

# Cervical Cancer Screening & HPV Testing in the U.S.



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L.A. Care

**Jane Gerndt, MPH**

Program Manager, Early Detection

# CERVICAL CANCER AT A GLANCE

Estimated new cases, 2024	Estimated deaths, 2024	Incidence rates, 2016-2020	Death rates, 2016-2020
<b>13,820</b>	<b>4,360</b>	<b>7.7</b>	<b>2.2</b>
		Average annual rate per 100,000, age adjusted to the 2000 US standard population	Average annual rate per 100,000, age adjusted to the 2000 US standard population

# CERVICAL CANCER IN CALIFORNIA **AT A GLANCE**

## Estimated New Cases and Deaths for Cervix Cancer, 2024

View by: State  ...

State	Death Estimates	New Case Estimates
California	490	1,560

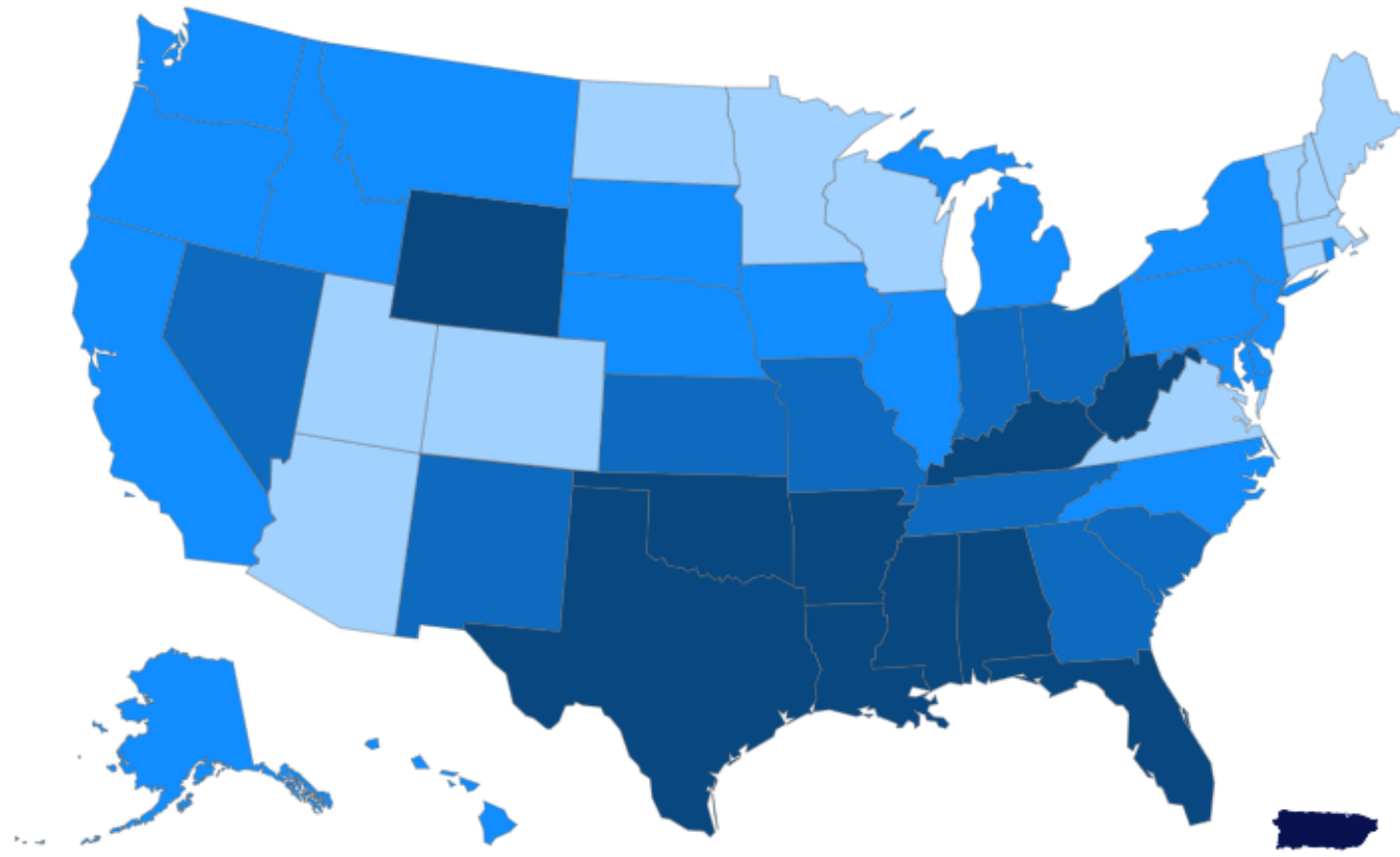
## Incidence Varies Widely by Age

- “Cervical cancer incidence rates decreased by more than half from the mid-1970s to the mid-2000s, but have stabilized over the past decade.”
  - Largely due to widespread uptake of cervical cancer screening
- “Decades of decline in incidence of cervical cancer have reversed in women aged 30-44 years, such that rates increased by 1.7% per year from 2012-2019”
- “In sharp contrast, declines accelerated during 2012-2019 to 11% per year among women ages 20-24, likely reflecting the first signs of cancer prevention due to HPV vaccination.”

