



## Cervical Cancer & HPV Vaccination

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American Cancer Society



Mission:  
**HPV** **CANCER**  
**FREE**

CERVICAL CANCER SCREENING:  
THE SCIENCE  
&  
HOW TO IMPROVE SCREENING RATES



# Presentation Objectives

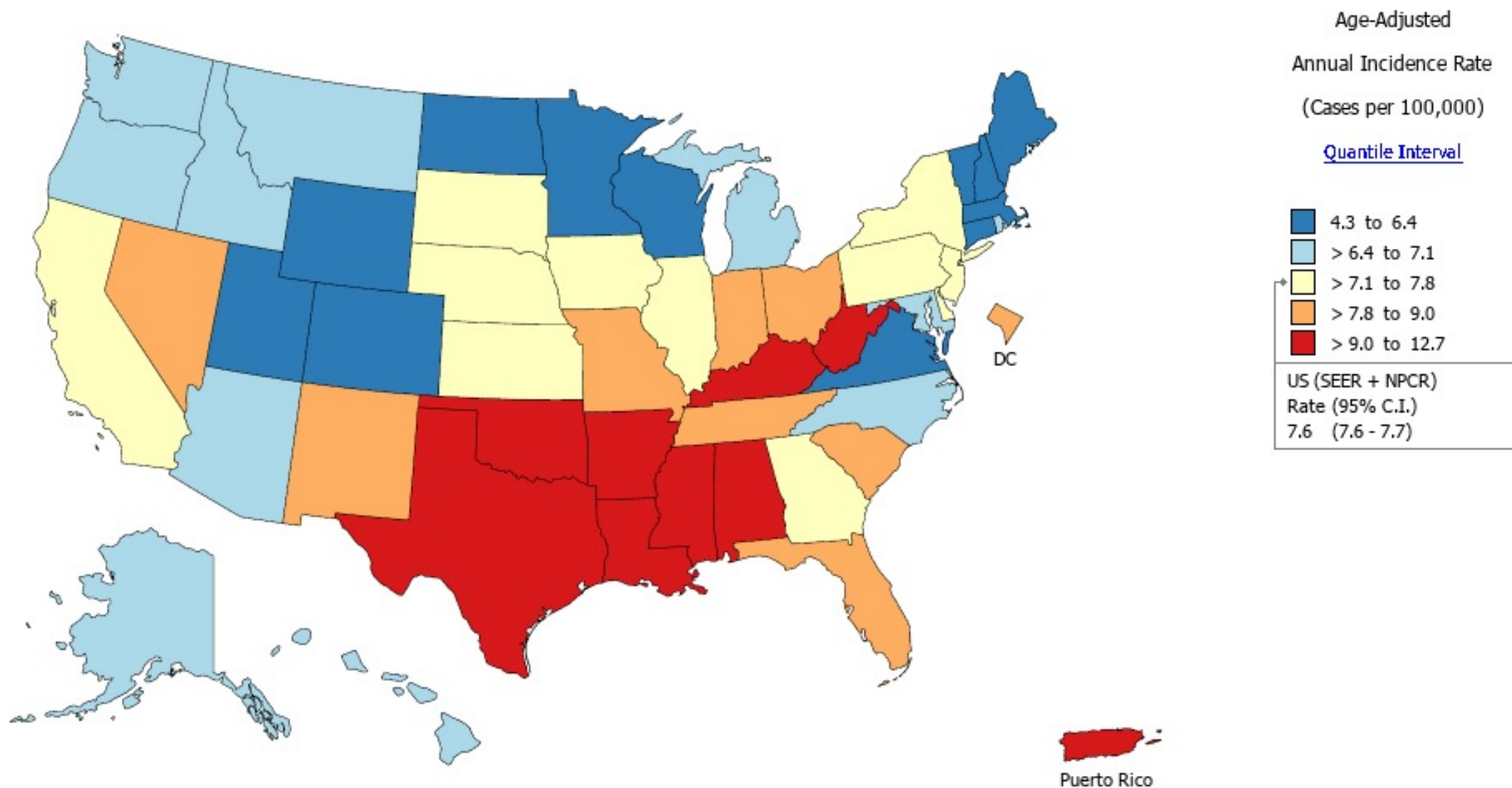
- Describe disease trends and evidence that contributed to recently updated cervical cancer screening recommendations from the American Cancer Society;
- Discuss the differences in cervical cancer screening tests and importance of routine screening;
- Describe the role HPV vaccination of pre-teens play in the elimination of cervical cancer; and
- Review ways to increase cervical cancer screening rates in your clinic.

