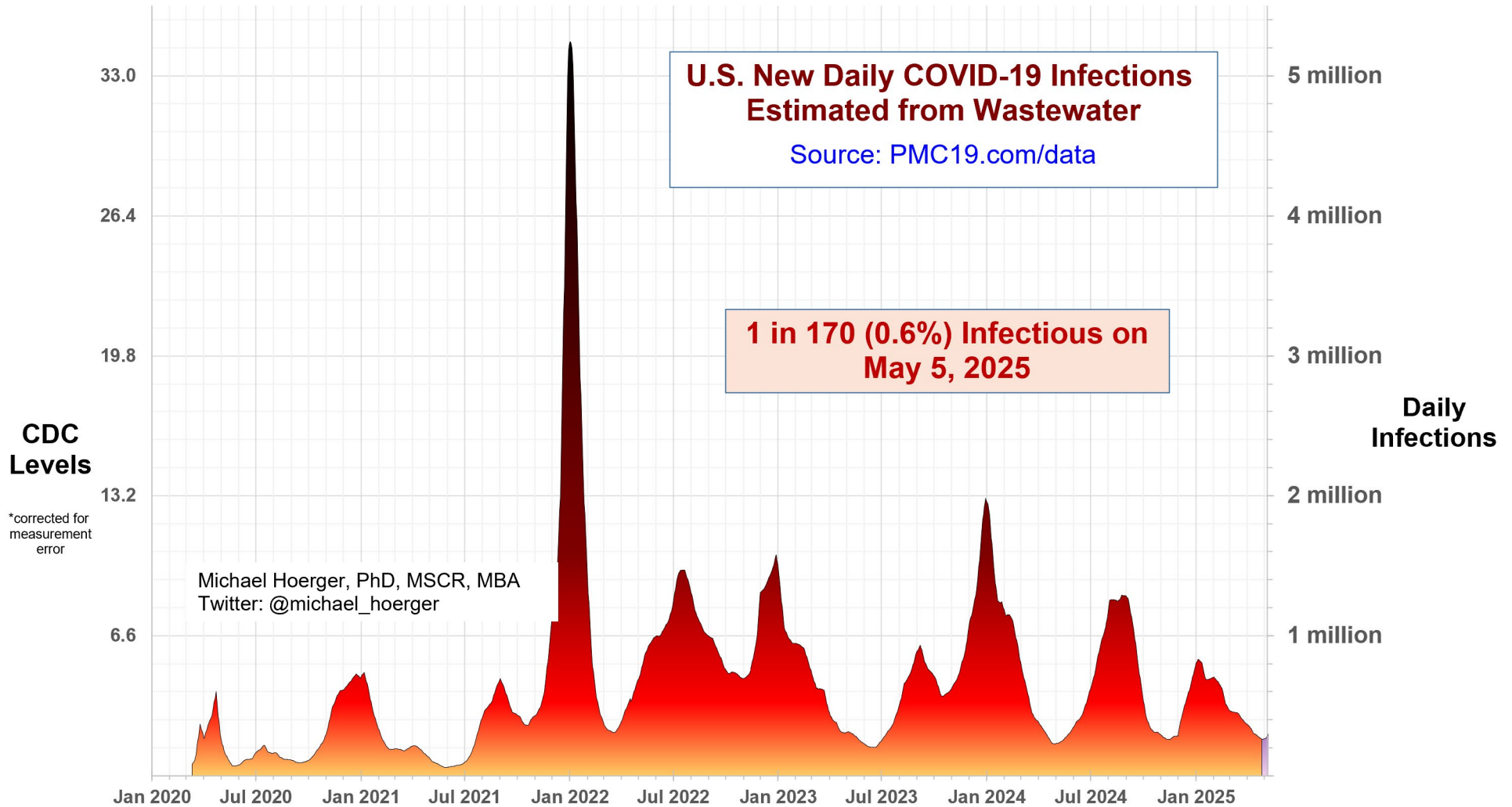


PMC U.S. COVID-19 Case Estimation and Forecasting Model: Report for May 5, 2025, pmc19.com/data