## Cervix Cancer Incidence Rates by State, 2017-2021



- 4.9 - 6.1
- 6.2 - 7.5
- 7.6 - 8.5
- 8.6 - 9.8
- 9.9 - 12



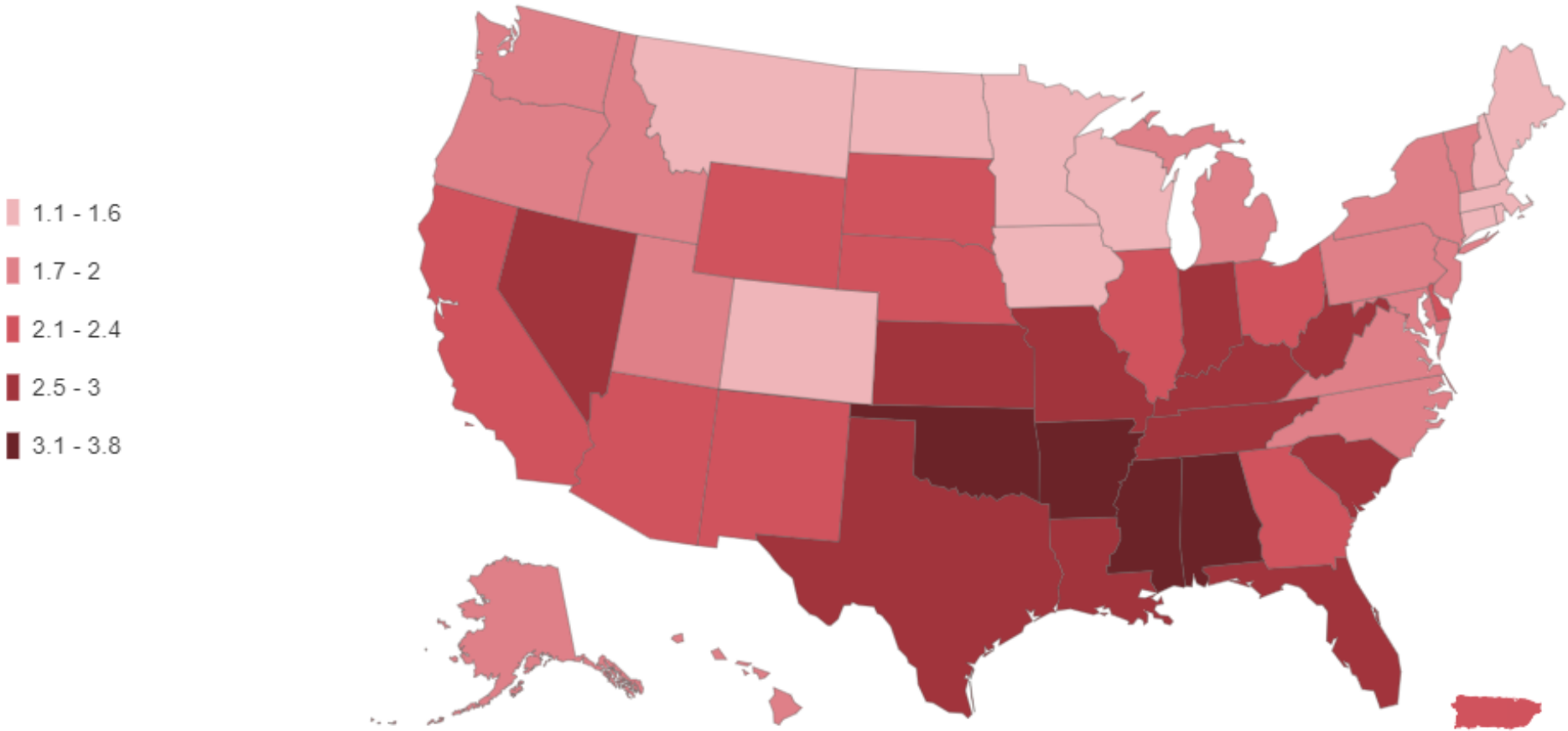
Map Table Bars

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Data Source: North American Association of Central Cancer Registries, 2023

Average annual rate per 100,000, age-adjusted to the 2000 US standard population. Incidence is adjusted for delays when possible. Nevada and Puerto Rico are not included in national rates (see Resources page).

### Cervix Cancer Mortality Rates by State, 2017-2021



Map    Table    Bars

©American Cancer Society, 2024  
Data Source: National Center for Health Statistics, Centers for Disease Control and Prevention, 2023  
Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

