

Extra weight can be a deadly complication when fighting COVID-19

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Dr. Craig Mallak's work in the morgue tracking Broward County's COVID-19 deaths startled him so much he shed pounds that he didn't even need to lose.

"Obesity is a factor in a lot of cases," Mallak, Broward's chief medical examiner, said in an email. "Motivated me to lose 18 pounds in June, and I'm not overweight to start with."

The dominant message so far in the pandemic is that older people are the most at risk. That's true, but doctors on the front lines of South Florida's outbreak are also finding obesity is making it harder for people to fight off the virus, regardless of age.

That could have grave implications for the United States, which has one of the highest obesity rates in the world, said Dr. Cate Varney, an obesity specialist at the University of Virginia Health System.

"A colleague asked me, 'Do you think it will get as bad as Italy?'" Varney recalled. "I said, 'No, it's going to be worse because we have higher rates of obesity.' This is a definite call to action. We can start now, but we need to be prepared at the end of this pandemic to really start taking obesity more seriously."

It's not just a few extra pandemic pounds that should spark worry, according to the Centers for Disease Control and Prevention's guidelines.

Specifically, people who have a body-mass index greater than 30 are at higher risk, said Dr. Sunil Kumar, medical director of intensive care at Broward Health Medical Center. Body-mass index varies by height and weight. A person who is off the normal weight by about 40 pounds could be considered obese, a category that includes about 30% of Floridians.

A man of average height—5 feet, 9 inches—would be considered obese at 203 pounds, while a woman of average height—5 feet, 4 inches—would meet that mark at 175 pounds, according to a BMI calculator.

Studies are showing that [younger patients](#) with COVID-19 who are admitted to the hospital are more likely to have obesity as an underlying factor. That's been backed up by Kumar's own observation in the ICU.

"The spread of this disease has significantly changed from the first wave," Kumar said. "I am seeing a lot more younger patients. I even have patients in the ICU as young as 19 who are really, really sick."

Varney, the obesity specialist, said several possible explanations exist as to why COVID-19 patients who are overweight tend to have worse outcomes. Research is still being done, and scientists don't have a definitive explanation yet.

One theory is that people with obesity have more Ace2 receptors on their cells. The virus uses these receptors to infect cells and then make copies of itself.

"If you have obesity, you have more Ace2 receptors so you are going to have a higher viral load, and it takes longer for virus to get out of your body," Varney said.

People with obesity are also susceptible to low-grade chronic inflammation, which has been associated with worse outcomes.

Another factor could be that being overweight compresses the lungs, leading to smaller lung capacity. Obesity is linked with other chronic illnesses, such as [high blood pressure](#), heart disease and Type 2 diabetes, that heighten the risk.

"This is what I am telling my obesity management patients: 'This is not about vanity,'" Varney said. "'This is not about looking good in clothes. What this virus has shown to us and needs to be taken seriously and recognized is the impact obesity has on your health and your life. It can

be the difference between life and early death."

Obesity and other chronic diseases are showing up in medical examiner records in South Florida. For Broward County, the most-mentioned underlying condition is arteriosclerotic cardiovascular disease (a buildup of plaque in the arteries), followed by diabetes, obesity, high blood pressure, chronic kidney disease and chronic obstructive pulmonary disease, according to a South Florida Sun Sentinel analysis.

Gov. Ron DeSantis invoked the link between weight and COVID-19 hospitalizations as a reason to keep Florida's gyms open. He expressed concerns that Floridians weren't getting [enough exercise](#) during the shutdown.

But Varney said telling people to eat less and exercise more is an oversimplification of a complex condition that is too often stigmatized, misunderstood and maligned by the public. Obesity has environmental, societal and genetic components that make it difficult to treat, she said.

About 30% of Floridians are obese, according to the Florida Department of Health. South Florida is better than the statewide average but still hundreds of thousands of people are at risk. The [obesity](#) percentage in Miami-Dade and Broward is about 25%, while Palm Beach County's is 20%.

Shevrin Jones, a state representative from Broward County, said he thinks his weight loss made a difference in his recovery from COVID-19. Jones had mild symptoms from the virus.

Jones said he weighed 461 pounds during his freshman year of college. Now, Jones, 36, is down to 211 pounds. He said he exercises five days a week and eats a healthy diet.

"Health is extremely important to me," Jones said. "My doctor told me he believes because of how much I exercise that's what saved me with this, having a strong immune system."

While exercising and eating healthy is good advice, it isn't a substitute for wearing a mask, washing hands and keeping physical distance from others, said Kumar, the ICU doctor.

Younger people who are at a normal weight also shouldn't let their guard down, he said. Kumar has seen otherwise healthy younger patients in the ICU.

"It makes you really upset with all this disease and death that we are seeing people who are not taking this seriously," he said. "The best thing for people to do is protect themselves and others."

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