Michael Hoerger, PhD, MSCR, MBA, Pandemic Mitigation Collaborative (PMC)



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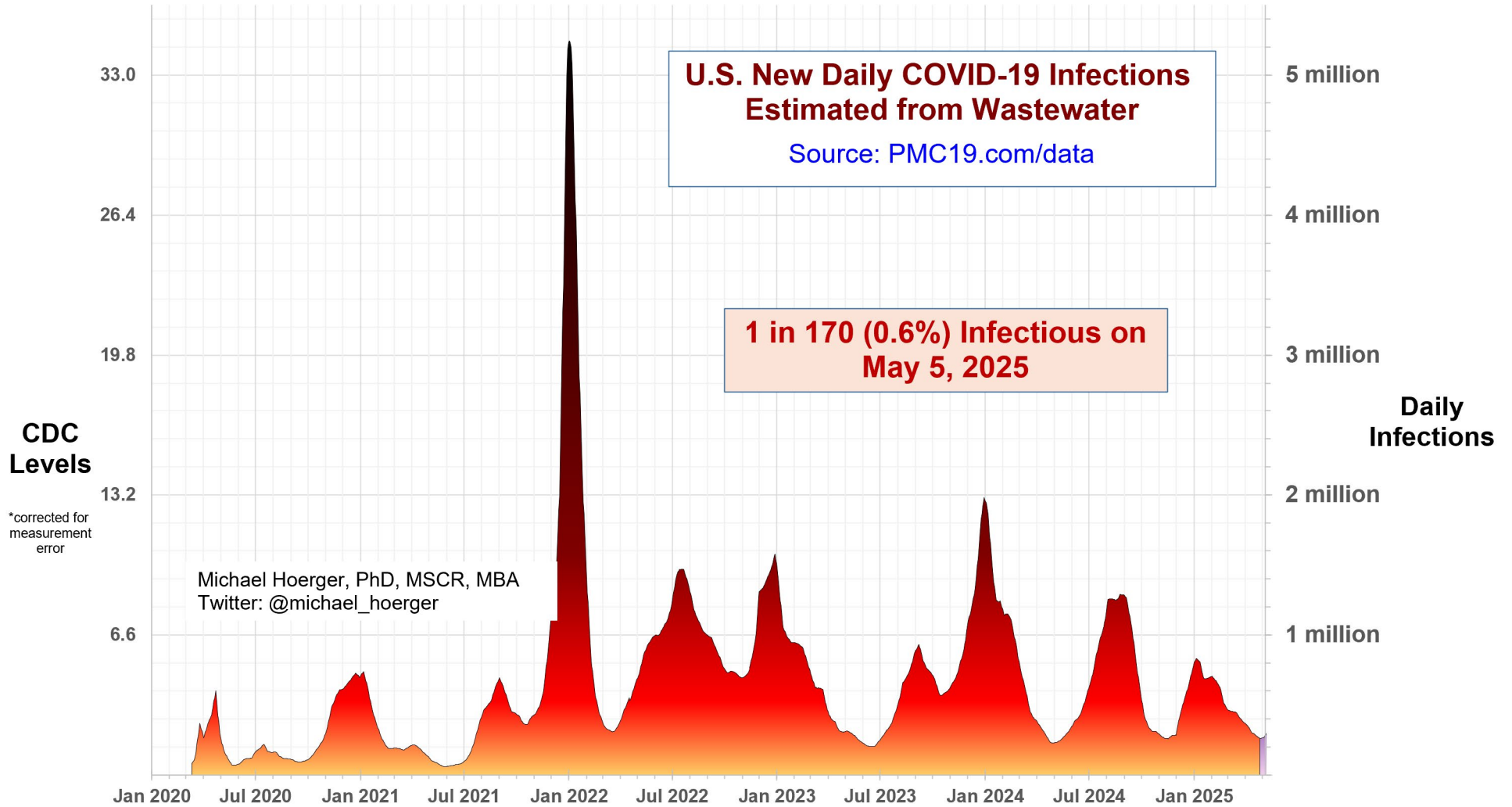
Announcements

Data Quality Note: The CDC (80% model weight) reported data this week, whereas Biobot did not (20% model weight). Data quality is moderate.