# Up-to-date Pap/HPV test, women 25 to 65 years by State, 2020

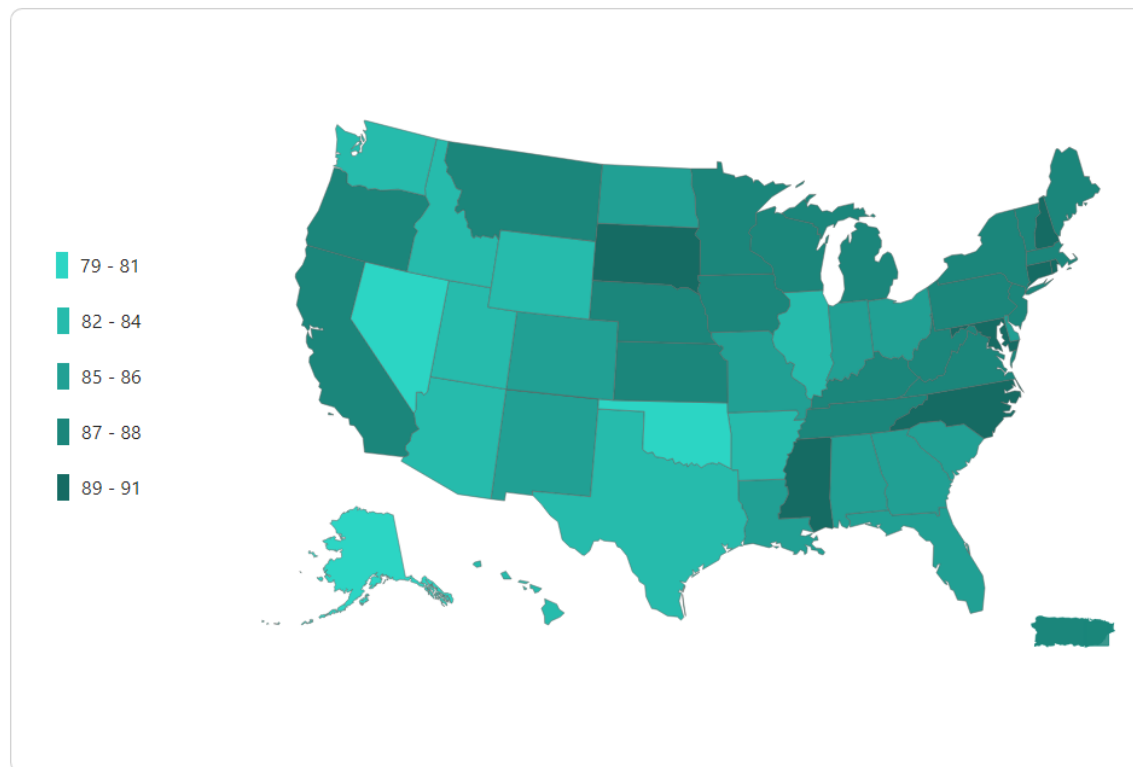
Compare by:

State

Bar Table Map

- State**
- Select all
  - Alabama
  - Alaska
  - Arizona
  - Arkansas
  - California
  - Colorado
  - Connecticut
  - Delaware
  - District of Columbia
  - Florida
  - Georgia
  - Hawaii
  - Idaho
  - Illinois
  - Indiana
  - Iowa
  - Kansas
  - Kentucky

Prevalence (%)



©American Cancer Society, 2024

Data source: Behavioral Risk Factor Surveillance, Centers for Disease Control and Prevention, 2021

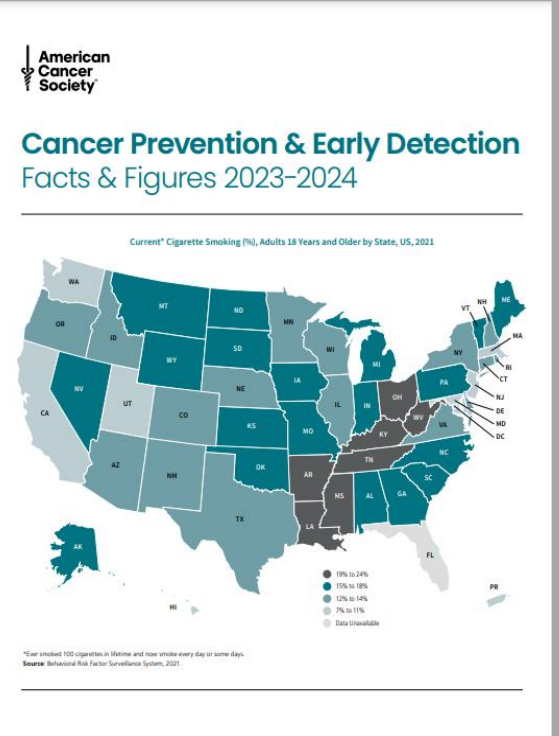
Pap test in the past 3 years among women 25-65 years OR Pap test and HPV test within the past 5 years among women 30-65 years.

Puerto Rico is not included in overall US median.

Total US values are medians of state values, excluding Puerto Rico.

## Screening Data Highlights (2021)

- 75% of women ages 25-65 years were up to date with cervical cancer screening.
- Screening rates were lower among Asian (64%), Hispanic (68%), and American Indian/Alaska Native (68%) women.
- Screening was lowest among recent immigrants (55%), women without a high school diploma (56%), and uninsured women (58%).

