Housekeeping Items

- Welcome to L.A. Care Provider Continuing Education (PCE) Program's Live Webinar!
- The Live Webinar is being recorded.
- Webinar participants are muted upon entry and exit of webinar.
- ***Webinar attendance will be noted via log in and call in with assigned unique Attendee ID #. Please log in through a computer (instead of cell phone) to Join Webinar / Join Event and choose the Call In option to call in by telephone with the event call in number, event access code and assigned unique attendee ID number. If your name does not appear on our WebEx Final Attendance and Activity Report (only as Caller User #) and no submission of online survey, no CME or CE certificate will be provided.***
- Questions will be managed through the Chat feature and will be answered at the end of the presentation. ***Please keep questions brief and send to All Panelists. One of our Learning and Development Team members and/or webinar host***, will read the questions via Chat when it's time for Q & A session (last 30 minutes of live webinar).
- Please send a message to the Host via Chat if you cannot hear the presenter or see the presentation slides.

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- PowerPoint Presentation is allotted 60 minutes and last 30 minutes for Q&A session, total of 90-minute webinar, 1.50 CME credits for L.A. Care Providers and other Physicians, 1.50 CE credits for NPs, RNs, LCSWs, LMFTs, LPCCs, LEPs, and other healthcare professionals. Certificate of Attendance will be provided to webinar attendees without credentials.

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- Within two (2) weeks after webinar and upon completion of the online survey, you will receive the PDF CME or CE certificate based on your credential and after verification of your name and attendance duration time of at least 75 minutes for this 90-minute webinar.

- The PDF webinar presentation will be available within 6 weeks after webinar date on lacare.org website located at https://www.lacare.org/providers/provider-central/provider-programs/classes-seminars

- Any questions about L.A. Care Health Plan's Provider Continuing Education (PCE) Program and our CME/CE activities, please email Leilanie Mercurio at lmercurio@lacare.org

Presenter's Bio

Susan Park, MD, MPH, is a UCLA Assistant Clinical Professor practicing Gynecology Oncology at Harbor-UCLA Medical Center. In this role, she primarily spends her time caring for underserved patients in a safety net hospital, help develop practice guidelines across the Department of Health Services sites and trains OB/Gyn residents and UCLA medical students.

Dr. Park is passionate about whole person care and strives to improve healthcare outcomes for her patients by ensuring equitable access to advanced cancer therapies, clinical trials, genetic testing and cancer navigation. Her interest in community health and education also extends to her active participation in the ASCCP education committee and steering committee for the California HPV Roundtable where she works with health systems to improve HPV vaccination outcomes.

Dr. Park is a native Angeleno and a UCLA "lifer" who completed her undergraduate, graduate and specialty training all at UCLA. She remained in the UC system, working for several years in the inaugural OBGYN Department at UC Riverside but came back to LA to work at Harbor-UCLA since 2017. In her spare time, she enjoys spending time with her family and two young daughters.

Cervical Cancer Screening Updates

SUSAN PARK, MD, MPH

GYNECOLOGY ONCOLOGY

10/26/2023 LIVE WEBINAR, 12:00 PM – 1:30 PM PST, 1.50 CME/CE CREDITS

DIRECTLY PROVIDED CME/CE ACTIVITY BY L.A. CARE HEALTH PLAN

Disclosures

The following CME planners and faculty do not have any financial relationships with ineligible companies in the past 24 months:

- Leilanie Mercurio, L.A. Care Provider Continuing Education Program Manager, CME Planner.
- Susan Park, MD, MPH, UCLA Assistant Clinical Professor, Gynecology Oncology at Harbor-UCLA Medical Center, CME Planner and CME Faculty.

An ineligible company is any entity whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Commercial support was not received for this CME activity.

Learning Objectives

LinkedIn

At the completion of the activity, learners can:

1. Review current guidelines for cervical cancer screening.

2. Identify at least 3 symptoms of cervical cancer.

3. Distinguish the different HPV tests (primary, cotest, reflex and genotyping).

4. Identify patients eligible for HPV vaccination.

5. List at least 3 effective interventions to reduce disparities in cervical cancer screening.

Outline

- Cervical cancer epidemiology
- Treatment
- Prevention strategies
  - HPV vaccination
  - Cervical cancer Screening
- Future Directions

Getty Images. stock

Key statistics to consider

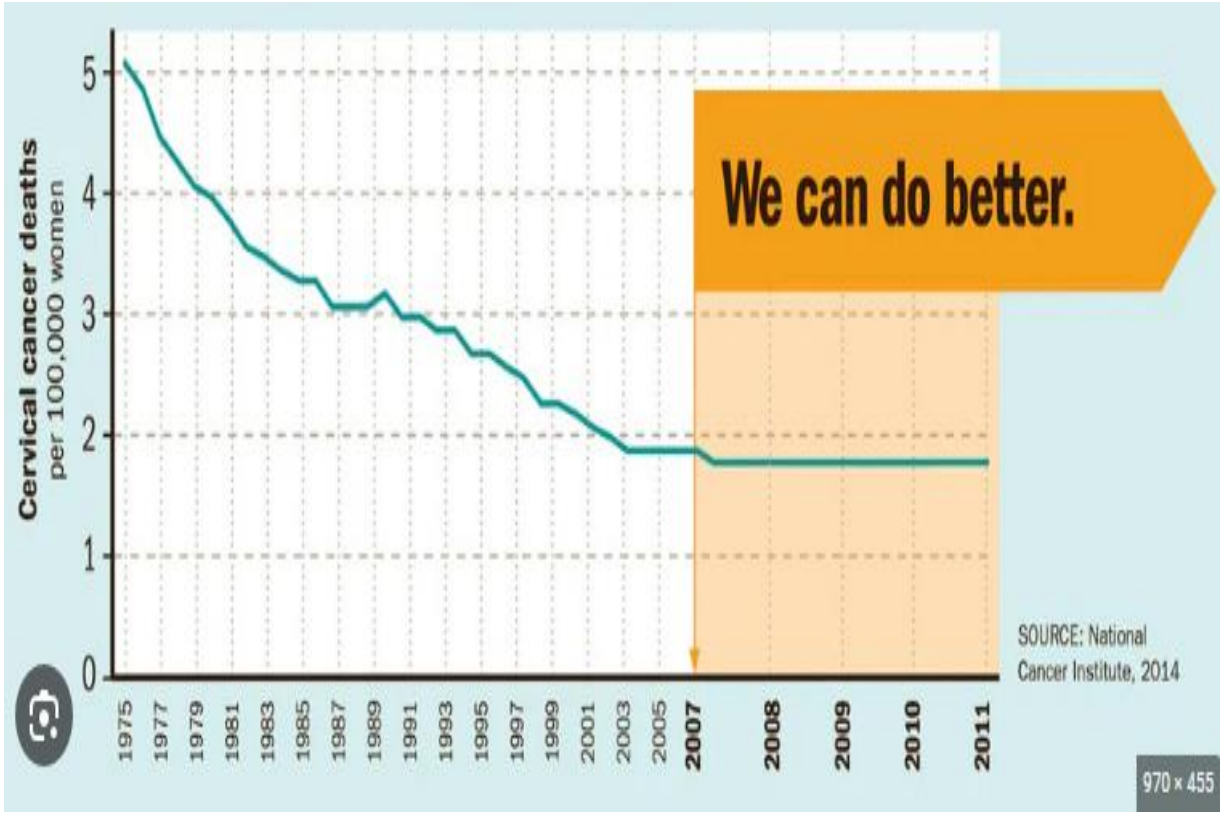
4000 Number of women who die of cervical cancer in the US each year.

88% Percentage reduction in HPV infections due to vaccination.

23% Percentage of women overdue for cervical cancer screening .

Cervical Cancer in the U.S.

- Third most common gyn cancer
  - 14,000 new cases/year in the U.S
  - **4,000** death/year
  - Histologic subtypes: squamous (70%), adenocarcinoma (25%), adenosquamous, clear cell (<5%)

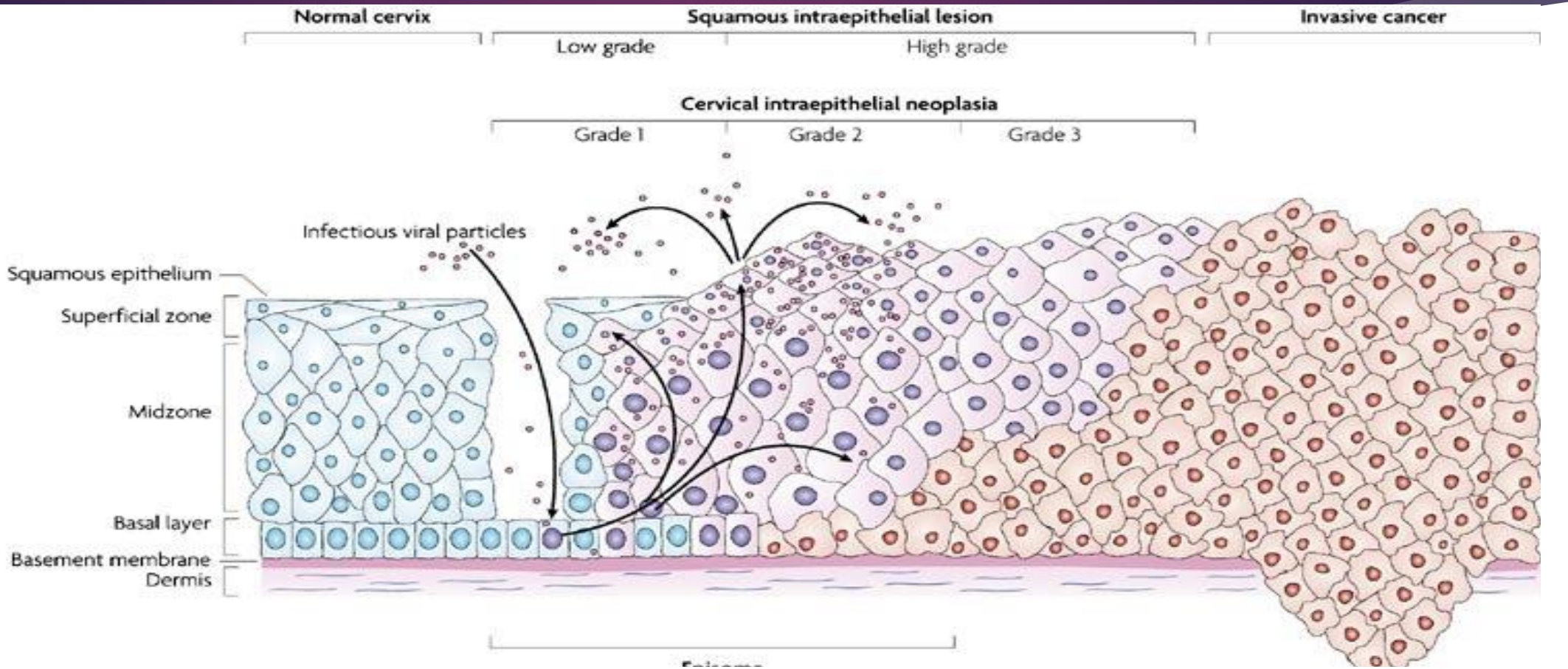


Human Papilloma Virus (HPV)

Stranger Things, Netflix

- Genital HPV is the most common STI in US
  - Incidence: 8-14 million persons infected each year
  - Prevalence: 80 million
- Over 150 HPV types identified, over 40 affect genital area
  - Low risk: 6/11 - cause genital warts, respiratory papillomatosis
  - High risk: oncogenic - 16,18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 69, 73, and 82.

