



Do the vaccines prevent transmission of the virus to others?

Many commentaries on the results of the vaccine clinical trials cite a lack of information on asymptomatic infection as a limitation in our knowledge about the vaccines' effectiveness. Indeed, this is a theoretical concern, since up to 40% of people who get infected with SARS-CoV-2 have no symptoms but may still transmit the virus to others.

So, until we know whether the vaccines protect against asymptomatic infection, we should continue to emphasize to our patients that vaccination does not allow us to stop other important measures to prevent the spread of Covid-19. We need to continue social distancing, masking, avoiding crowded indoor settings, and regular hand washing.

There are several good reasons to be optimistic about the vaccines' effect on disease transmission. First, in the Modern trial. [opens in new tab](#), participants underwent nasopharyngeal swab PCR testing at baseline and again at week 4, when they returned for their second dose. Among those who were negative at baseline and without symptoms, 39 (0.3%) in the placebo group and 15 (0.1%) in the mRNA-1273 group had nasopharyngeal swabs that were positive for SARS-CoV-2 by PCR at week 4. These data suggest that even after one dose, the vaccine has a protective effect in preventing asymptomatic infection. Among those who *do* get infection after vaccination, furthermore, it appears that viral loads are lower than in infected people who have not been immunized.

Second, findings from population-based studies now suggest that people without symptoms are less likely to transmit the virus to others. Third, many vaccines in wide use powerfully protect against both disease and transmission, so much so that infection control is one of the main motivators behind some vaccine policies.

Since originally posting these comments, some of my colleagues have reminded me that certain vaccines allow asymptomatic colonization, and no doubt this will sometimes be true about the Covid-19 vaccines. Plus, the protective effect will never be 100%, which is why while case numbers are still high, we still recommend the use of social distancing and masking in public. These caveats notwithstanding, the likelihood that these vaccines will reduce the capacity to transmit the virus to others remains excellent.

Taken from https://www.nejm.org/coronavirus?query=main_nav_lg

Read the article and mark the sentences T (true) or F (false)

- 1- Up to 40% of people who get infected with SARS-CoV-2 have symptoms and may still transmit the virus to others. ____
- 2- Vaccination does not allow us to stop other important measures to prevent the spread of Covid-19. ____
- 3- We don't need to continue social distancing, masking, avoiding crowded indoor settings, and regular hand washing. ____
- 4- There aren't any good reasons to be optimistic about the vaccines' effect on disease transmission. ____
- 5- After one dose, the vaccine has a protective effect in preventing asymptomatic infection. ____
- 6- Among those who *do* get infection after vaccination, furthermore, it appears that viral loads are higher than in infected people who have not been immunized. ____
- 7- findings from population-based studies now suggest that people without symptoms are more likely to transmit the virus to others. ____
- 8- To sum up, if people continue social distancing, masking, avoiding crowded indoor, among others, vaccines will reduce the capacity to transmit the virus to others. ____