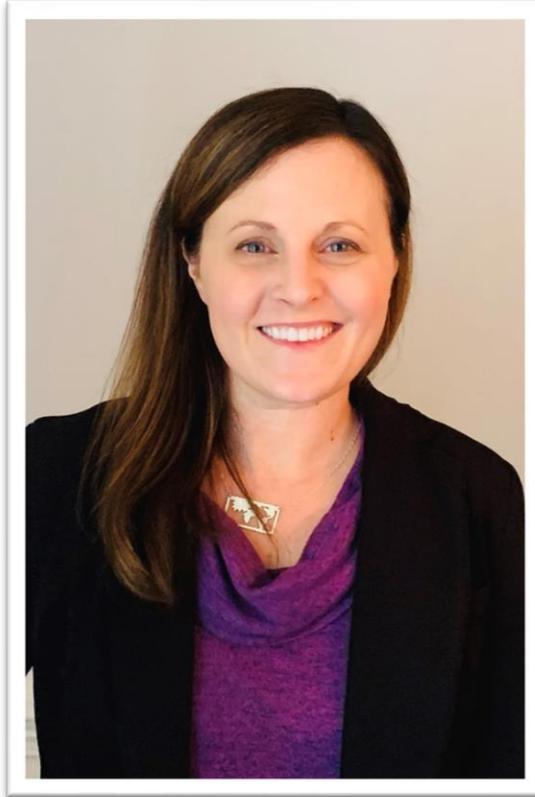


Cervical Cancer Screening

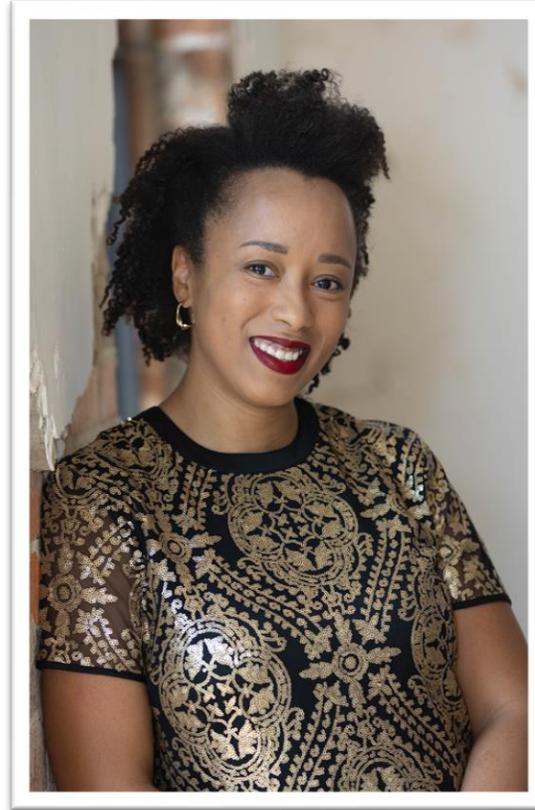


North Carolina & Beyond



Jill Pait, MS, CHES

Associate Director, State Partnerships
American Cancer Society



Alesia Bailey, MPH

Associate Director, Community Partnerships
American Cancer Society



Presentation Objectives

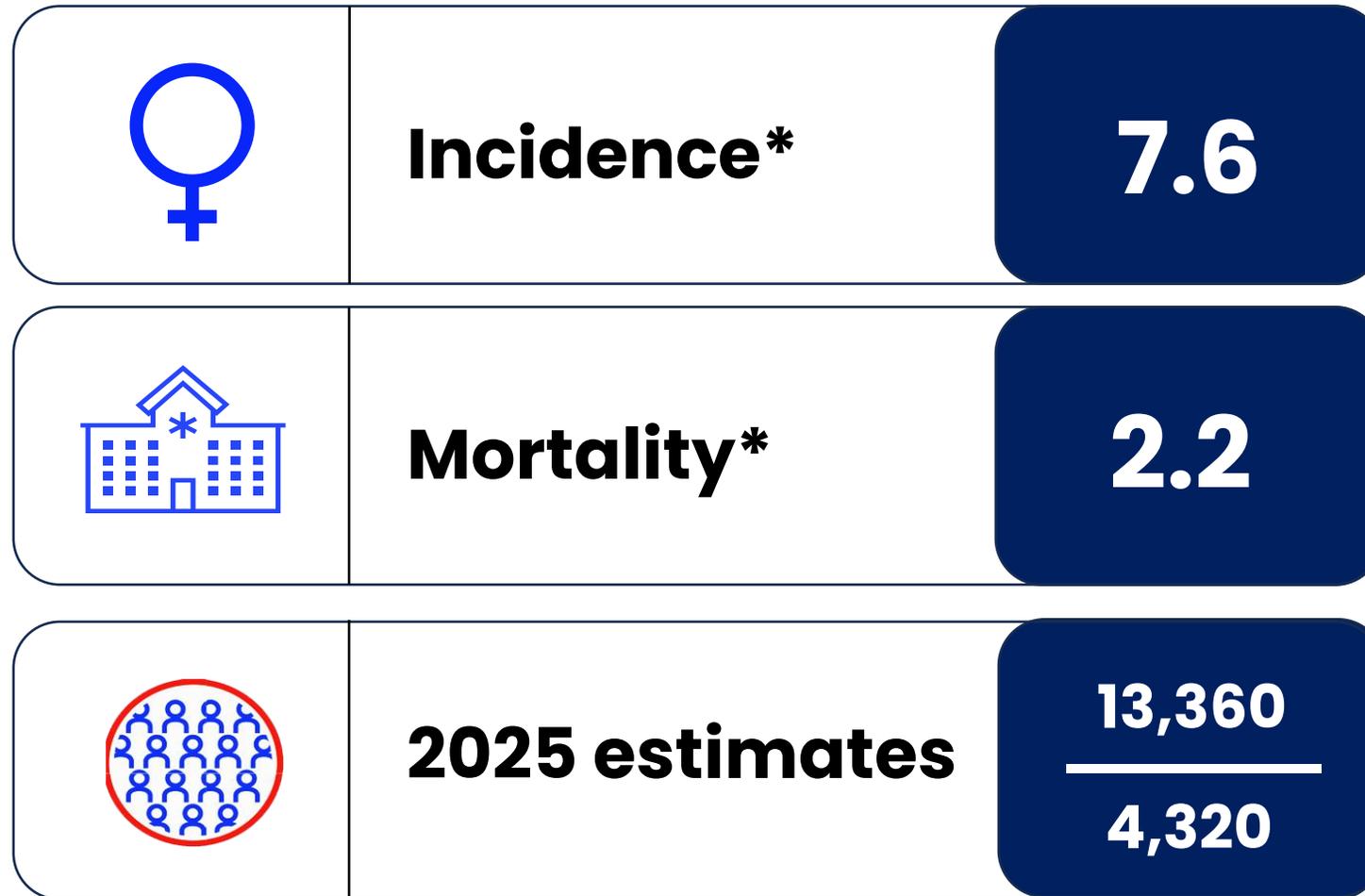
Understand the burden of cervical cancer

Describe current cervical cancer screening guidelines, trends and benefits of early detection

Review EBIs and resources to increase cancer screening rates in your clinics

Practice critical components of guideline activation through PDSA Activity

Cervical Cancer in the US



Incidence trends vary widely by age; for example, the rate decreased by 11% per year in women ages 20-24 during 2012 to 2021, likely reflecting the first signs of cancer prevention because of HPV vaccination.

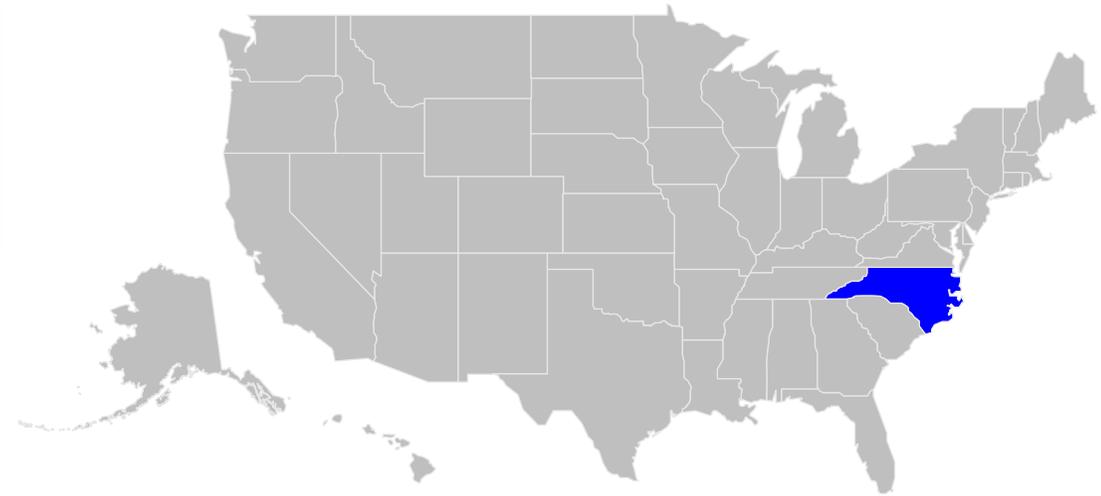
In 2020, the US spent **\$2.3 billion** on cervical cancer care.