HPV Infection and Carcinogenesis



Woodman *et al*. *Nature Reviews Cancer* 2007

Effect of HPV in the United States

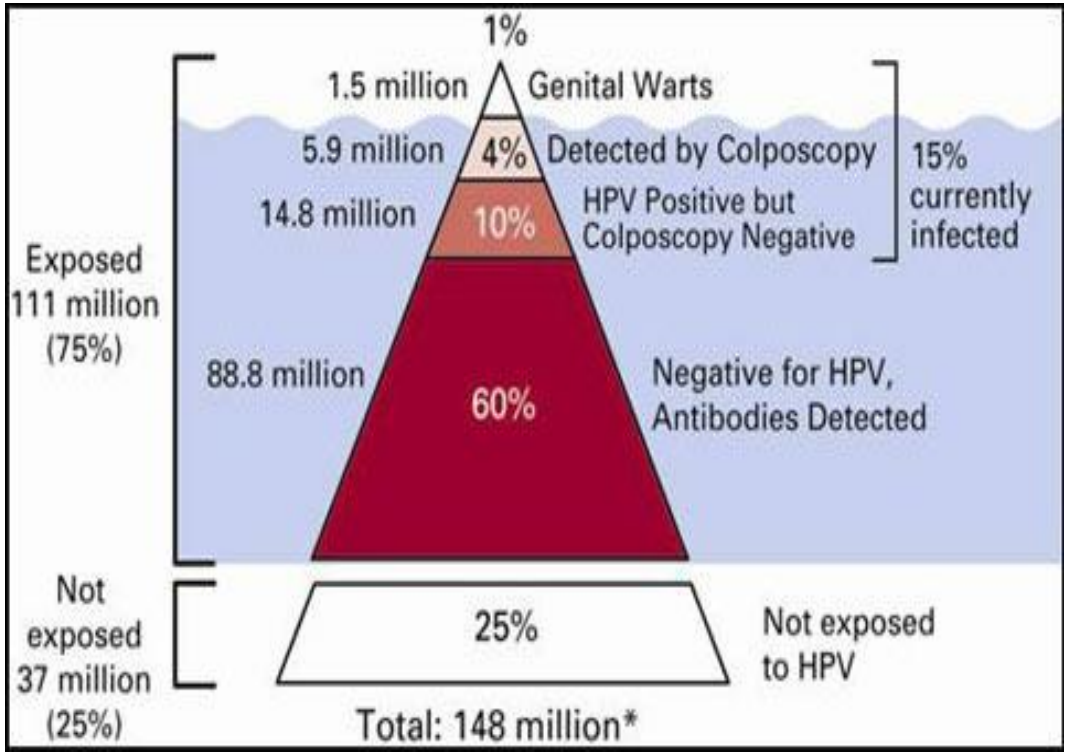


Image: Merck

- **74% of infections occur among those aged 15-24**
  - **Usually occurs shortly after sexual debut – 38.9% by 24 months of first intercourse (Revzina 2005)**
- **Majority of HPV infections are transient and cause no clinical problems**
  - **Median time to seroconversion is 8months**
  - **70% of new HPV infections clear within 1 year**
  - **90% clear within 2 years**
  - ***Persistent* infection is most important risk factor for cervical ca (HPV 16 is most virulent) – progression to cancer is usually decades**

Additional Risk Factors

Physiologic Risk Factors

- Persistent high risk HPV infection
- Increasing Age
- DES exposure
- Nutritional factors
- Immunosuppression/HIV infection
- Other STIs
- **SMOKING (50% increase!)**

Psycho-Social Risk Factors

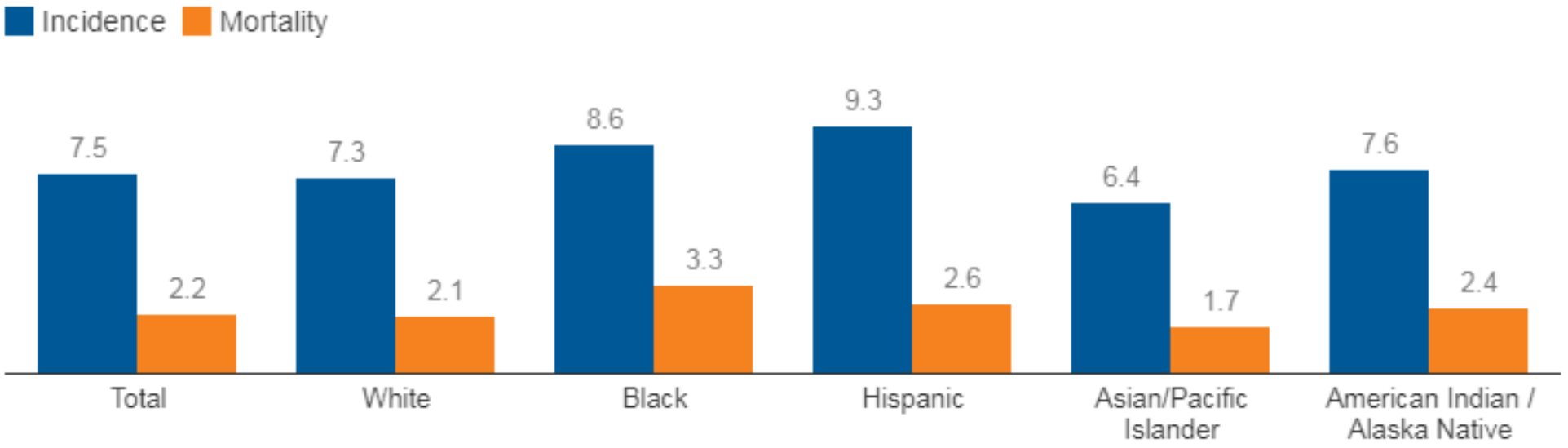
- Low income
- Lack of insurance
- Poor health literacy
- Cultural beliefs
- Access
- Language barriers
- Discomfort with exam
- Pandemic driven closures

Racial Disparities in Cervical Cancer

Figure 1

Racial and Ethnic Disparities in Cervical Cancer

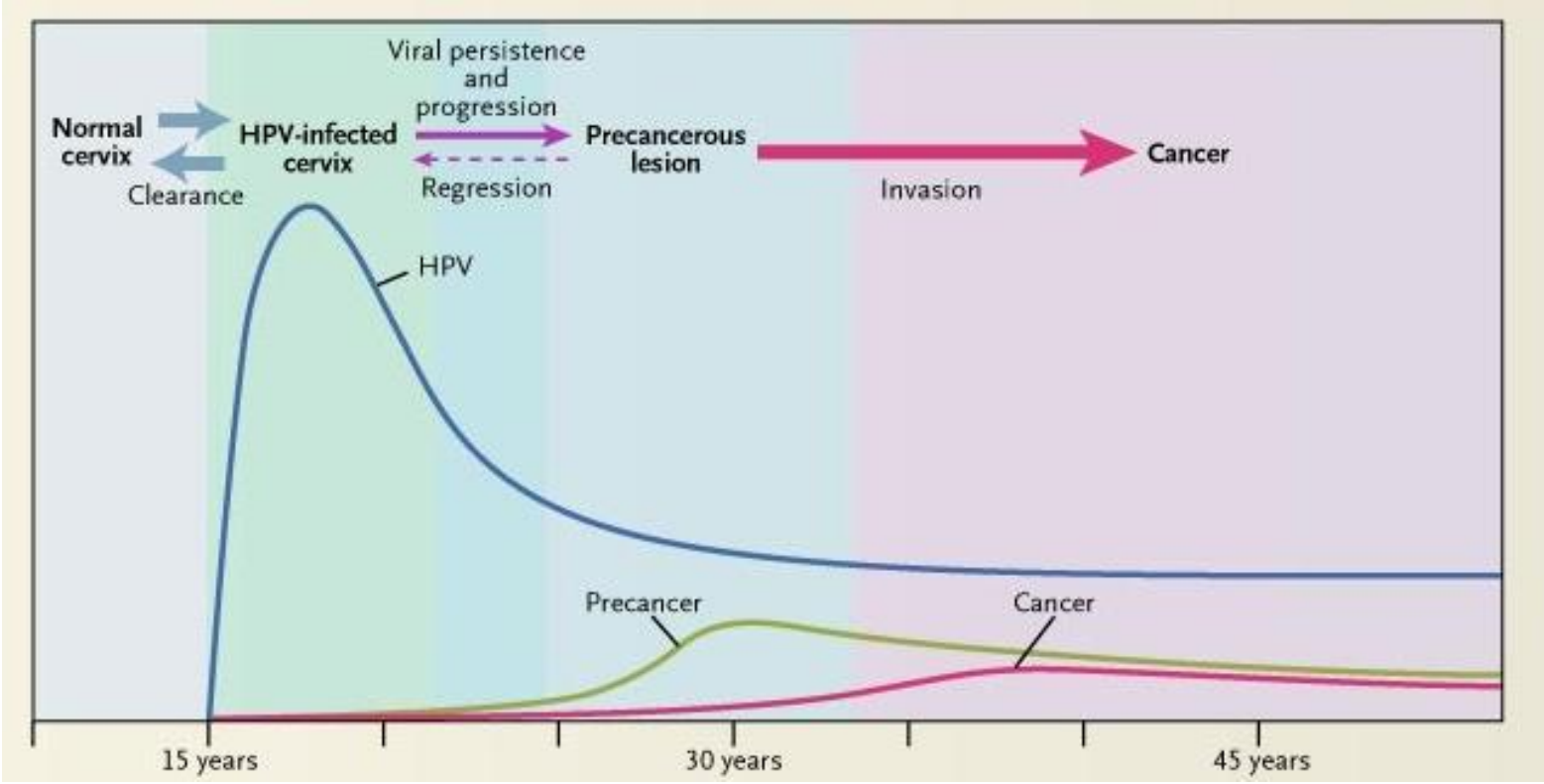
Cervical Cancer Incidence and Mortality Rates by Race/Ethnicity, 2014-2018