Technical Updates: We have transitioned the website into a mobile-first design and incorporated some file name changes and coding improvements to increase the efficiency of the weekly update process. If you have any trouble finding anything, please reach out.

The Big-Picture View of the Pandemic

We are in a “lull” between Covid waves. Presently, an estimated 0.6% (1 in 170 people) are actively infectious. The national average for transmission may not get much lower for some time.



Statistical Summary

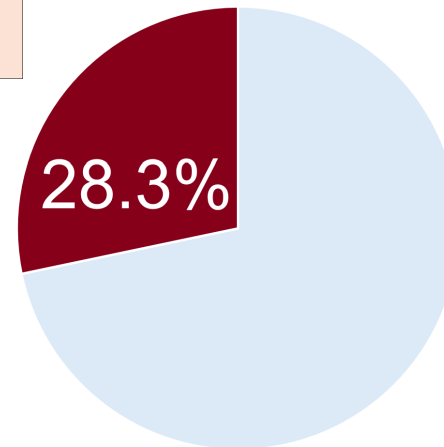
Presently, we are seeing an estimated nearly 2 million weekly infections, likely to result in 100-400k Long COVID cases, and 700-1,200 excess deaths in the U.S. In a room of 50 people of average risk, there would be a 1 in 4 chance of exposure.

Current Levels for May 5, 2025
% of the Population Infectious 0.6% (1 in 170)
New Daily Infections 281,000
New Weekly Infections 1,967,000
Resulting Weekly Long COVID Cases 98,000 to 393,000
Resulting Weekly Excess Deaths 700 to 1,200

Monthly Forecast
Average % of the Population Infectious 0.9% (1 in 110)
Average New Daily Infections 433,633
New Infections During the Next Month 13,009,000
Resulting Monthly Long COVID Cases 650,000 to 2,602,000
Resulting Monthly Excess Deaths 4,600 to 7,700

Running Totals
Infections Nationwide in 2025 63,644,000
Average Number of Infections Per Person All-Time, U.S. 3.74

How Does Risk Increase with More Social Contacts?			
Number of People	Chances Anyone Is Infectious	Number of People	Chances Anyone Is Infectious
1	0.6%	15	8.5%
2	1.2%	20	11.1%
3	1.8%	25	13.7%
4	2.3%	30	16.2%
5	2.9%	35	18.6%
6	3.5%	40	21.0%
7	4.0%	50	25.5%
8	4.6%	75	35.7%
9	5.2%	100	44.5%
10	5.7%	300	82.9%