*Average annual rate per 100,000, age-adjusted to the 2000 US standard population
SOURCE: Cancer Statistics Center (Accessed January 2025)

Cervical Cancer in North Carolina

Cervical Cancer	Incidence Rates (2017-2021)*	Death Rates (2018-2022)*
United States	7.6	2.2
North Carolina	7.0	2.0

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

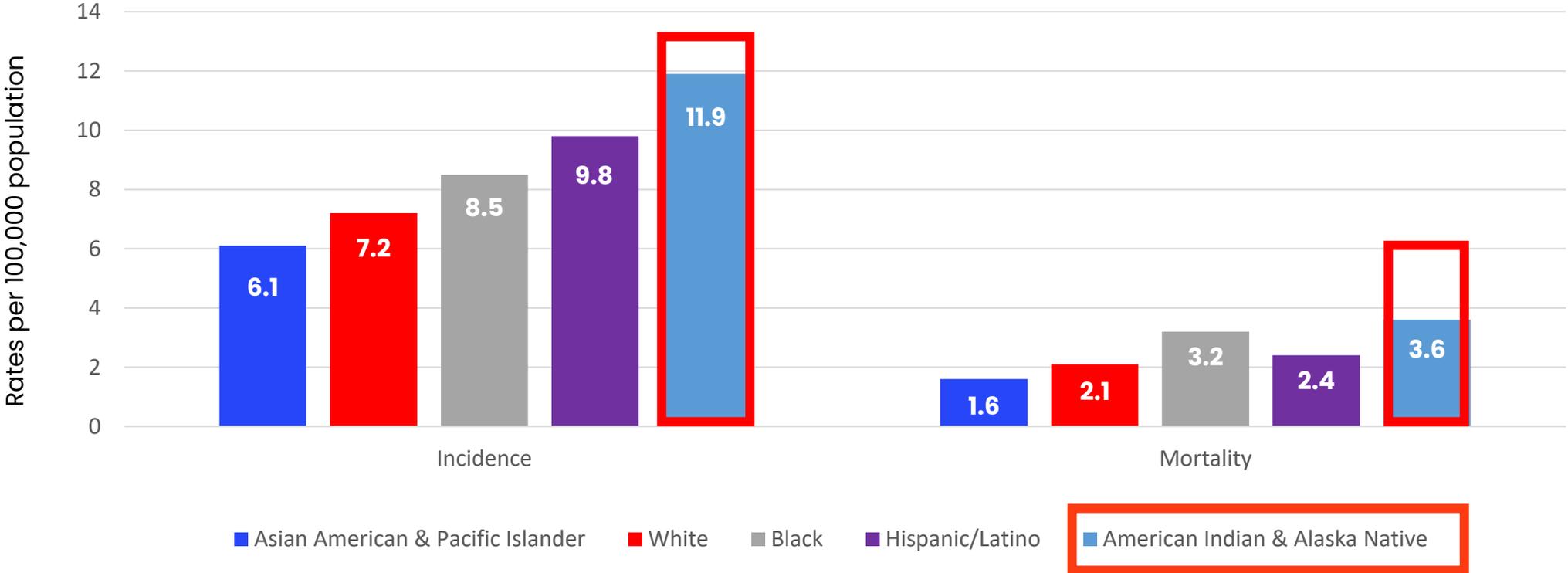


Estimated New Cases of Cervical Cancer in NC in 2025: 420

Estimated New Cervical Cancer Deaths in NC in 2025: 130

Cervical Cancer Incidence and Mortality by Race/Ethnicity.

Incidence and Mortality by Race/Ethnicity,
Cancer Facts & Figures 2025



SOURCE: American Cancer Society. *Cancer Facts & Figures 2025*.

Cervical Cancer Screening Guidelines

Cervical Cancer Screening for Individuals at Average Risk: 2020 Guideline Update from the American Cancer Society

Elizabeth T. H. Fontham, MPH, DrPH¹; Andrew M. D. Wolf, MD²; Timothy R. Church, PhD³; Ruth Etzioni, PhD^{4,5}; Christopher R. Flowers, MD, MS⁶; Abbe Herzig, PhD⁷; Carmen E. Guerra, MD⁸; Kevin C. Oeffinger, MD⁹; Ya-Chen Tina Shih, PhD¹⁰; Louise C. Walter, MD^{11,12}; Jane J. Kim, PhD¹³; Kimberly S. Andrews, BA¹⁴; Carol E. DeSantis, MPH¹⁵; Stacey A. Fedewa, PhD, MPH¹⁵; Deana Manassaram-Baptiste, PhD, MPH¹⁴; Debbie Saslow, PhD¹⁴; Richard C. Wender, MD¹⁶; Robert A. Smith, PhD¹⁶

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Additional supporting information may be found online in the Supporting Information section at the end of this article.

Corresponding Author: Robert A. Smith, PhD, Prevention and Early Detection Department, American Cancer Society, 250 Williams Street, Suite 600, Atlanta, GA 30303 (robert.smith@cancer.org).

Abstract: The American Cancer Society (ACS) recommends that individuals with a cervix initiate cervical cancer screening at age 25 years and undergo primary human papillomavirus (HPV) testing every 5 years through age 65 years (preferred); if primary HPV testing is not available, then individuals aged 25 to 65 years should be screened with cotesting (HPV testing in combination with cytology) every 5 years or cytology alone every 3 years (acceptable) (*strong recommendation*). The ACS recommends that individuals aged >65 years who have no history of cervical intraepithelial neoplasia grade 2 or more severe disease within the past 25 years, and who have documented adequate negative prior screening in the prior 10 years, discontinue all cervical cancer screening (*qualified recommendation*). These new screening recommendations differ in 4 important respects compared with the 2012 recommendations: 1) The preferred screening strategy is primary HPV testing every 5 years, with cotesting and cytology alone acceptable where access to US Food and Drug Administration-approved primary HPV testing is not yet available; 2) the recommended age to start screening is 25 years rather than 21 years; 3) primary HPV testing, as well as cotesting or cytology alone when primary testing is not available, is recommended starting at age 25 years rather than age 30 years; and 4) the guideline is transitional, ie, options for screening with cotesting or cytology alone are provided but should be phased out once full access to primary HPV testing for cervical cancer screening is available without barriers. Evidence related to other relevant issues was reviewed, and no changes were made to recommendations for screening intervals, age or criteria for screening cessation, screening based on vaccination status, or screening after hysterectomy. Follow-up for individuals who screen positive for HPV and/or cytology should be in accordance with the 2019 American Society for Colposcopy and Cervical Pathology risk-based management consensus guidelines for abnormal cervical cancer screening tests and cancer precursors. *CA Cancer J Clin* 2020;70:321-346. © 2020 American Cancer Society.

Keywords: cervical neoplasms, cervix neoplasms, guideline, mass screening, prevention and control

Introduction

The incidence of and mortality from cervical cancer have declined markedly in the United States since the mid-20th century, largely because of widespread screening practices that were initiated in the 1950s. Nevertheless, in the US, an estimated 13,800 cases of invasive cervical cancer will be diagnosed, an estimated 4290 deaths from cervical cancer will occur in 2020, and disparities by race/ethnicity and socioeconomic status persist.¹ These disparities, as well as the stabilization of incidence rates of squamous cell cervical cancer in non-Hispanic whites and increasing rates of advanced cervical cancer in some age groups of

Cervical Cancer Screening | ACS 2020 Guideline Update



Screening for Cervical Cancer: 2020 Guideline Update



<https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3322/caac.21628>

ACS Cervical Cancer Screening Guidelines

Under age 25	Ages 25–65	Older than age 65
<p>Screening is not recommended.</p> <p>Cervical cancer is rare before age 25.</p>	<p>Get screened every three to five years, depending on tests used.</p> <p><u>Primary HPV test:</u> every five years</p> <p><u>Co-testing:</u> every five years</p> <p><u>Pap test alone:</u> every three years</p>	<p>Most should stop screening.</p> <p>People who've had regular screening in the past 10 years with normal results should stop screening.</p>

People who do not have a cervix and who do not have a history of cervical cancer or serious precancer should not be screened.