NOTE: Data are age-adjusted rates per 100,000 women.
SOURCE: National Cancer Institute. SEER Stat Fact Sheets: Cervix Uteri Cancer. Accessed May 2021. • PNG

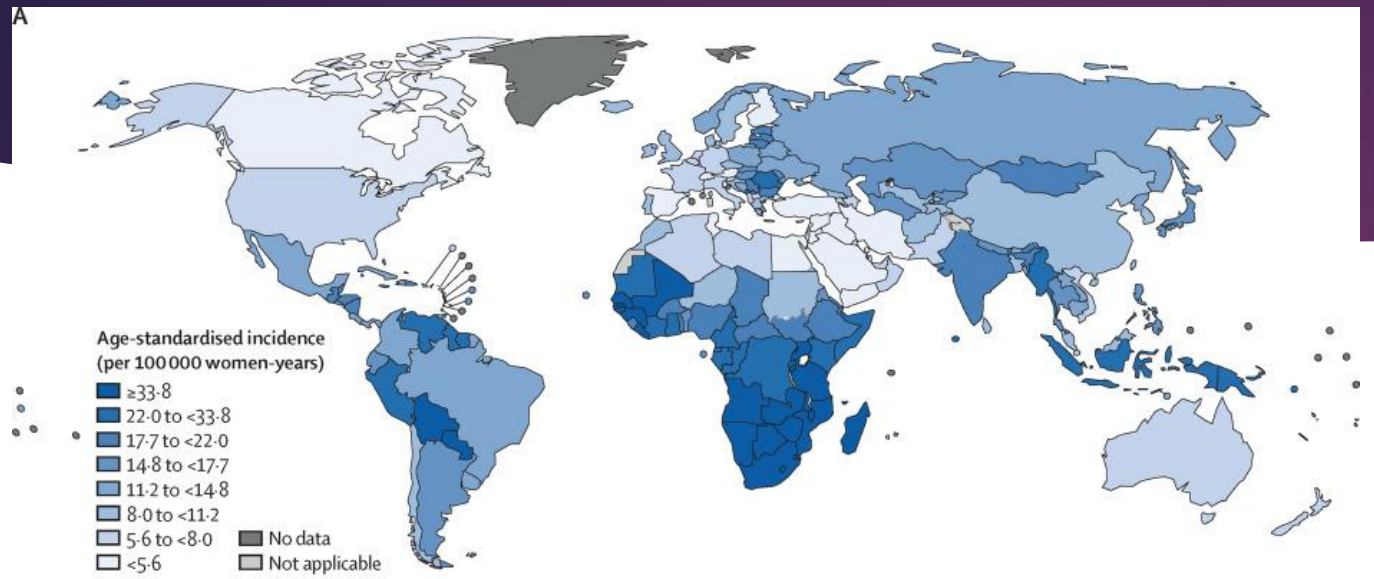
KFF

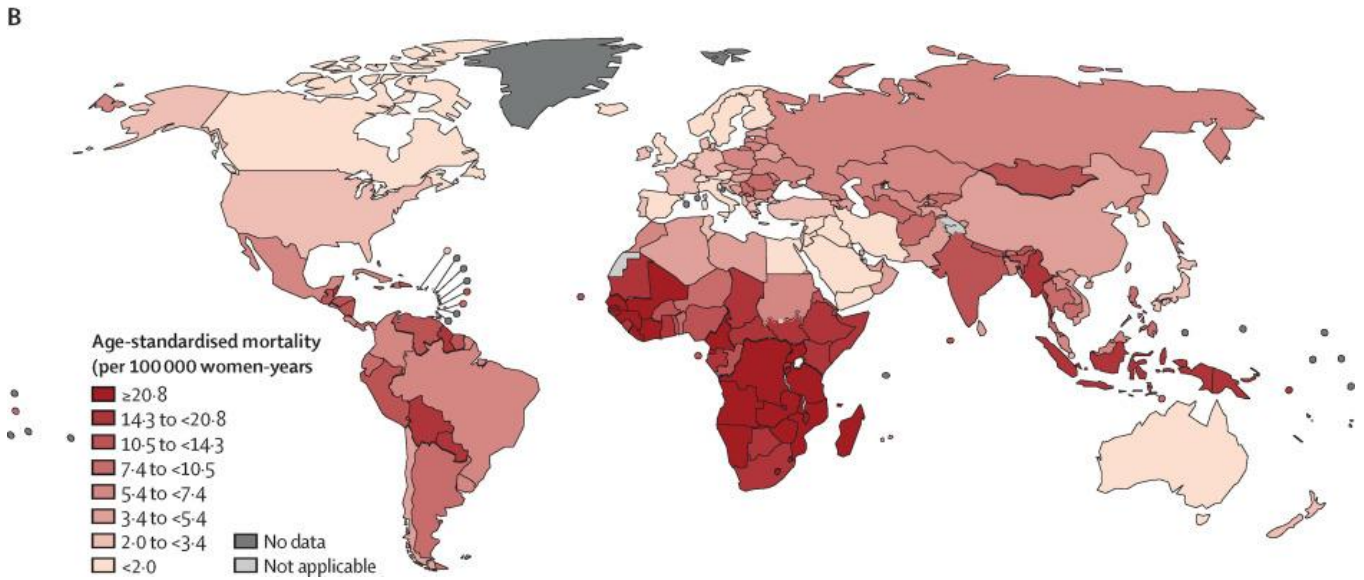
Natural History of HPV and Cervical Cancer



Schiffman and Castle, NEJM 2005

The Other Global Pandemic





<u>2020 worldwide</u> (Singh, Lancet 2020)
604 127 cervical cancer cases
341 831 deaths
87% of deaths occur in LMIC

<u>United States</u>
14,000 cases
4000 deaths

GLOBOCAN 2020

Cervical Cancer Workup

Asymptomatic

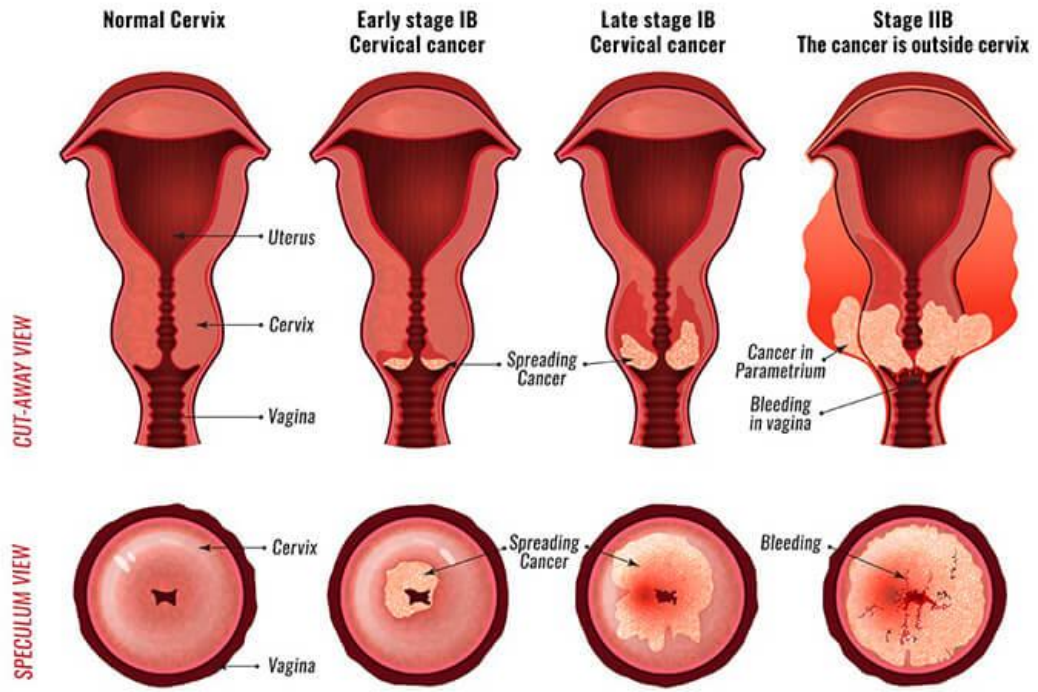
Screening Pap→ colposcopy and biopsies

Symptomatic

- Abnormal or postcoital vaginal bleeding
- Foul smelling discharge
- Pelvic pain/sciatic pain
- Trouble urinating
- Anemia

