

## News From the Centers for Disease Control and Prevention

### Even Partial COVID-19 Vaccination Protects Nursing Home Residents

A CDC [analysis](#) has shown that a single dose of the Pfizer-BioNTech COVID-19 vaccine protected medically vulnerable nursing home residents as well as it did general adult populations that were evaluated in other efficacy and effectiveness studies.

The analysis helps fill a data gap about vaccine effectiveness in this high-risk group—generally older, frail adults with underlying health conditions—who were left out of COVID-19 vaccine trials. [Excluding](#) older adults from the trials raised questions about how well nursing home residents would respond to vaccination.

By analyzing the Pfizer-BioNTech vaccine's performance during a late January outbreak at 2 Connecticut skilled nursing facilities, investigators from the CDC and the Connecticut Department of Public Health provided real-world data about this vulnerable population. A review of 463 residents' charts showed that the vaccine was 63% effective during the period that stretched from 14 days after their first shot until 7 days after their second.

"Even during a large disease outbreak in a long-term care setting, the Pfizer-BioNTech vaccine provided protection against SARS-CoV-2 infection, including in older adults aged 65 years [or older] with a high preva-

lence of underlying medical conditions," the authors wrote.

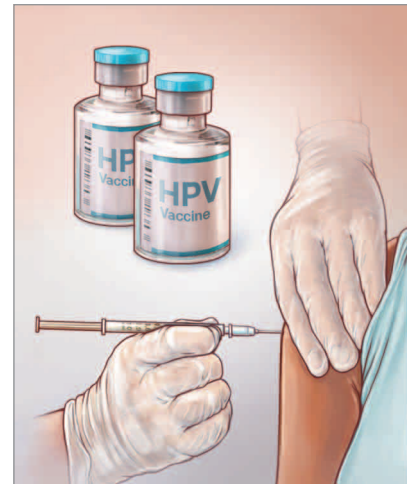
Waning COVID-19 cases as more residents and staff received second vaccinations made it impossible to assess vaccine effectiveness after 2 doses. Evidence from previous [studies](#) demonstrated greater protection among older adults after a second dose, suggesting that completing the 2-dose regimen may be particularly important to protect long-term care facility residents, the authors suggested.

### Vaccine Dramatically Reduces HPV Infection Among Young Women

Widespread vaccination of young women against human papillomavirus (HPV) has led to a greater than 80% reduction in infections with the 4 strains most often associated with disease, according to a CDC [study](#).

Although most HPV infections are benign and resolve quickly, HPV vaccination has been recommended since 2006 for pre-teen girls starting at age 11 or 12 years to prevent cervical, oral, or anal cancer and genital or anal warts resulting from persistent infection. Catch-up vaccination is recommended for teens and young women up to age 26 years.

Vaccination has also been recommended for boys aged 11 or 12 years since 2011. Initially, quadrivalent vaccines protected against



the 4 HPV strains most likely to [cause](#) disease. Newer versions that protect against 9 strains became available in 2015.

According to National Health and Nutrition Examination Survey data, infection rates among females aged 14 to 19 years with strains targeted by the quadrivalent vaccine fell from 11.5% during the 3 years before HPV vaccinations began to 1.1% during 2015 to 2018. In addition, infections with the other 5 strains decreased from 8.4% in the prevaccine era to 2.3% in 2015 to 2018. Among women in their early 20s, infection with quadrivalent vaccine-preventable strains decreased from 18.5% during the prevaccine years to 3.3% during 2015 to 2018. No decrease in prevalence was reported after 2015 for the other 5 strains.

Lower rates of sexual activity among females aged 14 to 19 years after HPV vaccine became available may also have contributed to decreased infections in their age group, the authors noted. Sexual activity rates in the older age group remained stable.

Significant decreases in infection rates among unvaccinated girls and young women who were sexually active indicate a herd effect from widespread HPV vaccination between the prevaccine era and 2015 to 2018. Infections with the quadrivalent vaccine-preventable strains fell by 87% among females aged 14 to 19 years and by 65% among women aged 20 to 24 years. — **Bridget M. Kuehn, MSJ**

**Note:** Source references are available through embedded hyperlinks in the article text online.