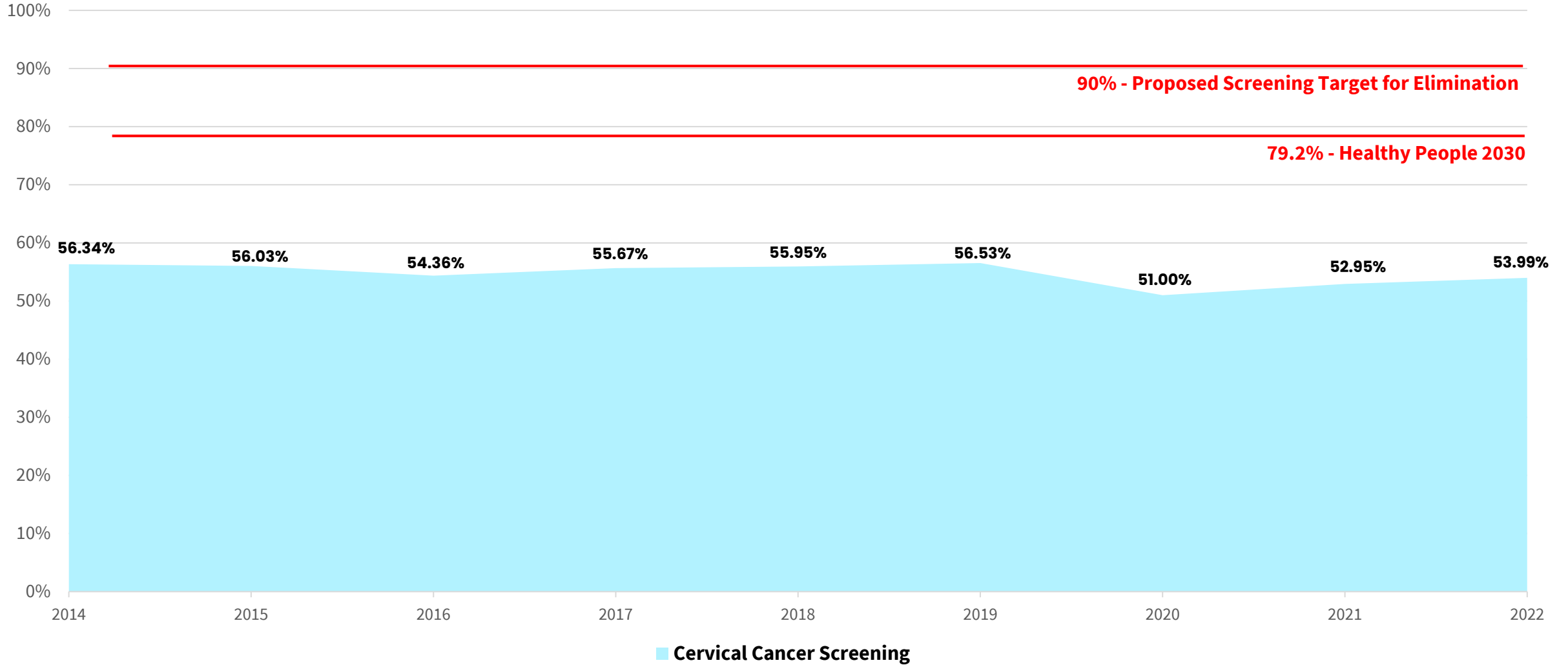




# Cervical Cancer Screening Trends of Federally Qualified Health Systems, 2014 – 2021

## 2014 – 2022 FQHC Cervical Cancer Screening Trends

HRSA Uniform Data System (UDS) Data

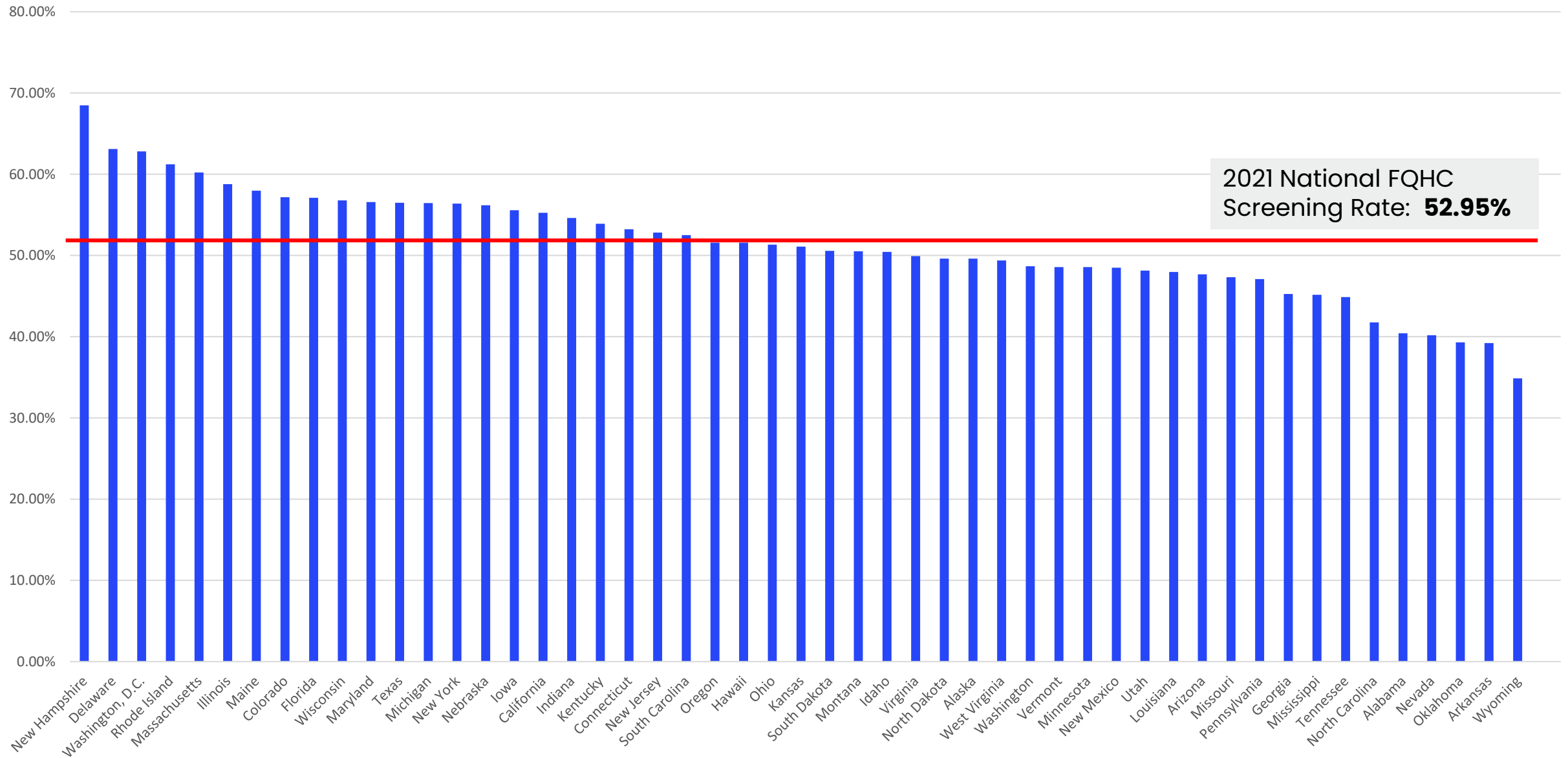


# National FQHC Cervical Cancer Screening Data

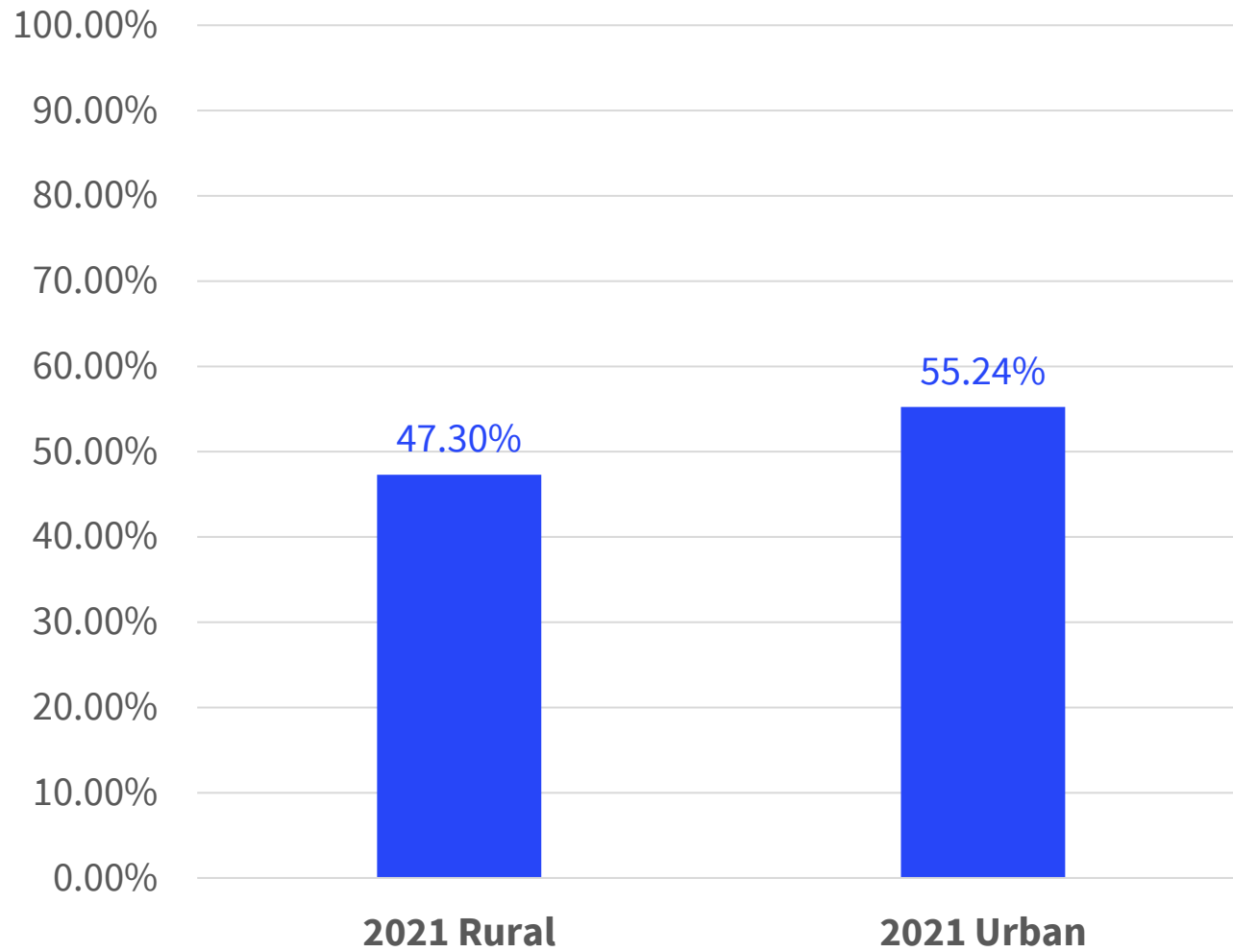
Year	Cervical Cancer Screening Rate	# Eligible Patients Screened	# Eligible Patients
<b>2014</b>	56.34%	3,421,045	6,072,396
<b>2015</b>	56.03%	3,558,415	6,350,987
<b>2016</b>	54.36%	3,655,375	6,724,066
<b>2017</b>	55.67%	3,894,117	6,995,030
<b>2018</b>	55.95%	3,996,179	7,142,074
<b>2019</b>	56.53%	4,184,135	7,400,971
<b>2020</b>	51.00%	3,807,982	7,466,884
<b>2021</b>	52.95%	4,024,986	7,601,674

In 2021, **3,576,688**  
eligible FQHC patients  
were not screened for  
cervical cancer.