# Cervical Cancer Statistics

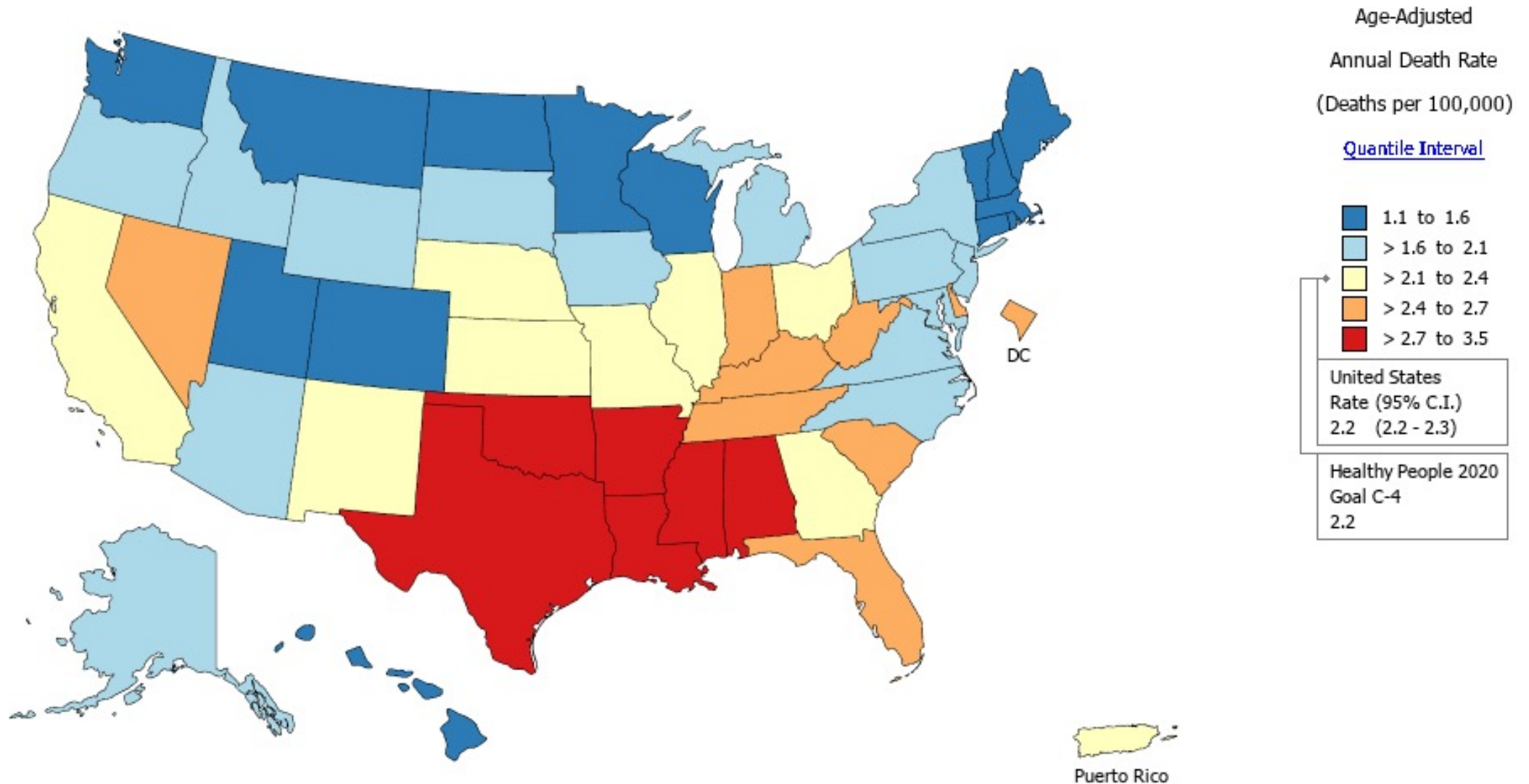
# How Common is Cervical Cancer?

- More than 14,000 new cases in the U.S. 2022 (240 in SC).
- Will cause about 4,280 cancer deaths in the U.S.
- Over the last 40 years, cervical cancer deaths have declined by more than 50%. The main reason for this is the use of screening tests.

**Incidence Rates<sup>†</sup> for United States by State  
Cervix, 2013 - 2017  
All Races (includes Hispanic), Female, All Ages**



**Death Rates for United States by State**  
**Cervix, 2014 - 2018**  
**All Races (includes Hispanic), Female, All Ages**



## Incidence rates, 2013-2017

by race and ethnicity, for cervix

Average annual rate per 100,000, age adjusted to the 2000 US standard population.

### Hispanic



### Non-Hispanic black



### American Indian and Alaska Native



### Non-Hispanic white



### Asian and Pacific Islander



- Hispanic women have the highest cervical cancer incidence rate.
- Non-Hispanic Black women have the 2<sup>nd</sup> highest cervical cancer incidence rate.



- Non-Hispanic Black women have the highest cervical cancer mortality rate.
- Hispanic women have the 2<sup>nd</sup> highest cervical cancer mortality rate.

## Death rates, 2014-2018

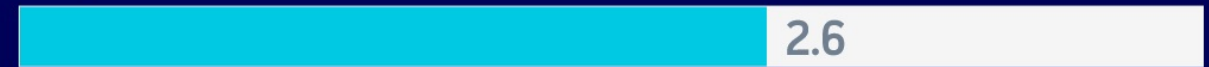
by race and ethnicity, for cervix

Average annual rate per 100,000, age adjusted to the 2000 US standard population. Rates for PR are for 2012-2016.