People who have received the HPV vaccine should still follow screening guidelines for their age group.

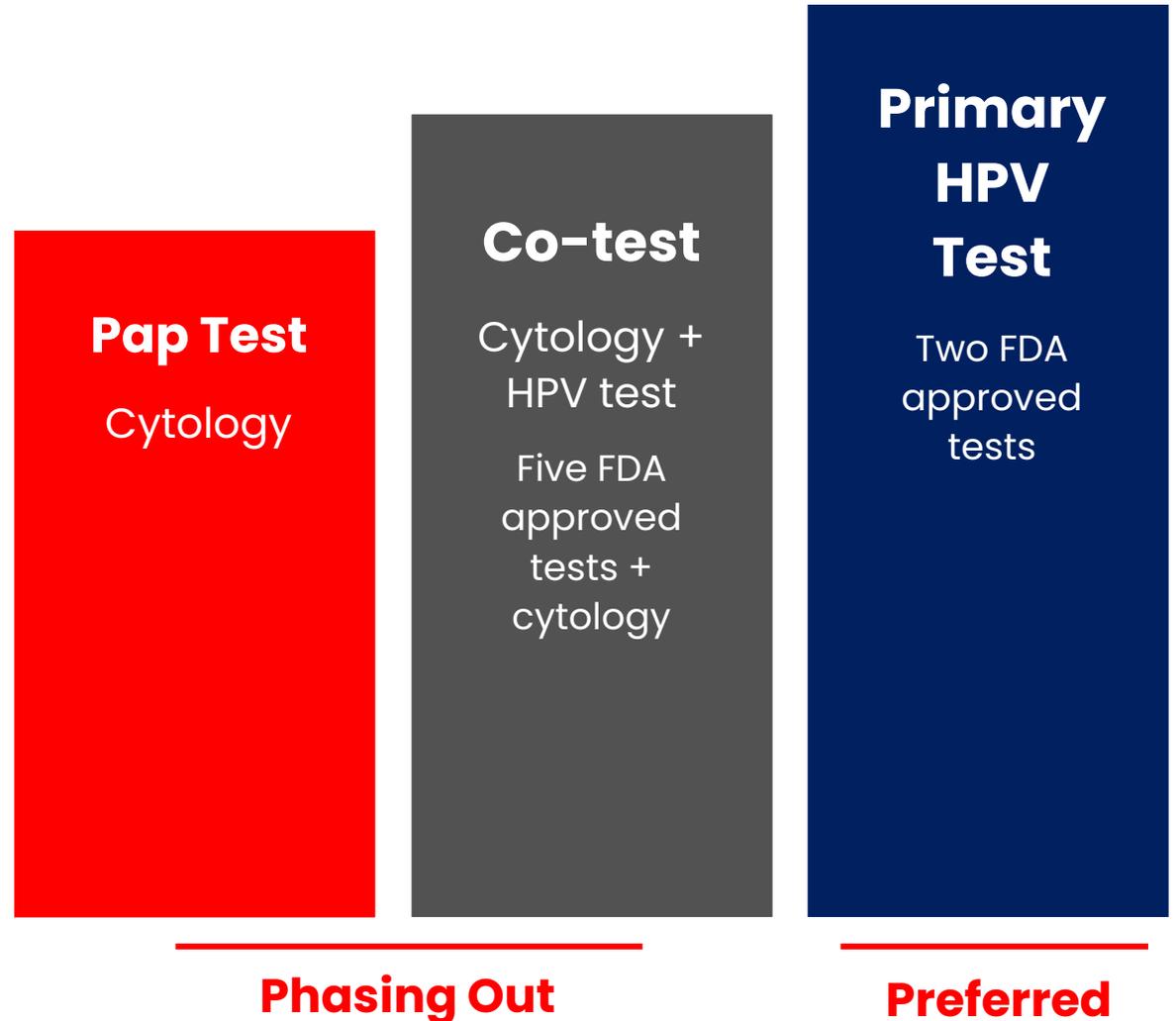
ACS vs. ACOG vs. Draft USPSTF Cervical Cancer Screening Recommendations

	American College of Obstetricians and Gynecologists (ACOG), 2020 ¹	Draft US Preventive Services Task Force (USPSTF), 2025 ²	American Cancer Society (ACS), 2020
Age to start	21	21	25
Screening test options and intervals	<p>Ages 21-65: Cytology alone, every 3 years</p> <p>OR</p> <p>Ages 21-29: Cytology alone, every 3 years</p> <p>Ages 30-65: Cytology plus HPV testing, every 5 years</p> <p>OR</p> <p>Ages 21-29: Cytology alone, every 3 years</p> <p>Ages 30-65: HPV testing alone, every 5 years</p>	<p>Ages 21-29: Cytology alone, every 3 years</p> <p>Ages 30-65: Clinician- or patient-collected high-risk HPV testing alone, every 5 years</p> <p>Alternative to HPV testing alone for ages 30-65:</p> <p>Cytology alone, every 3 years</p> <p>OR</p> <p>HPV testing plus HPV testing (cotesting), every 5 years</p>	<p>Ages 25-65+ Preferred: HPV testing alone every 5 years</p> <p>OR</p> <p>Acceptable: Either Cytology plus HPV testing every 5 years</p> <p>OR</p> <p>Cytology alone every 3 years</p>
Age to end	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.		

Cervical Cancer Screening Tests

Primary HPV testing is the preferred screening method.

- Primary HPV testing needs to be done less often.
- Pap tests are minimally effective in women who have been vaccinated.
- Co-testing offers minimal benefit compared with primary HPV screening.
- Regular screening is important, no matter which test is used.



Self-Collection

- 2 FDA approved tests
 - Onclarity HPV, made by Becton, Dickinson and Company (BD)
 - cobas HPV, made by Roche Molecular Systems
- People can now be offered the option to collect a vaginal sample themselves for HPV testing if they **cannot have** or **do not want a pelvic exam**
- **Must be done in a health care setting**, such as primary care offices, urgent care, pharmacies, and mobile clinics
- Can only be used for primary HPV testing, not cytology or cotesting
- Sensitivity is comparable to clinician obtained samples
- Multiple studies have shown effectiveness and acceptability, especially among underscreened populations¹
- Expected to have significant impact for never and rarely screened populations¹

¹Arbyn M, Smith SB, Temin S, Sultana F, Castle P; Collaboration on Self-Sampling and HPV Testing. Detecting cervical precancer and reaching underscreened women by using HPV testing on self samples: updated meta-analyses. BMJ. 2018 Dec 5;363:k4823. doi: 10.1136/bmj.k4823. PMID: 30518635; PMCID: PMC6278587.

Changes in Cervical Cancer Screening

Planning for the Future

Now

- Move to primary HPV testing



Future

- Pap tests phased out
- Co-testing phased out
- HPV self-collection test introduced (FDA-approved May 2024)



Planning for the Future

HPV vaccination will allow:

- Less frequent screening
- Later starting age for screening

SOURCE: Fontham, et al. *CA Cancer J Clin.* 2020;70:321.



Impact of Early Detection



Cervical cancer

Was one of the most common causes of death for women in the US



Thanks to screening

>50% decrease in incidence and mortality since the 1970s

Knowing about cervical cancer and screening can help save lives.

5-year relative survival by stage at diagnosis, Cervix, 2014-2020, all races and ethnicities



©American Cancer Society, 2025
Data source: Surveillance, Epidemiology, and End Results 22 registries, National Cancer Institute, 2024
Survival is adjusted for normal life expectancy and based on cases diagnosed 2014-2020 and followed through 2021.