# 2021 FQHC Cervical Screening Rate by State



## 2021 Cervical Cancer Screening Rates by Rural and Urban FQHCs



- Nationally, eligible FQHC patients are more likely to be up-to-date on cervical cancer screening if care is provided by an urban vs. rural based FQHC system.
- Rural / urban disparities differ between states.

# **ACS Cervical Cancer Screening Guideline**



# Cervical Cancer

Screening guidelines for women and people with a cervix at average risk.



## Under Age 25

### **Screening is not recommended.**

Cervical cancer is rare before age 25.

## Ages 25 to 65

### **Get screened using a primary HPV test every 5 years.**

If primary HPV testing is not available, screening may be done with a co-test (both HPV and Pap) **every 5 years**, or a Pap test **every 3 years**.\*

\*Getting screened regularly is the most important factor, regardless of which test.

## Over Age 65

### **Most should stop screening.**

People who have had regular screening in the previous 10 years with negative results should stop screening.

### People with a cervix

includes women who have not had their cervix surgically removed, transgender men who retain their cervix, and non-binary people with a cervix.

### People who have received the HPV vaccine

should still follow age-appropriate screening guidelines.

### People who have had a total hysterectomy

(removal of the uterus and cervix) should stop screening unless the hysterectomy was done as a treatment for cervical cancer or a serious pre-cancer.

## Have Questions About Screening?

Visit [cancer.org/getscreened](https://cancer.org/getscreened) for cancer screening FAQs, including information about how to schedule a screening test, how to afford screening with and without insurance, and more.

# Screening Test Definitions

- Pap Test
  - A test which collects cells from the surface of the cervix to check for any abnormal cells
  - Abnormal cells can be removed or treated before cervical cancer develops
  - When cancer is detected early, it is easier to treat
- HPV Test
  - A test which collects cells from the surface of the cervix to check for HPV
  - The cells are collected during a pelvic exam using a small brush or swab, then sent to a lab for testing
  - Results can help the doctor decide if more testing is needed
- Primary HPV Test
  - A primary HPV test is an HPV test done by itself for screening
  - 3 FDA approved primary HPV assays
- Cotesting
  - A co-test is when an HPV and Pap test are done together for screening



# What is Primary HPV Screening and Self-Collection?

- Both are cervical cancer screening tests
- **Primary HPV screening** – when an HPV test is done by itself for screening
- **Self-collected HPV test** - allows a patient to collect a vaginal sample that can be tested for the presence of HPV DNA without a pelvic exam, under the instruction of a healthcare worker
  - Needs to be run on a primary HPV screening platform
  - **Became FDA approved May 2024**
  - *Not yet approved for at-home testing*
- Not widely implemented in US, changing screening landscape
- Self-collection is not FDA approved for at home use at this time.



*All screening tests are good at finding cancer and pre-cancer. The most important thing to remember is screening regularly, no matter the test.*

# Self-collection Expands the Menu of Options

- Provides another option for screening
- Potential to provide a more welcoming screening option for (not an exhaustive list):
  - LGBTQ+ people
  - People with a history of sexual trauma
  - People with physical disabilities
  - People who do not want a speculum exam
  - Once at-home is approved, can reach people in various settings (e.g. rural settings)

## Self-collection Clinician Key Messages



***Implementation  
STEPS Guide coming  
soon!***

	American College of Obstetricians and Gynecologists (ACOG), 2020	US Preventive Services Task Force (USPSTF), 2018	American Cancer Society (ACS), 2020
<b>Age to start screening</b>	21		25
<b>Screening test options and intervals</b>	<p><b>Ages 21-65:</b> Cytology alone every 3 years OR <b>Ages 21-29:</b> Cytology alone every 3 years <b>Ages 30-65:</b> Cytology plus HPV testing every 5 years OR <b>Ages 21-29:</b> Cytology alone every 3 years <b>Ages 30-65:</b> HPV testing alone every 5 years</p>		<p><b>Ages 25-65+ Preferred:</b> HPV testing alone every 5 years OR <b>Acceptable:</b> Either Cytology plus HPV testing every 5 years OR Cytology alone every 3 years</p>
<b>Age to end screening</b>	65 if 3 consecutive negative Pap tests OR 2 negative cytology plus HPV tests OR 2 negative HPV tests AND no abnormal tests within the prior 10 years with the most recent within the prior 5 years AND no CIN2+ within the prior 25 years		