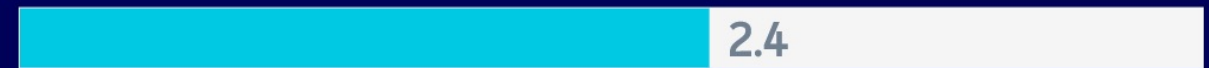
### Non-Hispanic black



### Hispanic



### American Indian and Alaska Native



### Non-Hispanic white

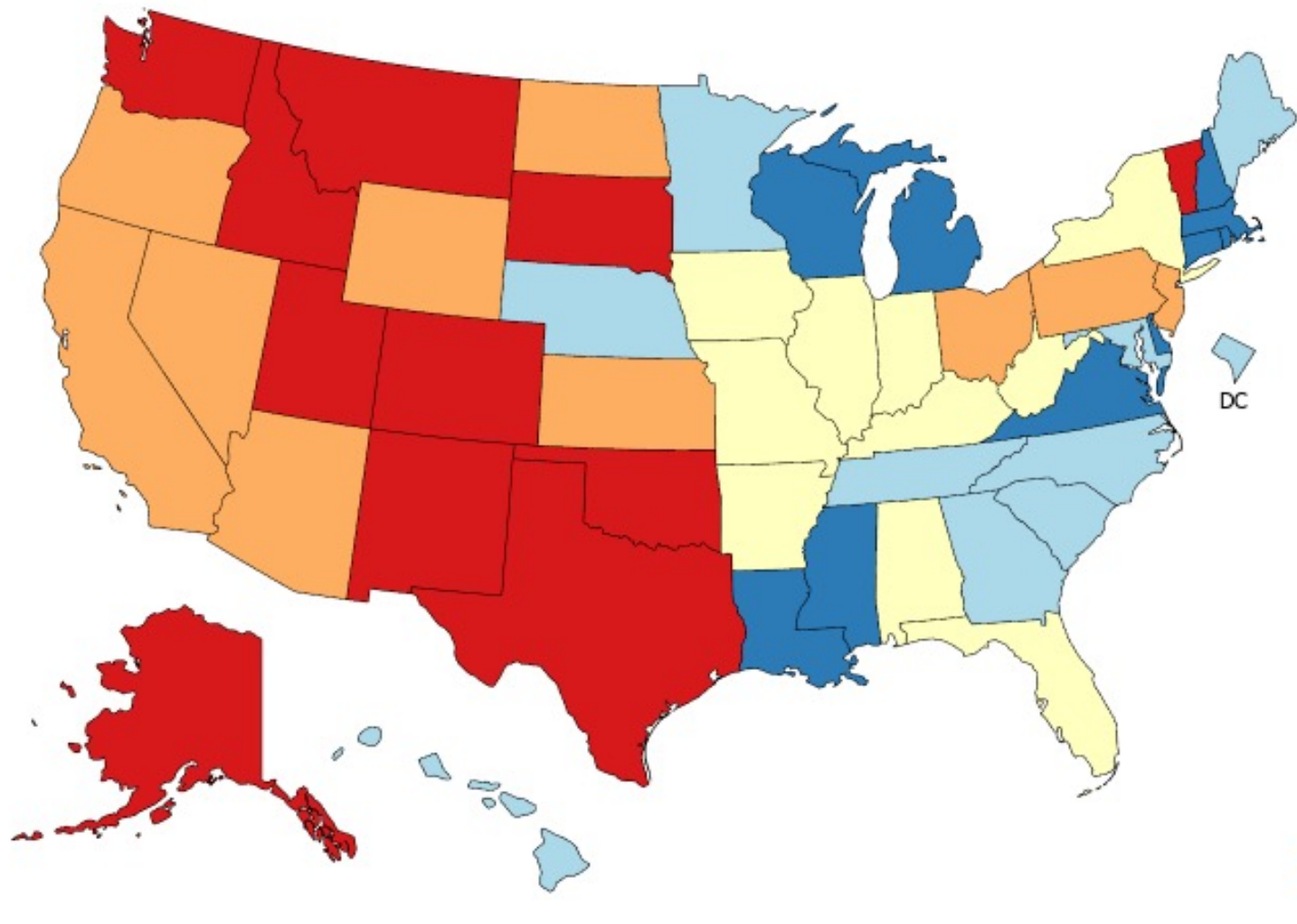


### Asian and Pacific Islander



# Cervical Cancer Screening Rates

**Screening and Risk Factors for United States by State  
 (Directly Estimated 2018 BRFSS Data)  
 Pap Test in Past 3 Years, No Hysterectomy  
 All Races (includes Hispanic), Female, Ages 21-65**



Pap Test in Past 3 Years, No Hysterectomy  
 (Percent of Respondents)

Quantile Interval

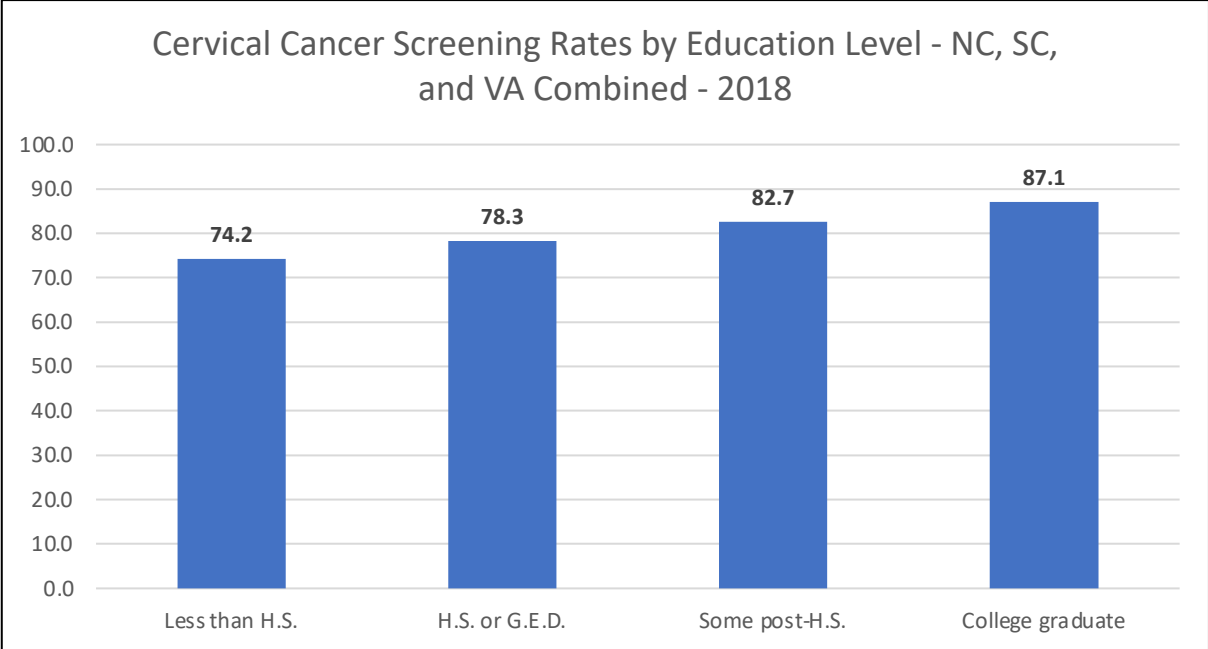
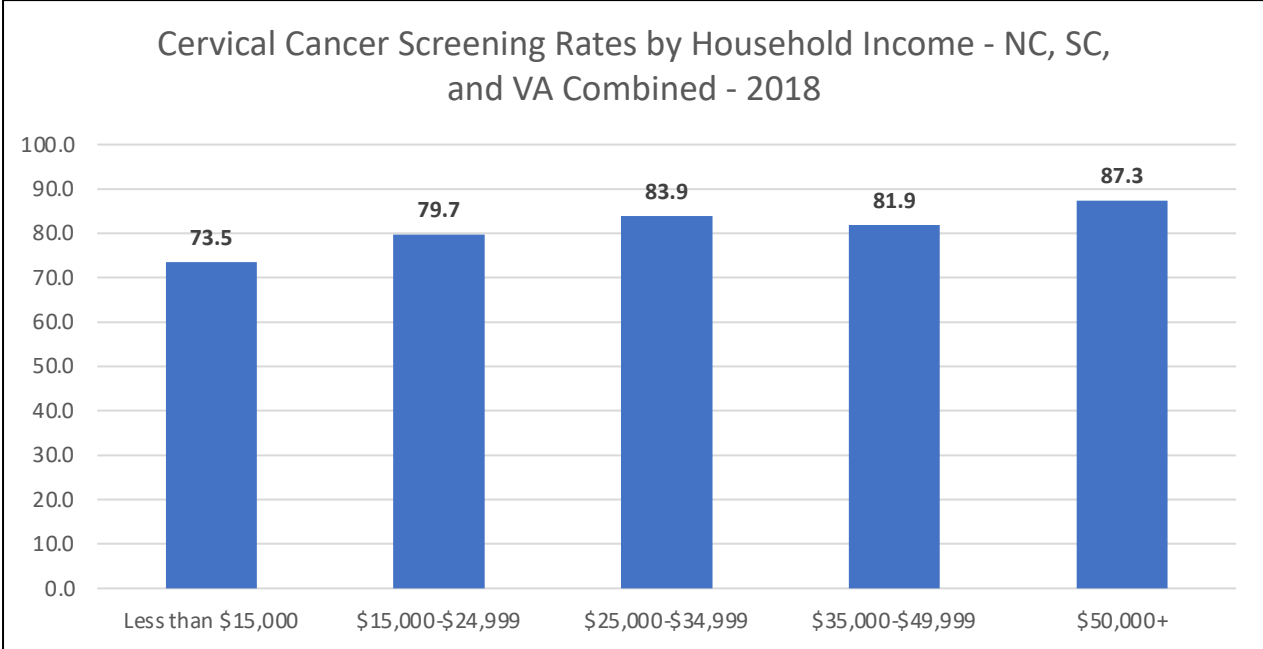
- 70.67 to 77.46
- > 77.46 to 79.32
- > 79.32 to 80.86
- > 80.86 to 82.80
- > 82.80 to 85.36

