

Dramatic Drop in Cervical Cancer Rates is Attributable to Widespread Adoption of HPV Vaccine

The CU Cancer Center's Office of Community Outreach and Engagement is working to increase access to the vaccines in rural and medically underserved populations.

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A recent [Medical University of South Carolina study](#) showing a dramatic drop in [cervical cancer](#) rates among women younger than 25 comes as no surprise to [University of Colorado Cancer Center](#) member [Jill Alldredge](#), MD, who agrees with the study's authors that the primary reason for the drop is wider adoption of the vaccine for human papillomavirus (HPV), the virus responsible for 99% of cervical cancers, over the past 20 years.

"This is something we anticipated would happen as HPV vaccination rollout increased nationally," says Alldredge, assistant professor of gynecologic oncology in the [CU School of Medicine](#). "It's fantastic to see that that's starting to come to fruition the way we planned."

A vaccine success story

The HPV vaccine began to be rolled out nationally around 20 years ago, Alldredge says, and it was originally recommended for girls between the ages of 9 and 26. Recommendations have expanded over the years, and the vaccine is now targeted at girls and boys from ages 9 to 45.

"A lot of people who didn't have access to it as kids can now get it as adults, and it's available to men and women," Alldredge says. "That increasing breadth of accessibility to the vaccine is now resulting in fewer cervical cancers, which was exactly the hope."

As HPV is a sexually transmitted virus that can also cause cancers in the throat, anus, vagina, vulva, and penis, the vaccine is most effective when given to children between ages 9 and 11, before they become sexually active. Some parents worry getting the vaccine at such a young age condones early sexual activity, a stereotype pediatricians constantly work to overcome.

"There are studies done by our pediatric colleagues that confirm that taking this vaccine does not change people's sexual behavior," Alldredge says. "Giving 9-year-olds this vaccine doesn't put

them at higher risk to have sex at an earlier age. This is still a barrier we face in the U.S. In countries like the UK and Australia, where this is a mandated vaccine by schools, the uptake is quite a bit higher, and they're seeing even more dramatic declines in cervical cancer."

Barriers remain

The CU Cancer Center's Office of [Community Outreach and Engagement \(COE\)](#) is working to overcome other barriers to getting the HPV vaccine at an appropriate age. Since 2020, COE has been engaged in a [project with Denver Health](#) to help parents of adolescents and young adults from medically underserved communities make informed decisions about the HPV vaccine.

"We're targeting underserved populations, mostly Hispanic and Latina, because there historically is a higher incidence and mortality from cervical cancer among that population," says [Evelinn Borrayo](#), PhD, associate director of COE.

The HPV Education and Patient Navigation Project was initiated in 2020 with support from the National Cancer Institute. The educational program about HPV and the HPV vaccine is for Denver Health parents who have adolescent children ages 9 to 17 or for young adult patients of Denver Health ages 18 to 26. Participants complete a short pre-education survey, watch a short educational video about the HPV virus and vaccine, and complete post-education surveys after watching the video.

COE also is working with Denver Health to review patient records and flag those patients who got the first dose of the multi-dose vaccine (two or three doses, depending on age) but didn't complete the full cycle.

"We look at patients who have come to the clinic at Denver Health for past 18 months, and those who appear to be missing a dose, depending on their age, we'll reach out to them or their parents," Borrayo says. "Then we try to provide a vaccine in a way that works for their schedule."

Rural populations another challenge

Another Colorado population lagging behind when it comes to HPV vaccination rates is the state's large rural population, which has only a 10%–30% completion rate for the full vaccine cycle, compared to around 60% in the rest of the state. COE is working with Valley-Wide Health Systems on a project, similar to the one with Denver Health, to increase vaccination rates in the San Luis Valley and eastern Colorado.

Borrayo says she is encouraged by the results of the University of South Carolina study, but through her work with COE, she knows there is still a lot of work to be done, particularly in Colorado.

"That's exactly what we want to see — that the vaccine prevents the incidence of cancer — but

ideally, it would be even better,” Borrayo says. “Women who qualify for the vaccine should be getting the vaccine, but that’s not always happening for a variety of reasons.”

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<http://beta.docker.cancerhealth.com/article/dramatic-drop-cervical-cancer-rates-attributable-widespread-adoption-hpv-vaccine>