



Mission
HPV Cancer
Free



2020–2023 Activity Report

*Mountain West
HPV Project to Reduce
Geographic Disparities for
Adolescents Living in
Rural States*

Released January 2024

cancer.org/hpv

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Mountain West HPV Project Overview

More than 50 million individuals live in rural communities in the United States. Like many special populations, individuals living in rural areas have access barriers to overcome and they have documented poorer health outcomes. This holds true for HPV vaccination which has low uptake and can result in higher rates of HPV-related cancers.

The American Cancer Society (ACS) received three years of funding for a project titled **“Mountain West HPV Project to Reduce Geographic Disparities in HPV Vaccination Rates for Adolescents Living in Rural States.”** The states included in this project included Idaho, Montana, Nevada, Utah, and Wyoming. The project sought to address geographic and gender gaps in HPV vaccination rates and increase on-time initiation. ACS applied a health equity lens to implement disparity-reducing interventions through a three-pronged strategy inclusive of:



Regional Consortium

For widespread state-level impact, the project required strong partnerships and stakeholder buy-in. ACS convened like-minded organizations and community partners to increase HPV vaccination by providing information, sharing knowledge, and identifying areas of need and future opportunities.



Quality Improvement

ACS engaged health systems in a learning collaborative with a focus on quality improvement (QI). This strategy catalyzes care systems and providers as the key drivers of vaccination uptake. ACS provided technical assistance on QI tools and evidence-based interventions (EBIs) to health system partners to increase on-time HPV vaccinations in 9-13 year-old adolescents.



Professional Education

A provider's recommendation is the most important factor in whether a child receives a vaccine. ACS provided HPV vaccination education through various methods including Project ECHO, learning series, and individual education sessions to inform traditional and non-traditional vaccinators.



PROJECT TIMELINE

2020



- Hired two ACS program staff to lead and execute the project
- Held inaugural virtual regional consortium meeting with core stakeholders to assess HPV vaccination efforts in each state
- Identified new additional partners through virtual convening sessions
- Hosted second regional consortium meeting virtually to share best practices, talk through challenges created by the global pandemic, and plan state-level actions

2021



- Held exploratory meetings with federally qualified health centers and state primary care associations to identify HPV champions for quality improvement opportunities
- Launched *"Back to School and Beyond in the Era of COVID-19"* ECHO series with 78 participants
- Launched *"Achieving New Heights: Increasing HPV vaccinations throughout the Mountain West"* ECHO series with 53 participants
- Convened the third virtual regional consortium delivering a call to action within the 5-state region and continued state action planning

2022



- Identified key health system partners for inaugural quality improvement (QI) learning collaborative cohort
- Initiated professional education opportunities with clinical providers, oral health professionals, and pharmacists
- Convened learning collaborative cohort monthly to explore QI processes, tools, and evidence-based interventions
- Held in-person state consortium meetings to highlight best practices and work through short term goals
- Recruited new partners for the second learning collaborative cohort

2023



- Expanded professional education offerings including in-person and virtual education for clinical staff, medical students, oral health professionals, and pharmacists
- Convened monthly second learning collaborative cohort to explore QI processes, tools, EBIs and share best practices for increasing HPV vaccination
- Launched *"HPV Vaccinations: Community Health Workers Role"* ECHO series with 88 participants in Nevada
- Hosted second round of in-person state consortium meetings to wrap up project and discuss sustainability

2024 & Beyond

Key elements and best practices from the Mountain West HPV Vaccination Project will be scaled up into ACS's national HPV program through state-based initiatives and geographic disparities work.



Regional Consortium

Convening state stakeholders to share best practices

From 2020–2023, ACS convened stakeholders in a combination of region-wide virtual consortium meetings as well as in-person individual state meetings. Stakeholders talked through best practices and learned more about current conditions surrounding HPV vaccination and HPV cancer prevention in the 5-state region. Attendees networked, shared current work, and participated in activities to help identify areas of focus and shape future opportunities.



2023 Utah HPV Stakeholder Meeting at Huntsman Cancer Institute

Notable State Wins:

- Idaho & Nevada have expanded HPV vaccination access by allowing dental professionals to vaccinate
- Nevada Community Health Workers will be able to bill for preventive services with patients
- Montana formalized an HPV statewide workgroup
- Utah Statewide Immunization Information System now forecasting “due now” for HPV vaccination at age 9

235

stakeholders
convened

100+

organizations
represented

8

in-person state
meetings

3

virtual region-
wide meetings



Quality Improvement through a Learning Collaborative

Driving Provider and System Change

ACS has a strong history partnering with healthcare systems to increase HPV vaccination rates through QI projects. The Mountain West project recruited partners in the five state region and delivered education via a learning collaborative model.

The curriculum focused on minimizing missed opportunities, addressing disparities, and reducing barriers exacerbated by the pandemic. The collaborative met monthly and ACS staff provided formal education and technical assistance in QI processes/tools and evidence-based interventions (EBIs). Partners aimed to increase HPV vaccination rates among patients ages 9-13 at the health system level by using QI processes to implement a combination of provider and system level interventions.