Pelvic exam and biopsies

Early Stage Disease

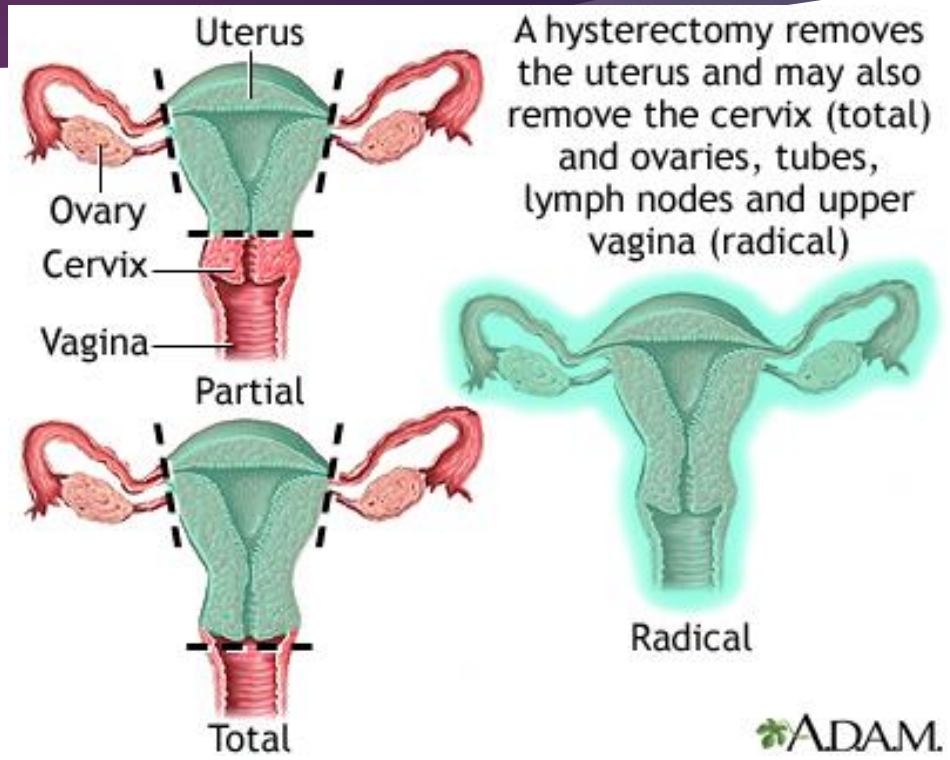


American Pregnancy Association

Stage	Description	5 year survival
Stage I	Confirmed to cervix	80-93%
1A1 1A2	Measured stromal invasion of <3.0 mm in depth Measured stromal invasion of ≥3.0 mm and <5.0 mm	
IB1 1B2 1B3	≥5mm stroma and <2cm greatest dimension ≥2cm and <4cm greatest dimension ≥4cm greatest dimension	
Stage II	Invades beyond uterus, not to pelvic wall to lower third of vagina	58-63%
IIA IIA1 IIA2	Without parametrial invasion <4.0 cm in greatest dimension ≥4.0 cm in greatest dimension	

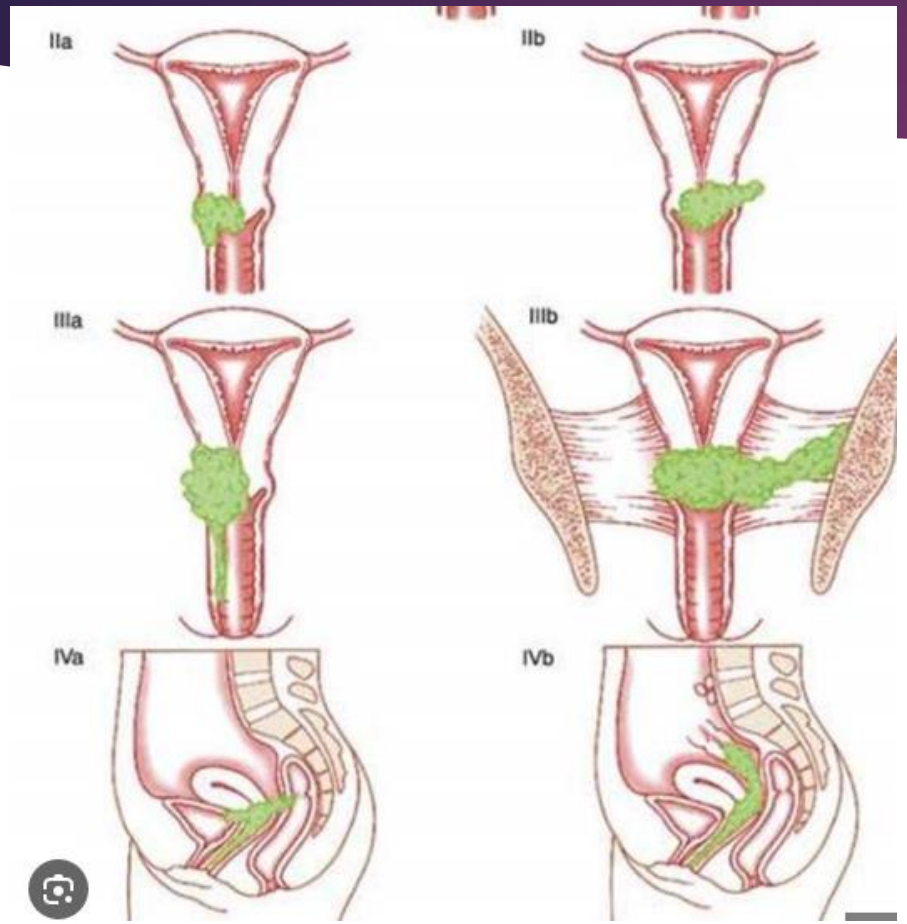
Surgical Management

- Treatment intent: CURATIVE
- Fertility Sparing
  - IA1: can do CKC or even LEEP vs simple trachelectomy
  - IA2-IB1 (**<2cm** lesion) – radical trachelectomy with staging; Conception rates 50-70%
- Hysterectomy +/- bilateral salpingo-oophorectomy



Medline

Locally Advanced Disease



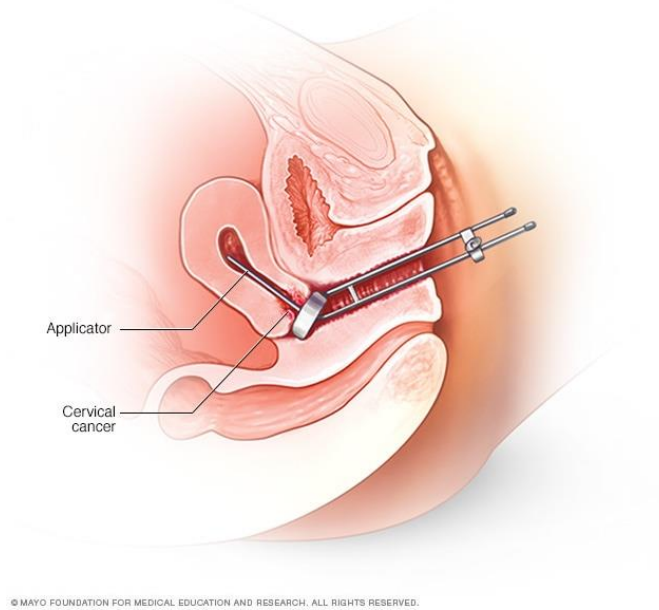
Stage	Description	5 year survival
Stage II	Invades beyond uterus, not to pelvic wall to lower third of vagina	58-63%
IIA IIA1 IIA2 IIB	Without parametrial invasion <4.0 cm in greatest dimension ≥4.0 cm in greatest dimension With parametrial invasion	
Stage III	Side wall extension, lwoewr 1/3 vagina, hydronephrosis or involvement of pelvic/PA nodes.	32-35%
IIIA IIIB IIIC IIIC1 IIIC2	involves lower 1/3of the vagina,no extension to the pelvic wall Ext to the pelvic wall and/or hydronephrosis or non-functioning kidney Involves pelvic/PA LN (r&p notations) Pelvic LN PA LN	
Stage IV	Extends beyond true pelvis	15-19%
IVA	Spread to adjacent organs (Ex. Bladder, rectum)	

Berek and Novak, Gynecology 15h Ed.

Chemo-radiation

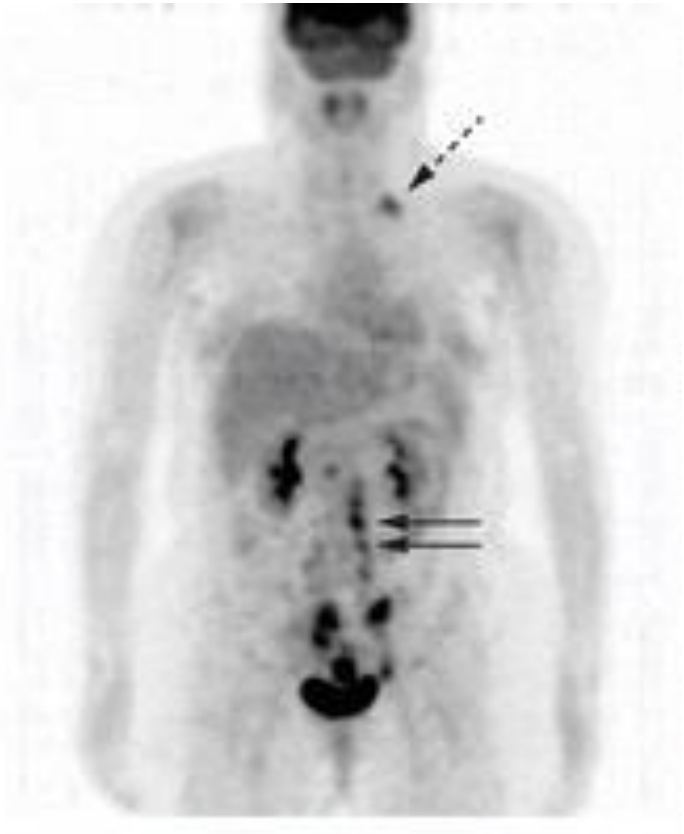
- Treatment intent: Curative
- Primary chemo-radiation
  - External Beam Radiation
  - Brachytherapy
  - Cisplatin chemosensitization

