

13 January 2021

BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Preterm births were said to have decreased during “lockdowns.” Better data now suggests that didn’t happen.

Compelling anecdotes make great headlines. Someone notices something and the next thing you know, it gets into the [media](#). By virtue of that alone, an *idea* or a *notion* suddenly becomes accepted as a scientific *fact*. Case-in-point: premature birth rates supposedly dropped precipitously during stay-at-home advisory periods early in the covid-19 pandemic. Now, in a [large study](#) published in the *Annals of Internal Medicine*, it appears that, at least in Sweden, that premature birth rates were unchanged during the stay-at-home period last spring.

What is different about the Swedish data? For one thing, the size of the study. Earlier smaller studies like ones from the United Kingdom and Denmark reported the rates of extremely premature births (born at under 28 weeks) went down immensely during the period in question. But small these studies of a relatively rare condition like extreme prematurity have a big problem: just a few extra events (or alternatively, a few less) can have gargantuan effects on the statistical outcomes. For example, if a rate increases from 1 in 1,000 to 2 in 1,000, that’s a 100 percent relative increase. On the other hand, an increase from 30 in 10,000 to 35 in 10,000 is 16 percent increase. Unlike previous studies, the new Swedish study covered the all hospitals nationwide over a two-month time period.

So, were physicians quoted in the media stories about an apparent decrease in premature births and those who carried out local studies that found that decreases in premature births misleading us intentionally? Certainly not. What is more likely are two alternative explanations. The first is purely related to anecdotal reporting bias. If someone detects something out of the ordinary, they report that observation. For example, if 5 premature births happen in a typical month in a given hospital, if zero or one occurred during the first month of the pandemic, it might have been noticed and reported, when it otherwise might not have. But a hospital down the road might have had a few more premature births than usual, though not so many that it was worthy of reporting an uptick. So, in reality, the number of events was close to average overall. People forget that “variance” is normal. If 100 events happen in 100 days, statistically, some days *should* have zero events, while others have three. But another explanation for the early anecdotes may have something to do with physicians at major hospitals experiencing what we might call a “reverse magnet” effect. Normally, a major academic hospital might be the destination for complicated cases. But during the pandemic, many of those same institutions were overwhelmed with covid-19. It’s possible that ambulances diverted premature laboring mothers to other hospitals. Did those hospitals go out of their way to report an increase in premature births? Not likely. But just a few of those instances could explain all of the perceived decreases in the very institutions where epidemiologic research takes place. That’s why comprehensive nationwide studies, like the one in Sweden, provide much better data.

—Jeremy Samuel Faust, MD MS

POLICY BRIEFING

New pandemic funding for state agencies.

The US Department of Health and Human Services (HHS) has [allocated](#) \$22 billion in federal funding for coronavirus aid, to be delivered by January 19th. Three billion dollars will be [dedicated](#) to support vaccine efforts, and \$19 billion will be [directed](#) toward testing and contact tracing efforts.

While allocation is based on population and urban population density, the wording of the law leaves it to each state to determine further distribution to local agencies. This piecemeal approach has left many experts concerned about the development of regional differences that could develop or be widened based on varying priorities of lawmakers and policymakers. Nevertheless, the incoming Biden administration has [announced](#) a federally-managed program, with more uniform guidance likely forthcoming. *Various.*

—Brief19 Policy Team

New testing requirement for travelers to US.

On Tuesday Dr. Robert Redfield, the director of the US Centers for Disease Control and Prevention (CDC), [announced](#) that all travelers to the US will be required to present proof of a negative coronavirus test no more than three days prior to travel, or to provide documentation of recovery from previous covid-19 infection. Aimed at limiting the spread of new seemingly more contagious variants, the rule is set to go into effect on January 26th. This move has been [supported](#) by airline industry groups who have lobbied for months for such measures to be put in place. That said, there will be no requirement for such testing for travel within the US, even as cases continue to soar out of control.

Various.

—Brief19 Policy Team

Kimi Chernoby, MD, JD, Policy Section Founder, Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large, Barb Cunningham, Copy-editor, Anna Fang, Week-in-Review. Megan Davis, social media. Kane Elfman PhD, Publishing and Design. Jeremy Samuel Faust MD MS, Editor-in-Chief.
<http://www.brief19.com/> Twitter: [@brief_19](https://twitter.com/brief_19) submissions@brief19.com. Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.