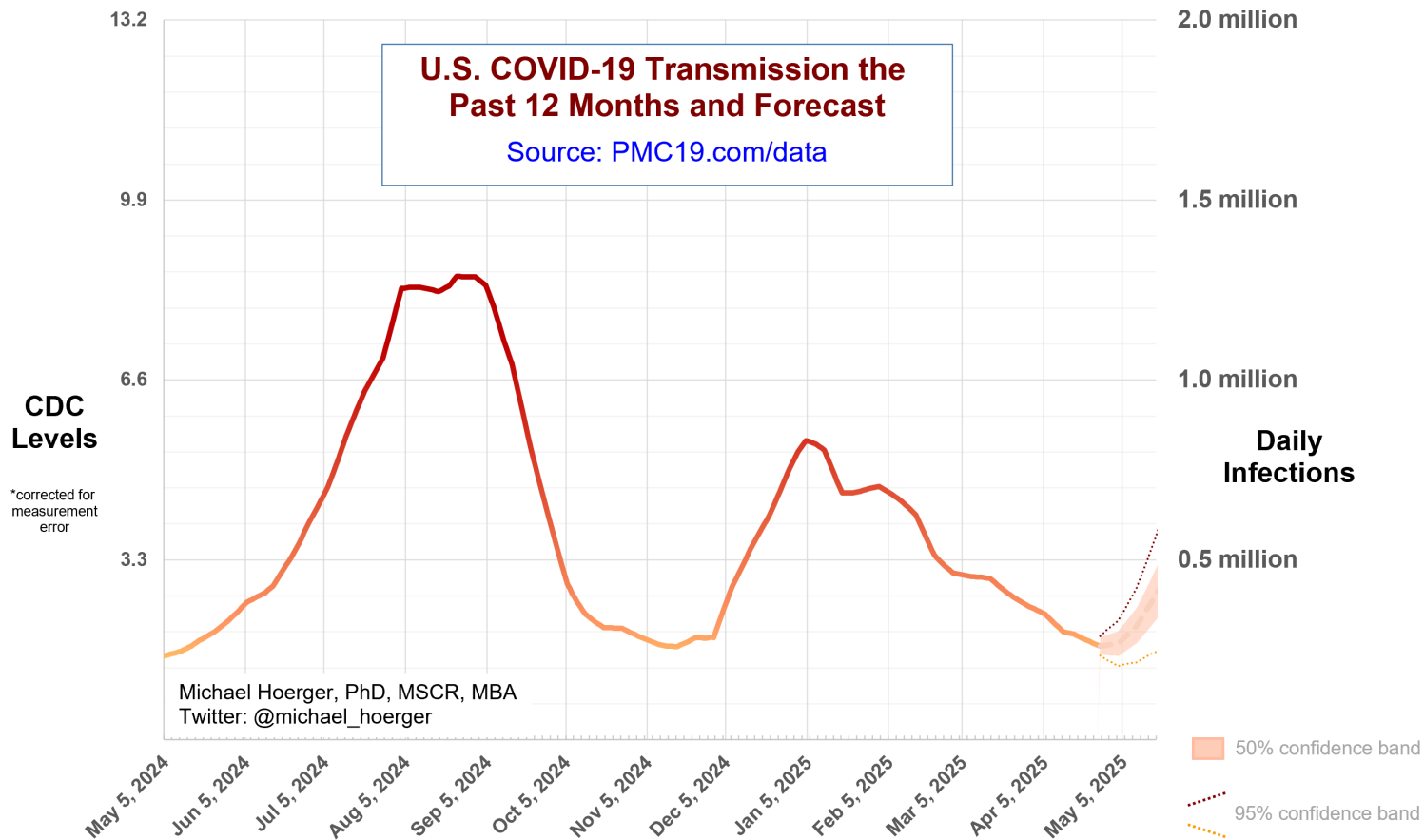
There is more COVID-19 transmission today than during 28.3% of the pandemic.

Assumes no testing/isolation protocols (U.S. only)
pmc19.com/data

Michael Hoerger, PhD, MSCR, MBA
Twitter: @michael_hoerger

Close-up on the Current Forecast

This graph shows the current forecast. Note that values for “today” are a forecast from data 9-12 days old. The current forecast is for steady transmission of 300-400k daily infections the next several weeks. Avoid overinterpreting the minor forecasted uptick. This time of year, transmission often bounces around, rather than leading into a wave. There are no current warning signs of a wave, so transmission may hover closer to the 300k mark for some time. With minor retroactive corrections, transmission could remain similar for some time or dip slightly lower. This is a good time to monitor local data.