United States  
 Percent (Median)  
 80.2

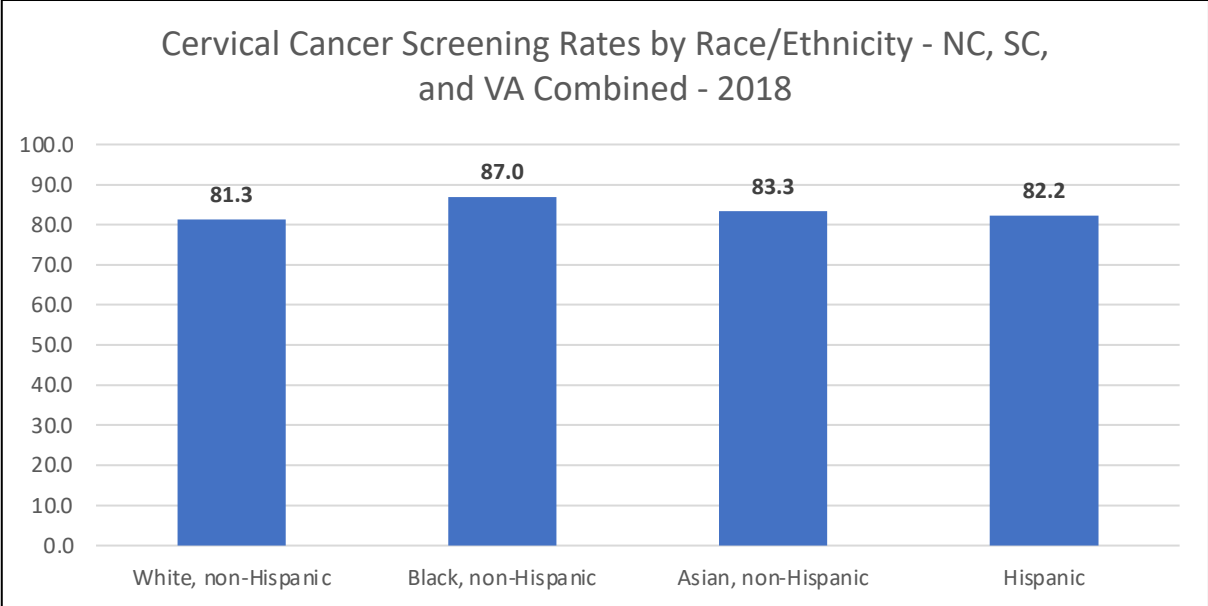
Healthy People 2020  
 Goal C-15  
 93.0%

Puerto Rico

# Cervical Cancer Screening Rates – Vulnerable Populations



**White women and women with the lower income levels and lower education levels have the lowest screening rates.**



# Cervical Cancer Screening Methods and Guidelines

# ACS Recommendations for Cervical Cancer Screening

1. Screening for cervical cancer is recommended for individuals with a cervix starting at age 25 years.

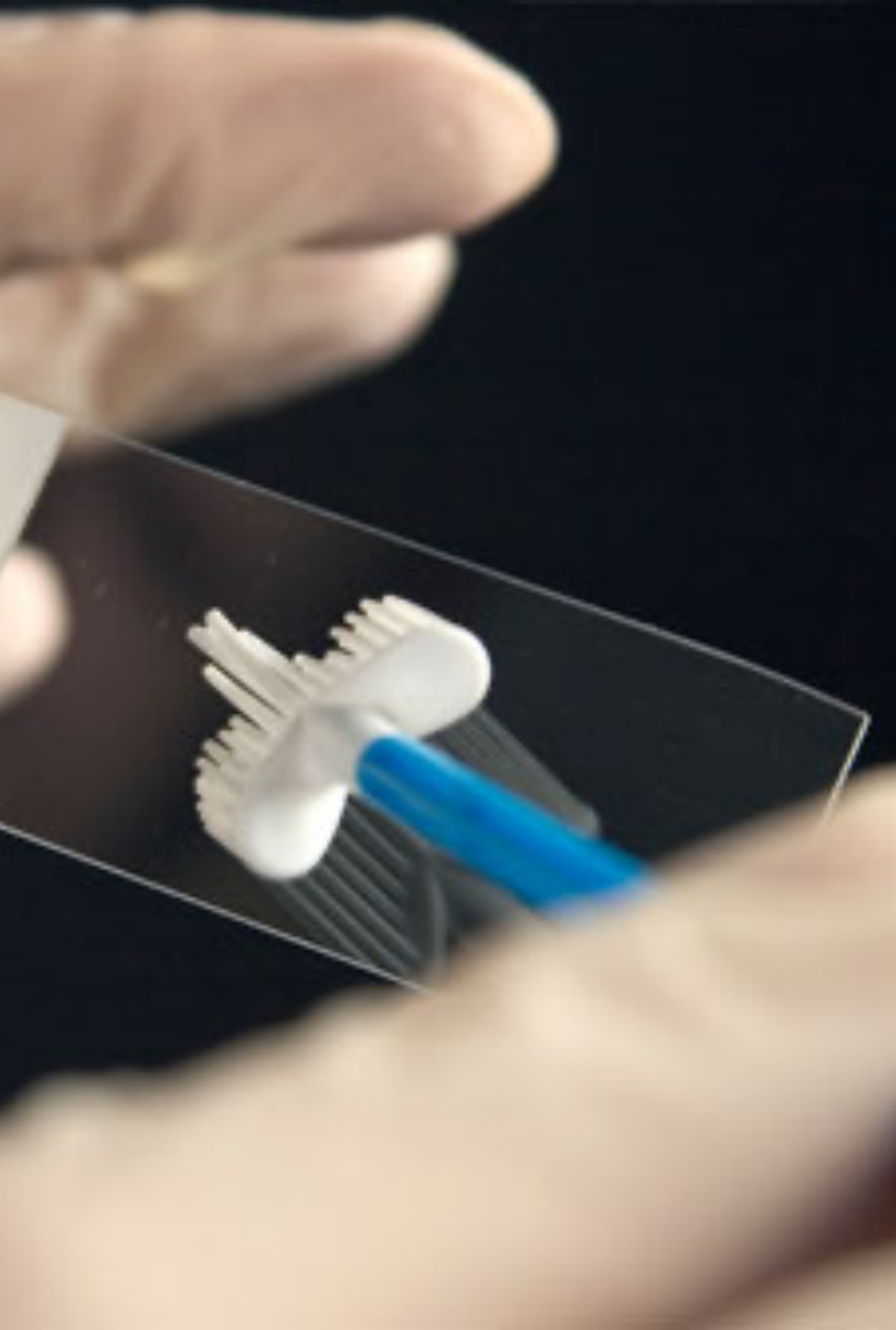
For individuals aged 25 to 65 years, screening should be done with a primary HPV test\* every 5 years.

