes. I hope you enjoy.

This summer, the U.S. reached an important pandemic milestone. According to multiple measures, the number of Americans dying today looks pretty close to what it looked like just before the pandemic hit.

As my colleague David Leonhard noted in July, you can make a pretty good case that this data shows the pandemic is finally,

mercifully over. But over the last several months, I've started to worry that even as we put COVID-19 somewhat in the rear view mirror, we're still not seeing the experience of the pandemic very clearly in hindsight.

Officially, more than a million Americans have died of COVID, but somehow that unbelievable fact isn't really the center of our story about the last three years.

We're not properly mourning or grieving a million deaths. Instead, we're arguing about school closures and mask mandates

and the wisdom of the enormous economic stimulus. It doesn't feel like we've all just lived through a world historical trauma.

It feels like we're putting the pandemic to the same trivial, often partisan purposes we put everything else.

In the spring, as congressional hearings led by Republicans on the early days of the pandemic got underway,

the epidemiologist Caitlyn Jettelina wrote an essay on what she called this revisionist phase of the pandemic.

I think that idea, revisionist history, offers perhaps the clearest description of the country's strange relationships with the pandemic right now.

And so, as the country moves on from the COVID emergency, I wanted to invite her on the show to talk about that revisionism in all its forms.

As always, you can email the show with your thoughts and guest recommendations at EzraKlineShow at nytimes.com.

Caitlyn Jettelina, welcome to the podcast.

Yeah, thanks for having me.

So, I wanted to start by asking, how do you think we ended up here, more than 1.1 million officially dead?

And seeming to argue less about how we could have saved more of those lives than about things like whether the FDA rushed to approve booster shots for the young.

How did that happen?

I don't know if we had a lot of time to really process what happened the past three and a half years. As an epidemiologist, we've just been going 2,000 miles per hour, just trying not to crash into a quardrail.

And I think we're finally at that stage where we can look back and process and reflect and define

what those lessons were learned and how we can do better and be smarter in the future.

Back in March, I claimed that we were entering this new phase of the pandemic called revisionism.

And I think there's an attempt to revise 2020 really under the comfort of 2023 vaccines and treatment and immunity.

And I think there's a couple reasons for that when there's bad actors.

There's also really a lack of nuanced discussion around trade-offs today, but also it's just a normal human response.

You brought up the 1918 flu pandemic, but how we remember and make decisions is largely driven by our experiences.

And it makes it easier to remember certain things while forgetting others.

And there's many biases contributing to this.

So I think we're in a really tough spot.

The past three and a half years were really tough for the United States, particularly because we thought we were prepared and we were not.

And it really tested our morals, our values, our psychology and our culture in the States as well. You wrote recently that humans don't like being reminded of their vulnerabilities.

It brings out a lot of hate and anger.

And I've had a sort of a similar intuition for a while that we've argued about our response to the pandemic sort of pointing our fingers at one another in part as a way of telling ourselves that it didn't have to be so hard or so brutal or full of quite so much death.

I wonder if you could talk a little bit about the way that we've been sort of projecting our frustrations or despair onto one another, the way that we are engaging in revisionism rather than reflection at the moment

and how that's messing up our picture of what we actually live through.

Yeah, I think the natural human responses that we've all been through hell the past three and a half years and what that looked like was very different for different groups of people.

And we all want someone to blame, honestly, and it's hard to blame a microscopic virus, right? It's easier to blame other humans for mistakes or things that we didn't agree with.

And I have been particularly reflecting in this space of just how much hate I've received the past three and a half years by being on the forefront in public facing of this pandemic, death threats, microaggressions, doxing, pretty terrible things.

And the one thing I can reconcile with is that when people don't like being afraid, people don't like not having answers.

And once we get through and we say, whew, that was over, you know, we survived, that sucked, but now things are good.

We're wanting to resolve that inconsistency and many people discount how bad things were then instead of focusing how good they are now.

Tell me how you see that point in particular, like how bad were things in 2020?

It was bad.

Early in 2020, it was horrible because, I mean, I just remember seeing body bags and refrigerated trucks.

I distinctly remember that Red Cross ship passing by the Statue of Liberty.

I think that was in March of 2020.

And those were all very scary things.

I think the other really scary thing as scientists that we're trying to determine policies and walk 330 million people through this experience was how little we knew as well.

It's easy to forget how many questions we had in the beginning.

And as we got questions answered as time went on, it was even more challenging to bring the public along for the scientific discovery ride.

And I think early Fauci said 70,000 Americans.

If anyone said in March of 2020, 1.2 million Americans, you would have been laughed at.

You know, I worked for the New York Times.

We sort of famously put a banner headline across the front page when 100,000 Americans died and listed them.

And that was an effort at some kind of public grieving, public mourning.

But we basically never indulged that impulse again.

I mean, we're at 11 times as many deaths and most of those milestones, 200,000, 300,000, 800,000, even a million.

Most of those passed with much less fanfare, even though the death totals are much larger.

When I hear you talking about the sort of grim memories of 2020 in particular, you know, the right crossboat, the body bags.

I also think about, you know, the temporary morgues that were set about side of hospitals.

And I also remember a time of great panic and tangled up in that panic was already, even from the start, a lot of partisanship and polarization.