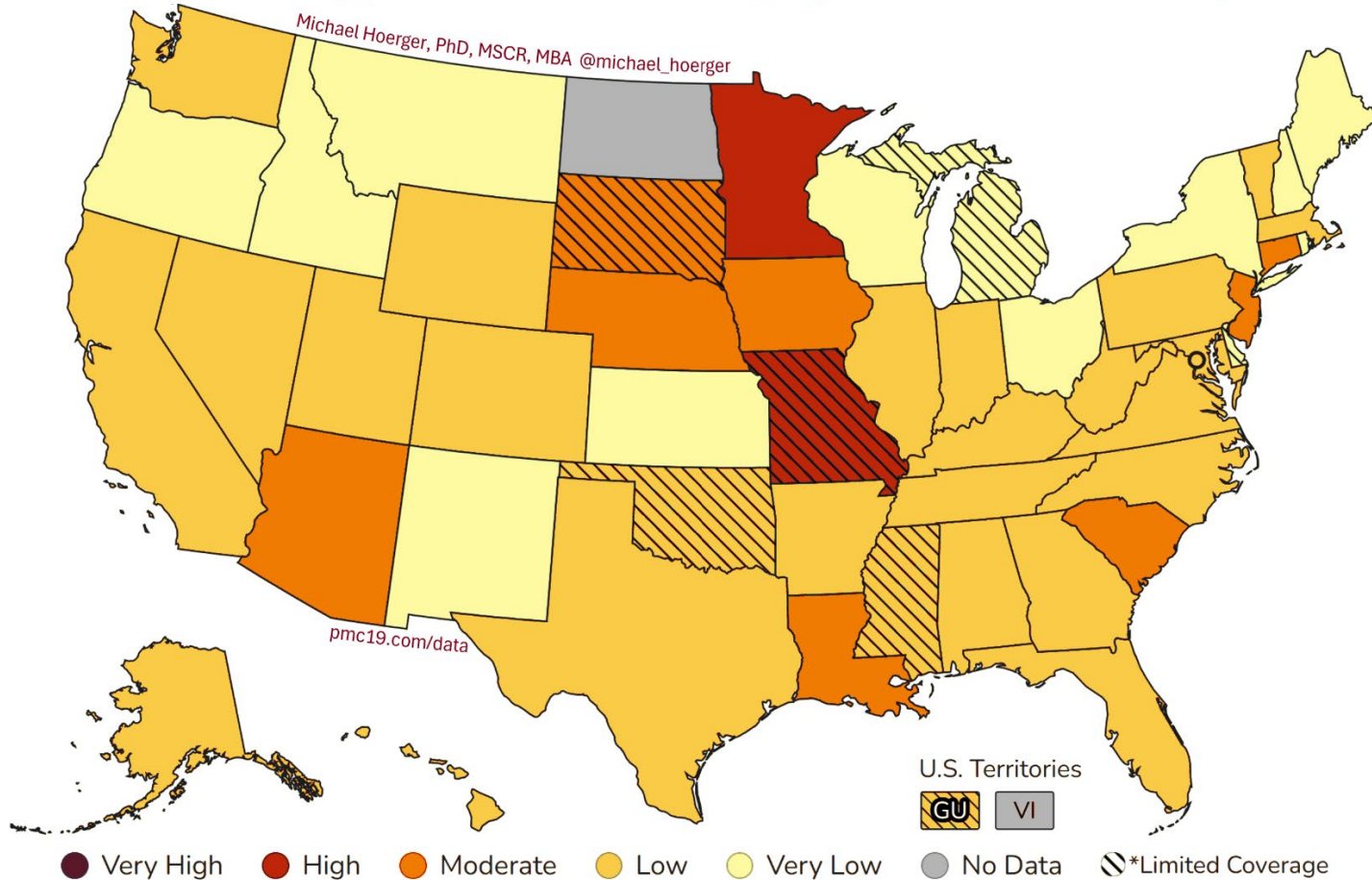


CDC COVID-19 Heat Map

This map uses the CDC state-by-state data to show areas with higher transmission in deeper red. The CDC version of the map, colored in cool blue is available online. Blue tends to confuse people to thinking transmission is “cool” or low, so we and various popular media outlets (e.g., Newsweek) tend to recolor. In April 2025, the CDC responded to our email statement of ethical concern on their use of cool-blue maps with an email that appeared written by AI.

