



Researchers: Less than third of Northwell COVID-19 patients had a fever



More than 175 Northwell scientists, clinicians and others worked to collect and analyze the data, said Karina W. Davidson, senior vice president of Feinstein Institutes for Medical Research. Credit: Feinstein Institutes for Medical Research/Lee Weissman

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Less than a third of COVID-19 patients hospitalized at Northwell Health hospitals on Long Island and New York City had a fever upon triage, even though fever is viewed as a key indicator of the disease, a study released Wednesday by Northwell Health researchers found.

The finding indicates “we need to be looking more broadly” than just at fever in determining whether someone may have COVID-19, said Karina W. Davidson, the lead author of the study and senior vice president at the Feinstein Institutes for Medical Research, the Manhasset-based research arm of Northwell.

Doctors use fever to help determine if someone likely has COVID-19, employers such as Amazon do temperature checks to determine if an employee can enter a workplace, and some have called for using temperature checks as part of plans to reopen the economy.

The study, which Northwell said was the first large analysis of U.S. COVID-19 patients in a scientific paper, also noted that nearly six in 10 had hypertension. The study focused on coronavirus patients admitted to 12 Northwell hospitals — nine of which are on Long Island — between March 1 and April 4. It was published in the Journal of the American Medical Association.

More than 175 Northwell scientists, clinicians and others worked quickly to collect and analyze the data because “we wanted to get all insights into how to manage this disease out as quickly as we can,” Davidson said.

Fever is one of the symptoms most closely associated with COVID-19, yet more than two-thirds of the 5,700 patients in the study “did not have a fever and yet were sick enough to need to be hospitalized,” she said.

“That’s the kind of important finding we thought needs to get out right away,” she said.

Another key finding was that, among patients who died, those with diabetes were more likely than those with other medical conditions — such as hypertension — to require the use of ventilators to help them breathe, and were more likely to receive treatment in the intensive care unit.

Davidson said it's unclear why, and whether factors other than diabetes itself could explain that finding.

"We look forward to future publications in which we correctly adjust for all of the things that go along with diabetes: being older, being male, maybe having kidney disease," Davidson said. About a quarter of adults with diabetes have kidney disease.

Diabetes is one of a number of underlying medical conditions that the U.S. Centers for Disease Control and Prevention linked to higher risk for severe COVID-19 illnesses. In New York State, 89% of COVID-19 deaths involved people with at least one underlying health condition, according to state Department of Health data.

The Northwell study found that 57% of the COVID-19 patients had hypertension, the most common underlying illness. Statewide, an identical 57% of the 15,302 New Yorkers who had died of COVID-19 as of Wednesday had hypertension.

The second-most common underlying health condition among the Northwell patients was obesity, at 42%, followed by diabetes, 34%.

The median age of patients was 63, and six out of 10 were male.

The study examined the 2,634 patients who had either been discharged or died by April 4. Men were more likely to die of COVID-19 than women, and people 66 years old or older were more likely to die than younger adults.

In addition, 88% of those who were on ventilators died. Researchers said the lack of data on those still in the hospital after April 4 may have biased those findings.

"Those who came to us unconscious or perhaps not breathing may have been ventilated right away and expired right away," Davidson said. "Those who

eventually will come off a ventilator and survive and do well are still in the hospital, and they're not included in those numbers.”

The Long Island hospitals in the study were North Shore University Hospital, Long Island Jewish Medical Center, Southside Hospital, Huntington Hospital, Long Island Jewish Valley Stream, Plainview Hospital, Glen Cove Hospital, Syosset Hospital and Cohen Children's Medical Center. The others are in Manhattan, Queens and Staten Island.