





# A Public Health Program Insuring the Health and Safety of Our New Mexico Populations

# Integrating Healthcare Information Through Surveillance of Cancer Screening and Vaccination

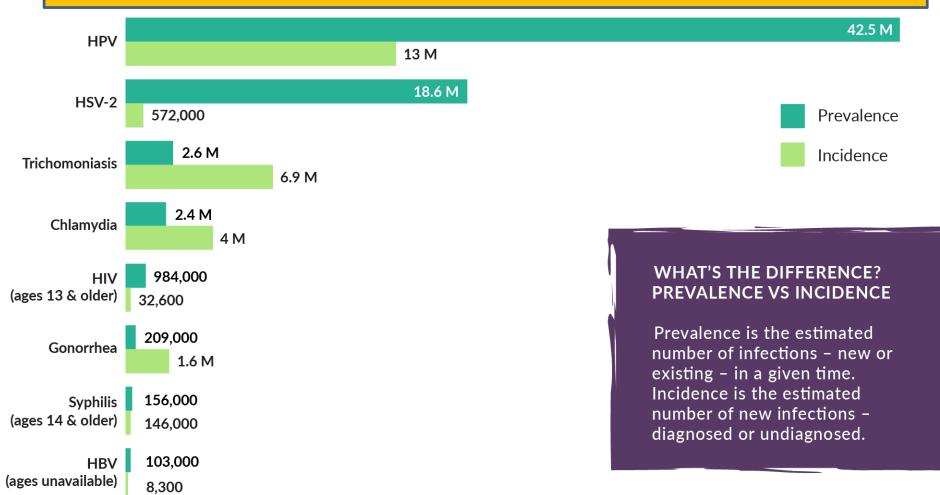
A partnership of local, national and federal organizations, agencies, community members & content experts





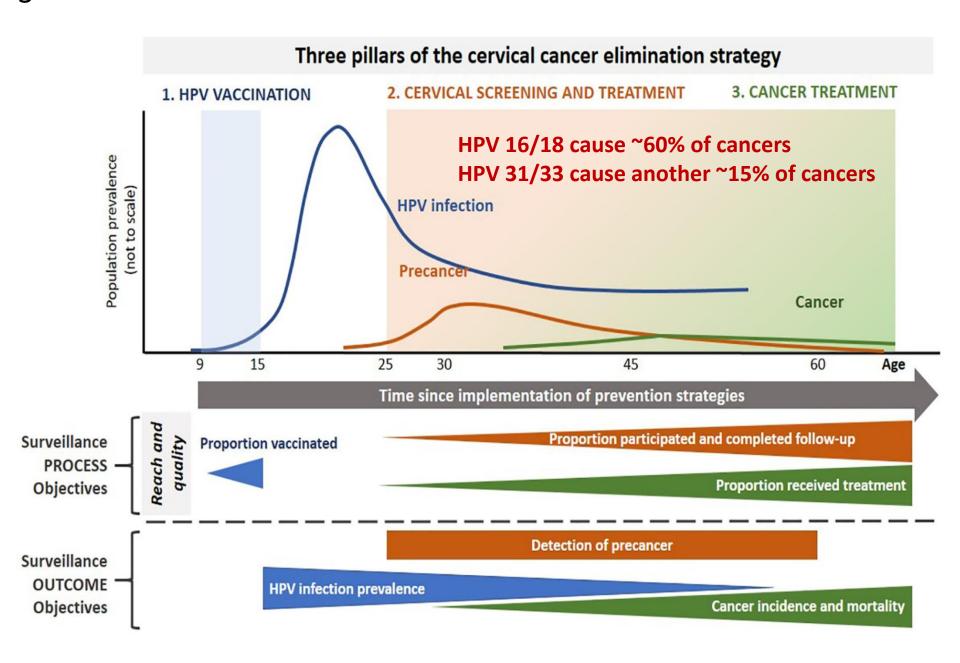
Hundreds of HPVs cover the bodies of humans and other PVs cover the bodies of many animals

The co-evolution of PVs with animals is not well appreciated by the public and is very different than what we classify as STIs