And one of the things I heard from quite a lot of people on the left was if we had had someone else in charge, we would not be dealing with this.

That's something like a zero COVID outcome would have been possible with a different president. But when I look at the comparison set across our peer countries, the U.S. did do worse than most of the countries it thinks of as its peers, both in the first year of the pandemic and overall.

But especially in that first year, the gap between how poorly we did and how poorly everyone else did seems relatively small, all things considered.

And I want to talk about the partisan dynamics and dimensions to that in a bit, but I wanted to ask you first, just given how almost uniform the brutality of the disease ended up being across the rich countries of the world.

where you have say Europe as a whole, I think on a per capita basis, they had about 80 or 85% as much death as the U.S. did.

How much of what we lived through, how much of that 1.1 million deaths, how much of that pandemic brutality overall was avoidable in your view and how much of it was in a way that we may be quite uncomfortable acknowledging

the inevitable result of just this disease infecting and growing through this population on this planet in this year at this time with our politics.

Yeah, so you're right. The United States is one of the leaders in excess deaths during this pandemic, and it's only natural to compare to other countries and even comparing across states.

I think politics had a lot to do with it, but there was also really decisive politics in other countries and they didn't do as bad.

And so I actually think one of the main reasons was because of our underfunded fragmented public health system in the United States that this COVID-19 was just a different beast and coordination across all local and states was close to impossible. Talking about data infrastructure is one of them.

Another one is communication. I still think we're doing a terrible job in communicating to the public on a national and even sometimes local level on what's going on, bringing them again along for the scientific discovery ride.

So there's that public health system that's underfunded that a lot of countries actually fixed from past epidemics.

For example, I always look at Vietnam. They didn't do a great job with SARS in 2003, but after that they created a new public health system from the lessons they learned and that really paid off for them

The other thing that we can't ignore in the United States is that we just didn't have a lot of wiggle room to mess up. We hit hospital capacity in a bad flu year, not even given a pandemic.

We also have very little safety nets for populations like health insurance, sick paid leave, which a lot of other countries do have like the UK or Sweden or Denmark.

And so, yes, I think politics fueled a lot of decisiveness, but I also think much deeper underlying factors also played a very big part.

And in thinking about those challenges and those deeper underlying factors, in theory we could be responding and walking out of this pandemic and committing ourselves to a real rededicated effort to build out our public health authority, build out our public health infrastructure.

But as you noted earlier, when you mentioned that phrase pandemic revisionism, we're doing a little bit of that. We're trying to take measures now that might help us in future pandemics.

But at a sort of a cultural level, at a level of discourse and political debate, we seem to be doing almost as much forgetting as we are returning and reforming.

And I wonder if you could just tell us a little bit about what in particular you meant when talking about pandemic revisionism. What did you have in mind when you wrote that piece?

I think the bottom line is that revisionism is something that us humans are designed to do, that we, again, remember and make decisions largely based and driven on our experiences.

And part of that is psychological resilience, and some of that is biological, right? To wade through all of the information and all of the experiences we went through the past three and a half years, we have to use shortcuts.

And our human brain isn't like a computer. It's not just like data in or data out. The way we think about things is not purely logical. Biasies have a large effect on memories.

So it is part of this cognitive dissonance that early 2020 was horrible, but things are much better now. And we can reconsider this big past event, and it can feel off-putting or inconsistent, but we want to resolve that inconsistency.

So many people discount how bad things were.

And one thing that I think really help with revisionism is having a serious conversation about the COVID-19 pandemic and how to prepare for the future.

Like you said, we seem to be entering the cycle of panic and neglect, and this cycle is not new for public health. We go through this cycle of panic and neglect every single emergency in the United States, and it is quite exhausting.

And we need to figure out a way to get out of that revolving door, so we are better prepared for the future.

It seems to me that there's a sort of a growing consensus everywhere you look, not just on the right, that as a whole we went a little too far.

And I'm curious how you tell that story, but the data points that spring to my mind are something

like three dozen states have passed laws restricting the future use of public health authority, polls show, declining faith in public health and in vaccines.

Many Americans feel quite sure that schools stayed close too long, and if they ever should have closed in the first place, we can talk about schools in a little bit more detail later.

But when the Times conducted a survey of epidemiologists and public health figures a few months ago about how we might respond to a future pandemic, the prompts they gave was that they were facing a novel disease that was more infectious, more deadly, and didn't have the same age skew as COVID,

which means that young people were just as likely to die from this imagined new disease as the old one.

And yet almost every expert weighing in on every policy question put to them advised that in response to that new disease we should do a little bit less and respond with a lighter touch than we had with COVID.

How do you think about this national move? It's not all the way to let it rip, but if we were living in a way that was animated by a lot of fear in 2020, it seems to me like we're living now or thinking about COVID now in ways that have much more to do with some mix of excess confidence or fatalism.

Though those sound contradictory at a policy level, they kind of end up in the same place. How do you think about why we're there and where that's pulling us now?

I think there's several reasons. The one big lesson that I learned that we were never taught in in school, for example, was that policy isn't just determined by epidemiology or science.

It's dependent on psychology, culture, resources, competing demands, morals. I was an epidemiologist helping lead the response in Texas, and I will forever be grateful for that because the one thing it taught me was to listen.