Wikipedia



Mayo clinic

Metastatic Disease

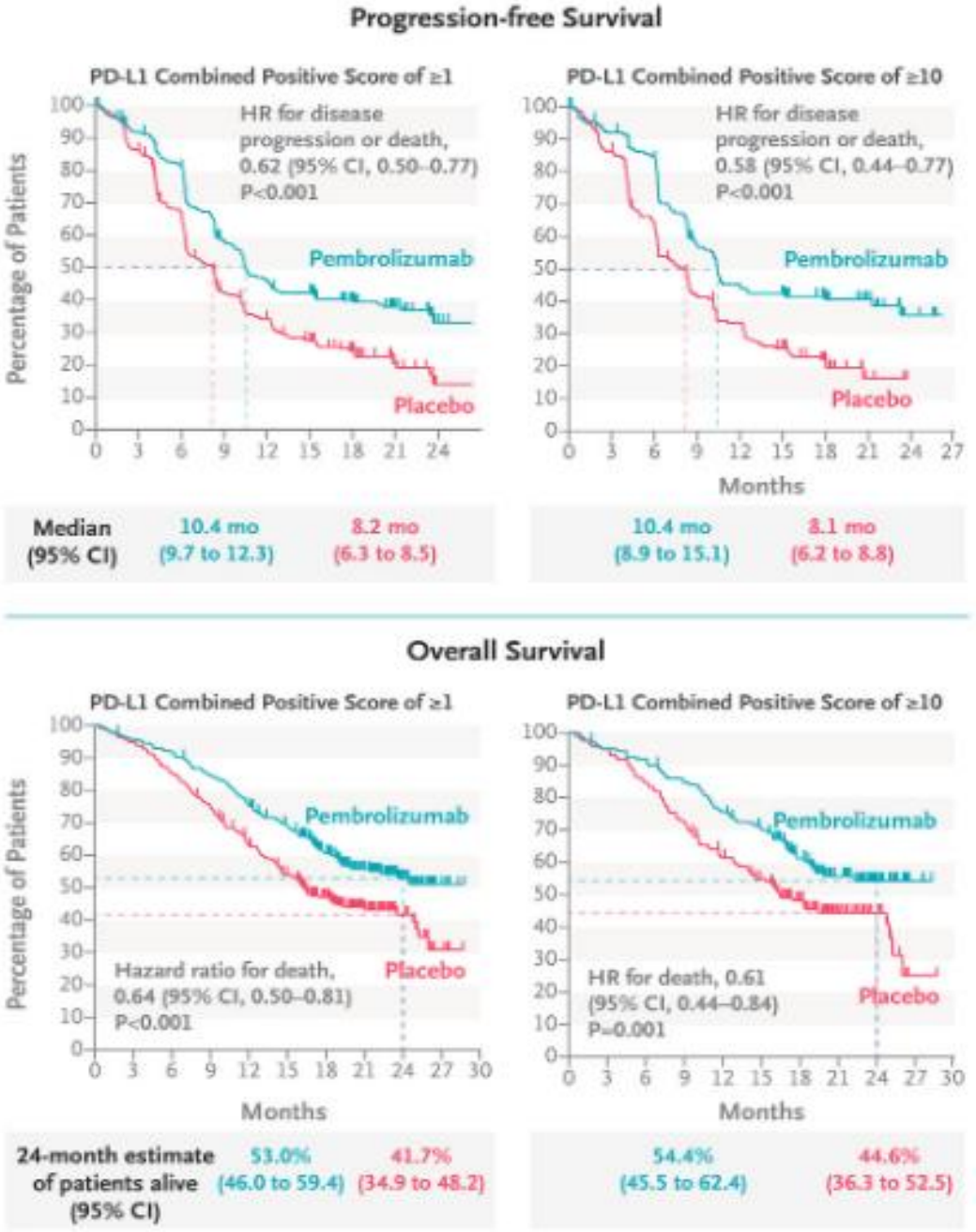


Chao et al , Future Medicine 2014

Stage	Description	5 year survival
Stage IVB	Spread to distant organs	<15-19%

Systemic Treatment

- Goal: **Palliative**
- Chemotherapy: cis/carboplatin + paclitaxel
- GOG 240 (Tewari, NEJM 2014)
  - Adding bevacizumab increased ORR from 36 →48%
  - OS 16.8 vs 13.3 months (HR 0.77 (CI 0.62-0.95) (update Tewari, Lancet 2017)
- Keynote 826 (Colombo et al, NEJM 2021)
  - Adding pembrolizumab to PDL1 positive tumor improves PFS
  - PFS 10.4 vs 8.2 months (HR 0.65)
  - OS at 24 months (53 % vs 41.7% (HR 0.64))



Cervical Cancer is preventable!

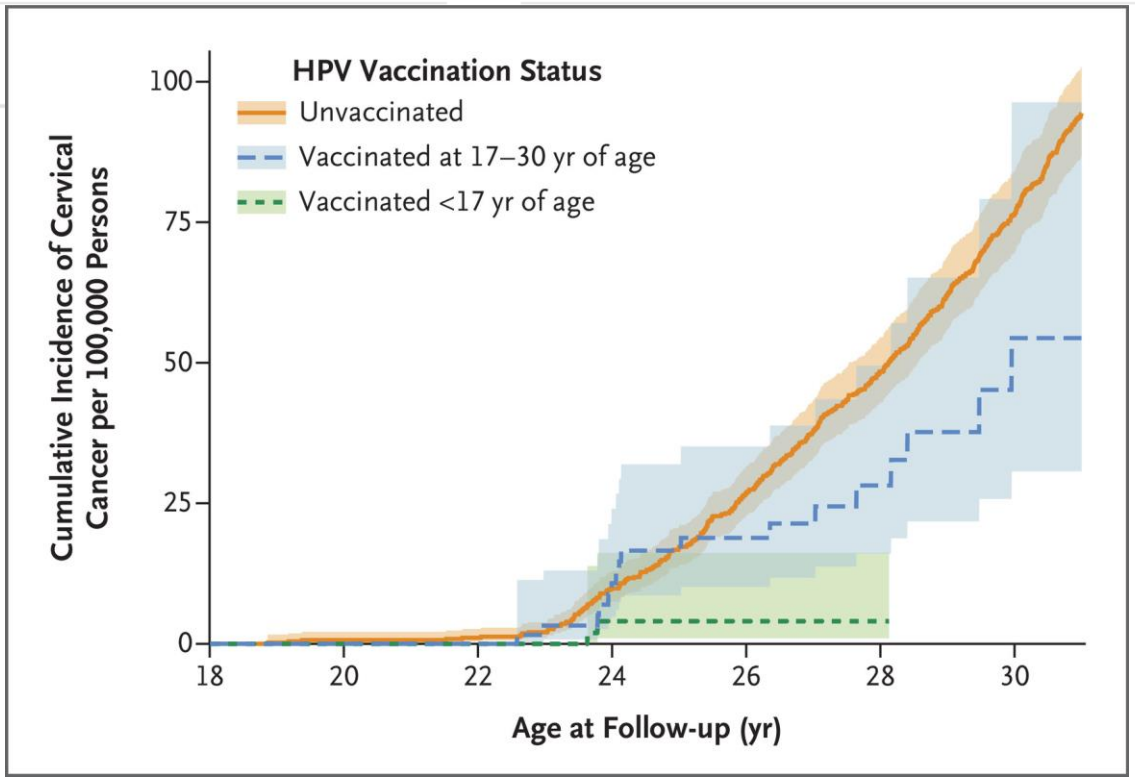
ORIGINAL ARTICLE

HPV Vaccination and the Risk of Invasive Cervical Cancer

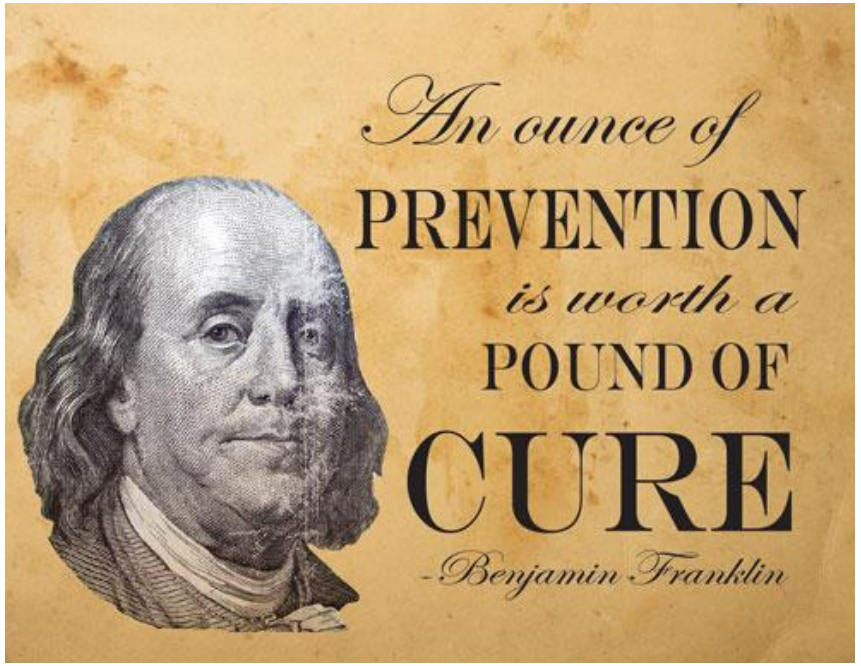
Jiayao Lei, Ph.D., Alexander Ploner, Ph.D., K. Miriam Elfström, Ph.D., Jiangrong Wang, Ph.D., Adam Roth, M.D., Ph.D., Fang Fang, M.D., Ph.D., Karin Sundström, M.D., Ph.D., Joakim Dillner, M.D., Ph.D., and Pär Sparén, Ph.D.

Article Figures/Media

- Swedish registry of 1.67mil women ages 10-30
  - Incidence rate ratio 0.12 if vaccinated before age 17
  - IRR 0.47 if vaccinated age 17-30



Prevention is key!



