



New Mexico HPV Pap Registry  
working on prevention of HPV-associated cancers

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

Integrating Healthcare Information Through  
Surveillance of Cancer Screening including

HPV infections and  
Vaccination

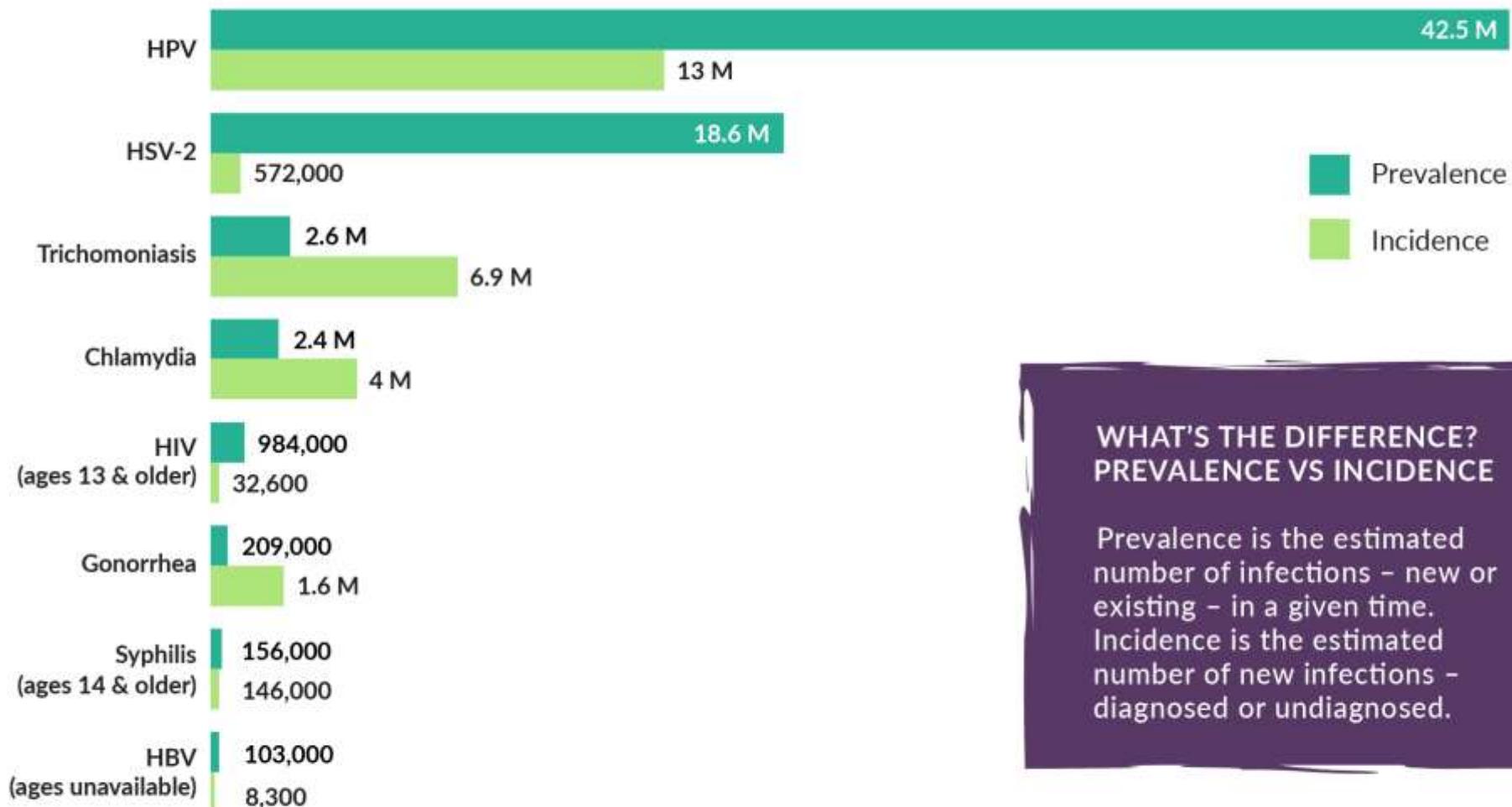
A partnership of local, national and  
federal organizations, agencies,  
community members & content  
experts