Monthly topics included:

- Draft and refine Aim statements
- Process mapping
- Root cause analysis
- Review EBIs
- Organize Plan-Do-Study-Act (PDSA) cycles
- Implement sustainable change

High Impact EBIs Implemented:

- Patient reminders
- Reducing structural barriers
- Staff education
- Strong provider recommendation
- Provider prompts
- Standing orders
- HPV vaccination Initiation at age 9



“ Prior to the ACS project, there were system lectures and webinars given on HPV risk and vaccination. As a result of the ACS partnership, we have added electronic health record (EHR) clinical decision support (CDS) that cues providers and parents to initiate vaccination at age nine and emphasizes the importance of equal vaccination for boys and girls. ”

Learning Collaborative Health System Partner



Quality Improvement Results

Provider and System Change



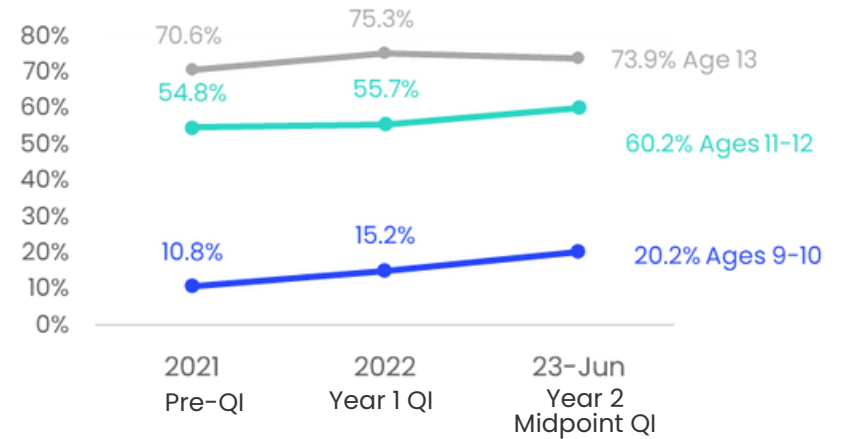
- Launched the Mountain West QI learning collaborative cohort with 7 health system partners serving patients at 62 clinic sites
- > 65 EBIs implemented
- Increased HPV initiation rates across all age groups
- Increased HPV completion rates across the 11-12 and 13 year old age groups



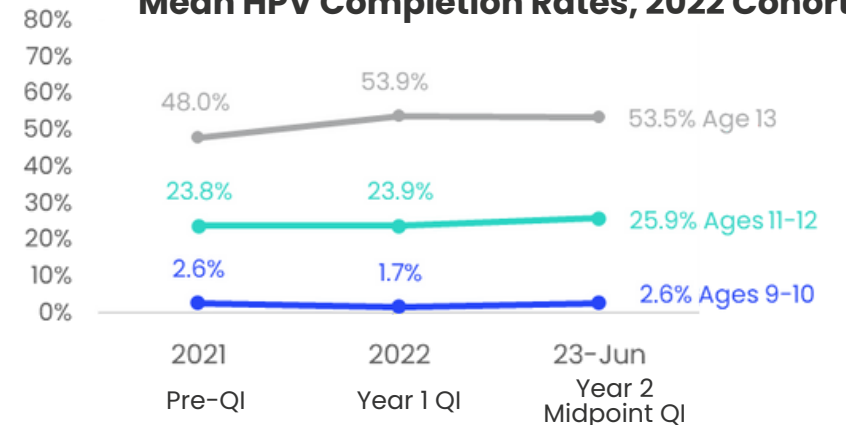
- Six 2022 cohort systems continued into a second year serving patients at 53 clinic sites
- 10 new health systems joined serving patients at 31 clinic sites with a strong focus on rural engagement
- The 2022 cohort members saw increases in mean HPV vaccination initiation and completion rates across nearly all age groups
- Final 2023 cohort data will be collected in early 2024

OUTCOMES:

Mean HPV Initiation Rates, 2022 Cohort



Mean HPV Completion Rates, 2022 Cohort



5

states represented

17

health systems engaged

93

clinic sites

52,305

active patients ages 9-13 yo

20

rural clinics engaged



Professional Education

Research shows that a strong recommendation is the most effective intervention and best predictor of vaccination uptake. ACS partnered with various regional and local stakeholders to provide professional education to traditional and non-traditional vaccinators through three different methods: Project ECHO, formalized learning series, and individual education sessions. Education sessions encompassed HPV vaccination starting at age 9, addressing vaccine hesitancy using communication methods like presumptive language and motivational interviewing, talking through health inequities throughout the Mountain West, and highlighting unique ways to reach adolescents and their parents with HPV vaccinations.

“This was one of my favorite CE’s I have ever done. I loved the variety of opinions and ideas and I feel like I can take a lot back to my work and this applied directly to me. I love the confidence this gave me in patient education.”