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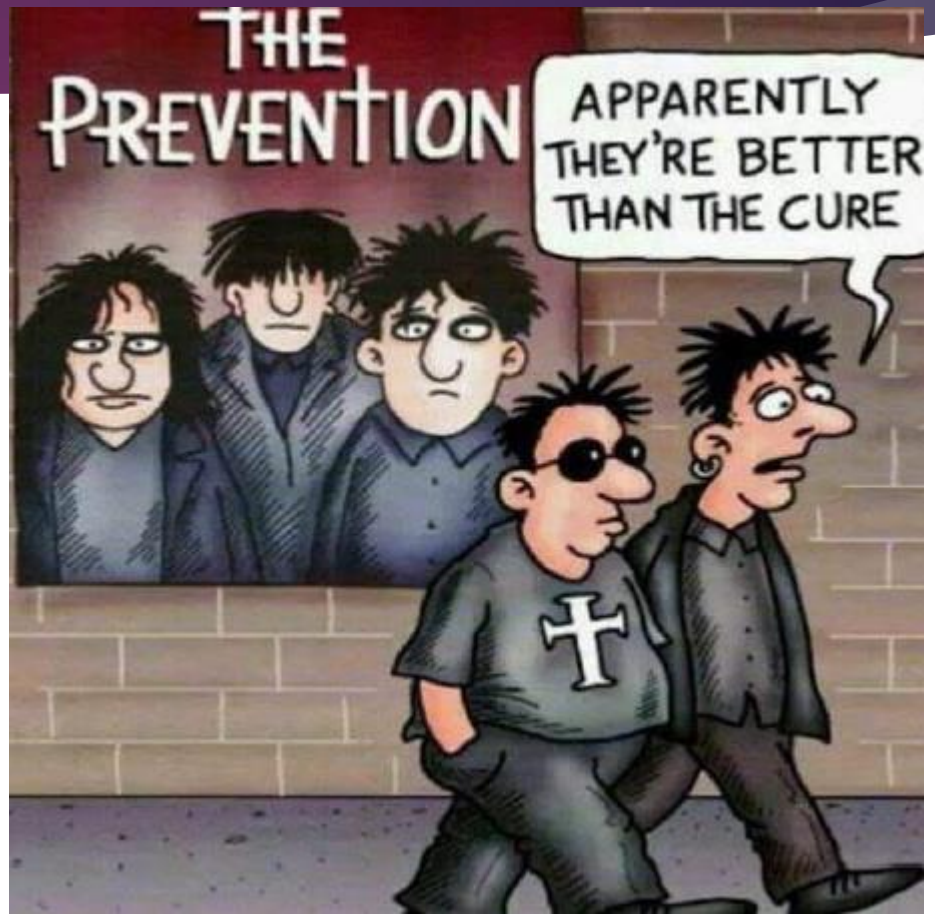

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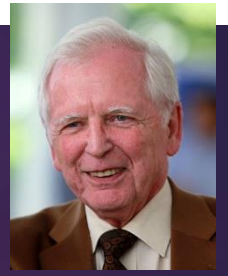
Evolution of Cervical Cancer Screening and Prevention


1943 – *Diagnosis of Uterine Cancer by the Vaginal Smear by* ***Georgios Papanikolaou***

1983 – ***Harald zur Hausen (German Virologist)*** *– makes first association between HPV16 virus and cervical cancer (awarded the 2008 Nobel Prize in Medicine)*

1991 – ***Ian Frazer*** *and* ***Jian Zhou*** *discovered VLPs*

2003 – HPV test included in screening guidelines

2006 – HPV4 Gardasil introduced by Merck and Co

2009 – HPV2 Cervarix produced by GlaxoSmithKline

12/2014 – HPV9 Gardasil-9 introduced by Merck and Co

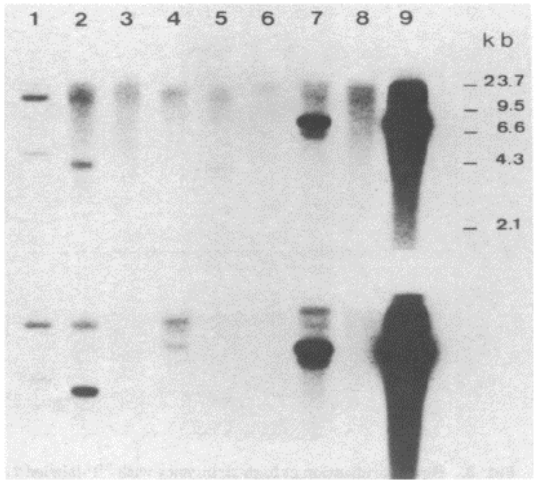
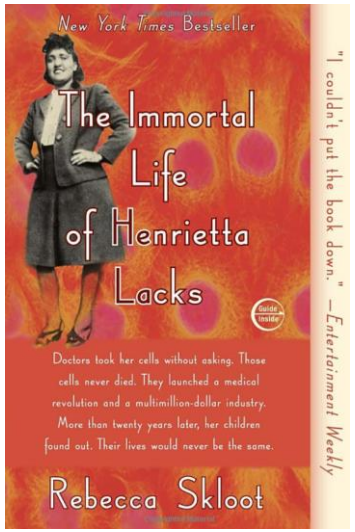


Image: PNAS 1983



Primary Prevention: HPV Vaccine

Eligible persons	# Doses	Dosing Intervals
Persons 9-14 years Except immunocompromised	2	0, 6-12 months
Persons 15-26 years And immunocompromised 9-26 years *FDA expansion to age 45 10/2018	3	0, 1-2, 6 months • Minimum interval between 1st and 2nd dose is **4 weeks** • Minimum interval between 2nd and 3rd dose is **12 weeks** •Minimum interval between 1st and 3rd dose is **24 weeks**

- Females with abnormal pap tests, positive HPV tests or genital warts can still receive the vaccine
- Do not restart series if recipient is late for follow-up doses and resume vaccine series at regular dosing interval for remaining vaccines
- If subsequent dose given too early, should be re-administered
- Any available HPV vaccine product may be used to continue or complete series(interchangeable)

Who do we offer HPV vaccines to?

- Routine recommendation: ages 9-12
- "Shared decision making" for 27-45
  - Consider if at risk for new HPV strains = this is a PREVENTION vaccine
  - Consider costs to system and vaccine supply
- Immunocompromised
  - Will need 3 doses regardless of age
- Healthcare workers
  - ASCCP recommends vaccination with high exposure to HPV (gyn, FP, derm, OR))

How well are we vaccinating?

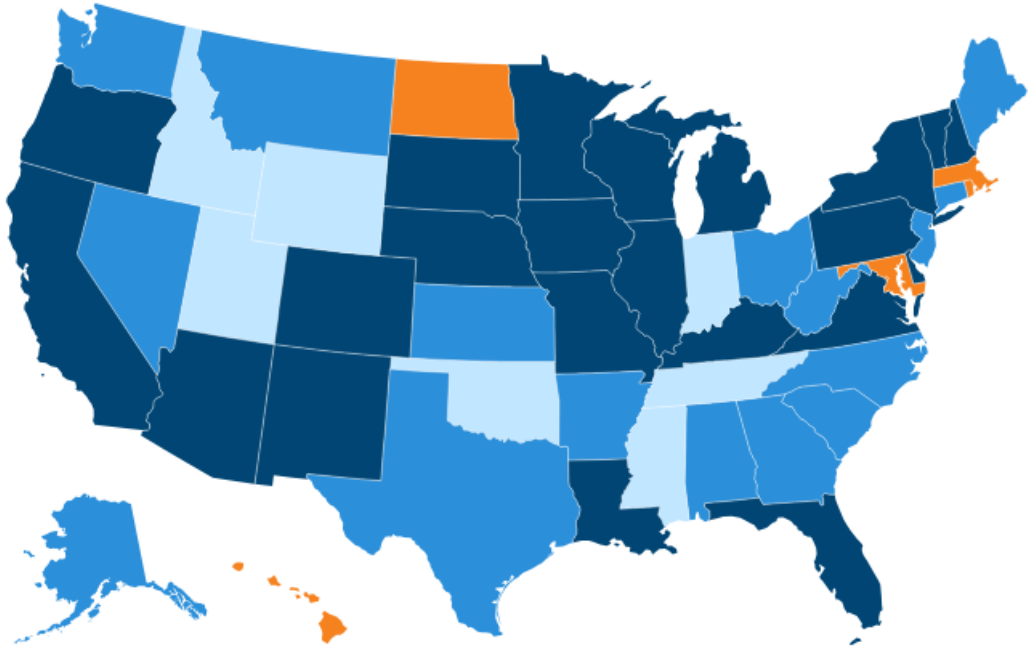
Figure 5

HPV Vaccination Rates of Adolescents, by State

Adolescents ages 13-17 with HPV Up-to-Date (UTD) Vaccination Series, 2019

Estimated vaccine coverage for adolescents ages 13-17

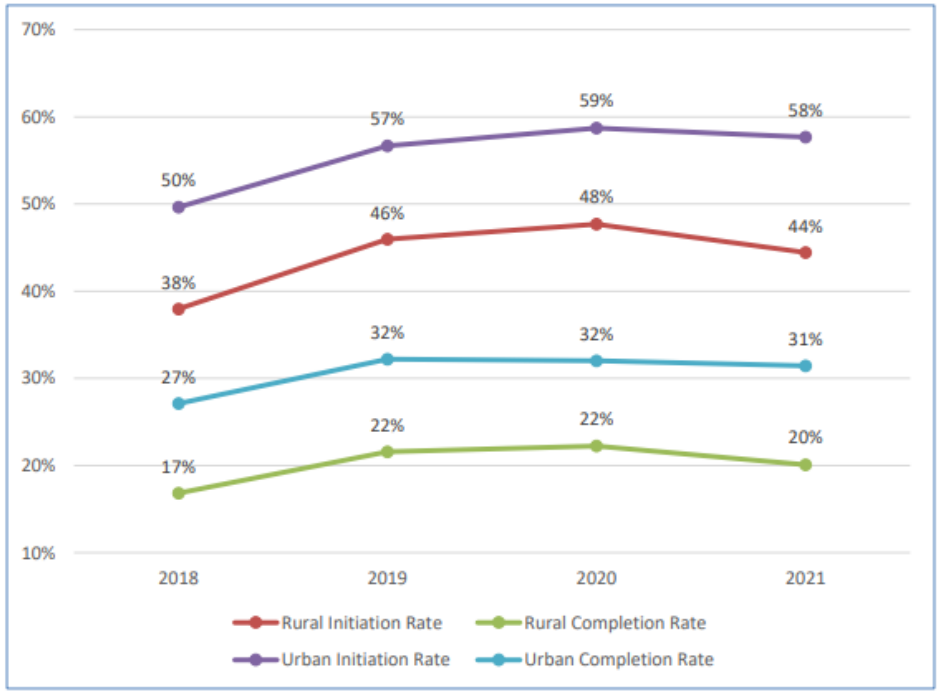
< 46.7% | 46.7%–54.3% | 54.3%–64.0% | ≥ 64.0%



NOTE: HPV UTD includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years and there was at least 5 months minus 4 days between the first and second dose. In DC, 75.5% of adolescents are HPV UTD. DC requires