Like really listen, not just hear, but listen to the competing demands, the risks and the benefits, putting the public back in public health.

What would that look like? I recently went back and looked at the pandemic policies, particularly in the pre-vaccine period, so basically across 2020.

I was really surprised to see how much, at the state level at least, how much unanimity there was in terms of what are often called lockdowns, school closures, business restrictions, social gathering restrictions.

There was a lot of difference at the level of rhetoric from leaders, but when it came to the actual measures that were put into place, for most of that spring and summer and even by some measures into the fall, we were moving somewhat in unison.

Did you feel at the time in Texas that there was a real groundswell of opposition and resistance was growing and could be alleviated if concerns were listened to, and how could we do better in listening to the people who might have felt boxed out of those conversations?

I absolutely saw what you were saying. The spring summer of 2020, I felt like everyone was on the same page, whether it was Republican state or Democrat state or rural or urban.

And then the school debate started in late summer of 2020, and I think that this is where we started seeing a difference in values and a difference in priorities depending on where you stood and where you were.

And so I think that really started fueling this. Of course, you then also had the Nevermaskers becoming more and more loud in fall of 2020. And then once vaccines hit, you have disinformation sowing a lot of doubt.

But also, people were starting to get protected. And what that meant, the risk calculus started changing over time. And I think because of that, on an individual level, values became louder and louder.

And how do we do it better in the future? Other than truly having an ear to the ground and communicating and framing things that it's not us against each other, it's us against a virus, it's not the economy against public health, it's them together, is a billion dollar question.

And I am not convinced that we will do better next time with this because, again, we just haven't had a really serious conversation about the risks and benefits.

Yeah, I mean, this whole subject raises to me what's a kind of huge looming question, which is, how well did our mitigation measures actually work? How do we know how well we did in the pre-vaccine phase? What do we know about what impact things like school closures and masking and social distancing had on the spread of the disease?

There was a big paper that came out a couple weeks ago, I think, showing that overall, in the aftermath of vaccinations, Republican voters were 43% more likely to die, I think, than Democratic voters, which is a mind boggling effect.

But almost just striking to me was that in the phase before vaccination, there was no difference at all. And that matches some other studies that have been done.

And I wonder, you know, thinking both in a state-by-state comparison way, a community-to-community comparison way, thinking about the international level, how do you think about this whole suite of things we did in 2020 to stop the spread of the virus?

And how should we think about, to what degree we might want to think about implementing them or revising our policies? Should we be faced with a similar set of dilemmas or decisions sometime again soon?

I think this is why I'm having a challenging time answering your previous question, is because we do not know how mitigation measures compared to vaccinations, for example, in terms of mortality.

So we know vaccinations saved more than 3 million people in the United States. That's a pretty easy analysis that the Commonwealth Fund just put out a few months ago.

But beyond that, we still do not know what works best to slow the spread of COVID-19 in terms of non-pharmaceutical interventions.

For example, test and trace or isolation or quarantine or indoor mask mandates or closing venues. And this is very surprising to me because that means we still can't answer important questions like you're asking, like their effectiveness, or even more importantly, the trade-offs.

We can see in the scientific literature that prolonged shelter in places are linked to, for example, harmful alcohol use.

But how does that compare to uncontrolled viral transmission? We don't know.

And these analyses are incredibly complicated to do accurately, but I think they're equally important because we need these answers to be armed with better knowledge to do better next time.

And unfortunately, these difficult questions don't win a lot of political points.

And I think one of the reasons why we're not finding answers right now.

Can I ask you just in particular, like what you think about, for instance, the effective school closures on spread or the effective masking on spread?

I mean, do you think that we can talk about that in meaningful detail or do you think it's still a kind of a black box that simply requires more study and more scrutiny?

Well, we can tackle masking first. Everyone wants a one-word answer to this question is, do masks

work?

But there's a whole lot more nuance. You know, these three words strung together beg several loaded questions.

What does work mean? What kind of mass? During what period of transmission? What disease? What social context?

So it's a really complicated question.

So when I think about masks, I really divide it into three buckets.

One is, can masks physically stop droplets and aerosols coming in or out?

This is a physics question and the answer is yes.

We've seen many lab studies with SARS-CoV-2 that show that the number of particles inhaled by someone is stopped by masks

and the number of particles emitted by a person in a lab is stopped by masks.

The better the mask, for example, filter and fit, the better the stop of transmission.

So we have that physics lab. That's obvious.

The second question is, do masks work on an individual level?

So if masks work in the lab, they must prevent infections among individuals in the real world.

But that's not necessarily correct because tightly controlled environments are very different than the real world.

And we've seen that, you know, some people don't wear them correctly. They worm at different frequencies.

And then the third bucket is, and I think this is where you're getting at with the huge policy question is,

if masks work in a lab and sometimes on individuals, then if hundreds and thousands of people wear them perfectly and imperfectly at one time,

do they reduce transmission during a pandemic?

And this is a guestion we do not have a good answer to.

Theoretically, masks will reduce the risk of transmission if they do so on an individual level.

Because when a community masks, those small effects compound exponentially across the population, which would make a dent in cases.

But how much masks reduce transmission in a population is not an answer we have.

There's been very few studies that have looked at this.