If primary HPV testing is not available, screening may be done with either co-testing that combines an HPV test with a Papanicolaou (Pap) test every 5 years or a Pap test every 3 years.

2. Individuals older than 65 years who have had regular screening with normal results should not be screened for cervical cancer. Once screening is stopped, it should not be started again.
3. Individuals who do not have a cervix (for example, because of a hysterectomy) and who do not have a history of cervical cancer or a serious precancer should not be screened.

# When to Start Screening

**OFFICIALLY  
25  
YEARS OLD**



# What Test to Use

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## HPV Test vs. Pap Test

- Pap tests are an inferior test compared to HPV-based screening
- Pap tests are minimally effective in women who have been vaccinated
- Co-testing offers minimal benefit compared to primary HPV screening



How Often  
to Test

EVERY 5 YEARS

When to  
Stop  
Screening





# Planning for the Future

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*Co-testing or cytology testing alone are included as acceptable options for cervical cancer screening because access to primary HPV testing may be limited in some settings. As the US makes the transition to primary HPV testing, the use of cotesting or cytology alone for cervical cancer screening will be eliminated from future guidelines.*

- *Pap tests will be phased out.*
- *Cotesting will be phased out.*

# HPV Vaccination and Cervical Cancer

# Causes of Cervical Cancer

- The cause of nearly all cervical cancer is Human Papillomavirus (HPV).
- There are many types of HPV. “Low-Risk” types may cause warts on genitals, anus, mouth and throat. “High-risk” types are linked to cancer.
- HPV is transmitted through skin-to-skin contact. Most people who are infected with high-risk HPV never have any symptoms.

# HPV Vaccination Prevents Cervical Cancer



# ACS Recommendations for HPV Vaccination

1. Girls and boys should get 2 doses of the HPV vaccine at ages 9 to 12 years.
2. Children and young adults up to age 26 years who have not received the HPV vaccine should get vaccinated. Vaccination of young adults will not prevent as many cancers as vaccination of children and teens.
3. The ACS does not recommend HPV vaccination for persons older than 26 years.



Mission:  
**HPV** CANCER  
FREE





**EXPLORING MARS  
IS ON HER TO-DO LIST.**

**IS PROTECTING  
HER FROM CANCER  
ON YOURS?**

Learn how at [cancer.org/dreambig](https://cancer.org/dreambig)

Why emphasize age  
9-12?

Higher on-time vaccination rates =  
increased numbers of cancers prevented





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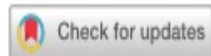
# What about adults?



RESEARCH



OPEN ACCESS



Prevalence of cervical disease at age 20 after immunisation with bivalent HPV vaccine at age 12-13 in Scotland: retrospective population study

Tim Palmer,<sup>1</sup> Lynn Wallace,<sup>2</sup> Kevin G Pollock,<sup>3,4</sup> Kate Cuschieri,<sup>5</sup> Chris Robertson,<sup>3,6,7</sup> Kim Kavanagh,<sup>7</sup> Margaret Cruickshank<sup>8</sup>