## 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

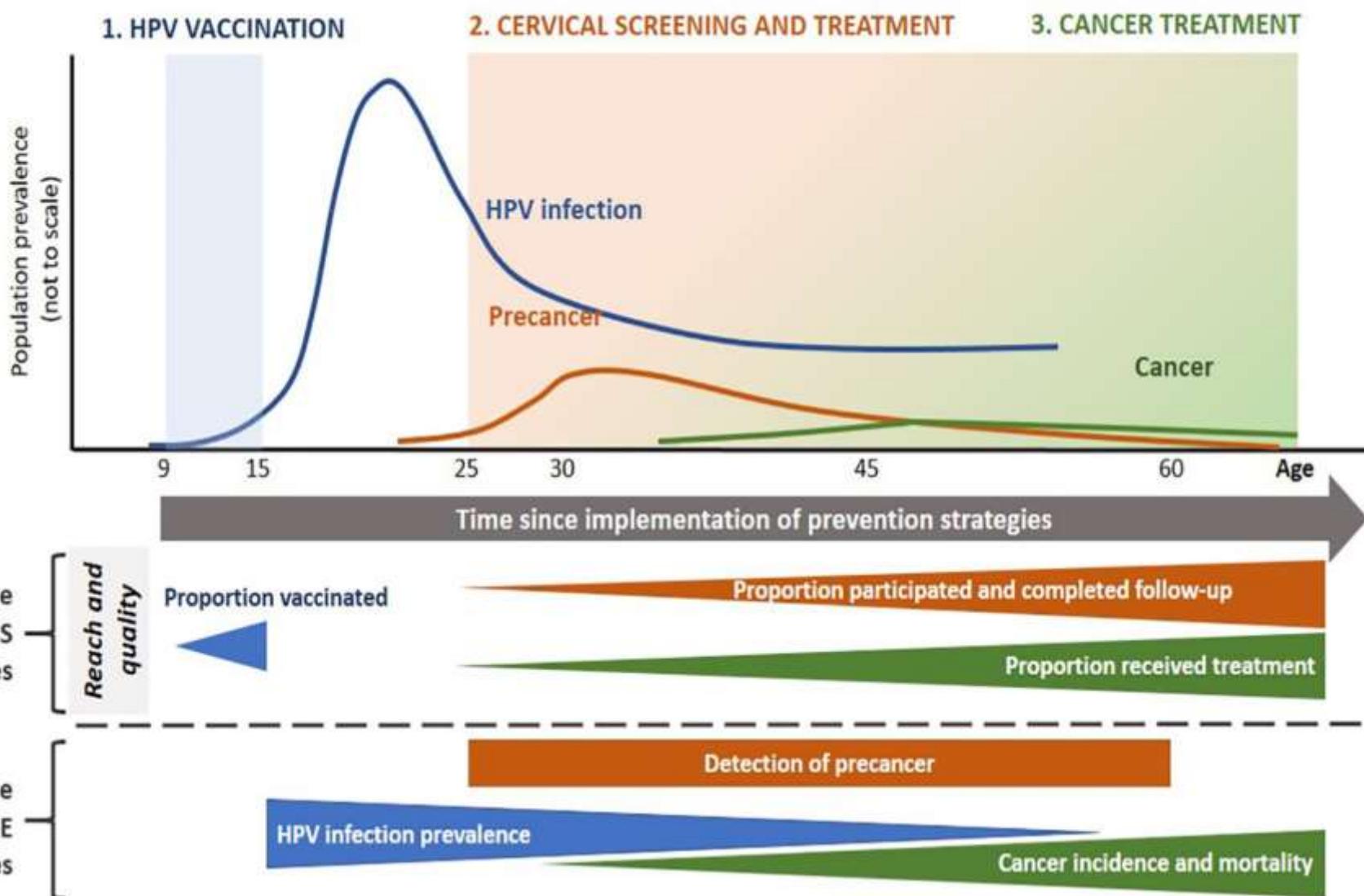


### WHAT'S THE DIFFERENCE? PREVALENCE VS INCIDENCE

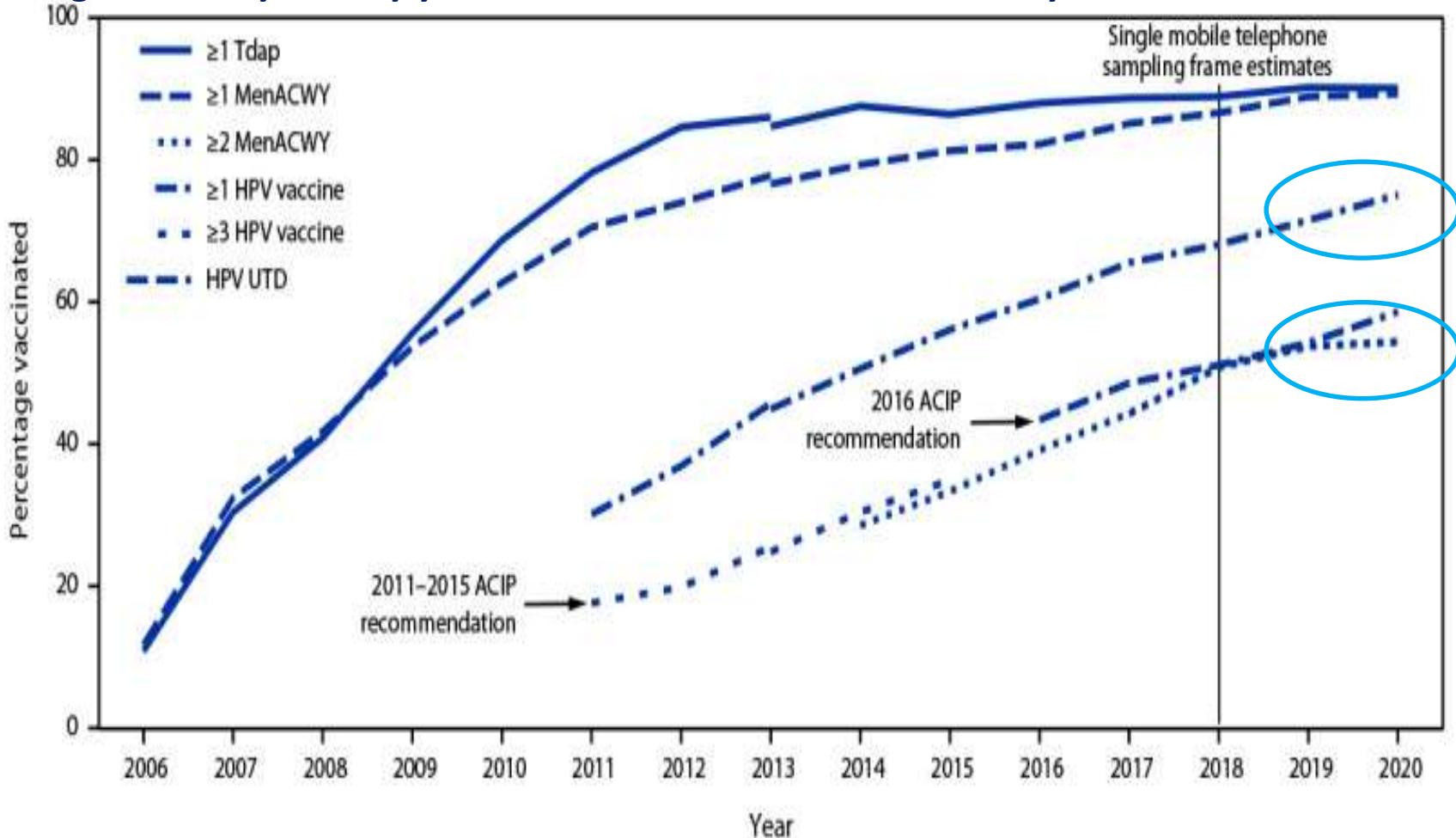
Prevalence is the estimated number of infections – new or existing – in a given time.  
 Incidence is the estimated number of new infections – diagnosed or undiagnosed.