And among the few studies, there's a huge range of around nine to 45% reduction in transmission with community masking.

And this range means that these studies were done in different settings and different cultures.

So many unanswered questions remain.

So if you say, do masks work, I guess my answer would be yes.

But how much they work during a pandemic is and what that again, that trade off is with social, moral, cultural factors during an emergency is something we need to understand a whole lot more.

Well, I was struck over the past couple of years by just how much backlash it also produced.

I mean, my view throughout was that even if masks only reduced disease transmission by 10%, which is an effect that's meaningful, but on the margin.

I still think, what's the cost to me of putting on a mask when I go into grocery store?

What's the cost to me of putting on a mask when I get on the subway?

It just doesn't feel like such a large imposition, even over a pretty extended period of time, even if it

has some amount of real benefit to the broader population.

And it just feels like that was not the way that many Americans thought about masks.

In fact, I often hear people talking about the experience of the pandemic, like they describe any period of time in which they were even encouraged to wear a mask as though it was like the equivalent of lockdown.

And I view it as much more a tool to allow us to continue to operate somewhat normally with a few additional protections to protect the people around us.

The backlash just seems to me at least huge compared to the imposition, but maybe more importantly, we just don't have a very good idea of how to balance that risk of backlash against the ultimate benefit.

And maybe you could say the backlash was worth it if it reduced cases by 50%.

But if you're just a 10% and you're introducing a policy or policy guidance that ends up eroding trust in public health authorities and ultimately maybe diminishing vaccine uptake down the road, it seems like a trickier question to answer in any definitive way.

Oh, it's a super tricky question.

I think what it comes down to is that masks were used as a symbol of tribalism.

And so masks were politicized.

So whether you wore a mask or you did not wear a mask showed exactly what tribe you're in. And that was a very dangerous thing to play with, making public health measures our tools, which we have very little of out of population level, a symbol of bipartisanship was dangerous.

And I think it's going to hurt us during the next pandemic and even during our respiratory flu seasons as well, because it does help on an individual level.

And I wish it wasn't made into that symbol.

Well, another thing that was polarized almost from the start, but certainly in the more recent years was the kind of counter example of Sweden.

I wonder if you could talk a little bit about how you saw that country's approach, maybe how you understood it at the outset and how, if you're thinking has evolved about what they achieved and didn't achieve how it has evolved over time.

It's really challenging to compare across states, let alone countries, because what works in one country doesn't work in another and vice versa.

And I think we can learn lessons from each other and we should, but they also must be adapted in our context.

Like I said earlier, just letting a virus run rampant like Sweden did in the beginning in an immune naive population was just not an option us Americans had.

I will also say that Sweden didn't also have a perfect response compared to the United States.

They had less excess deaths, but compared to their neighbors like Denmark, they did a much more terrible job if we judge their job on excess deaths.

And even if they didn't have policies, there was still individual level behavior changes because people just wanted to protect themselves as well in Sweden.

So I will say it's very difficult to compare against Sweden for reasons I said earlier, just because we have also different safety nets.

We don't have health insurance and paid sick leave and good hospital capacity like other countries

Yeah, I mean, I think some measures of excess mortality had 10 times as many Swedes dying in the

first year of the pandemic as Norwegian.

So there are complications all around.

I didn't mean to suggest that Sweden was a model of an ideal approach when I've written about them recently.

I've said what striking is how average their pandemic outcomes were ultimately, but also in terms of what they actually did at the time.

We talk about them as an example of everybody go their own way, kind of almost let it rip approach to the disease.

But there was a lot of guidance offered.

A lot of schools did in fact close for a period of time.

A lot of people did shelter in place for a period of time.

It was just built in a somewhat less heavy handed way.

Although as I said earlier, I think we also to some degree overstate how heavy handed the American policy response was.

These lockdowns, what we call lockdowns lasted five weeks in the average Republican state, seven weeks in the average Democratic state.

This is in a pandemic that lasted three years.

But we have this memory of this unbelievably extended ongoing and brutal lockdown, which wasn't really the way most Americans navigated the pandemic.

And then we compare it and contrast it with countries like Sweden that we say had a much more hands off approach.

But in fact, at a practical level, people were behaving in the way that they were going to behave, responding to the threats of the pandemic in the way that they were going to respond to them. And the differences between the countries was not nearly as great as a lot of the political rhetoric tends to suggest.

I completely agree with you.

And I would consider United States middle of the road too.

I mean, if you look at the other end of New Zealand and Australia or even China with their very, very long policies, the landscape in which these unfold is really important.

And like you said, we have to be very careful with revisionism and what happened and what we feel like happened.

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We don't have health insurance and paid sick leave and good hospital capacity like other countries do.

So let's talk about in some more focus the partisan dynamics that we've been touching on throughout, but just to take them slightly more front and center.

You know, Donald Trump was for a lot of liberal Americans, at least the kind of gravitational center of COVID policy in 2020.

And we almost wanted to believe that he was singularly responsible for the pandemic as a whole. And at the time, my thoughts sort of ran along those lines as well.

I was frustrated over and over again, disappointed in his sort of indifference.

But when I look at the pandemic overall, I see the US performing, as I said earlier, a bit less well than its peers in 2020 and then a lot less well than its peers in 2021.