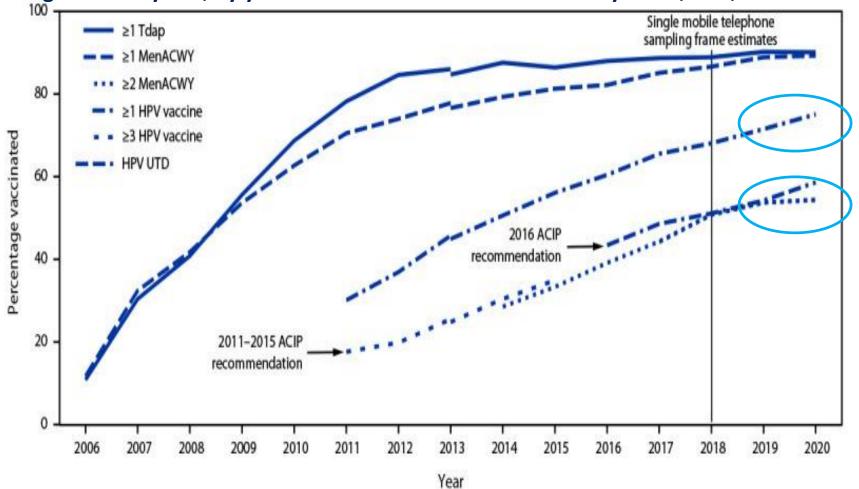


<sup>\*</sup>Bars are for illustration only; not to scale, due to wide range in number of infections. Estimates for adults and adolescents ages 15+ unless otherwise stated. HIV and HBV data only represent sexually acquired infections.

### 3 New Mexico acts as a model for cervical cancer prevention for the United States



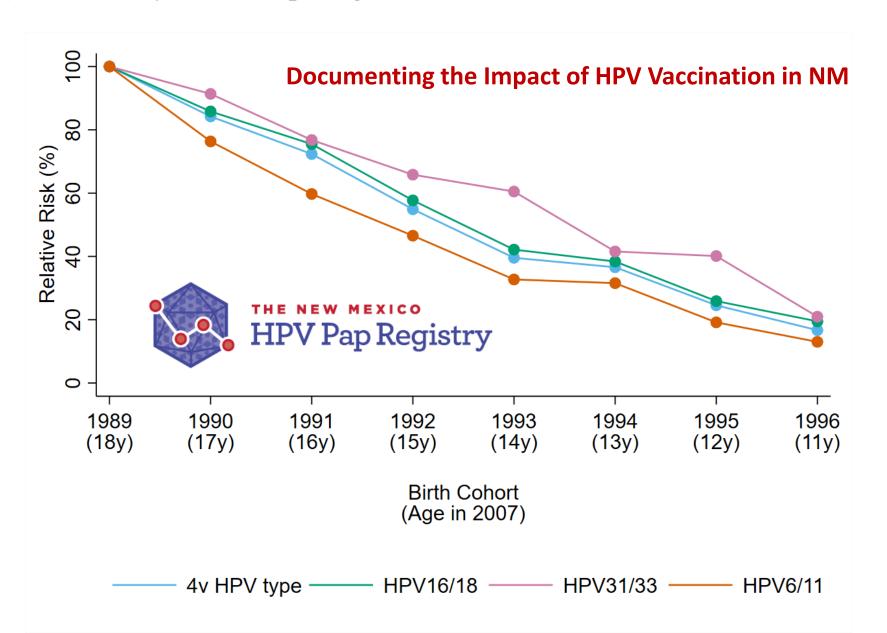
Estimated vaccination coverage with selected vaccines and doses among adolescents aged 13–17 years, by year — National Immunization Survey–Teen, USA, 2006–2020



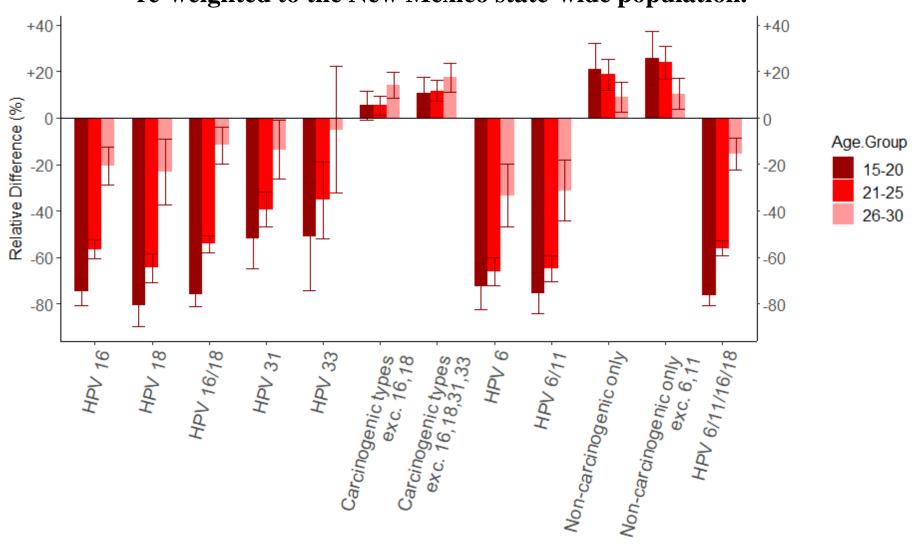
**New Mexico-specific Adolescent Vaccination 2020 Data Tracks Nationally** 