BMJ: first pa

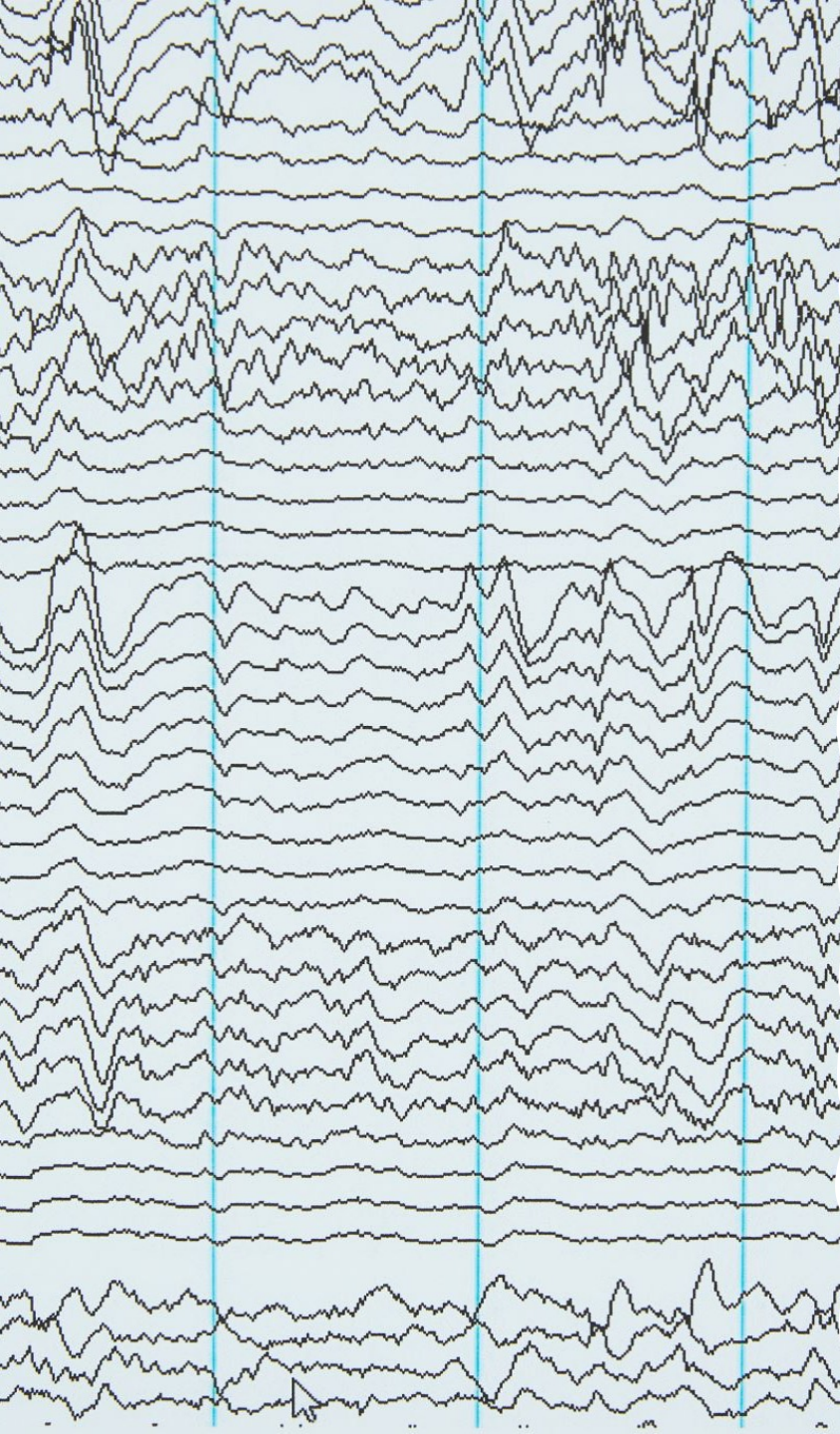
Age at Vaccination	Effectiveness (against CIN3+)
12-13	86%
17	51%
18-21	15%

# Cervical Cancer Prevention

# Cervical Cancer Prevention

- Avoid being exposed to HPV.
  - Limit number of sexual partners over life-time.
  - Condoms may provide some protection
- Don't smoke.
- Get yourself (if under 26) and your children vaccinated.
- Get screened.

What Can You & Your Clinic Do To  
Increase Breast Cancer Screening Rates?



# Know Your Current Screening Rates

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*What are your system's baseline and current screening rates?*

# Measure Cervical Cancer Screening Performance

- Collect, report and monitor data
- Measure success from baseline
- Routinely run screening reports for clinics and clinic teams

# Track Cervical Screening Completion & Follow-up

- Develop and implement a cervical cancer screening follow-up process
- Utilize reminders such as phone calls or messages through the patient portal