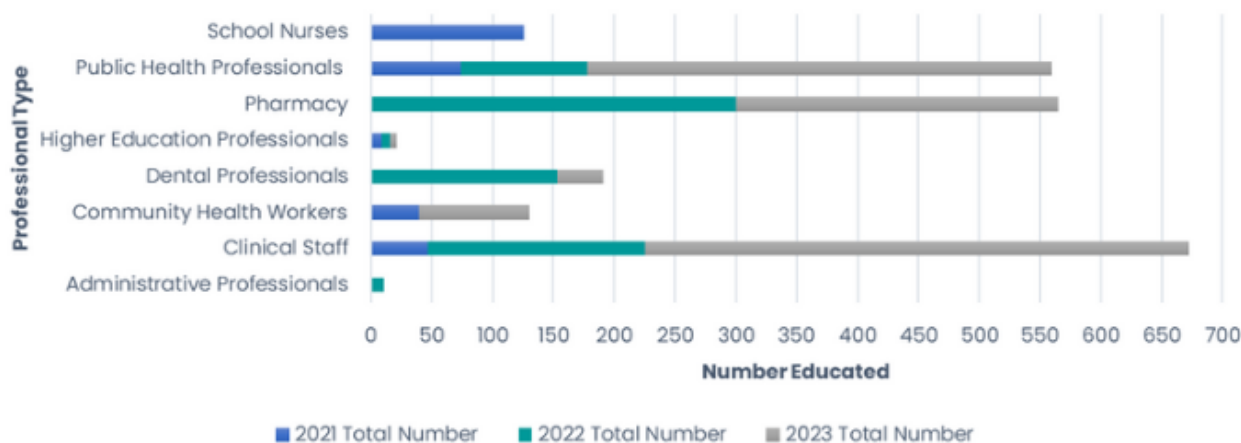


2,173

Unique participants engaged from 2021-2023



Types of Professionals Educated 2021-2023



“I really enjoyed this HPV panel. I have gained a wealth of knowledge on how to work with those who experience health inequity, I have gained many resources to support patients, and myself as a student and future practitioner.”

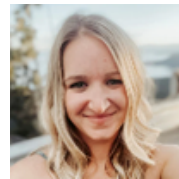
Funder Acknowledgment

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Desert Sage Health Centers
Families First Pediatrics
Family Healthcare
Family Health Services
FourPoints Health
GenesisCare
Head & Neck Alliance
Heritage Health
High Sierra AHEC
Hill County Health Department
HLN Consulting
HPV Free Idaho
Huntsman Cancer Institute
Hygienist for Health
Idaho Academy of Family Physicians
Idaho Chapter American Academy of Pediatrics
Idaho Comprehensive Cancer Control
Idaho Department of Health & Welfare
Idaho Immunization Coalition
Idaho Immunization Department
Idaho Oral Health Coalition
Idaho Primary Care Association
Idaho Society of Health System Pharmacists
Idaho State University– College of Pharmacy
Idaho Dental Hygienists’ Association

Immunize Nevada
Immunize Oregon/Oregon HPV Prevention Alliance
Intermountain Health
Kepka Research Lab
La Pine Community Health Center
Lake County Public Health
Lewis & Clark County Public Health
Liberty County Public Health
Marias Healthcare Services
Midtown Community Health Center
Montana Academy of Family Physicians
Montana Association of School Nurses
Montana Chapter American Academy of Pediatrics
Montana Cancer Control Programs
Montana Central Tumor Registry
Montana Dental Association
Montana Dental Hygienists’ Association
Montana Department of Health & Human Services
Montana Family Planning/Bridgercare
Montana Immunization Department
Montana Office of Rural Health
Montana Primary Care Association
Natural Transitions Consulting
Nevada Academy of Family Physicians
Nevada Chapter American Academy of Pediatrics
Nevada Cancer Coalition
Nevada Certification Board/CASAT
Nevada Comprehensive Cancer Control
Nevada Dental Association
Nevada Dental Hygienists’ Association
Nevada Department of Health & Human Services
Nevada Health Centers
Nevada Immunization Department
Nevada Medicaid
Nevada Minority Health & Equity Coalition
Nevada Oral Health Program
Nevada Primary Care Association
Nevada State Immunization Program
New Mexico Immunization Coalition
Northern Nevada HOPES
Northern Utah Immunization Coalition
Ogden Clinic
Oregon Health Authority
Pacific Dental Services
Partnership Health Center
Renown Regional Medical Center
RiverStone Health

Roseman University of Health Sciences– College of Dental Medicine
Salt Lake County Health Department
Sarah Cannon Cancer Institute
Select Health
Smiles Across Montana
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Utah Community Health Workers Association
Utah Comprehensive Cancer Control
Utah Dental Association
Utah Dental Hygienists’ Association
Utah Department of Health and Human Services
Utah Immunization Department
Utah Oral Health Coalition
Utah Statewide Immunization Information System USIIS
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Washoe County Health District
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