

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: COVID BOOSTER: NASAL SPRAY ON THE WAY?
REPORT: **MB #5153**

BACKGROUND: Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. These particles range from larger respiratory droplets to smaller aerosols. There are currently almost 94 million cases of the coronavirus with an average of over 26,000 people contracting the virus every seven days, and over one million deaths.

(Sources: https://www.who.int/health-topics/coronavirus#tab=tab_1
<https://usafacts.org/visualizations/coronavirus-covid-19-spread-map>)

DIAGNOSING: To test for the COVID-19 virus, a health care provider takes a sample from the nose (nasopharyngeal swab), throat (throat swab) or saliva. The samples are then sent to a lab for testing. If you're coughing up sputum, that may be sent for testing. The FDA has authorized at-home tests for the COVID-19 virus. The most common things people who become ill with COVID-19 have include fever or chills, a dry cough or shortness of breath, fatigue, muscle or body aches, new loss of taste and/or smell, sore throat, congestion or runny nose, and/or nausea or vomiting.

(Sources: <https://www.mayoclinic.org/diseases-conditions/coronavirus/diagnosis-treatment/drc-20479976#:~:text=To%20test%20for%20the%20COVID,may%20be%20sent%20for%20testing>.
<https://www.webmd.com/lung/covid-19-symptoms#1>)

NEW TECHNOLOGY: Vaccines protect against severe COVID-19, but they're less adept at preventing infection. That has many scientists pursuing a needle-free alternative: nasal sprays to ward off SARS-CoV-2 infection. The sprays would be fast-acting and would be applied frequently, perhaps once or twice a day, to the site where the virus first takes hold — the throat and nasal lining. Unlike vaccines, which train the recipient's immune system to build durable protection, the sprays are short-lived compounds that would directly block the virus's ability to enter cells. Multiple research teams have shown that such sprays effectively prevent SARS-CoV-2 infection in animals.

(Source: <https://www.nature.com/articles/d41586-022-03575-x>)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com