\*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.

## Three pillars of the cervical cancer elimination strategy



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

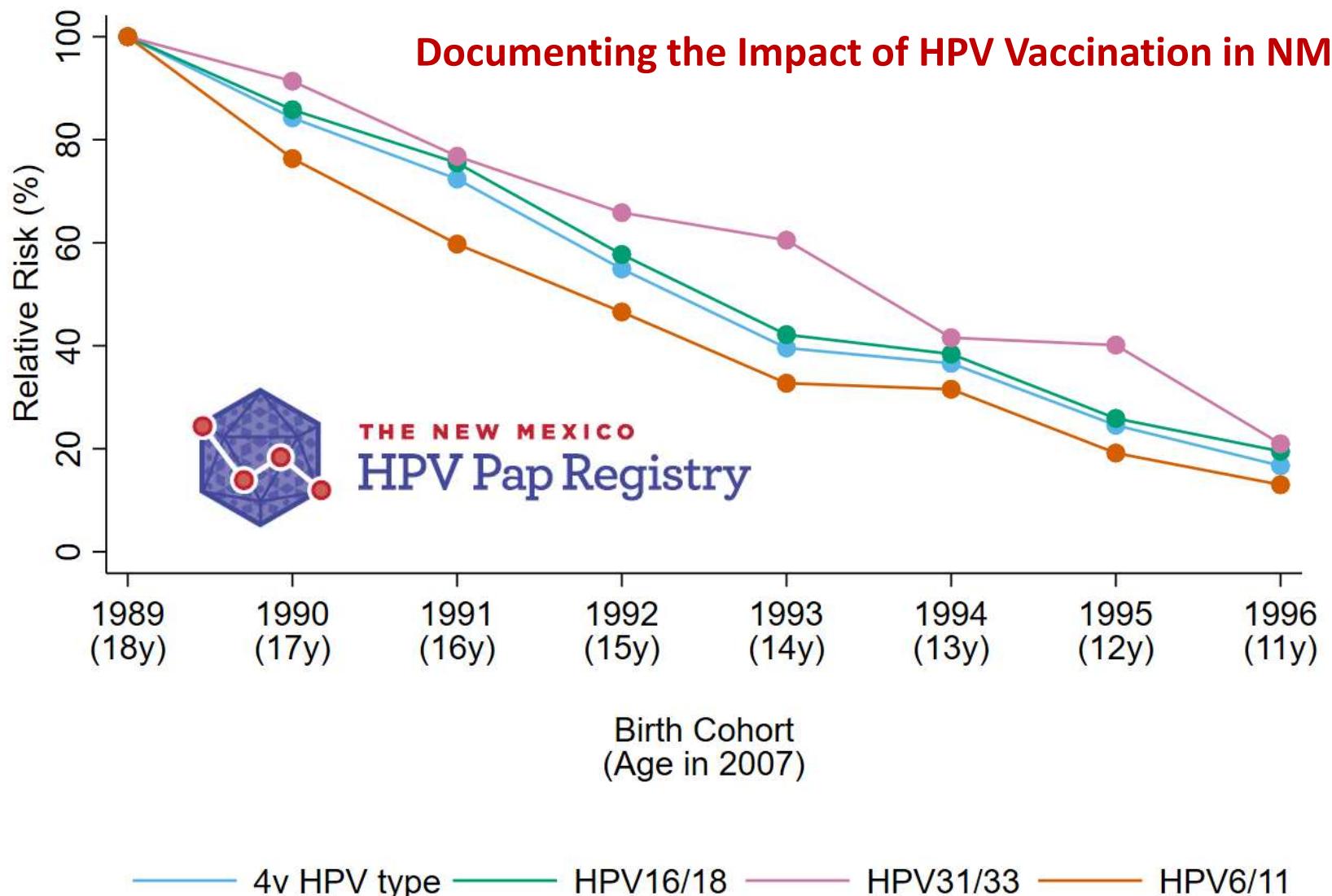


### New Mexico-specific Adolescent Vaccination 2020 Data Tracks Nationally

≥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)

