Something COVID And Climate Change Have In Common? Unreliable Models

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By now you're likely aware that the COVID-19 models wrongly predicted catastrophic forecasts across different states.

For example, according to the University of Washington's Institute for Health Metrics and Evaluation (IHME) model, two weeks ago Virginia's coronavirus infection rate was due to peak this past Monday, April 20. Today was supposed to be the state's peak for deaths.

The model predicted 1,041 deaths during the initial COVID wave. Thus far, the state has 324 total deaths—less than one-third of initial projections. Yet, it was this model that likely influenced Virginia Governor Ralph Northam's decision in March to issue one of the nation's most extreme stay-at-home orders, effective through June 10. The order included the shuttering of nearly all businesses, save those the governor deemed "essential," and the closing of all schools in the state for the rest of the school year.

With all this, Virginians will likely ask, was it necessary to shut down the state so early based on a model we now know was so flawed?

This isn't unique to Virginia. In all, the IHME initially projected up to 240,000 US deaths. Thus far, there's been just over 41,000. In Tennessee, the model was off by 2000%.

The dire predictions featured in the IHME models were so unreliable, some experts call it a "travesty" that policymakers at the federal, state, and local levels have used it to make life-or-death decisions.

"That the IHME model keeps changing is evidence of its lack of reliability as a predictive tool," epidemiologist Ruth Etzioni of the Fred Hutchinson Cancer Center, who has served on a search committee for IHME, told STAT News. "That it is being used for policy decisions and its results interpreted wrongly is a travesty unfolding before our eyes."

Many of the COVID-19 models have been wrong and now we're all getting a crash course in just how unreliable they can be at predicting outcomes in the future. Reliance on these models can quite literally drive policies that can unnecessarily destroy economies.

Models are useful but their findings should be treated with some skepticism. While models can help scientists make ballpark estimates based on certain variables, not all variables can be predicted. For instance, models designed to predict climate change can't account for natural climate variables, such as solar activity, cloud cover, volcanic activity and ocean activity. These variables play an important role, yet climate models aren't sophisticated enough to include—never mind predict—them. It is therefore impossible to predict how these factors will change in the future or even whether they will completely overshadow any changes caused by humans.

Despite these clear limitations, climate models continue to be the impetus for drastic policy measures, such the much ballyhooed Green New Deal. This proposal would wreck the U.S. economy and significantly lower the living standards of all Americans, while doing nothing to significantly reduce carbon emissions worldwide.

Models can also become political tools. In a 2018 article in The Hill, Patrick Michaels of CATO explained that even though the most dire predictions about global warming–based on models–have been wrong, they are ones most often cited because they support the most radical climate change policies being pushed by green activists.

Micheals goes on to explain that the U.N.'s Intergovernmental Panel on Climate Change (IPCC), which is often cited by policy makers and climate activists, comes to its grim predictions by averaging "…the 29 major climate models to come up with the forecast for warming in the 21st century, a practice rarely done in operational weather forecasting."

Giving equal weight to 29 different models, researchers in the journal Nature concluded, is "suboptimal."

That’s putting it lightly.

Micheals highlights one model that’s more reliable–the Russian model–and asks why the IPCC doesn’t put more weight on the model that is working. He concludes, “Perhaps because it has less global warming in it than all the other U.N. models?”

Instead of using the one or two climate models with a track record of accuracy, politicians, activists, and regulators have a bad habit of defaulting to models predicting the worst possible outcomes. Models that in some cases, have even been discredited.

Reliance on flawed models create a culture of alarmism that makes rational, thoughtful discussions and robust debates about workable solutions nearly impossible. Yet, in the cases of both coronavirus and climate change, that is exactly what must take place.