KFF, CDC

Figure 6. HPV vaccine initiation and completion rates among 13-year-olds by urbanicity classification, 2018-2021 (Source: CAIR)

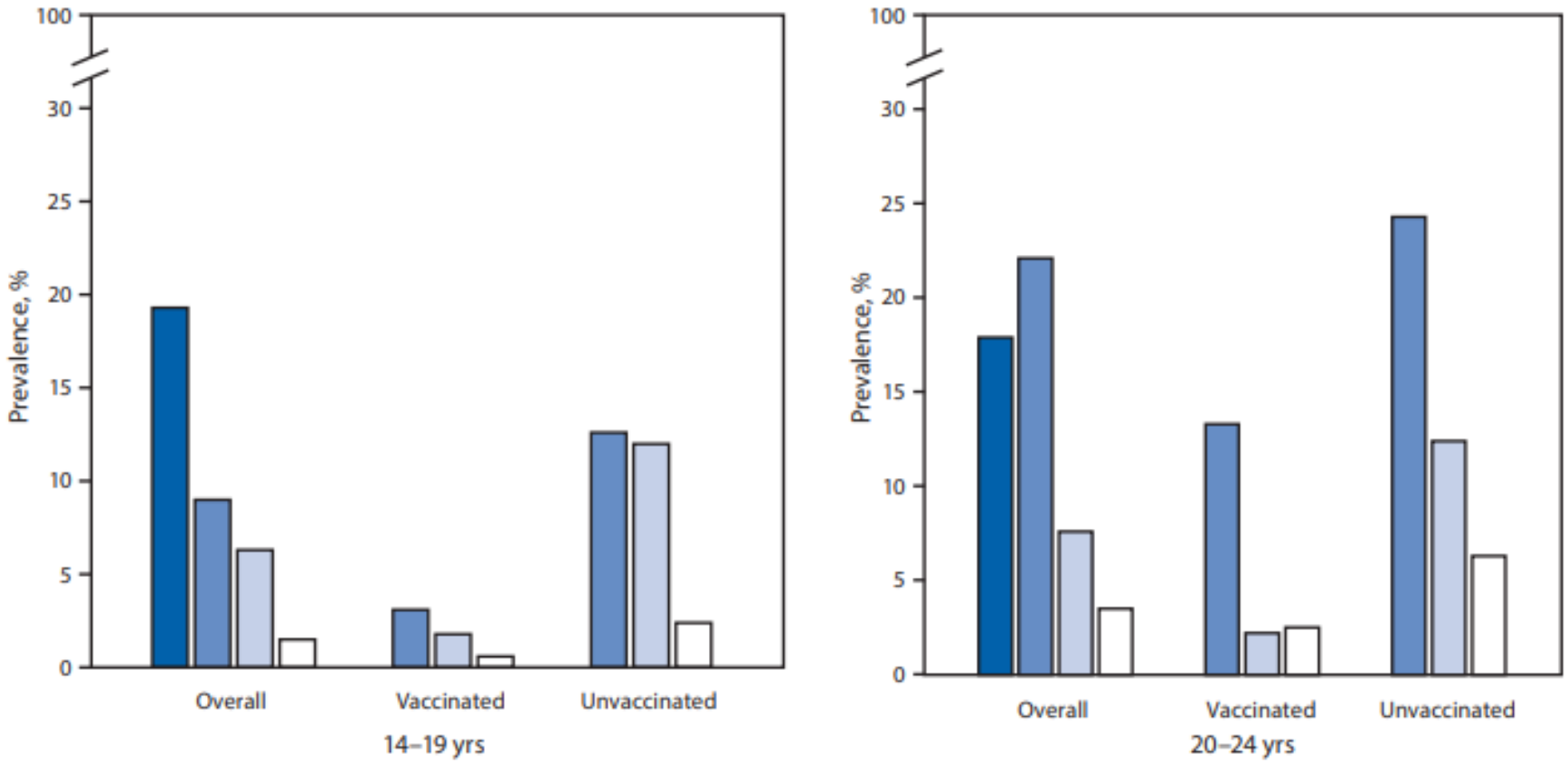


California HPV Vaccination Roundtable: "Using and Improving HPV Vaccination Data" Workgroup, 2023 Update

CA HPV RT

How well are we preventing HPV cancers

FIGURE. Quadrivalent vaccine-type (4vHPV-type) prevalence among sexually experienced females aged 14–34 years, by age group, vaccination history,* and survey years — National Health and Nutrition Examination Survey, United States, 2003–2018†,§



88% reduction!

1% Prevalance of HPV in age 14-19

Stats on other HPV related cancers

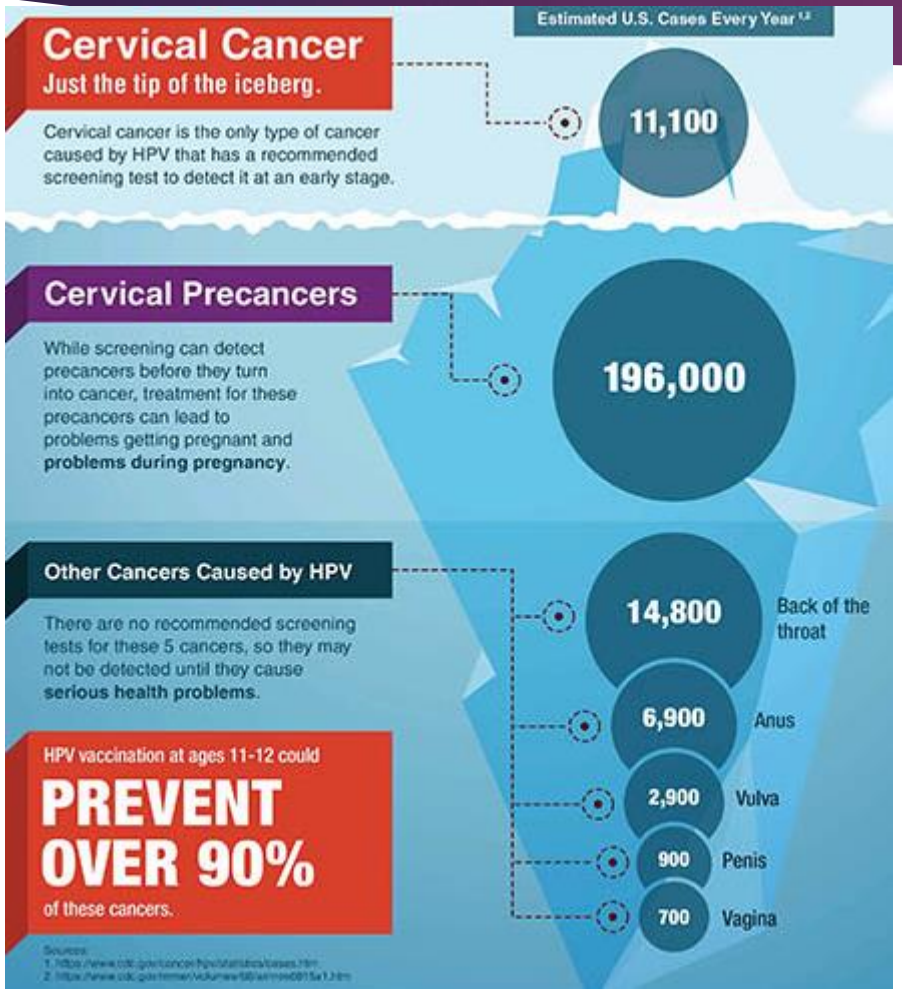
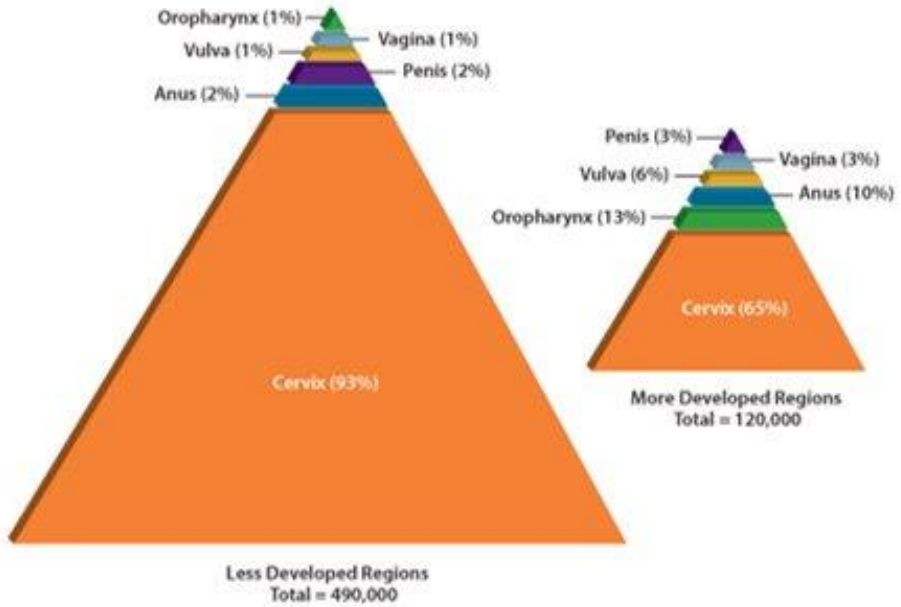


Figure 8
Numbers of HPV-Associated Cancers in Less Developed and More Developed Regions



Note: Global estimates of genital warts and RRP incidence are not available.

