

## Preventing Cancer in South Dakota: Successful Strategies to Increase HPV Vaccination Rates

### Summary

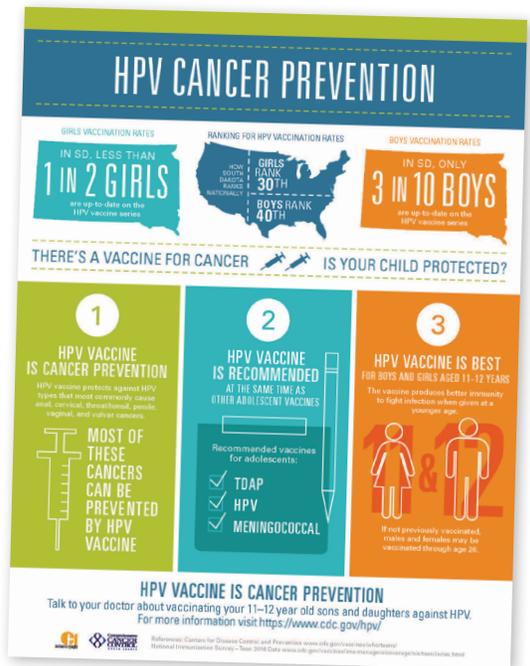
The South Dakota Comprehensive Cancer Control Program (SDCCCP) partnered with health systems across South Dakota to increase the state's human papillomavirus (HPV) vaccination rates. Efforts focused on the implementation of evidence-based interventions. Increases in first dose initiation and series completion rates were seen among all participating sites.

### Challenge

HPV vaccine protects against HPV types that most commonly cause cervical, throat/tonsil, anal, penile, vaginal, and vulvar cancers. Despite the importance of HPV cancer prevention, South Dakota HPV vaccination coverage rates fall considerably short of the Healthy People 2020 goals of 80%. In 2017, the percentage of males and females ages 13-17 in South Dakota who were up-to-date on the HPV vaccine series was 44.8% compared to 48.6% nationally.<sup>1</sup>

### Solution

In an effort to reduce the burden of HPV associated cancers, the Comprehensive Cancer Control, Immunization, and All Women Count! Programs within the SD Department of Health (SDDOH) released a request for applications targeting health systems interested in partnering to implement evidence-based interventions to increase HPV vaccination rates in the state. Health systems were required to implement at least two of the proposed evidence-based interventions: client reminder and recall systems, community-based interventions, provider assessment and feedback, provider reminders, and standing orders. In addition to the funding for this project, the programs also provided technical assistance to support project implementation, address questions, and share best practices throughout the duration of the project period.



“ Sharing unblinded health care provider data was key. Physicians compared HPV vaccination rates with others in their practice and were motivated to make HPV vaccination a priority. ”

**Tracy Bieber, RN**  
Sanford Health Immunization Strategy Manager

## Key Components

To date, the SDDOH has partnered with Sanford Health, Avera Health, Community Health Center of the Black Hills, and Black Hills Pediatrics, LLP to increase HPV vaccination rates. All partner sites implemented client reminders, three sites implemented provider reminder and recall systems, and two sites implemented provider assessment and feedback processes. Client reminders included mailed letters, automated phone calls, staff phone calls, texts and emails. Reminders were sent to adolescents and/or their guardian if they were due for the first or subsequent doses of the HPV vaccine. Provider reminder efforts focused on electronic health record enhancement to establish a provider tracking dashboard for HPV vaccination and clinical event alerts. Provider assessment and feedback efforts included sharing and discussion of clinic and provider-level vaccination coverage rates in an open and unblinded manner monthly to drive quality improvement efforts. All sites provided patient and provider education regarding the HPV vaccine and were encouraged to establish a same way, same day and no missed opportunity culture that aimed to ensure every eligible adolescent received a strong recommendation for the HPV vaccine regardless of their visit reason.

## Results

Project partners were asked to provide system-level data quarterly throughout the project. The outcome measures that were tracked included HPV vaccine doses administered, HPV vaccine series initiation rates, and HPV series completion rates at baseline and by month throughout the project. The cumulative project reach for this effort included over 162,000 males and females ages 11-26. Over 125,000 client reminders and 24,614 doses of HPV vaccine were administered. First dose initiation and series completion rates increased for all sites. First dose initiation rates increased on average by 12%, with an average baseline  $\geq 1$  dose rate of 33%. Series completion rates increased by 9%, on average, with an average baseline series completion rate of 17%.

## NEXT STEPS

The SDDOH continues to implement efforts to increase HPV vaccination rates. Other health systems in SD interested in implementing similar interventions are encouraged to reach out to the SDDOH for assistance.

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## References:

1. Walker TY, Elam-Evans LD, Yankey D, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2017. *MMWR Morb Mortal Wkly Rep* 2018;67:909–917. DOI: <http://dx.doi.org/10.15585/mmwr.mm6733a1>