

# Herd protection seen with 4-valent HPV vaccination

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(HealthDay)—From 2006 to 2017, there was a decrease in 4-valent

vaccine-type human papillomavirus (HPV) detection among vaccinated and unvaccinated women, according to a study published online Jan. 22 in *Pediatrics*.

Chelse Spinner, from the University of Cincinnati, and colleagues determined the proportion of vaccinated and unvaccinated [women](#) who were positive for vaccine-type HPV across studies that recruited women aged 13 to 26 years from hospital-based and community health clinics from 2006 to 2017.

The researchers observed an increase in vaccination rates from 0 to 84.3 percent, and 97 percent of participants received the 4-valent vaccine. Detection of the 4-valent vaccine-type HPV decreased 80.9 percent among women who were vaccinated, from 35 to 6.7 percent (odds ratio, 0.13). There was a 40 percent decrease in 4-valent vaccine-type HPV detection among women who were unvaccinated, from 32.4 to 19.4 percent (odds ratio, 0.50). In waves 3 (2013 to 2014) and 4 (2016 to 2017), the estimated vaccine effectiveness was 90.6 and 80.1 percent, respectively.

"The significant decrease in 4-valent HPV types among women who were unvaccinated suggests herd protection," the authors write.

"Although these findings are important for [clinical care](#) and [public health policy](#), continued surveillance will be important to assess for waning vaccine effectiveness, herd protection, and the impact of 9-valent vaccine introduction."

Two authors disclosed financial ties to the [pharmaceutical industry](#), including companies involved with HPV diagnostics.

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