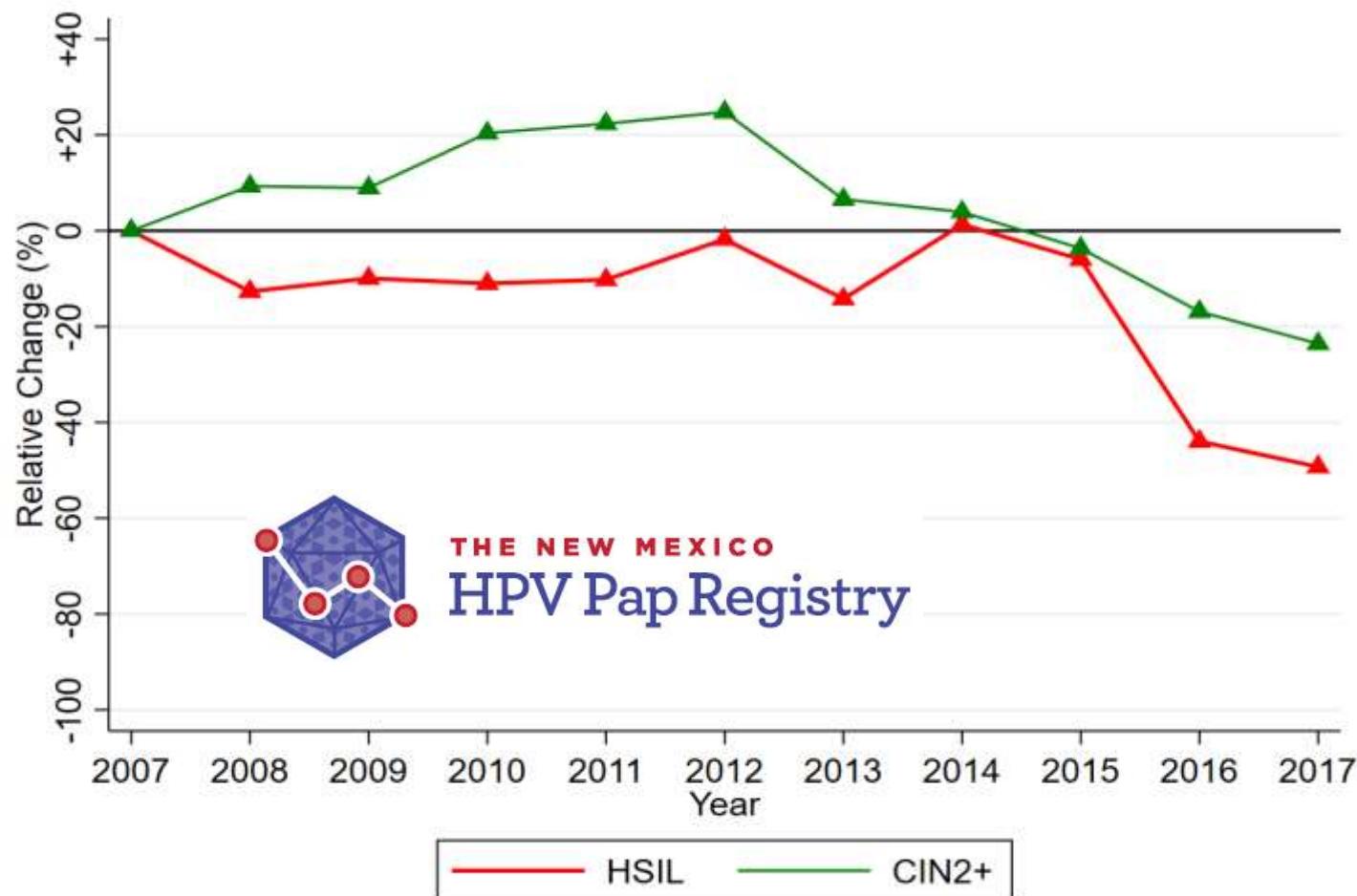
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The relative risk (%) of HPV infection for females in New Mexico declined dramatically when comparing women born in 1989 vs 1996, for HPV positivity by birth cohort, adjusted for age at screening, re-weighted to the state-wide population.



