

Colorado Cancer Coalition Priorities: 2016-2018

Option 1 of 10: Cancer Prevention: HPV Vaccination

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Goal 3: Increased uptake of clinical interventions to prevent cancer.

Objective 3.2: Increase HPV and Hepatitis B Vaccine uptake.

Focus Area: Males/females who have received 3 or more HPV doses.

→ Strategies

- Promote vaccination programs and requirements in schools and hospitals.
- Educate parents about the HPV vaccine as a cancer prevention method.
- Implement vaccine reminder and recall systems targeted at providers and clients in pediatric and primary care provider offices.
- Participate in the Colorado Immunization Information System (CIIS) to track vaccine uptake within clinics.
- Implement provider assessment and feedback quality improvement processes.
- Implement provider reminder systems to discuss vaccines with parents/guardians.
- Implement standing provider orders for HPV vaccination.

→ Measures

	Data Source	Baseline	2020 Target
Adolescents age 13-17 who have received at least one dose of the HPV Vaccine	2014, National Immunization Survey -Teen (NIS-Teen)	62.5% (Females only)	80%
		40.7% (Males only)	80%
Adolescents age 13-17 who have received three or more doses of the HPV Vaccine		42.1% (Females only)	80%
		21.9% (Males only)	80%
Adults ages 18-26 who have received an HPV Vaccine	2014 BRFSS	36.5%	80%
Adults ages 18-26 who have received three doses of the HPV Vaccine		19.9%	80%

→ What we know about the problem

- According to CDC, HPV is thought to be responsible for more than **90% of anal and cervical cancers**, about **70% of vaginal and vulvar cancers**, and **more than 60% of penile cancers**. Cancers of the head and neck are mostly caused by tobacco and alcohol, but recent studies show that **about 70% of cancers of the oropharynx may be linked to HPV**. Many of these may be caused by a combination of tobacco, alcohol, and HPV.
- Every year 27,000 people are diagnosed with cancer caused by HPV- 1 case every 20 minutes.
 - Each year, an estimated 465 HPV-related cancers are diagnosed in Colorado, excluding in situ cervical cancer cases. The cancer registry does not collect in situ cases for cervical cancers, so this estimate is low compared to the actual potential impact of HPV vaccination.
- HPV-related oropharyngeal cancers are more likely in men than women, and are **projected to surpass the number of cervical cancers** as the #1 type of cancer caused by HPV by 2020.
- Lack of a strong provider recommendation is a significant driver of low HPV vaccination rates. Furthermore, **clinicians underestimate the value parents place on the HPV vaccine**. This fact presents a feasible evidence-based opportunity to make change.

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- The HPV vaccine is recommended for boys and girls 11-12 years old as they have a higher immune response to the vaccine than older teens. Most HPV infections occur during the teen and college-aged years.
- Data for the recommended age group of 11-12 years (as well as older age groups) is captured using the [Colorado Immunization Information System \(CIIS\)](#). CIIS is a real time, consolidated immunization data system allowing users to determine current vaccine status. Providers currently are not required to report to CIIS. However, utilization of this database allows ascertainment of vaccination rates down to the clinic and county level. This is important in order to understand regional differences and target evidence-based interventions.
- In the greater Denver-metro area, as of November 2015, about **26.3% of 11-12 year old males and 29.8% of females are up-to-date** with their HPV vaccine, significantly below the 2020 target.
- The NIS-Teen survey includes data on adolescents ages 13-17. HPV is a part of the annual survey and responses are confirmed with patients' providers.
- BRFSS survey includes adults 18 and over, but only those between the ages of 18-49 are asked about vaccination. This was an optional module in 2014, so asking these questions again would depend on funding and prioritization by the BRFSS team.

→ Why should CCC members prioritize this area of work?

Prioritization factors	Considerations	Notes
Likelihood of Population Impact	<ul style="list-style-type: none"> • With more than 80% of sexually active adults infected with HPV by age 50, HPV vaccination is a cost-effective and efficient public health intervention. Widespread use of the vaccine would save thousands of people every year from the burdens of HPV-related cancer. • Herd effects have been reported in countries with >50% HPV vaccination coverage 	
Evidence of Feasibility	<ul style="list-style-type: none"> • Many states have seen increased vaccination rates through the use of evidence-based interventions, including implementing practice level quality improvement processes and communications campaigns • Chicago implemented these strategies and initiation rates increased from 57.6% to 78.1% for females and 45.8% to 64.9% for males 	
Established Need	<ul style="list-style-type: none"> • CO vaccination rates are significantly below the Healthy People and CCC target of 80% • 80-100% HPV vaccination rates could result in a 76-83% reduction in cervical, an 86% reduction in HPV-associated male genital, and a 63%-86% reduction of anal cancers • In 2014, coverage for each dose was higher among Hispanic girls than among white girls 	
Measurability	<ul style="list-style-type: none"> • Multiple indicators to measure vaccination rates: NIS-Teen Survey, BRFSS, CIIS • Evidence of change will likely be seen using CIIS data as HPV vaccination rates are assessed at the local level 	

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Collective Impact	<ul style="list-style-type: none"> • Denver Metro Alliance for HPV Prevention aims to align public and private health providers/institutions, medical societies, and organizations in addressing cancer prevention • Efforts to expand outside the greater Denver metro area to rest of state will be stalled without support of the CCC 	
Identified Gaps	<ul style="list-style-type: none"> • Efforts need to be multidisciplinary and multifactorial in order to achieve an aligned policy, systems, and environmental approach to increasing HPV vaccination rates • Without collaboration between various organizations, promotion of a common message related to HPV immunization and support for sustainable change may be lacking 	
Opportunities for Leveraging Partnerships	<ul style="list-style-type: none"> • Denver Metro Alliance for HPV Prevention and other state grantees have begun implementing evidence-based strategies in practice • Effective strategizing on best practices and expanding reach can occur by combining efforts from across the state 	
Political/ Community Support	<ul style="list-style-type: none"> + Alliance members have committed to supporting this focus area + LPHAs, School based health centers, primary care providers, pediatricians, nurses and public health professionals are engaged and poised to act. - Often misperception of the vaccine; lack of provider time, resources, and view of the importance of the HPV vaccine <p>Critical to have CCC support HPV vaccination efforts to garner additional buy-in, address potential pushback, and support a centralized hub for the objective</p>	

Would you or your organization commit to helping with this priority?