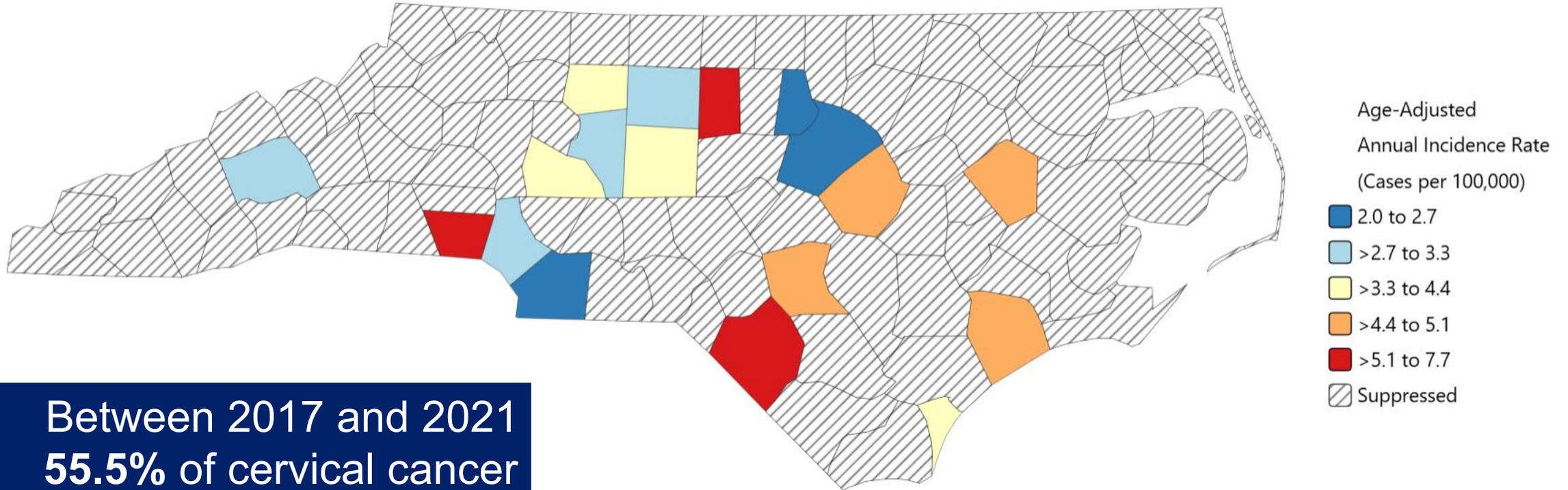
91%
Localized

vs.

19%
Distant

Incidence Rates: Cervix (Late Stage[^]), 2017–2021

All Races (includes Hispanic), All Ages | North Carolina

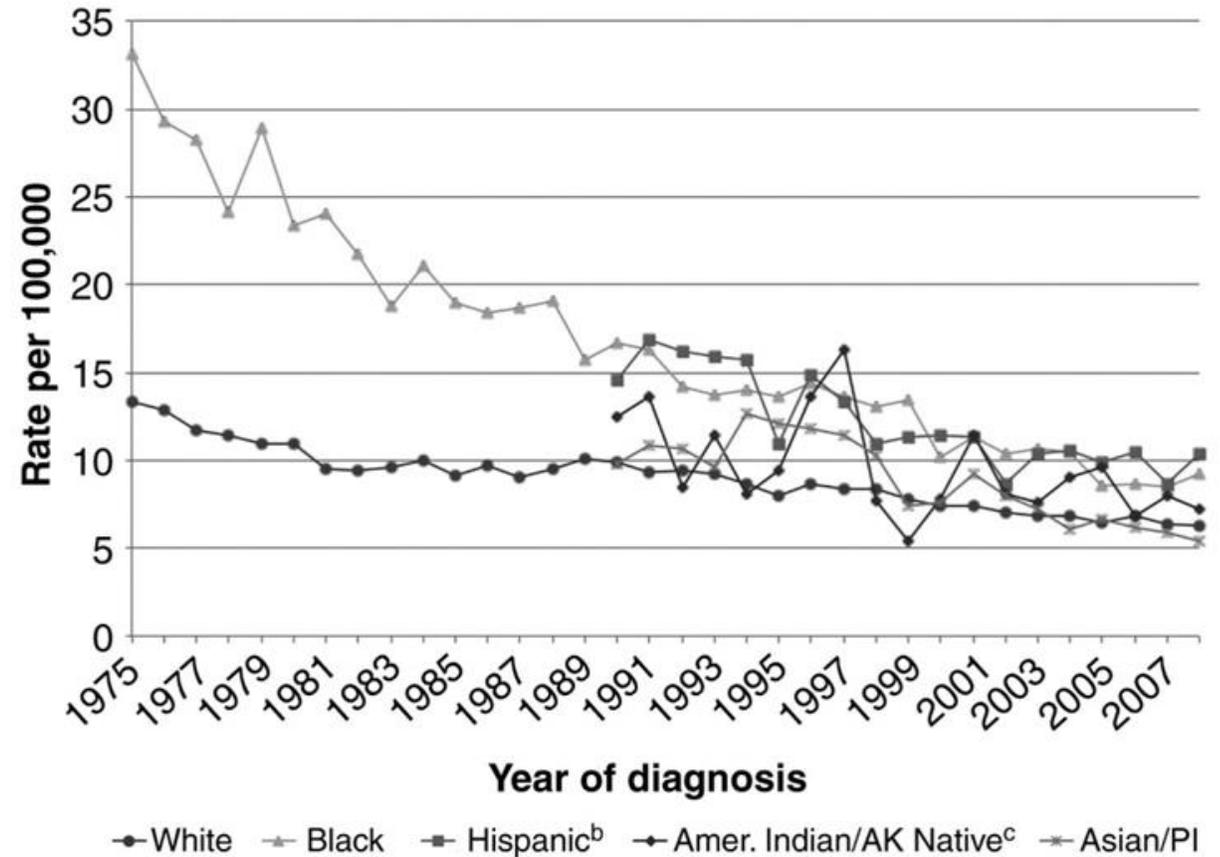


Between 2017 and 2021
55.5% of cervical cancer
cases were diagnosed at late

[^] Late Stage is defined as cases determined to be regional or distant. Due to changes in stage coding, Combined Summary Stage (2004+) is used for data from Surveillance, Epidemiology, and End Results (SEER) databases and Merged Summary Stage is used for data from National Program of Cancer Registries databases. Due to the increased complexity with staging, other staging variables maybe used if necessary.

Screening Prevents Cervical Cancer

Since screening has been introduced in the United States, the rate of cervical cancer has decreased by 80%.



Pierce Campbell CM, et al. Prevention of invasive cervical cancer in the United States: Past, present, and future. *Cancer Epidemiology, Biomarkers & Prevention*. 2012;21(9):1402-8.

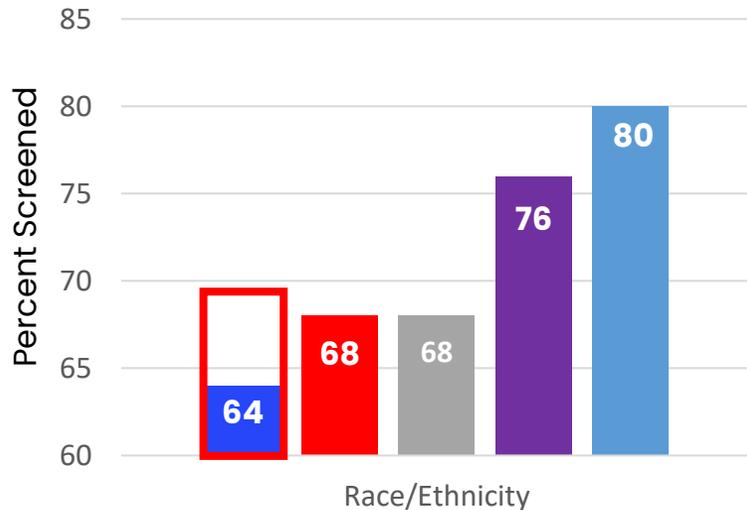
Peto J, et al. The cervical cancer epidemic that screening has prevented in the UK. *Lancet*. 2004;364(9430):249-56.