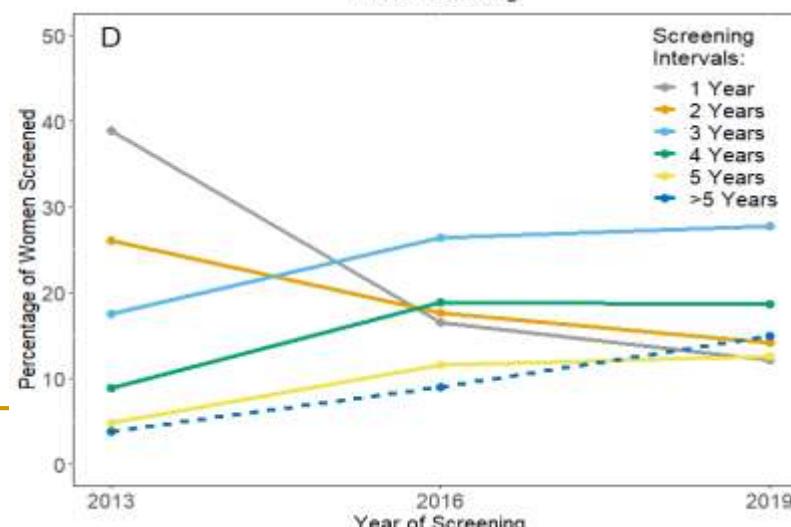
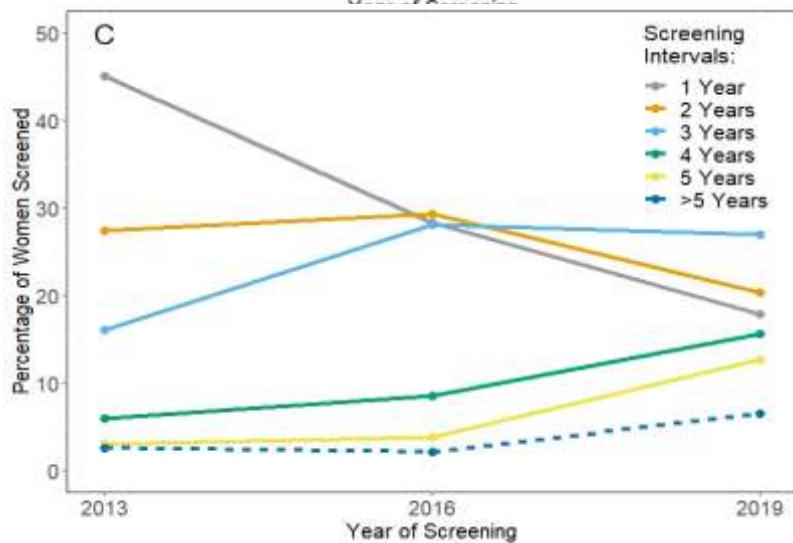
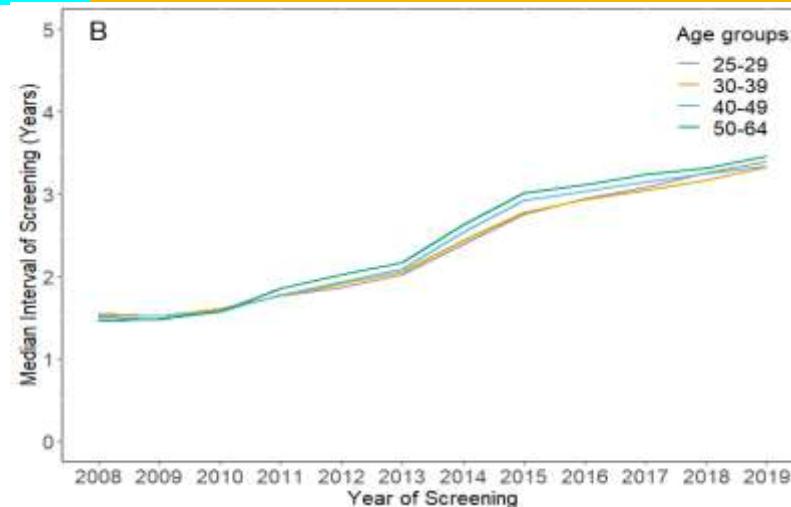
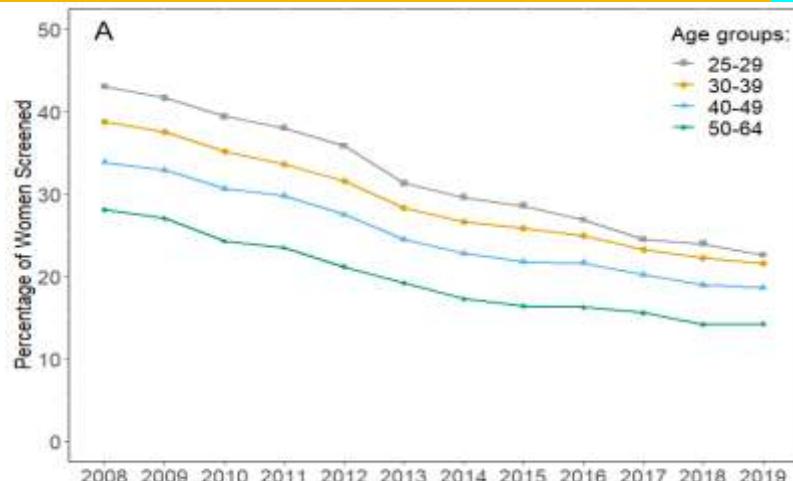
## 6 Documenting the relative reduction in percentage of HSIL (high-grade Pap test) and CIN2+ (high-grade precancers)

