SARS-CoV-2, COVID-19 rates decreased after one vaccine dose

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(HealthDay)—Substantial reductions in severe acute respiratory

syndrome coronavirus 2 (SARS-CoV-2) and symptomatic COVID-19 have been reported following administration of one dose of the BNT162b2 COVID-19 vaccine, according to a research letter published online Feb. 18 in *The Lancet.*

Sharon Amit, from The Chaim Sheba Medical Center in Ramat-Gan, Israel, and colleagues assessed vaccine-associated rate reductions in SARS-CoV-2 infection and COVID-19 rates in a retrospective cohort involving 9,109 vaccine-eligible health care workers (HCWs).

Overall, 7,214 (79 percent) and 6,037 (66 percent) had received their first and second doses, respectively, by Jan. 24, 2021. The researchers identified 170 SARS-CoV-2 infections between Dec. 19, 2020, and Jan. 24, 2021, for which 99 HCWs reported symptoms and were designated COVID-19 cases. Of the HCWs who became infected, 52 percent were unvaccinated and 46 and 2 percent tested positive after the first and second dose, respectively. The SARS-CoV-2 infection rate was 7.4 per 10,000 person-days among unvaccinated HCWs compared with 5.5 and 3.0 per 10,000 person-days on days 1 to 14 and 15 to 28 after the first vaccine dose, respectively, with adjusted rate reductions of 30 and 75 percent, respectively. The symptomatic COVID-19 rate was 5.0 per 10,000 person-days in unvaccinated HCWs compared with 2.8 and 1.2 per 10,000 person-days on days 1 to 14 and 15 to 28 after the first dose, respectively; adjusted rate reductions were 47 and 85 percent, respectively.

"Early reductions of COVID-19 rates provide support of delaying the second dose in countries facing vaccine shortages and scarce resources, so as to allow higher population coverage with a single dose," the authors write.

More information: Abstract/Full Text