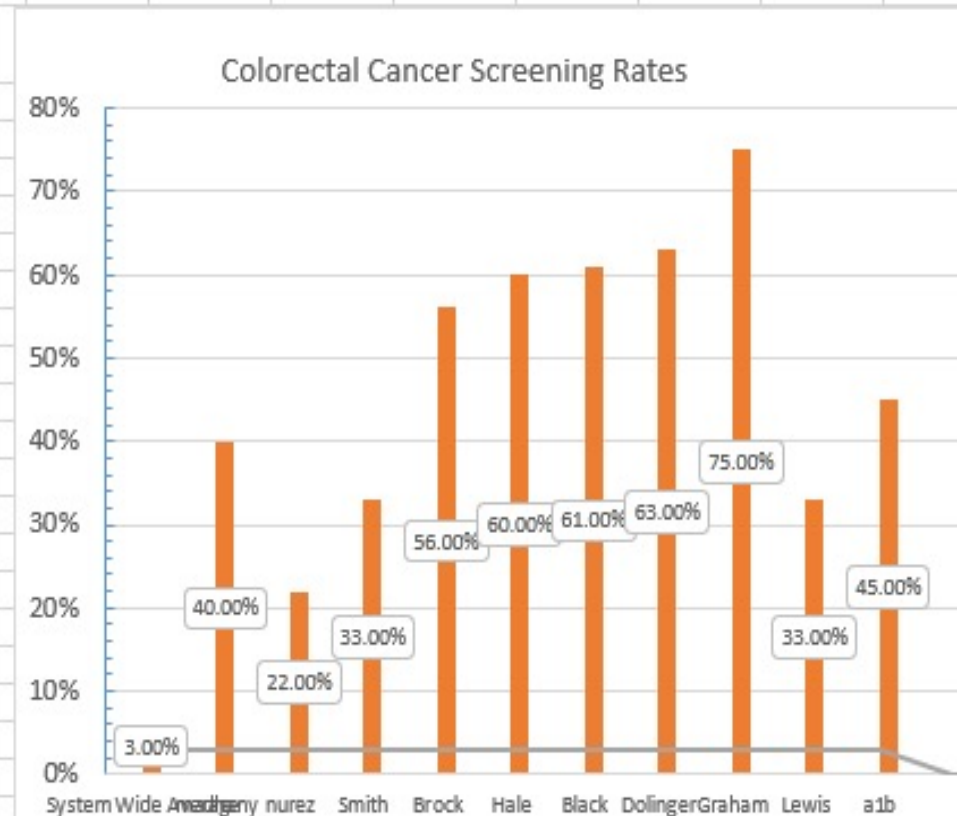




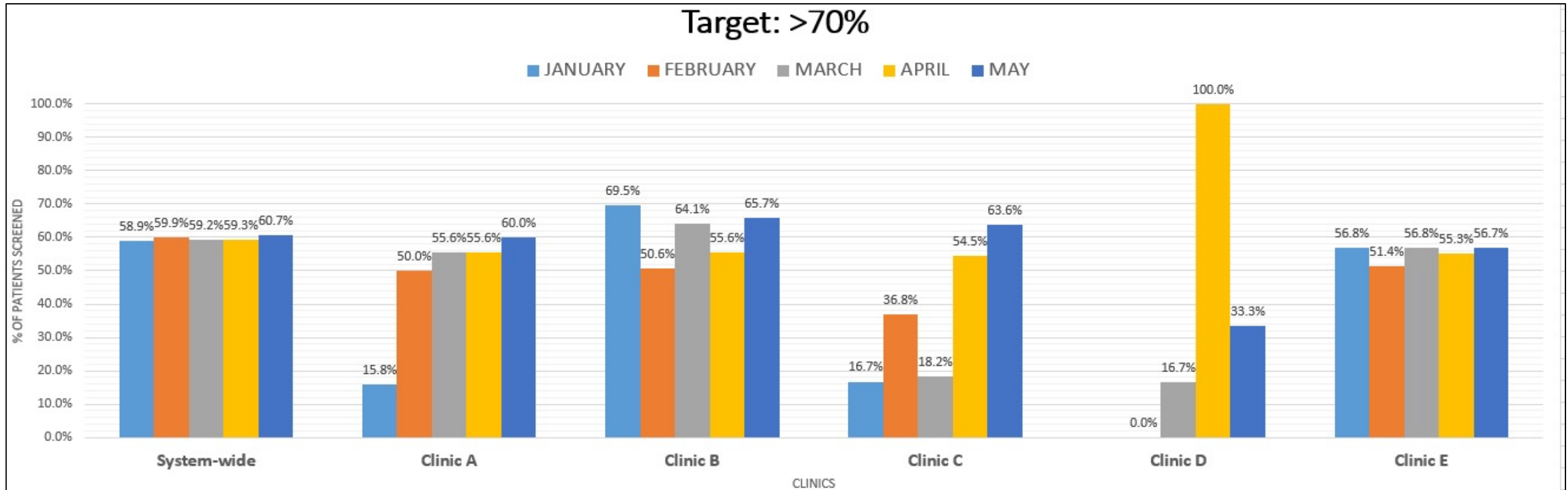
# Develop Provider Assessment and Feedback Tools

- Showing cervical cancer screening rates (report cards) by provider

	Name/Identifier	Screening/Vaccination Rate	System Wide Average
1	System Wide Average	3.00%	3.00%
2	madhany	40.00%	3.00%
3	nurez	22.00%	3.00%
4	Smith	33.00%	3.00%
5	Brock	56.00%	3.00%
6	Hale	60.00%	3.00%
7	Black	61.00%	3.00%
8	Dolinger	63.00%	3.00%
9	Graham	75.00%	3.00%
#	Lewis	33.00%	3.00%
	a1b	45.00%	3.00%



# Example: Clinic Screening Performance Measurement Tool



Month	System-wide	Clinic A	Clinic B	Clinic C	Clinic D	Clinic E
JANUARY	58.9%	15.8%	69.5%	16.7%	0.0%	56.8%
FEBRUARY	59.9%	50.0%	50.6%	36.8%	0.0%	51.4%
MARCH	59.2%	55.6%	64.1%	18.2%	16.7%	56.8%
APRIL	59.3%	55.6%	55.6%	54.5%	100.0%	55.3%
MAY	60.7%	60.0%	65.7%	63.6%	33.3%	56.7%

# Example: Provider Assessment and Feedback Tool

October's Providers Individual Clinical Performance Measures Percentages

Measurement	HRCHC Goal	Provider					
		A	B	C	D	E	F
Colorectal Cancer Screening	25.00%	NA	26%	26%	NA	27%	NA
Measurement	HRCHC Goal	Provider					
		G	H	I	J	K	L
Colorectal Cancer Screening	25.00%	NA	NA	30%	28%	32%	NA
Measurement	HRCHC Goal	Provider					
		M		N	O	P	
Colorectal Cancer Screening	25.00%	26%		NA	49%	22%	

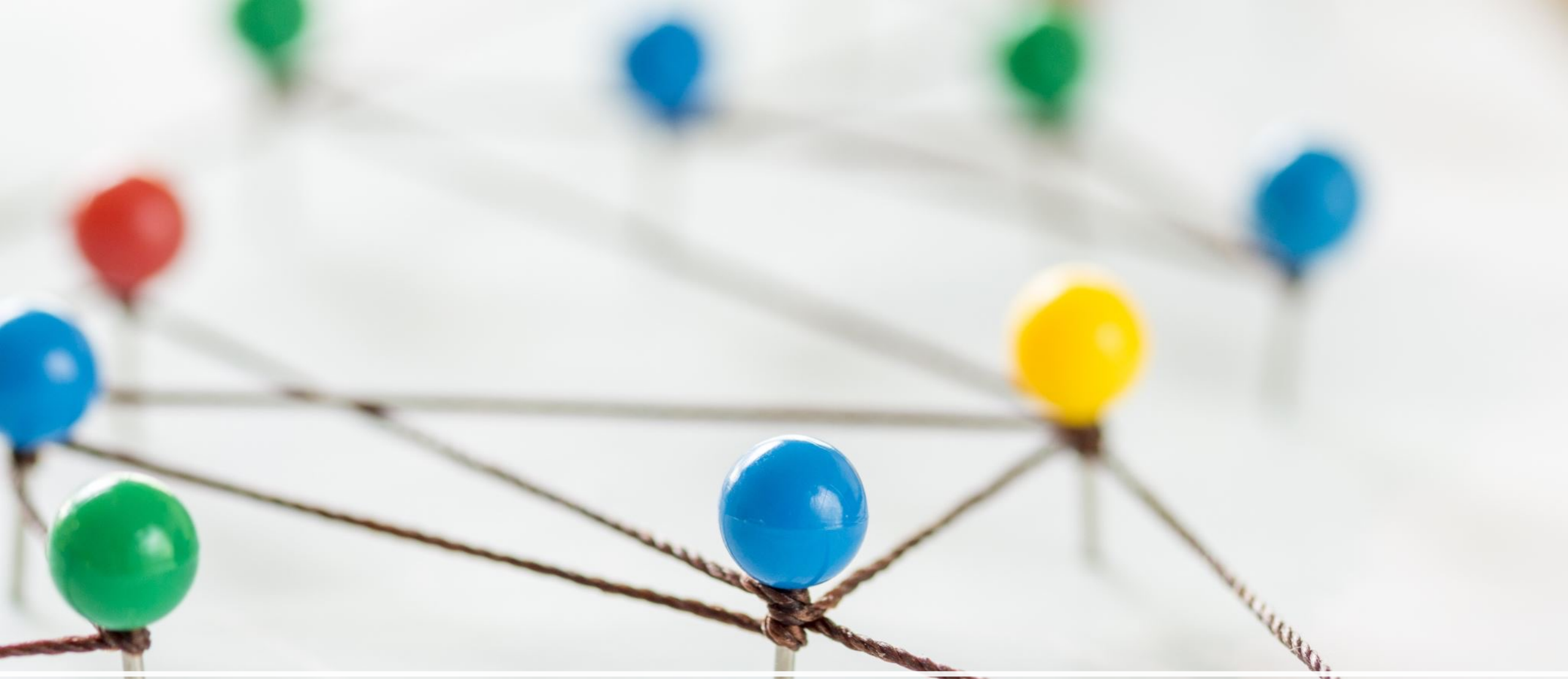


Clinical Performance Measure trending at or above target  
 Clinical Performance Measure not meeting expectations