<https://www.cdc.gov/nwss/rv/COVID19-currentlevels.html>

COVID-19 Heat Map, CDC Data & Risk Levels, Higher Transmission in Deeper Red



Regional Case Estimation

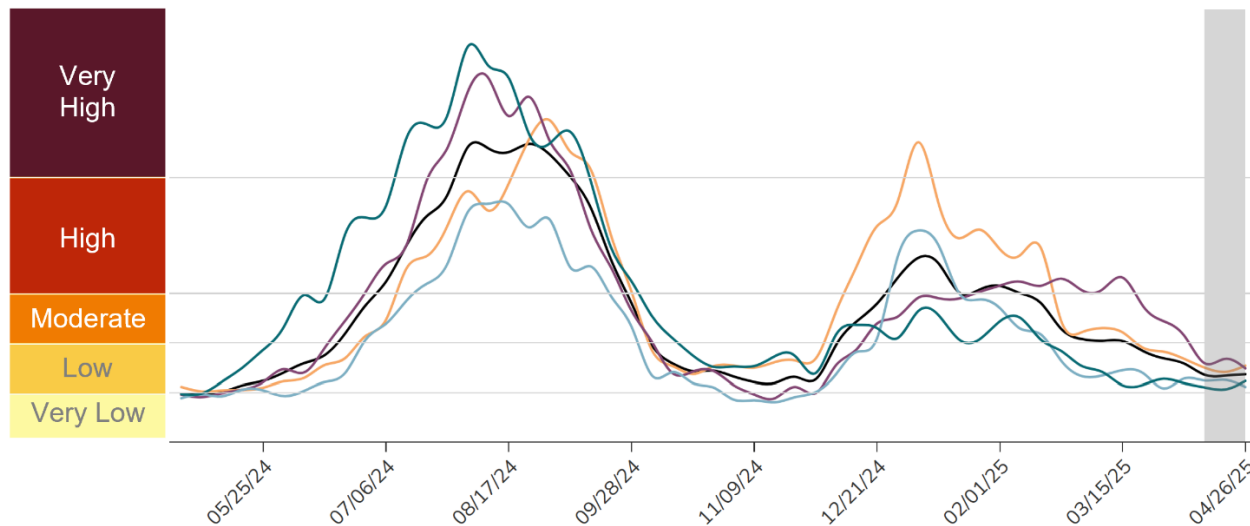
This graph from the CDC shows regional variation in transmission. You can use the “PMC Regional Multiplier” to get a ballpark estimate the proportion of a given region actively infectious with COVID-19 (see Technical Appendix document on the dashboard page).

The CDC regional data are available online:

<https://www.cdc.gov/nwss/rv/COVID19-nationaltrend.html>

State-level data are also available: <https://www.cdc.gov/nwss/rv/COVID19-statetrend.html>

CDC Regional Levels with PMC Estimates of the Percentage Actively Infectious



Estimated Percentage Actively Infectious*			
		PMC Model	Raw CDC Data
	National	0.6% (1 in 170)	0.6% (1 in 156)
	Northeast	0.5% (1 in 209)	0.5% (1 in 191)
	Midwest	0.7% (1 in 151)	0.7% (1 in 139)
	South	0.6% (1 in 157)	0.7% (1 in 144)
	West	0.5% (1 in 189)	0.6% (1 in 173)