≥1 Tdap	89.3 (84.9–92.6)
≥1 MenACWY	85.2 (80.1–89.2)
≥1 HPV	77.4 (71.9–82.0)
HPV UpToDate (UTD)	59.2 (53.0–65.1)

## The relative risk (%) of HPV infection for females in New Mexico has declined dramatically when comparing women born in 1989 vs 1996 state-wide

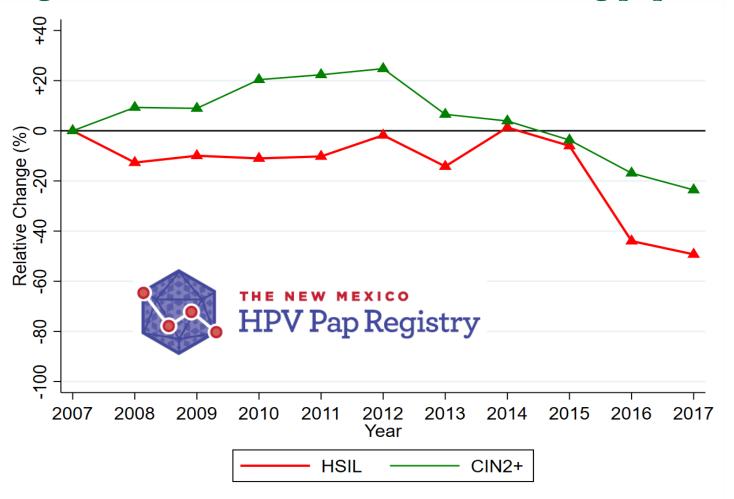


Relative difference (%) and 95% confidence intervals in HPV positivity for different HPV types, for women aged 15-20, 21-25, and 26-30 years, re-weighted to the New Mexico state-wide population.



7 Documenting the relative reduction in percentage of HSIL (high-grade Pap test) and CIN2+ (high-grade precancers)

Among women aged 21-25 years, disease declined by year of cervical screening across time, for New Mexico's screening population



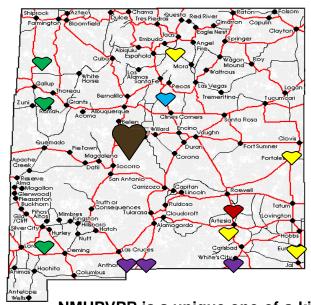
#### **NMHPVPR Public Health Reporting State-wide**

County Estimates of NM Women	
with cervical cancer preventive care	
in NMHPVPR 2001-2015	

in NMHPVPR 2001-2015	
County	Women
Bernalillo	261,902
Catron	1,338
Chaves	25,242
Cibola	10,226
Colfax	4,876
Curry	19,122
De Baca	751
Dona Ana	83,806
Eddy	21,358
Grant	11,352
Guadalupe	1,484
Harding	244
Hidalgo	1,738
Lea	25,544
Lincoln	7,794
Los Alamos	6,726
Luna	9,374
McKinley	28,981
Mora	1,817
Otero	24,730
Quay	3,306
Rio Arriba	15,249
Roosevelt	7,451
San Juan	48,239
San Miguel	10,785
Sandoval	53,508
Santa Fe	57,227
Sierra	4,302
Socorro	6,464
Taos	12,879
Torrance	5,761
Union	1,405
Valencia	28,737

StateWide Inclusion

803,717

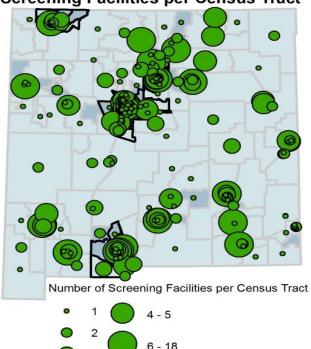


NMHPVPR is a unique one-of-a-kind resource as the only cervical screening registry in the United States. It has demonstrated leadership on a national and international basis serving as a global model for assessing cancer care delivery and outcomes.

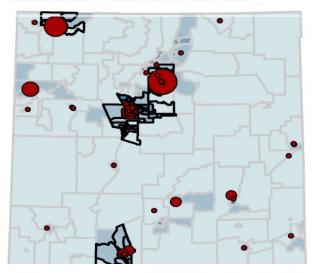
This state-wide public health program documents successes in reducing the overall burden of cervical pre-cancer and provides critical data to document and enable the integration of HPV vaccination and cervical cancer screening.

NMHPVPR not only measures benefits of screening and vaccination throughout the state, but it has the ability to measure potential unforeseen harms when cervical cancer screening changes and as HPV vaccination increases over time. Understanding harms are as important as benefits to our people's health.