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



# New Mexico HPV Pap Registry shows how cervical cancer screening

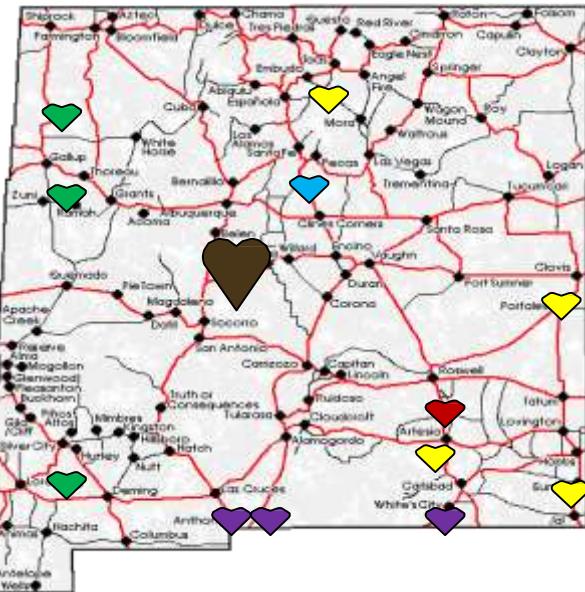
- A) declined across NM for more than a decade,
- B) Screening intervals lengthened over this time however ...
- C) and D) show ~65% of women were over-screened at 1, 2 and 3 years vs 5 years wasting New Mexico's health care dollars and increasing harms vs benefits.
- Disturbingly, underscreening ( $\geq 5$ -7 years) increased over time (dashed lines)



## NMHPVPR Public Health Reporting State-wide

### County Estimates of NM Women with cervical cancer preventive care 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