Screening Trends and Opportunities

Impact of SDOH on Cervical Cancer Screening

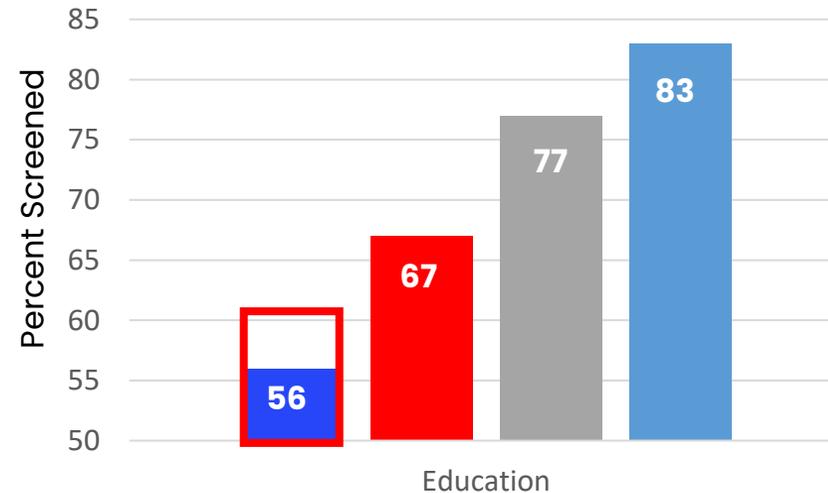
Cervical Cancer Screening % in Adults Ages 25–65,
Cancer Prevention & Early Detection Facts & Figures 2023–2024

Race/Ethnicity



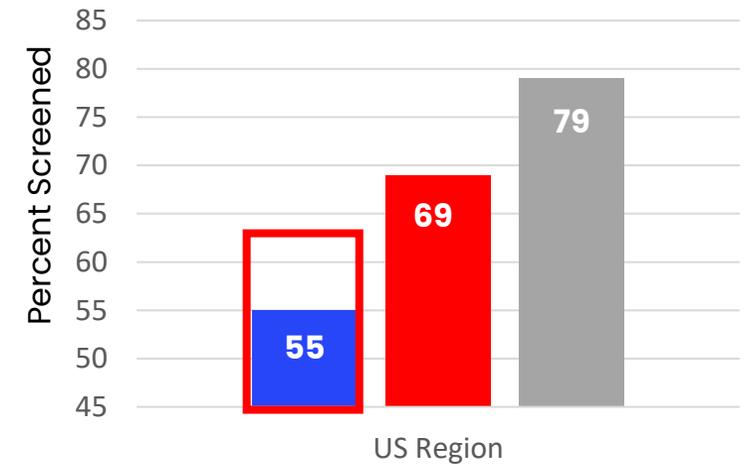
- Asian American
- American Indian & Alaskan Native
- Hispanic/Latino

Education



- Some high school or less
- High school diploma
- Some college

Immigration Status

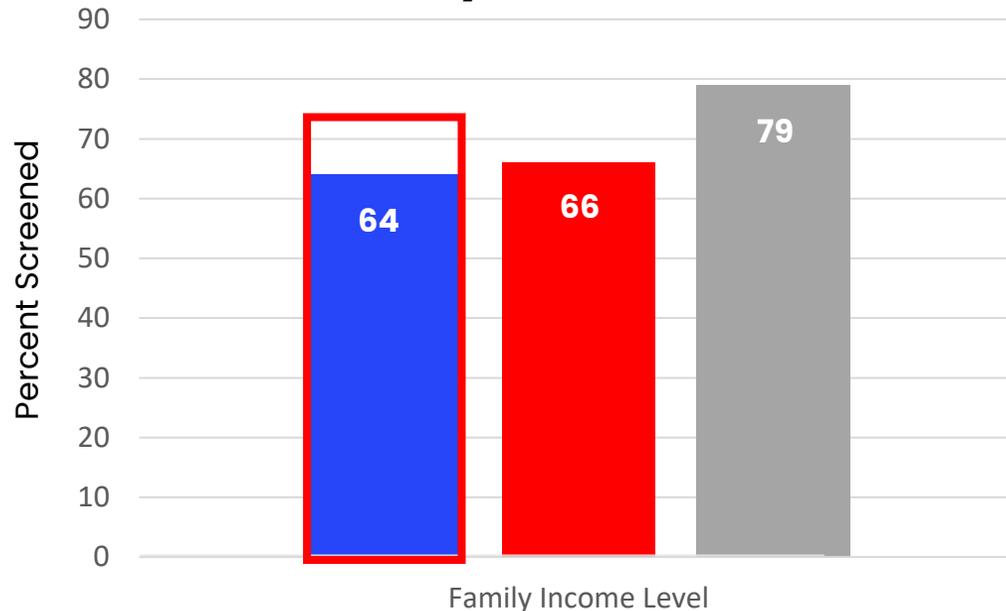


- In US fewer than 10 years
- In US 10+ years

Impact of SDOH on Cervical Cancer Screening (cont.)

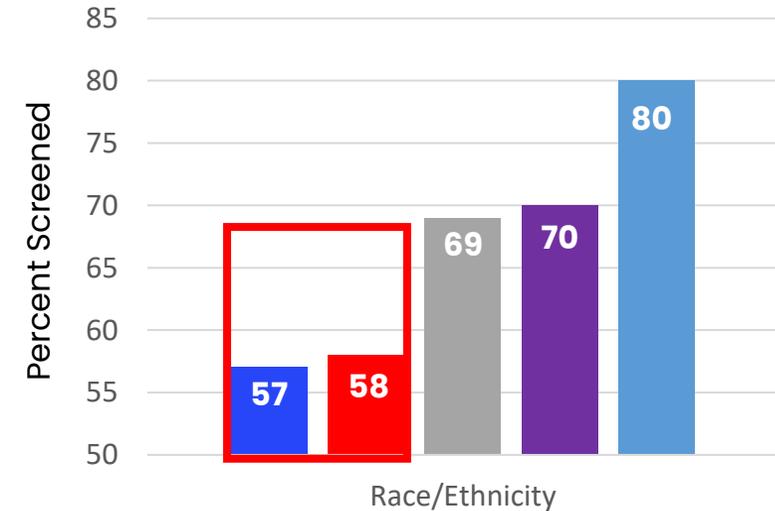
Cervical Cancer Screening % in Adults Ages 25–65,
Cancer Prevention & Early Detection Facts & Figures 2023–2024

Family Income Level



- <100% of Federal Poverty Level (FPL)
- 100% to <200% of FPL
- >200% FPL

Insurance Status



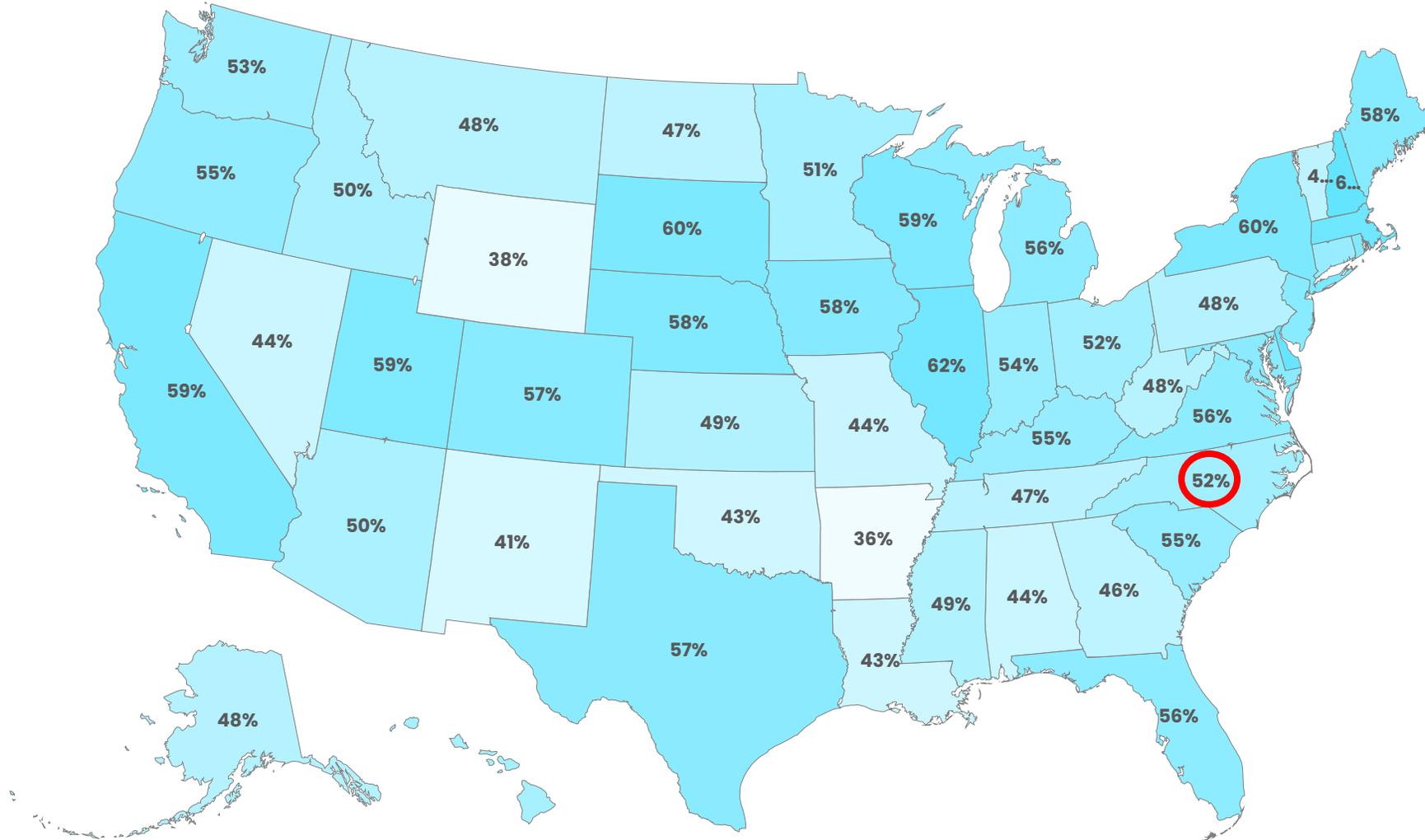
- Medicare (ages > 65 years)
- Uninsured
- Medicaid/Public/Dual eligible