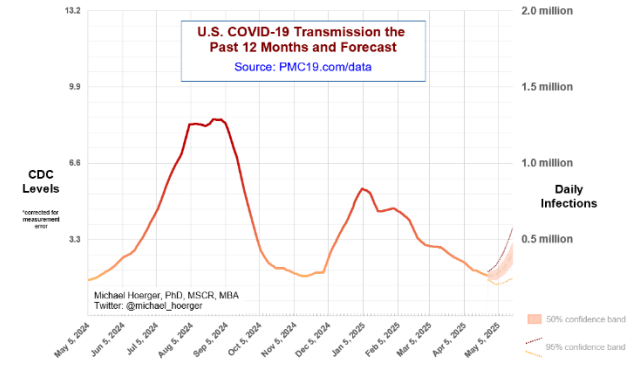
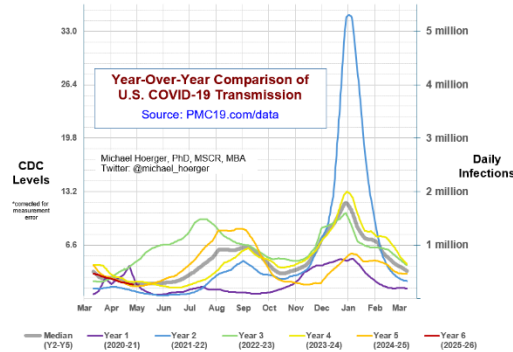
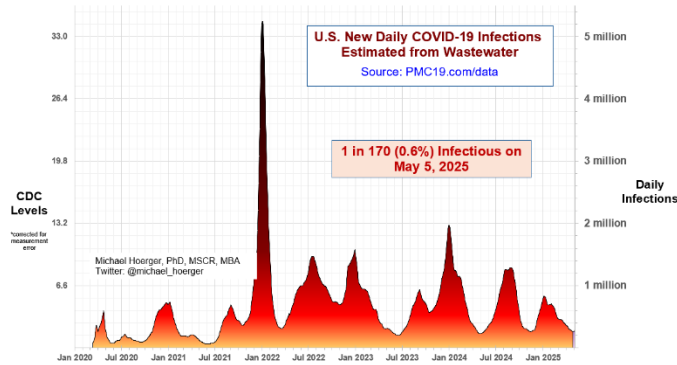
PMC Regional Multiplier*
0.313

* CDC level multiplied by the PMC Regional Multiplier provides an approximate estimate of the percentage actively infectious.

* The "Raw CDC" values are simply the value in the CDC chart multiplied by the PMC Regional Multiplier. The "PMC Model" estimates adjust those data by accounting for reporting time lag.

PMC COVID-19 Dashboard

Here is the complete PMC COVID-19 Dashboard. Please share the images across social media and other websites. Michael Hoerger, PhD, MSCR, MBA | Pandemic Mitigation Collaborative | pmc19.com/data



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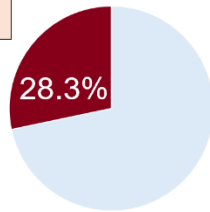
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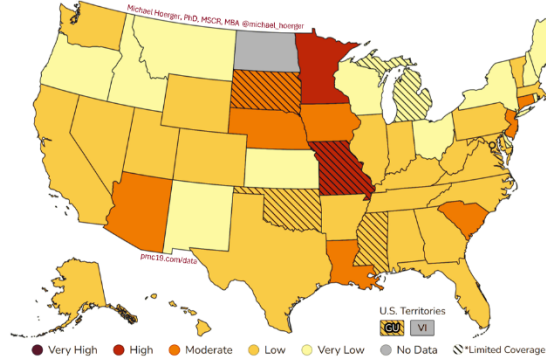
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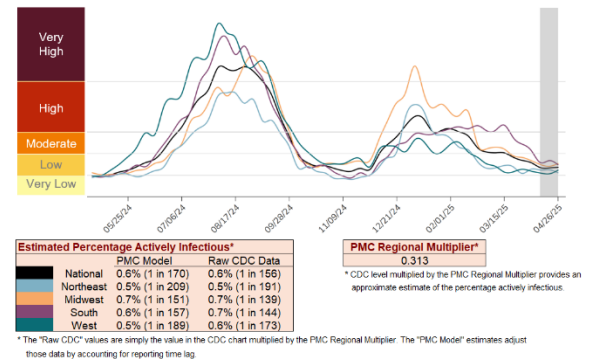


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COVID-19 Heat Map, CDC Data & Risk Levels, Higher Transmission in Deeper Red



CDC Regional Levels with PMC Estimates of the Percentage Actively Infectious



A separate document called a Technical Appendix appears on the dashboard page and has more methodologic info.