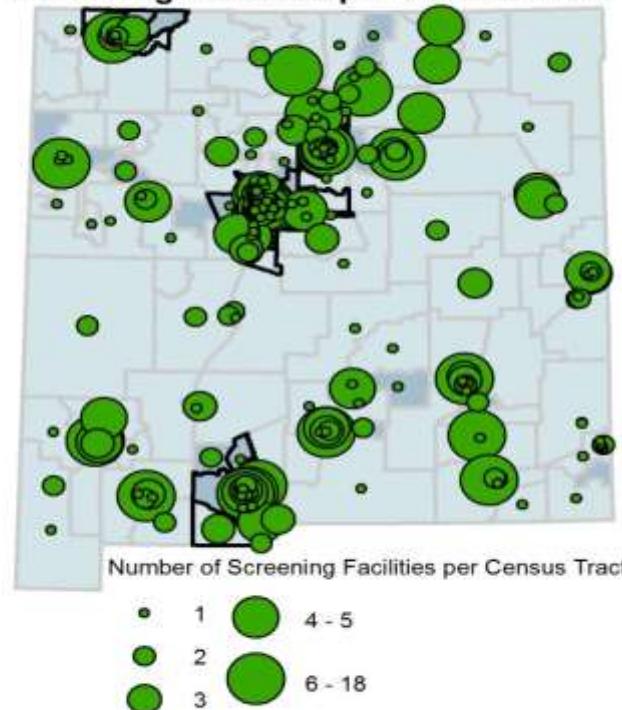


NMHPVPR is a unique one-of-a-kind resource as the only cervical screening registry in the United States. It has demonstrated leadership on a national and international basis serving as a global model for assessing cancer care delivery and outcomes.

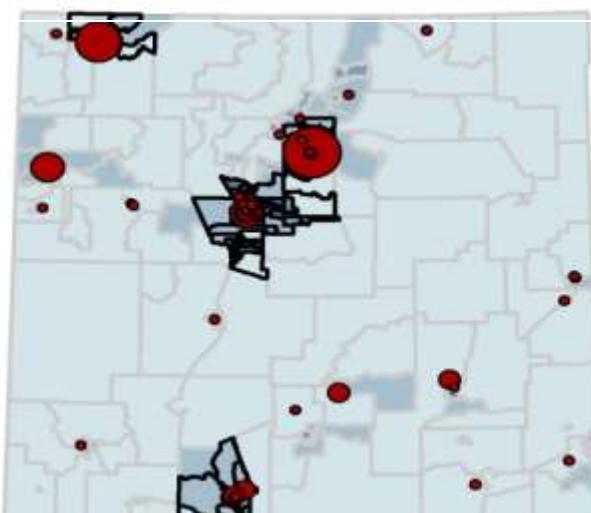
This state-wide public health program documents successes in reducing the overall burden of cervical pre-cancer and provides critical data to document and enable the integration of HPV vaccination and cervical cancer screening.

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



# 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 United States (U.S.). 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 screening of women and vaccination of both men and women for human papillomaviruses (HPVs). It will take decades to observe the impact of HPV vaccination's on cancer reductions due to the time course of the diseases.
- Unfortunately, in the U.S. as many as 25% of the ~80 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. For women who are screened where disease is detected, rural NM should consider mobile healthcare solutions to provide specialized diagnosis and treatments
- An overarching view is that cervical cancer remains largely a disease of unscreened women and will also likely be 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



NMHPVPR documents needed 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 and recalled to insure timely screening, over-screening needs to be stopped to reduce harms and effect cost-savings, rural New Mexico needs available specialty care for precancer treatment likely mobile solutions and HPV vaccination coverage needs to be increased.

2021 and Other Peer-Reviewed Clinical Research Publications  
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+2021>

<https://pubmed.ncbi.nlm.nih.gov/?term=new%20mexico%20HPV%20pap%20registry>



New Mexico HPV Pap Registry  
works to improve the prevention of HPV-associated cancers  
and its methods and expertise support efforts to improve  
prevention of other screen-preventable cancers

**Thank you !!! - QUESTIONS**

Cost-Effective Cancer Prevention Through **Integrating Healthcare Information** and Surveillance of Cancer Screening