SOURCE: National Health Interview Survey

2023 FQHC Cervical Cancer Screening Rates

HRSA Uniform Data System (UDS) Data
National Screening Rate = 55%

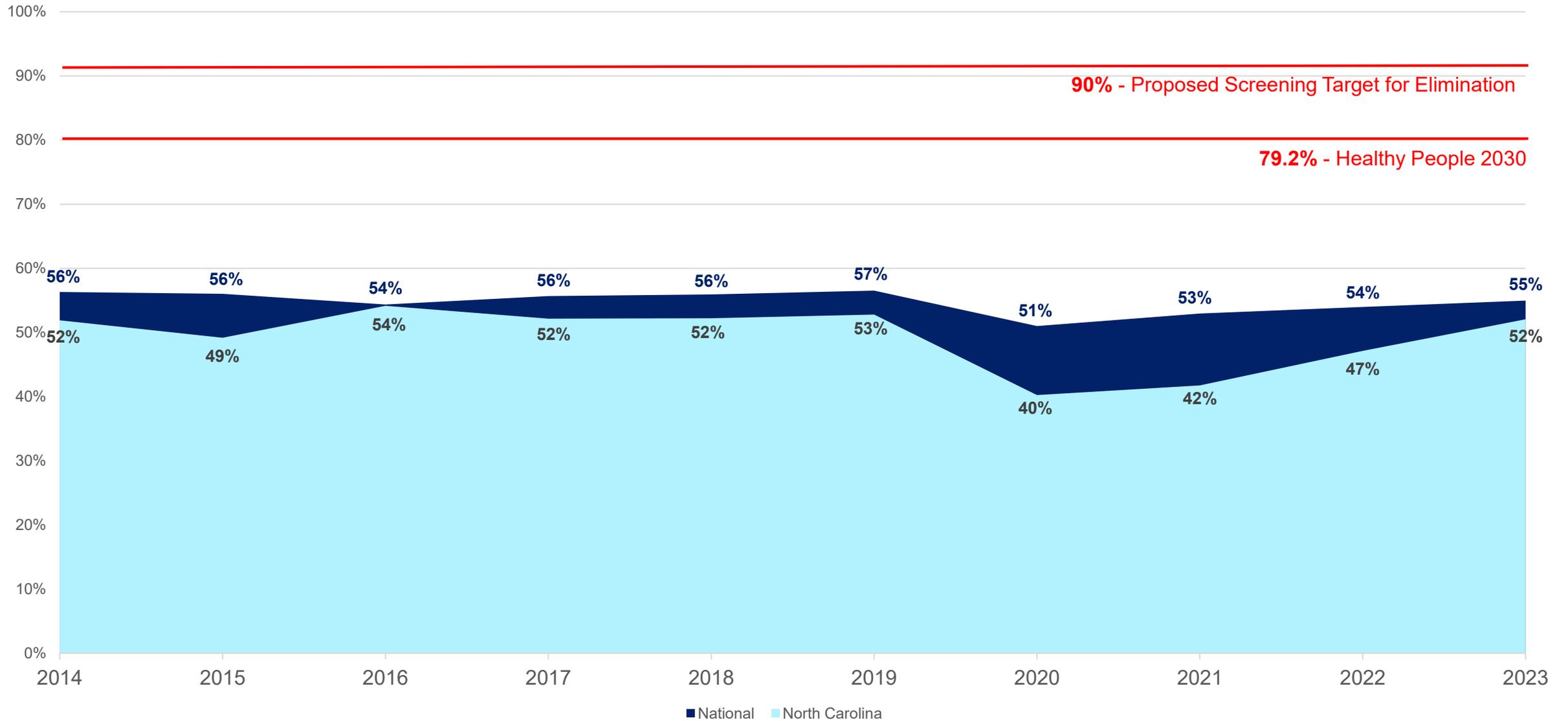
Cervical Cancer Screening Rates 
36% 70%



© GeoNames, MI

Source: HRSA Health Center Program Uniform Data (UDS) Data, 2023. <https://www.hrsa.gov/foia/electronic-reading>. Accessed: 9/1/2024. Public data with calculations and data visualization by the American Cancer Society.

National & North Carolina FQHC Cervical Cancer Screening Trends



Source: HRSA Health Center Program Uniform Data (UDS) Data, 2023. <https://www.hrsa.gov/foia/electronic-reading> . Accessed: 9/1/2024. Public data with calculations and data visualization by the American Cancer Society.

Screening Opportunity in NC FQHCs

88,252

eligible patients
up-to-date with
cervical cancer
screening in 2023

81,221

eligible patients
who had a
medical visit and
were not
screened in 2023

Identify un[der] screened patients.

- Who are OUR un[der] screened patients?
 - Risk stratify your data.
 - Equity stratify your data.
- Are there commonalities of your un[der] screened patients?



Develop parallel process for identifying patients who are missing follow-up and completion of the screening process.

