TSA worker omicron data can help gauge pandemic's severity

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The daily number of COVID-19 cases reported in the nation has surged over the past two weeks, now surpassing 1 million, with 95% of them from the omicron variant. At such a rate, every week, over 2% of the entire population becomes infected.

The Centers for Disease Control and Prevention reports such data, as well as hospitalizations and deaths attributed to COVID-19. Hospitalization numbers continue to increase, now matching previous highs set in early 2021.

The big difference today is that vaccines are available to prevent severe outcomes, providing a layer of protection for our nation's hospitals and health systems. Nonetheless, medical resources are being stretched to the breaking point, with embattled health care workers having to withstand the worst of the weight.

The one piece of good news is that omicron is producing less severe outcomes than delta and other variants. However, with more people resorting to at-home testing to assess their infection status, the true number of infections remains shrouded.

To estimate such numbers requires a surrogate group to be identified that represents the status of COVID-19 in the entire population. One such group is Transportation Security Administration screeners at the nation's 400-plus airport security checkpoints.

The TSA provides daily updates on the number of active COVID-19 cases among its screeners. The agency also provides a running case total, as well as the number of deaths. As of Jan. 21, there were 19,930 infections among TSA employees, with close to 92% of them airport screeners. This represents almost 40% of the TSA airport screening workforce.

The five airports with the most TSA screeners infected are Miami, New York's John F. Kennedy, Newark, Los Angeles and O'Hare International Airport. In addition, 34 TSA employees have died from COVID-19.

The past month has been particularly brutal for the TSA. On Dec. 27, the TSA reported 1,147 TSA officers with active infections, or around 2% of its workforce. By Jan. 3, this number jumped to 2,609, an increase of over 125% and over 5% of the agency's screening workforce. By Jan. 12, this number peaked at 3,783, or over 7.5% of its workforce. Recent data suggests that new infections have plateaued.

Keep in mind that these are active cases, so many of these people likely have mild symptoms and will not be active after five or 10 days, depending on which CDC guidelines they follow.

Given that these officers are testing frequently, their infection rate provides a window into what is likely occurring across the nation. With the prevalent use of at-home tests to determine infection, the number of cases reported by the CDC undercounts the true number of infections. As such, the TSA numbers may be providing useful insights into actual nationwide numbers.

The 40% of the TSA screener workforce that has been infected would translate into over 130 million confirmed cases in the nation, around double the CDC's official count. More recently, the 7.5% of active cases among screeners would translate into close to 25 million people across the nation being currently infected.

With around 93% of TSA officers vaccinated, which is higher than the vaccination rate in the nation's adult population, this suggests that these infection estimates for the general population are likely underestimates.

FULL TEXT

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hence providing lower bounds. Given the large number of TSA screeners, the rate of false negatives from at-home tests (estimated to be around 15% for some tests) means that many TSA officers are certain to be working while infected, risking the spread of the virus to other TSA screeners and passengers passing through checkpoints. This means that at large and medium-size airports, with multiple security checkpoint lanes, there is a high likelihood that one or more TSA officers are screening passengers while infected.

If omicron were to cause severe diseases comparable to delta and no vaccines were available, our health care system would have already collapsed under the weight of the accompanying demands. Having vaccines that diminish the severity of infections is what is keeping our nation's health care infrastructure afloat, albeit barely. Tracking TSA cases is one way that omicron infections can be estimated for the nation. As TSA infections begin to moderate and drop, as they now appear to be, it will provide a clue that the same phenomenon is occurring across the nation, providing a beacon of light that the current surge of infections is abating.

Sheldon H. Jacobson is a professor of computer science at the University of Illinois at Urbana-Champaign.

CAPTION: Photo: A Transportation Security Administration officer at John F. Kennedy International Airport in New York. MARK LENNIHAN/AP
CREDIT: By Sheldon H. Jacobson