

A new look at the Old Dominion.

Hospital testing sheds some light on extent of asymptomatic COVID-19 in Virginia

By Kate Masters June 1, 2020

In the weeks since Virginia's hospitals have reopened for <u>non-life-threatening procedures</u>, many have implemented wider COVID-19 testing protocols to protect patients and staff from the virus.

In some cases, the results have been illuminating. In a Thursday call with the Virginia Nurses Association, Melody Dickerson, the senior vice president and chief nursing officer for Virginia Hospital Center in Arlington, said her facility had been testing all admitted patients for the last three to four weeks.

"I would tell everyone on the call that if you're not doing that, it's certainly something you should consider," she added. Within the hospital's labor and delivery department, 1.6 percent of mothers tested positive for COVID-19 with no symptoms. The number jumped to 1.8 percent for patients coming in for surgery, she said.

"To see two percent of those patients who are asymptomatic yet positive for this virus, it really speaks to the risk to all of us in the community," Dickerson continued. "But also the risk that we present to our patients and likewise."

In the absence of widespread prevalence testing, both in Virginia and nationwide, the data helps shed light on the extent of asymptomatic COVID-19 — one of the most difficult factors in controlling the spread of disease. In a May 28 editorial for the New England Journal of Medicine, researchers with the University of California, San Francisco, called asymptomatic transmission the "Achilles heel" of pandemic control, pointing to evidence that the virus can shed at high levels even among patients with no signs of illness.

Dr. Thomas Yackel, the president of MCV Physicians at Virginia Commonwealth University, said it was "precisely for that reason" that VCU decided to implement its own universal testing protocols for hospital patients once the resources became available. The health system has been seeing roughly the same numbers at Virginia Hospital Center, with roughly one to two percent of patients testing positive for the disease without any indicators.

"There are people who are positive who don't have some of the symptoms, or they don't recognize what the symptoms are," he added. Recently, one of his patients called him after losing her sense of smell — a <u>frequently reported</u> but often underrecognized sign of the virus. Yackel called her in and she tested positive for COVID-19, even though she didn't display any other symptoms.

"Sometimes these are people who are thinking they're healthy enough to come in for a surgery, an elective procedure, or to deliver a child," Yackel said. "But they could be in one of those categories —

either they will develop symptoms in the next couple of days or they're asymptomatic but still carrying the virus."

While Virginia's testing numbers have been gradually increasing, with more than 10,000 PCR tests administered at least four days this week, the state's resources are generally directed to high-risk populations, including nursing home residents and symptomatic health care workers. Among the total 42,533 coronavirus cases, as of Friday, five percent were reported as asymptomatic, with 57 percent symptomatic and 38 percent unknown or unreported, according to the Virginia Department of Health.

But without random testing of the general population — the only real way to determine the extent of asymptomatic cases — both Yackel and Dr. William Schaffner, a professor of preventive medicine and infectious diseases at Vanderbilt University Medical Center, said hospital data could be cautiously extrapolated to the rest of Virginia.

Right now, it's an imperfect system. Not all hospitals are universally testing patients. Some health systems, including Sentara and Carilion Clinic, are opting to test only those coming in for operations and procedures. Others, such as Riverside, are only testing those with symptoms.

Some of the state's biggest health systems, including Sentara, Bon Secours, and HCA Virginia, declined to release the percentage of asymptomatic patients who tested positive for COVID-19. Geography could also make a difference. Carilion Clinic — based in a county with fewer than 300 reported cases, including Roanoke City and Salem — reported that just seven of its 1,967 surgical patients have been asymptomatic.

Still, Schaffner said it was "noteworthy" that some hospital systems were reporting asymptomatic positivity rates close to two percent. "Those people have caught it from somebody and they're probably going to give it to one or more people," he said.

"I think it's as close to a population prevalence study that we have right now, especially in Virginia," Yackel added. Understanding the number of asymptomatic positives is also important as the state moves toward gradually reopening.

<u>Updated modeling from the University of Virginia</u> shows that the state's peak in COVID-19 cases could arrive in late July or early August. The severity is largely dependent on how closely social interaction returns to pre-pandemic levels, according to the Richmond Times-Dispatch.

Schaffner said he's seen much higher asymptomatic positivity rates in other states, including one innercity hospital where 14 percent of patients in labor and delivery tested positive without any symptoms. But both he and Yackel said the rate at Virginia hospitals still underscored the importance of social distancing measures, such as avoiding large gatherings and wearing masks in public.

"If you're just going about your daily activities, I would think of it this way: every hundredth person that you interact with could be in the asymptomatic phase of spreading the virus," Yackel said. "That's why social distancing works. It's not the distance. It's reducing the number of close encounters with many, many people."