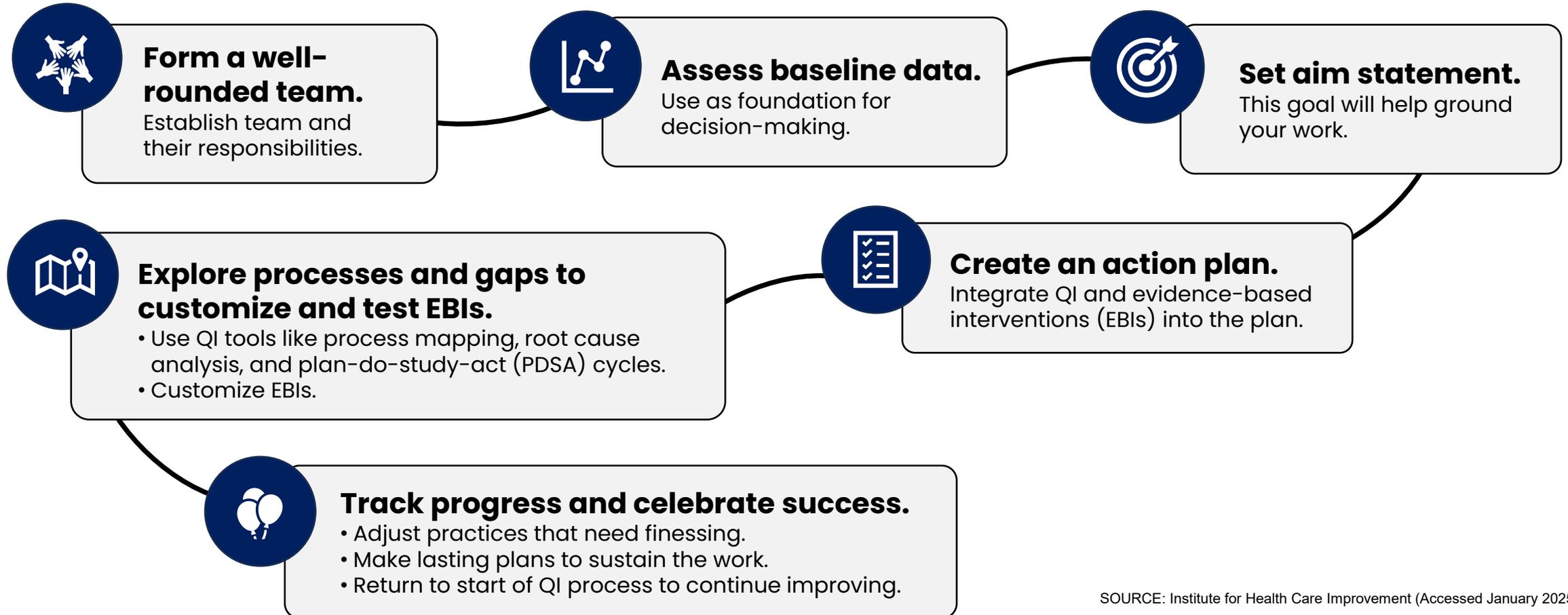


Cervical Cancer Screening Interventions



Recommended Quality Improvement (QI) Process

Health systems can work with your local ACS staff partner to develop this process.



Evidence-Based Interventions for Cervical Cancer Screening

EBIs are most successful when done together.



Patient Directed

- Reminders
- Education (one-on-one)
- Small Media



Provider Directed

- EHR Enhancements
- Assessment and feedback
- Standing Orders
- Professional education
- Reminders and recall



Access to Care

- Reduce structural barriers.
- Patient Navigation & CHWs

Talk to ACS staff partners or visit [The Community Guide](#) to learn more.

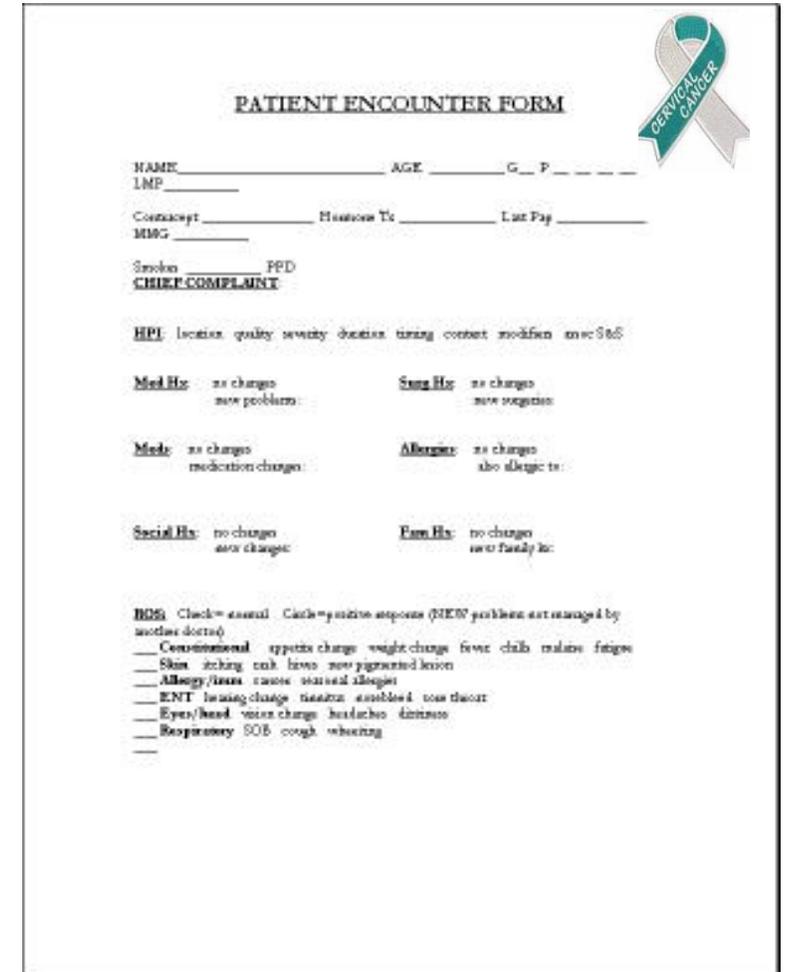
A recommendation from a clinician is the most predictive factor for a patient initiating and completing the cancer screening process.*

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

Implement Provider Reminders

Ideas:

- ✓ Tickler in EHR
- ✓ Sticker on encounter form
- ✓ Laminated educational card



PATIENT ENCOUNTER FORM

NAME _____ AGE _____ G. P. _____
LMP _____

Concept _____ History Tr. _____ Last Prg. _____
MMG _____

Smoker _____ FPD _____

CHIEF COMPLAINT

HPI: location, quality, severity, duration, timing, context, modifiers, associated

Med Hx: no change / new problem Surg Hx: no change / new operation

Medx: no change / medication change Allergies: no change / also allergic to:

Social Hx: no change / new change Fam Hx: no change / new family hx

HDS Check=assess Check=positive response (NEW problem not managed by another doctor)

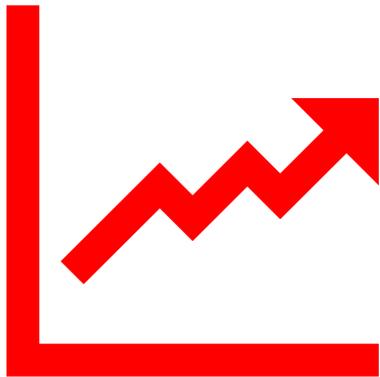
- ___ Constitutional: appetite change, weight change, fever, chills, malaise, fatigue
- ___ Skin: itching, rash, hives, new pigmented lesion
- ___ Allergy/issue: rashes, seasonal allergies
- ___ ENT: hearing change, tinnitus, swollen/red throat
- ___ Eyes/Head: vision change, headache, dizziness
- ___ Respiratory: SOB, cough, wheezing
- ___

Measure & Monitor Cervical Cancer Screening Performance

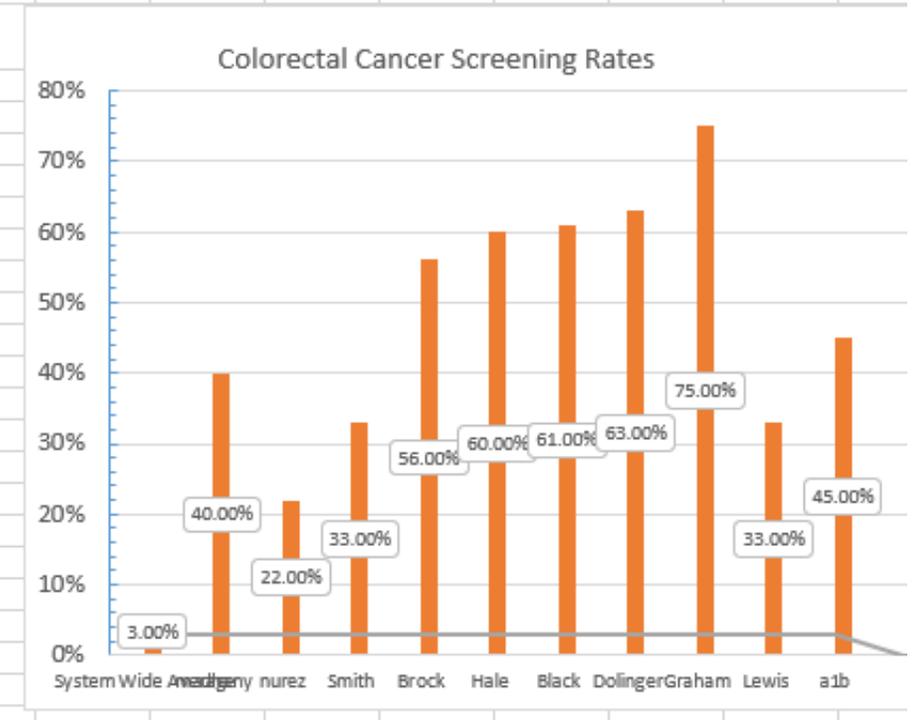
- ✓ Collect, report and monitor data regularly (Ex. monthly)
- ✓ Measure success from baseline
- ✓ Routinely run cervical cancer screening reports for clinics and clinic teams

Develop Provider Assessment & Feedback Tools

- Showing 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%



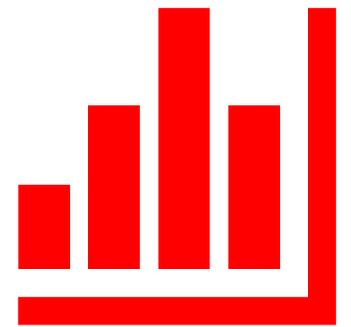
Implement Patient Reminders

- ✓ Postcards, mailed letter, Text messages
- ✓ Phone calls, automated message
- ✓ Messages through your patient portal



Screening for Eligibility & Follow-up

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



Reduce Barriers: Think about your community



Transportation



Stigma/Racism



Insurance



Health literacy



Language

What kinds of barriers to screening do your patients often face?