# Aim Statement

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*We aim to increase our cervical cancer screening rates by 20% by December 31, 2022 to save lives from a preventable disease!*



# Screening Process Map

# Start with Evidenced Based Interventions

*What interventions are going to be implemented at your clinic?*

# Implement Provider Reminders

Ideas:

- Tickler in EHR
- Stickers on encounter form
- Laminated educational card

# Make a Recommendation

- **Studies have shown that a recommendation from a provider (or a member of the provider's team) is the most influential factor on patient screening behavior.**





# Prepare the Patient

- Preparing and educating patients are key components to getting patients screened
- Many patient education materials are available to help educate patients. Here are some examples of materials available through your ACS staff partner.

## What you should know about cervical cancer

American Cancer Society Guidelines for the Early Detection of Cervical Cancer



## Lo usted debe saber sobre el cáncer de cuello uterino

Guías de la Sociedad Americana Contra El Cáncer para la detección temprana del cáncer de cuello uterino

*What you should know about cervical cancer*



Cervical cancer starts in the cells lining the cervix – the lower part of the uterus (womb). The number of cervical cancer cases has dropped by more than half in recent decades.

### Risk Factors

**Human papillomavirus infection** by the human papillomavirus (HPV) is the most important risk factor for cervical cancer. Infection with HPV is common. The infection normally goes away on its own or doesn't cause any problems. HPV infections that don't go away can increase a person's risk for cervical cancer.

**Other risk factors** include: becoming sexually active at a younger age; having many sexual partners or a partner who has had many sexual partners (although many women who get cervical cancer have had only one sexual partner); smoking; having a weakened immune system; having a history of chlamydia infection; using oral contraceptives for a long time; having 3 or more full-term pregnancies; being younger than age 20 with a first full-term pregnancy; and being born to a woman who took diethylstilbestrol (DES) during pregnancy.

### Prevention

Not all cervical cancers can be prevented. But depending on a person's age, overall health, and personal risk for cervical cancer, there are some things that can be done that may help reduce the risk.

- **HPV vaccination** Vaccines can help protect young people from infection with the types of HPV that can cause cervical and other cancers. HPV vaccination is recommended for boys and girls between ages 9 and 12.

Children and young adults ages 13 through 26 who have not been vaccinated, or who haven't gotten all their doses, should get the vaccine as soon as possible. Vaccination at the recommended ages will help prevent more cancers than vaccination at older ages.

- **Regular screening** Screening is testing for a disease in people who have no symptoms. Regular screening for cervical cancer can help find changes in the cervix that can be treated before they become cancer.
- **Not smoking** can help reduce the risk of cervical precancers and cancer.

### Screening and Early Detection

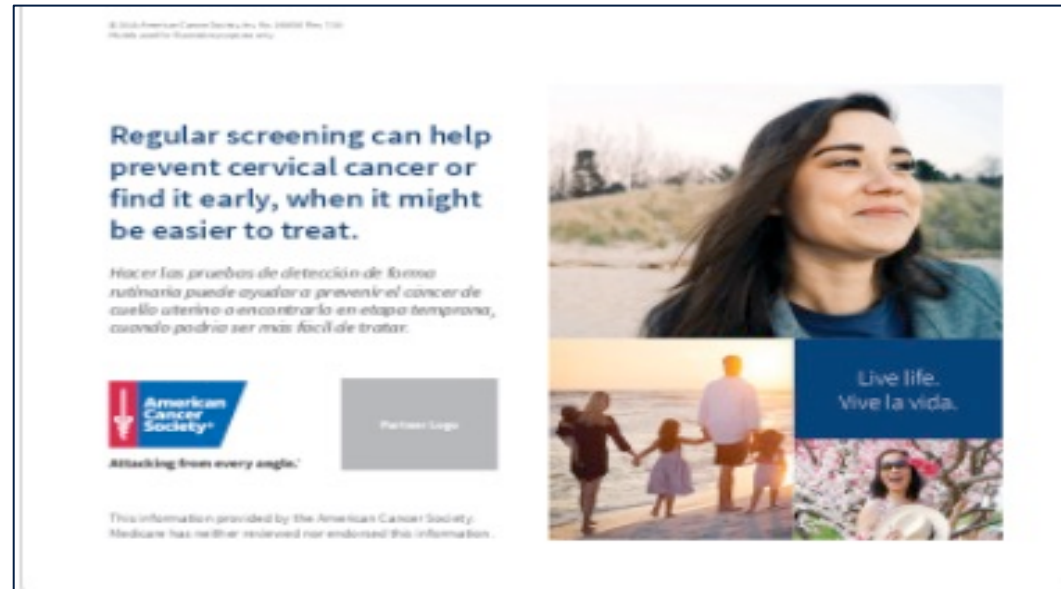
The American Cancer Society recommends the following for people who have a cervix and are at average risk for cervical cancer:

- **Cervical cancer testing should start at age 25.** People under age 25 should not be tested. Cervical cancer is rare in this age group.
- **People between the ages of 25 and 65** should get a primary HPV test every 5 years. A primary HPV test is an HPV test that is done by itself for screening. If you cannot get a primary HPV test, get a co-test (an HPV test with a Pap test) every 5 years or a Pap test every 3 years.

*The most important thing to remember is to get screened regularly, no matter which test you get.*

# Implement Patient Reminders

- Postcards (ACS has customizable screening reminder postcards)
- Text message
- Phone calls
- Messages through your patient portal



# Reduce Structural Barriers

- Extended office hours
- Free or reduced cost screenings



Mission:  
**HPV** **CANCER**  
**FREE**

Thank you!  
Q&A



**Contact Information**  
**Kim.hale@cancer.org**



**Attacking from every angle.™**