And that second story has a lot more to do with vaccination and vaccination uptake than it does with presumably with non-pharmaceutical interventions.

But of course, Donald Trump plays an interesting and complicated role on vaccination too, since he's both one of the authors of the Operation Warp Speed in some ways responsible for the rapid development and rollout of those vaccines.

And also as someone who is a kind of inveterate down player of the risks of the pandemic, presumably someone who also dampened enthusiasm at least among his supporters for vaccination uptake when the vaccines eventually became available, mostly under Joe Biden.

So how do you think about Donald Trump in thinking about the sort of longer story of the pandemic? So Operation Warp Speed was a huge success. There is no question about that. And I was really happy about how that played out. So I want to say that positive.

I think though, one thing I was incredibly frustrated with, particularly in the beginning of setting the stage of what SARS-CoV-2 is, introducing this threat to Americans was just the lack of communication.

And when I have started digging into why this was the case, why were we so reactive rather than proactive in framing this issue and warning Americans.

And again, framing it, it's us against the virus instead of us against each other. A lot of other countries did that.

I keep seeing how it comes down to putting a muzzle on the CDC, political interference with public health officials. And so that lack of communication went for months and months.

For example, COVID-19 data. We didn't even have data coming out of the CDC. John Hopkins had to step up and volunteer efforts had to step up to actually understand what was going on.

And putting a muzzle on public health officials and the experts in this context did in reputable damage. And a reason, I think, that a lot of trust was lost.

And you see opening up in really with a vaccine rollout, these huge partisan divides, which again, we're not so present in much of the policy response before them.

But I think there's also a way of looking at that vaccine rollout as a kind of a success story. And there's a dark side too. There's a downside. There's a way in which we failed.

Early on in the vaccine rollout, there were there was a lot of talk about the polio vaccine and how much outreach was an energy was put behind getting that into kids arms in the fifties.

But I went back and looked recently and the Jonas Stock polio vaccine was introduced in 1955 and targeted toward the young. And by 1961, so five or six years later, it had only reached about half of Americans under the age of 60.

And with these vaccines, within two years, we got to 80% of adults and 95 or even 99% of vulnerable seniors. So, you know, of course, the context is different. The pandemic in this case was raging in a much more profound way than polio had been 70 years ago.

But I also think it's striking that we got such a large percentage of the country to take vaccines against a disease they hadn't heard of a year or two before the shots themselves had been developed over the course of just a few months.

And, you know, it wasn't perfect. We did less well than most of our peers in Europe and we suffered a lot in 2021 as a result.

But just as a kind of a baseline, where are we in public health history kind of a data point? It feels to me that not only do we sometimes underappreciate or under celebrate Operation Warp Speed, but we also don't quite appreciate how significant it is that we got four out of five adults to take a vaccine.

We got 19 out of 20 or more seniors to take a vaccine. Does that match how you see the rollout or should I be taking a more sort of darker view of how much worse we did than our peers?

No, I keep going back to those stats, too, that 91 percent of Americans over 12 years old have one dose in their arm. That is incredible feat.

And that took a ton of on-the-ground work engaging with stakeholders, answering questions.

I think we could have done it quicker and I think we could have gotten the full vaccine series to a whole lot more people. But I do think that is a huge success that is underplayed.

And I wish that we would look at the successes as much as our failures.

Even with that rollout, we have this remarkable phenomenon in the U.S. which tells the story of the gap between our vaccination coverage and the coverage in other countries where we had this significant uptake, the overwhelming majority of the most vulnerable people getting shots pretty quickly.

And yet, because it happened at a time when we were seeing these new variants that also spread more rapidly, the ultimate impact on our national death tolls was not all that significant.

You know, 2021 was a deadlier year than 2020 was.

And I wonder if we made some mistakes there in communication, if we were so focused on talking about the risk to individuals given an infection and not enough about the risk of infection and the way that those two things combined, that we sometimes gave, especially people who were vaccinated, a little bit too much of a sense of their own invulnerability,

because at the national level, we got everybody vaccinated, individuals were protected quite significantly, but not all the way to 100%.

When you have the disease spreading five times as fast in a population that has one-fifth the mortality risk that they had before, the net effect is kind of equal.

Do you think that we could have done a better job of continuing to advise, especially the vulnerable elderly, the vulnerable vaccinated elderly, in the aftermath of mass vaccination?

Absolutely. Again, one of the biggest lessons I learned was how important scientific communication is, and that includes discussion of uncertainty and a discussion of how our knowledge evolves.

One key example that I just can't get out of my head is telling people that once they're vaccinated, they could take off their masks.

And that was such a big mistake because we didn't also communicate what we didn't know, which was we didn't know how this virus was going to continue to mutate.

We didn't know how well our vaccines would keep up.

So just getting that one dose is just not enough. Just not wearing a mask or not thinking about ventilation or not testing, just having a vaccine strategy is going to let the virus leak through for a certain amount of population.

And when you're talking about 330 million Americans, that's going to be a big chunk.

And so, yeah, I think that our proactive scientific communication around this was a big mistake.

And we also can't discount that that was also happening at a time where with a very different

information ecosystem, with a disinformation and anti-science rhetoric really getting pushed out at the same time, sowing doubt.

