No, the New Coronavirus Is Unlikely Sexually Transmitted Via Semen

However, intimate contact can increase the risk of spreading COVID-19 through coughing, sneezing and kissing, experts caution.

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A new study by University of Utah Health published in the journal Fertility & Sterility suggests that the new coronavirus that causes COVID-19, a severe respiratory disease, is unlikely to spread via semen, meaning the chances of sexual transmission of the virus are remote, according to the report.

For the investigation, Chinese and American researchers collected semen samples from 34 Chinese men one month after they were diagnosed with mild to moderate cases of COVID-19.

Lab tests didn't detect the coronavirus in any samples, but researchers also wanted to rule out that it didn't enter the testes, where sperm cells are formed. (Virus in the testes could result in long-term damage to semen and semen production.)

To make this determination, scientists used a detailed genetic map called an "atlas" to examine RNA—genetic material used to make proteins—in testicular cells from healthy organ donors.

Utilizing this atlas, researchers checked the expression of a pair of genes that act as receptors to allow the coronavirus to enter cells and replicate. (Both receptors must be present in the same cell in order for the virus to access cells effectively.)

Findings showed that the genes that directed the production of these two receptors were found in only four of the 6,500 testicular cells. This suggests that it is unlikely that the coronavirus would invade human testicular cells, the scientists said.

Researchers noted that limitations of the study included a small sample size and that participants weren't severely ill with COVID-19.

"It could be that a man who is critically ill with COVID-19 might have a higher viral load, which could lead to a greater likelihood of infecting the semen," said James M. Hotaling, MD, an associate professor of urology at the university specializing in male fertility and the study's co-author. "We just don't have the answer right now."

Although the results were reassuring, Hotaling stressed the importance of understanding that the virus can be passed through intimate contact via coughing, sneezing and kissing and that some people can have the virus but show no symptoms.

For related coverage, read “Safer Sex Tips in the Age of COVID-19” and click here.

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