Reducing Barriers

Give screening priority to those who:

- Have never been screened
- Have had a past abnormal screening test result
- Were previously scheduled for follow-up exams or treatment
- Are overdue for screening



Resources

- [Cervical Cancer Fact Sheet for Patients and Caregivers](#)
- [Cervical Cancer Fact Sheet for Health Care Professionals](#)
- Cervical Cancer Screening Flyer (multiple languages)
- Cervical Cancer Screening Guidelines Information Card (English & Spanish; co-brandable)
- [If You Have Cervical Cancer](#) (English and Spanish)
- [Preparing for Self-Collection Clinical Communication Guide](#) Now Available
- [Ready-to-use Presentations](#)
- [2025 ACS QI Implementation Manual.pdf](#)
- [National Roundtable on Cervical Cancer: cervicalroundtable.org](#)



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 for cancer screening FAQs, including information about how to schedule a screening test, how to afford screening with and without insurance, and more.

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Cervical Cancer Fact Sheet for Patients and Caregivers

Cervical cancer starts in the cells lining the cervix - the lower part of the uterus. The number of cervical cancer cases has dropped by more than half in the last 20 years.

Risk Factors

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:

- Smoking sexually active at a young age and having many sexual partners or a partner who has had many sexual partners. (although many people who get cervical cancer have only had one sexual partner)
- Smoking
- Having a weakened immune system
- Having a history of chlamydia infection
- Using oral contraceptives for a long time
- Having three or more full-term pregnancies
- Being younger than age 20 with a first full-term pregnancy
- Being born to a person who took diethylstilbestrol (DES) during pregnancy

Screening and Detection

Screening is a procedure that finds precancerous changes in the cervix or cervical cancer at an early stage. Screening can help reduce the risk of dying from cervical cancer.

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 people from infection with the types of HPV that can cause cervical and other cancers. HPV vaccination is recommended for all children regardless of gender between ages 9 and 12.

Cervical Cancer Fact Sheet for Health Care Professionals

Cervical Cancer in the US

Cervical cancer incidence rates have declined by more than half in recent decades, largely due to the widespread use of regular screening, behavioral changes, and early cervical cancer detection. However, disparities in screening rates for people who are more likely to have regular cervical cancer screening exist.

Risk Factors

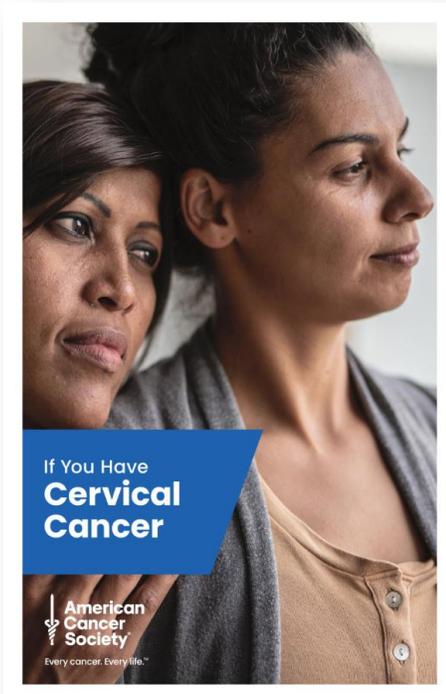
HPV, almost all cervical cancers are caused by persistent infection with HPV. HPV 16 and 18 are the subtypes most associated with invasive cervical cancer.

Other Risk Factors

- Smoking sexually active at a young age and having many sexual partners increases risk, although many people diagnosed with cervical cancer have only had one sexual partner.
- Smoking
- Immunosuppression, including HIV infection
- Long-term use of oral contraceptives
- Having three or more full-term pregnancies
- Young age at first full-term pregnancy (earlier than age 20)
- Intrauterine diethylstilbestrol (DES) exposure
- Lack of access to adequate health care services, including cervical cancer screening.

Screening and Detection

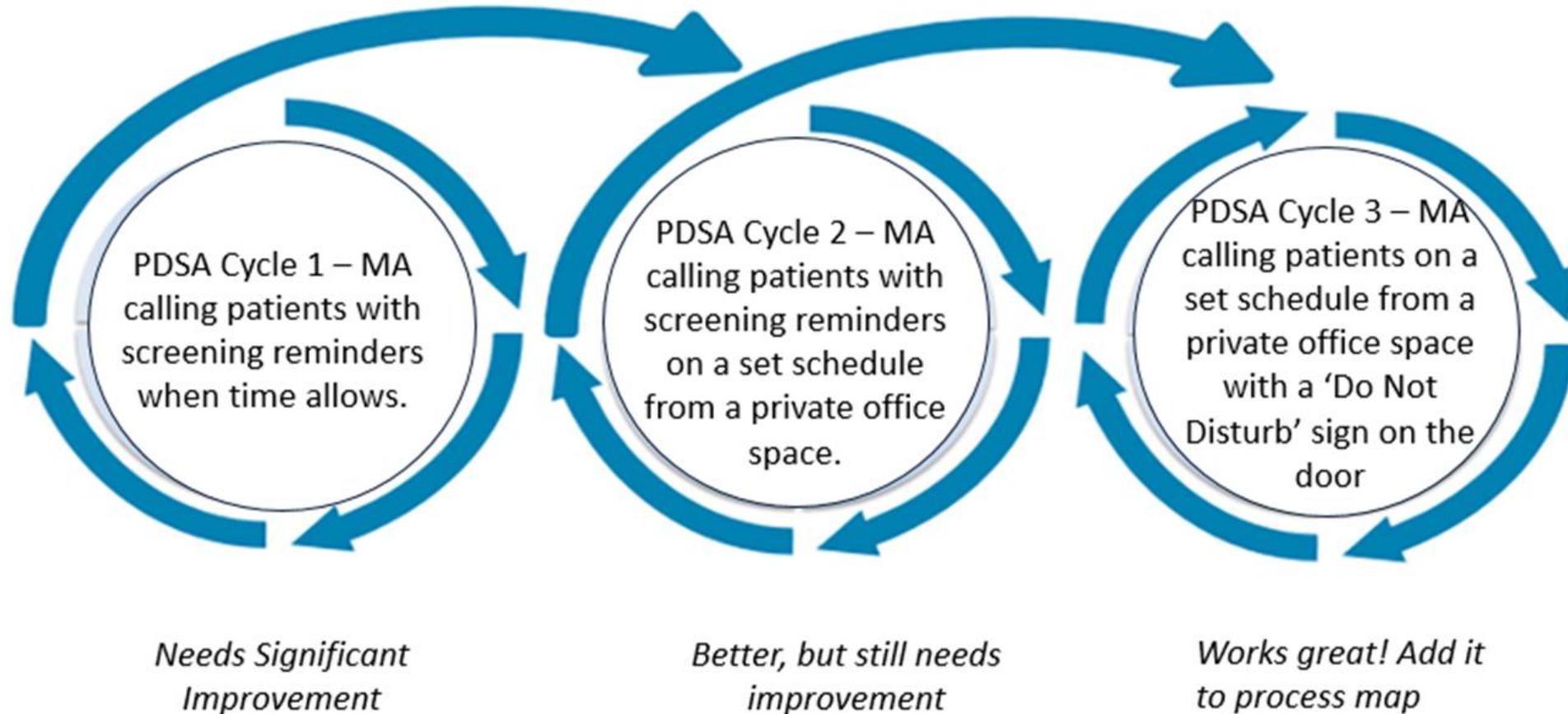
The American Cancer Society recommends the following for early detection in people who have a cervix and are at average risk for cervical cancer:





PDSA Activity

PDSA



1/2/20





Thank you for
doing the hard
work to prevent
and find cervical
cancer early!