And we didn't recognize that a top-down approach is no longer adaptable to today's times, that information is no longer dictated by authorities, but it's networked by peers.

And we need to adapt to that sort of system in public health.

Yeah, I mean, on the communication point, I guess given what we're saying earlier about masks, it doesn't seem to me to be so foolish to say you might feel a bit more comfortable taking off your mask once you've been vaccinated.

The thing that's really striking to me is how little communication around the age skew of these effects really was so that someone who was 80 didn't understand what a different landscape they were facing than someone who was 60, than someone who was 40.

And we heard a lot about how the old were more vulnerable.

But I think even the people for whom that information was most relevant, which is to say the very elderly, weren't given enough context for just how large that skew really was.

Someone who's in their 80s might be a thousand times more vulnerable to infection than someone who's, say, a teenager, and may even be a few times more vulnerable than someone who's just five or ten years younger.

And that goes especially for the post-vaccination era in which someone who's 80 reduced their risk significantly, but was still the equivalent of someone who was unvaccinated and, say, 60.

And the guidance that we gave someone who was unvaccinated and 60 before the vaccinations was not, do whatever you want, go about your life as though everything's normal.

It was, let's take a lot of precautions.

Now someone who was 20 and vaccinated, the logic looks a lot different.

You could probably feel comfortable saying, okay, you know, mostly this risk has been reduced quite close to zero and you should think about your life in quite different terms.

You're completely right.

That communicating risk accurately and without bias is absolutely crucial.

And this is because contextualizing really small numbers and really large numbers is close to impossible for human brains.

And that lack of risk communication is because it was multi-dimensional, very complicated to quantify, and even more difficult to communicate.

And I think this is especially true with infectious diseases because risk changes with time and varies across different people.

And one thing we didn't do well in public health was try and communicate this risk, particularly because this was a novel threat.

A lot of humans, even today, don't know where to place this in the repertoire of things trying to kill us.

And so getting better at data-driven guides of personal risk would be incredibly helpful moving forward.

You know, Joe Biden comes into office in January 2021.

And since that point, something like two-thirds of all the COVID deaths that we've had in this country have taken place.

This is a period of time in which he also had the tool of vaccines that Donald Trump didn't have. He campaigned for the presidency in part by saying someone who presided over 200,000 American

deaths should not continue to hold that office.

And yet he's been in office for 700,000 American deaths.

The first year was presided over by a COVID minimizing president.

The second and third years, in theory, at least presided over by a president who purported to take the threat seriously and wanted to get a handle on it and put science back in the White House.

And yet we ended up with this quite grim, ugly outcome of the last two years.

In fact, the U.S. experience of those 2021 in particular was worse than its peers by a much larger margin than had been the case in 2020.

And this is to me a kind of a sad, distressing, and somewhat disorienting story about the pandemic, which is to say we remember a lot of that initial panic.

We're still fighting about it. We're still arguing about it. We also remember it.

And we've just done a much less job of sort of marking time and marking the tragedy of the last two years, where we've kind of taken our eye off of the actual toll of the disease and let it unfold in a much less center stage kind of way.

And I wonder why you think that happened or how you think about that phenomenon.

I think it happened because of four reasons. One is the pandemic fatigue. We just are sick of it and we start normalizing it.

Second, it shows also the failure of approaching a infectious disease in an individualistic way that we essentially ignored in the United States that infectious disease violate the assumption of independence.

That what your neighbor does around you in a bus or at work or at school directly impacts you. And this is very different than, for example, diabetes or cancer, where if you get diabetes and the person next to you won't necessarily get diabetes.

And this individual level risk management perspective or framing that we went into in the United States in year two and year three is against everything that public health is.

That public health doesn't treat individuals. We treat populations and losing that narrative thread was a disservice to Americans.

I think also the third thing that really impacted our normalization of deaths was the integration of politics into public health.

I know a lot of people in public health were quite excited when Biden took office because we thought it was going to be a very different type of approach,

but it ended up being pretty darn similar to the administration before. And I think that also hurt Americans as well.

So I think it's complicated. I think it is incredibly tragic and it's hard to visualize 1.1 million Americans dead.

Like you said, I saved that New York Times front page article of 100,000, but how do you communicate 10 times that is very challenging to do?

And we need to do that in order to show the true toll.

I would just add one point to the political item on your list, which I think is really a good one. And that is in 2020 liberals, because they were so outraged at Donald Trump's handling of the disease, were also therefore kind of keeping a close score. They were pointing to the deaths and being outraged about it.

And while Republicans were minimizing or dismissing a lot of the impact, at least half the country was still focused on this as a grim, horrifying tragedy and an outrage.

And that meant that the death totals just had a sort of a political and cultural currency.

And when the control of the White House switched over, it just seemed like a lot of the partisan imperatives were not aligned for anyone to keep such a close track of the score.

And as a result, we sort of looked past a lot of what was going on and in fact looked past a lot of, for instance, that pretty soon the majority of deaths were among the vaccinated

and started modulating or calibrating our sense of the state of play much more by the resuming normalcy of our own lives than by the mortality statistics, however large they may be.

I wanted to ask now just what you cited earlier as the sort of, I don't know if you'd exactly want to call it like the original sin, but it's definitely like the still the hottest, most argued over subject when it comes to pandemic response and that's school closures.