#### State-wide Healthcare Service Access Screening Facilities per Census Tract



#### **Excisional Treatment Facilities**

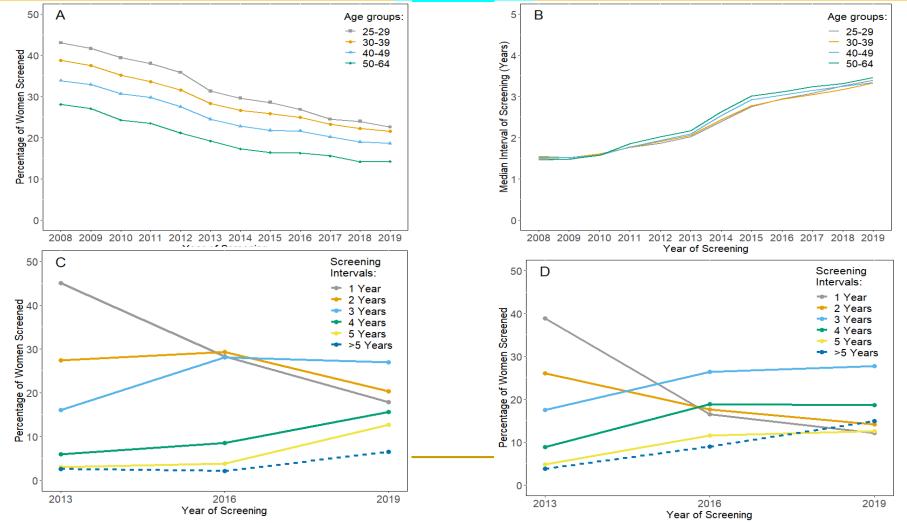


New Mexico HPV Pap Registry shows how cervical cancer screening

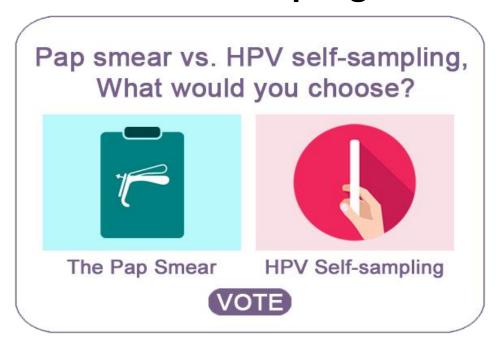
- A) declined in frequency across NM for more than a decade,
- B) Screening intervals lengthened over this time however ...

C) and D) show ~65% of women were <u>over-screened</u> at 1, 2 and 3 years vs 5 years wasting New Mexico's health care dollars and increasing harms vs benefits.

Disturbingly, <u>underscreening</u> (≥ 5-7 years) increased over time (dashed lines)



## The GO FORWARD for Cancer Screening Self-Sampling



## Performance of an affordable urine self-sampling method for human papillomavirus detection in Mexican women

R Hernández-López , L Hermosillo, L León-Maldonado, R Velázquez-Cruz, L Torres-Ibarra, E Lazcano-Ponce, A Lörincz, C M Wheeler, F X Bosch, J Cuzick, B Rivera-Paredez, B Nedjai, J Salmerón Published: July 21, 2021

### **HPV-related Cancer Prevention**

No woman or man in New Mexico should die of a preventable cancer

- Approximately 15,000 women currently develop cervical cancer each year in the U.S.
- Even more HPV-related cancers than this are diagnosed in men and women each year.
- Over 80% of cervical cancers and other HPV-related cancers (including head and neck cancers) could be prevented with HPV vaccination of both men and women
- Unfortunately, in the U.S. as many as 20 million women aged 21-64 years have not been screened at all or were screened inadequately in the last 5 years —
- In NM, 65% of women with cervical cancer (2009-2016) were not screened or were underscreened.
- An overarching view is that cervical cancer remains largely a disease of unscreened women and will likely become a disease of the unvaccinated in decades to come.
- Over \$14 billion in U.S. healthcare dollars and many millions of New Mexico's health care dollars are spent annually on prevention (screening, diagnosis and vaccination) and treatment of HPV-associated diseases

The New Mexico HPV Pap Registry needs legislative support for its infrastructure





NMHPVPR documents necessary cancer prevention improvements.

Without its surveillance efforts, data documenting the impact,
costs, benefits and harms of health care delivery in New Mexico would remain
unknown.

- Unscreened women must be screened with active outreach to insure timely screening
- Over-screening in New Mexico needs to be corrected to save millions of \$
- Rural New Mexico needs available specialty care for precancer treatment
  - HPV vaccination coverage needs to be increased

Selected Peer-Reviewed Clinical Research Publications Impacting National Policy
of the New Mexico HPV Pap Registry
Can be found at the below links

https://pubmed.ncbi.nlm.nih.gov/?term=New+Mexico+HPV+Pap+Registry







### The return on investment 2009-2022?

Over \$40 million dollars in external funding \$1.35 million/year is needed for NMHPVPR infrastructures Current HB2 appropriates <\$250,000/yr to NMHPVPR

## Thank you !!! - QUESTIONS



