

SARS-CoV-2 reinfection risk drops with presence of antibodies

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(HealthDay)—Health care workers with anti-spike or anti-nucleocapsid

immunoglobulin G (IgG) antibodies have a reduced risk for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) reinfection in the following six months, according to a study published online Dec. 23 in the *New England Journal of Medicine*.

Sheila F. Lumley, B.M., B.Ch., from Oxford University Hospitals NHS Foundation Trust in the United Kingdom, and colleagues examined the incidence of SARS-CoV-2 infection in seropositive and seronegative health care workers attending testing of staff at Oxford University Hospitals. A total of 12,541 health care workers participated and were followed for 31 weeks after anti-spike and anti-nucleocapsid IgG measurements.

The researchers found that 11,364 health care workers had negative antibody results and 1,265 had positive antibody results, including 88 with seroconversion during follow-up. Overall, 223 anti-spike-seronegative health care workers had a positive polymerase chain reaction (PCR) test: 100 and 123 during screening while they were asymptomatic and symptomatic, respectively. Two anti-spike-seropositive [health care workers](#) had a positive PCR test, both of whom were asymptomatic when tested (1.09 and 0.13 per 10,000 days at risk, respectively; adjusted incidence rate ratio, 0.11). None of the workers with anti-spike antibodies had symptomatic infections. The results were similar when baseline status was determined using anti-nucleocapsid IgG assay alone or in combination with anti-spike IgG assay.

"The presence of anti-spike antibodies was associated with a substantially [reduced risk](#) of PCR-confirmed SARS-CoV-2 infection over 31 weeks of follow-up," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

More information: [Abstract/Full Text](#)

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