Can you tell me what you thought about school policy, say beginning in the spring of 2020, and to the extent that you're thinking has changed over time, explain a little bit about how that might have happened.

Yeah, so many thoughts on this.

For me, how we should think about the cost of schools closures. There's really only tough and tougher policy decisions during an emergency. I want to start with that. I do not envy decision makers in times of emergency because many decisions are trust jumps,

whether we like it or not. And I think schools is a great example. So in Texas, we open schools in fall of 2020, and I will say I was not happy about it at the time.

I distinctly remember AAP's strong recommendation to get kids in schools, because the reason I was having a really hard time with this in early 2020 is because in policy, right, we typically weigh benefits with risks.

But what if we don't know the risks at the time, right? It's hard to remember how little we knew back then. Our children truly less risk than adults, because this typically isn't how viruses work. Do we throw immune naive teachers into an environment without vaccines? Are schools super spreaders for a community? What will be the impact on multi-generational homes? Do masks work on a population level?

And it also wasn't clear what schools were actually doing if they were opening. And many school closures were in part harmful, I would say, because low-income children didn't have access to laptops or high-speed Internet,

which local and state and even federal governments could have addressed, but they really didn't. So looking back, I am glad we opened schools in fall of 2020. I was not happy about it, but I struggle because I don't know what the answer would be for next time,

because the lessons learned from COVID-19 may not apply in the future. Because, again, like I said, this virus is really odd. Typically, viruses impact children and older adults the most because of their immune system, but that wasn't the case here.

And in the future, it may be. And so this risk-benefit ratio of closing schools may change. And I think we really need to keep that in mind.

I guess my feeling was that it seemed perfectly reasonable in the spring, even as we knew a bit about the age skew, it seemed perfectly reasonable that if we were going into a quite aggressive COVID mitigation phase, a sort of a flatten the curve at all costs phase, it seemed perfectly reasonable to me that schools would close.

I did wish that we did more over the spring and the summer to make more schools able to open in September than we're ultimately able to. And I found myself frustrated over the course of that year

that many places in many parts of the country were having a really hard time doing that, even as schools elsewhere in the world managed to open without, it seems, really significant spillover effects on their populations. But I also thought that the costs of our continued lockdown have been somewhat overstated.

And I wondered what you thought about the pandemic learning loss discussion, because to me, we've had setbacks, all the measures which are in perfect measures, but all the measures so that students suffered as a result of being out of school, although the correlations are not super clear at every level in general.

I think we can say that the country did worse during the pandemic years than in previous years. But they also, those losses seem relatively small to me, given the scale of the rhetoric that we often hear that this is a generational setback and it may ultimately impose a larger cost on the country than the pandemic as a whole did.

We're talking about students performing on most of these national standardized tests at about the level they did sometime around the year 2000. In some cases, they went back to their performance levels in 1998, in some cases in 2003.

And to my mind, if you've taken a poll of all the country's parents in the spring of 2020 and said, we're going to be going through a really bumpy road, there's going to be a lot of death in this country, there's going to be a lot of struggle to limit disease spread, and there's going to be a lot of political battle around all of those interventions.

It's going to be a quite messy, ugly time on almost any measure or metric that you use. And as a result of all of that disruption, your child will have the school experience that he or she might have had 20 years ago.

I think that just about every parent would have been pretty happy taking that deal. And now we're looking at that same data and saying, this is not just a horrible loss, and it's not just a policy problem that we should be endeavoring to ameliorate.

But it is, in fact, somehow like the signal crime of the whole pandemic that we've put so much on the nation's children and burdened them with so much in ways that were unnecessary and ultimately just dramatically harmful.

And I just have a hard time seeing it that way. I wonder what your thoughts are.

I have mixed feelings about this because I do see the harms. And as a mom, you don't mess with my kids, right?

Yeah.

I think the other challenge that's also unfolding simultaneously with this is the correlation versus causation debate, particularly around not just the testing scores that you mentioned, but also mental health among kids right now.

I think a lot of people are linking lockdowns in no school to a rise in mental health without a broader context that actually we have had a rise in mental health even before the pandemic.

A new study just came out that suicides did not increase during stay at home orders or schools closed.

And so...

And in fact, there was an uptick when the schools reopened, right?

Yeah. And there's an uptick when the schools reopen. And so again, I think we're getting really stuck into this debate of a false dichotomy that you are either pro schools closing or anti schools closing. Well, in reality, I think we're more on a spectrum and it hits very close to home because these are

our kids and we want them to be okay.

I think kids are incredibly resilient and they will be okay.

They are just growing up in a very different time than we all grew up and to us that is unfamiliar and scary.

I don't want to undersell the disruption of school closures and indeed the pandemic as a whole on children.

I think it was in many ways devastating for many kids and the educational setbacks are real, especially, you know, we had made a lot of progress over the last 20 years.

It just seems to me to be something that we might think we might consider as part of the bundle of difficulty that we all struggled through over the last three years,

rather than something that should be set apart as an exceptional failure on the part of the country. I agree with you. I think the lesson really learned, though, is what you mentioned was that opening schools during our next pandemic,

because we're going to have another pandemic, should be a priority and opening them in a safe way with 21st century tools,

not these 19th century tools to fight a 21st century virus.