# Why does the ACS Guideline prefer primary HPV screening?



**More efficient  
than  
cotesting**



**More effective  
than a Pap test  
alone**

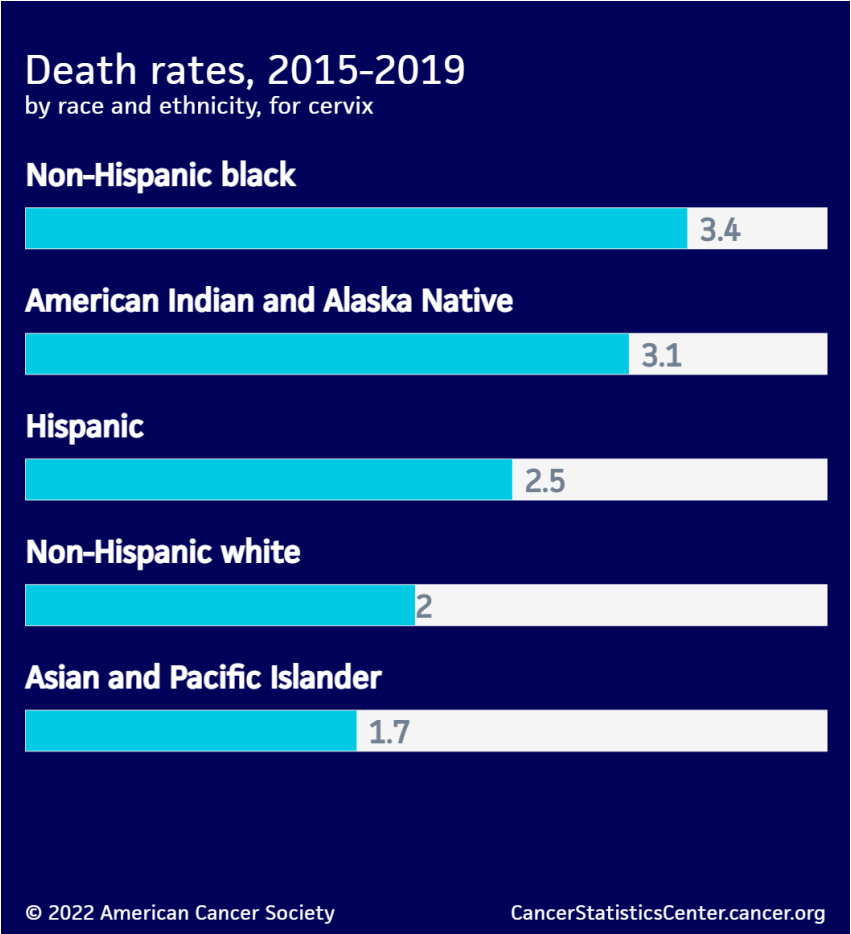
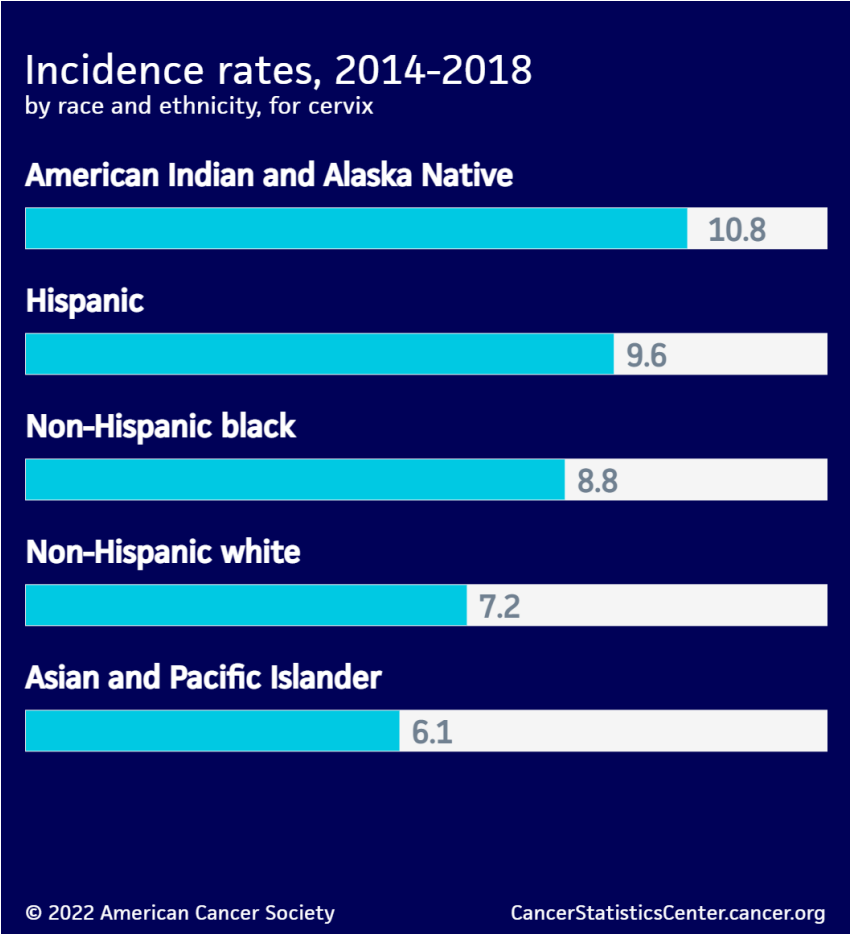
*\*Primary HPV screening is also necessary for self-collection (self-collection is not yet FDA-approved for cervical cancer screening)*

# Importance of Following Up on Positive Screening Results

# Health Disparities and Health Equity



# Incidence/Death Rates in the U.S. by Race/Ethnicity



## Cervical Cancer Screening % Aged 21-65y, United States, 2018

Race/ethnicity		Education		Insurance status		Family income level		US region**	
Non-Hispanic White only	84.8	Some high school or less	74.0	<b>Aged &lt;65 y</b>		<100% Federal poverty level (FPL)	71.4	Northeast	86.4
Non-Hispanic Black only	86.9	High school diploma	80.6	Uninsured	64.9	100% to <200% FPL	78.0	Midwest	84.2
Non-Hispanic AI/AN only or multiple	79.9	Some college	86.2	Medicaid/other public only	81.0	<200% FPL	86.6	South	83.0
Non-Hispanic Asian only	74.6	College graduate or higher	90.1	Private (any)	86.5			West	82.3
Hispanic-Latino	81.7			<b>Aged &gt; 65 y</b>				<b>Total</b>	<b>83.7</b>
				Medicare only	74.2				
				Medicare + Medicaid/other public only	NA				
				Medicare + private supplemental	82.6				



## Equality



## Equity



Health equity means that **everyone has a fair and just opportunity** to prevent, find, treat, and survive cancer. It is not the same as equality.

Equality is providing everyone with the same tools and resources. Equity is providing tools and resources based on needs that allow everyone the opportunity to be as healthy as possible.

**A Clinician's  
Perspective: *Dr.  
Rodriguez***



**A recommendation from a clinician** is the most predictive factor for a patient initiating and completing the cancer screening process.\*

\*Impact of provider-patient communication on cancer screening adherence: A systematic review  
<https://www.sciencedirect.com/science/article/abs/pii/S0091743516302912?via%3Dihub>

# Major Findings

## Mammograms

- **Provider recommendation** was associated with receipt of mammogram ( $p = .002$ )
- Women with **physicians who recommended screening** were more likely to have a mammogram. (OR = 2.29, 95% CI = 1.42–3.69)
- A **lack of doctor recommendation** was significantly associated with lower odds of screening among Latinas (OR = .01, 95% CI = .002, .12) and Arab women (OR = .25, 95% CI = .10, .61) but not significant for Black women

[Impact of provider-patient communication on cancer screening adherence: A systematic review](#)

## Cervical Screening

- Pap: A **lack of doctor recommendation** was significantly associated with lower odds of screening among Latinas (OR = .09, 95% CI = .02, .42) and Arab women (OR = .26, 95% CI = .12, .54) but not significant for Black women.
- Women who reported a physician recommendation had a nearly **7.0 higher odds** of having been screening for cervical cancer in the preceding 3 years.
- Women whose healthcare providers had recommended screening were more likely to become **routine screeners** (Adjusted OR = 2.04, 95% CI = 1.32, 3.15).

## Colorectal Screening

- Individuals without a recommendation were significantly less likely to be screened, for both uninsured (95% CI = 0.003–0.083) and insured (95% CI = .054-.0119) individuals.
- Participants who reported that they had discussed colorectal cancer screening with their health care provider had a 10-times greater likelihood of screening compared to those who did not report provider communication about screening (OR = 10.78, 95% CI = 4.85, 29.94,  $p < .001$ ).
- When physicians made a clear recommendation about screening (Advise step), participants were significantly more likely to be screened (OR = 4.31, CI = 1.75, 10.59).

# Evidence-based Interventions for Increasing Cervical Cancer Screening Rates

CLIENT DIRECTED	PROVIDER DIRECTED	ACCESS TO CARE
Client reminders	Provider reminders/recall	Reduce structural barriers
One-on-one patient education	Provider assessment and feedback	
Small media	Professional education	

**What does improving  
cervical cancer  
screening processes and  
rates look in practice?**

***Q&A with Dr. Rodriguez***

**What barriers do you run into the most when it comes to getting your patients screened for cervical cancer?**

**Can you describe a time when you used a best practice to get someone screened for cervical cancer who would have otherwise not been screened?**



**What is the most important factor when implementing a workflow change in your clinical practice to make it successful?**

**How can we each be champions in our own practices and workplaces to increase cervical cancer screening rates and reduce disparities?**

**Where do you see the biggest area of opportunity in the field of cervical cancer prevention and early detection?**

# Take Home Messages



# Cervical Cancer Screening Take-Home Messages

- **Focus efforts on unscreened women – need to take a health equity approach to address disparities in cervical cancer & screening**
- **Frequent (annual, biennial) cervical screening can lead to more harms than benefits**
- **HPV screening has many advantages, including the foundation for self-collection**
- **HPV screening every 5 years is extremely safe: can lead to better detection, less procedures**
- **Guidelines are based on a rigorous review and achieved broad consensus**

# **Cervical Cancer Screening Take Home Messages Cont.**

- **Self-collection and primary HPV screening have tremendous opportunity to increase screening rates**
- **Change can be hard, but it is worth it!**
- **Identify cervical cancer screening clinical champions**
- **Support policies that provide coverage for testing up until the point of diagnosis**
- **Get involved with the ACS National Roundtable on Cervical Cancer at [cervicalroundtable.org](http://cervicalroundtable.org)**

# References

1. American Cancer Society. Cancer Statistics Center. <https://cancerstatisticscenter.cancer.org/>. Accessed 1/23/2024.
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For questions, feedback,  
and collaboration:

[Jane.Gerndt@cancer.org](mailto:Jane.Gerndt@cancer.org)

**Jane Gerndt, MPH**

Program Manager, Screening