And that is something I did not see happen, play out in Texas, for example, where I was, that we needed to prioritize,

yeah, opening schools, but opening them safely. So we get the benefits of not super spreader events, but also the benefits of the safety and having food and all the benefits structured learning has.

And I hope that that can be at the forefront of our mind going forward, even before the debate about opening businesses and venues and all of that,

which, if I remember correctly, which is all jumble now, took president over opening schools safely. Yeah, I mean, I think what you're bringing us to is a useful perspective on which to sort of close the conversation,

which is that on all of these particular subjects, what we're really talking about are trade-offs. But we're talking about those trade-offs at a cultural level, at a political level, in needlessly binary terms.

and not thinking smartly enough about exactly how to balance the different sets of interests.

And if someone feels like, for instance, schools were closed too long,

it seems like the default position they return to is that schools should never have closed at all.

And that just feels perhaps that ultimately in a different pandemic might be the right choice.

It just seems like a hard thing to judge leaders for in this pandemic,

as we were sprinting through an incredibly panicked phase as a country.

But I wanted to ask you about that bigger picture perspective, which is just to say,

if these are all trade-offs, and if one of the things that we should have learned over the course of this pandemic is how much each decision is a balancing act,

a political balancing act, a social balancing act, to some degree, like an emotional balancing act, are we in any better of a place in thinking through those trade-offs than we were three years ago? Is it possible that we could respond to a next pandemic in a better way than we did this one? We're in a worse position in some senses and a better position in others.

How we respond to the next pandemic or the next novel threat is up to us right now.

Yes, there's going to be a new threat. It's going to be probably very different than SARS-CoV-2 and how it looks and how it spreads.

But that doesn't mean all the lessons that we learned over the past three and a half years are not applicable and that they won't help.

I go back to other countries that prepared after SARS and how well they did with SARS-CoV-2.

And we have very smart modelers out there. We have very smart technology.

And I think we just have to get smarter at working with each other.

And one of the ways I think we do that is we need a COVID-19 commission, just like we had with 9-11,

that really digs down into what we got right, but what we got wrong and more importantly, why? And having a very honest conversation about this to move forward.

And that's just something I haven't seen done, which has been disappointing.

It's almost hard for me to imagine how that would play out in our current political environment.

I mean, it just seems to me we're sort of doomed to be living with an impoverished history here that we're so captive on almost all sides of the spectrum from almost all perspectives.

We're so captive to not just partisanship, but certain kinds of wishful thinking and coping mechanisms

that we're just not seeing what we went through clearly enough to learn from it.

Yes, but also just reckon with it and see clearly that we went through a world historical trauma.

We have suffered enormously, especially those who died and those who are sick.

But even those of us whose lives were just disrupted in more quotidian ways,

we're still quite discombobulated by that experience.

And it feels to me really quite strange that we're sort of walking like zombies out of that experience into a future without actually processing or seeing clearly what we went through.

And I guess I'd like to think that a COVID-19 commission could give us the basis of a real factual history.

But I don't know, it seems so hard to imagine it unfolding at least in the context of Congress in this country.

Probably for me, it would have to come from somewhere else or some other civil society organization.

I think you're exactly right.

Because it was so politically charged that the past three and a half years that I don't know if it belongs in Congress.

It may belong at a middle of the road foundation.

I think I have less doom and gloom than you have.

It takes time to process trauma.

And at least us in the public health world, and I'm sure also as reporters,

we just haven't had that time to self-reflect and to process.

I haven't.

And it's going to take time to heal and to understand and to try to hear the other side and try to hear what we got wrong and how we can do better in the future.

Well, we always end the show with book recommendations.

So Katelyn, what are three books that you'd recommend on COVID or about anything else?

Yeah, I'll give one COVID, but I'm like sick of reading about COVID.

So this summer I've started...

You're part of the problem, Katelyn.

I am.

But I've started digging into more fun books.

But the one COVID one, if I were to recommend it to anyone,

is called Lessons from the COVID War, an investigative report.

I thought this book was absolutely spot-on on the lessons we learned throughout the pandemic.

It was written by the 9-11 Commission Director,

and it has a lot of input from a lot of scientists around the United States.

And I really enjoyed that book.

The other books I'm reading right now, Beyond COVID, is Open by Andre Agassi.

It's about a tennis player, and I never really cared about tennis before,

but he is such a good storyteller.

I've just been hooked this summer reading his story.

So highly recommend that autobiography.

And the other one that I just started is Lessons in Chemistry,

which is pretty hilarious and light,

and so I've appreciated just being able to escape in those two worlds.

Katelyn Juggalina, thanks so much for coming on the show.

Thanks for having me.

This episode of The Ezra Klein Show was produced by MFA Pagawu,

fact-checking by Michelle Harris with Mary Marge Locker and Kate Sinclair.

The engineer is Sonia Herrero.

Our senior editor is Roger Karma.

The show's production team also includes Roland Hu and Kristen Lin.

Original music by Isaac Jones.

Audient strategy by Christina Samiluski and Shannon Busta.

The executive producer of New York Times Opinion Audio is Annie Rose Strasser.

And special thanks to Jeff Gelt.