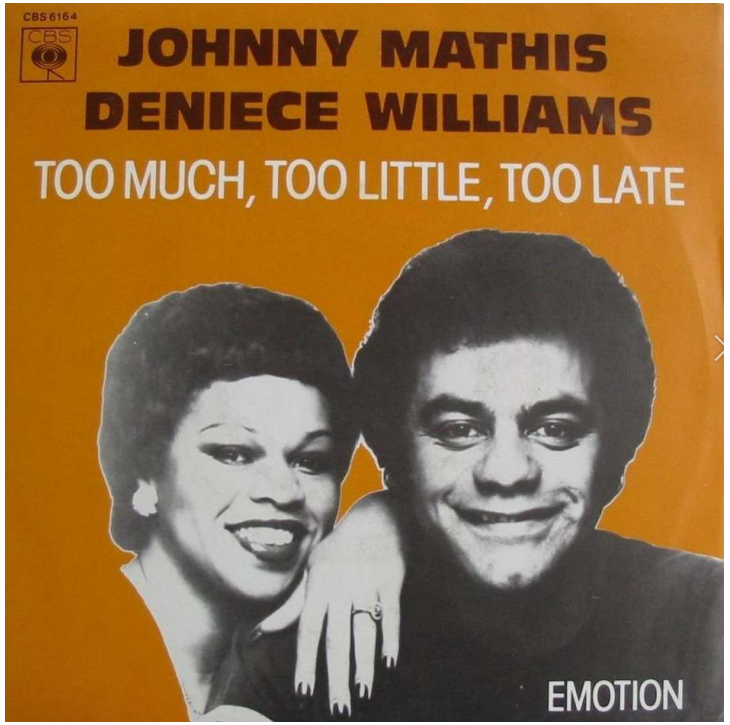
Source: de Martel C, Ferlay J, Franceschi S, Vignat J, Bray F, Forman D, et al. Global burden of cancers attributable to infections in 2008: a review and synthetic analysis. Lancet Oncol. 2012;13(6):607-15. Available from: http://www.ncbi.nlm.nih.gov/pubmed/22575588

Cervical Cancer Screening Guidelines

	Age to screen	Recommendations
USPTF 2018/ACOG/ASCCP	21-29	Cytology q3 years
	30-65	-Cytology q3 years OR -Cotesting q5 years OR -Primary HPV q5years (*FDA approved tests: Roche cobas and BD clarity*)
ACS 2020	25-65	-**Primary HPV q5years (preferred)** -Cotesting q5 years (alternate) - Cytology q3 years (alternate)

Harms of detection and over-treatment

- Invasive diagnostic procedures: colposcopy and cervical biopsies
  - Pain, vaginal bleeding, infection
  - Failure to diagnosis (inadequate sampling)
- Excisional procedures: associated with adverse pregnancy outcomes
- Abnormal tests associated with anxiety, distress, concern
  - HPV infection – relationship concerns
- Cost



Google images

Why the change by ACS?

TABLE 4. Model-Estimated Benefits and Burdens of Cervical Cancer Screening Starting at Age 21 Versus 25 Years, per 1000 Screened Over a Lifetime

	PER 1000 WOMEN					
SCREENING STRATEGY[a]	TOTAL NO. OF TESTS[b]	NO. OF COLPOS	CIN2,CIN3 DETECTED	CANCER CASES	CANCER DEATHS	LYG
1. No screening	0	0	0	18.86	8.34	63,921.34
2. Cyto every 3 y from age 21 y/cotest every 5 y ages 30-65 y	19,806	1630	201	1.08	0.30	64,192.97
3. Cyto every 4 y from age 21 y/HPV every 3 y ages 25-65 y	17,067	2209	217	0.75	0.23	64,195.53
4. Cyto every 4 y from age 21 y/HPV every 5 y ages 25-65 y	12,042	1826	209	0.81	0.25	64,195.35
5. Cyto every 4 y from age 21 y/cotest every 5 y ages 25-65 y	20,859	2029	213	0.82	0.26	64,195.26
6. Cyto every 3 y from age 25 y/HPV every 5 y ages 30-65 y	10,671	1303	175	1.46	0.40	64,188.10
7. Cyto every 3 y ages 25-65 y	13,313	564	142	2.60	0.86	64,176.12
8. HPV every 5 y ages 25-65 y	10,954	1775	195	0.94	0.28	64,193.52

Abbreviations CIN, cervical intraepithelial neoplasia; COLPOS, colposcopies; Cotest, cytology and human papillomavirus test; Cyto, cytology; HPV, human papillomavirus test; LYG, life-years gained.
[a]Scenarios 1 through 5 were reported previously (see Kim 2018[44,45]), whereas scenarios 6 through 8 were estimated as part of the supplementary modeling analysis.
[b]Values indicate the total number of tests, irrespective of primary, triage, or surveillance context.

When to stop cervix cancer screening

- **At age 65**
- Provider determines "adequate screening"
- ACS/ASCCP/ASCP guidelines define adequate prior screening as
  - **3 consecutive negative cytology results**
  - **or 2 consecutive negative HPV results**
  - within **10 years** before cessation of screening
  - most recent test occurring within **5 years**"

- **Continue beyond age 65 if:**
- Adequacy cannot be assessed
- Assessment of lifetime risk

Emerging evidence for extending screening for certain populations

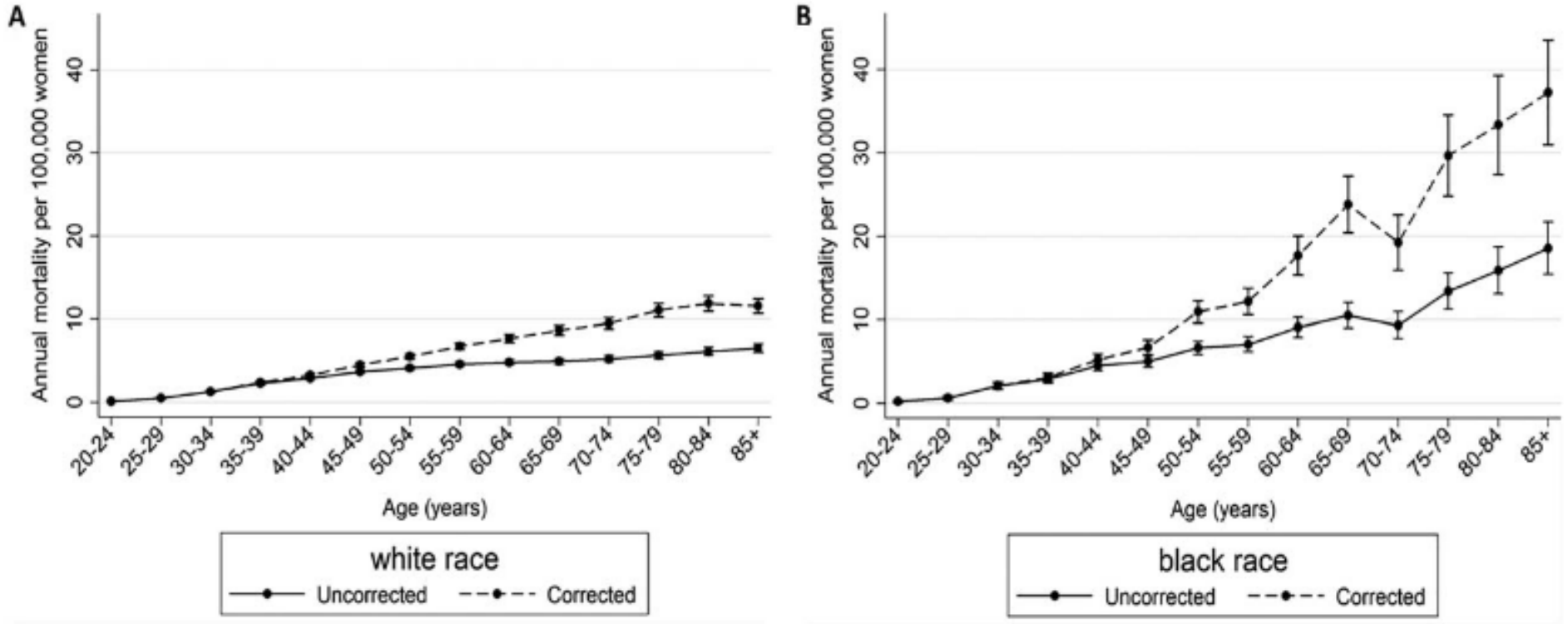


Figure 3. Age-specific cervical cancer mortality rates, uncorrected and corrected for the prevalence of hysterectomy, in (A) white and (B) black women.

Special Circumstances

- **Heightened pap test screening:**

- Prior history of CIN 2/3, VAIN, VIN, PAIN, or cervical/vulvar/vaginal cancer – screen for at least 25 years after diagnosis
  - No colpo on LSIL lesion or less
- ***High risk patients:*** history of in utero DES exposure or immunosuppression (HIV, transplant patients, steroid use)
- Uterine didelphys – pap both cervices!

- **No need to continue screening:**

- Hysterectomy for benign indication (unless meets criteria above)
- Women with history of endometrial cancer

How to Pap

Conventional Pap

- Majority of cells not captured – use wood or plastic spatula
- Non-representative transfer of cells
- Clumping and overlapping of cells
- Obscuring material
- HPV testing requires separate swab

Liquid based cytology (LBC)

- Virtually all of sample collected – use plastic spatula
- Even distribution of cells
- Decrease in unsatisfactory results – less likely to be affected by gel, blood, other contaminants
- Increased sensitivity for SIL
- Specimen available for HPV and other STD tests.

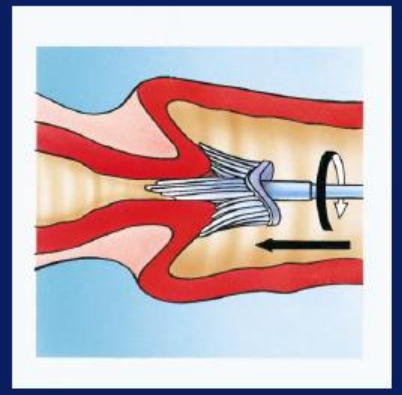
ThinPrep Pap Collection

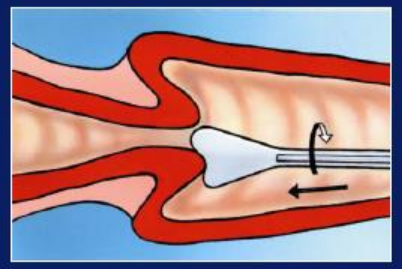
Obtain

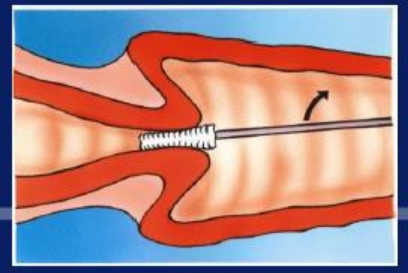
Broom

OR

Spatula & Brush







Rinse Immediately & Vigorously

Tighten Vial

CALIFORNIA STD/HIV PREVENTION TRAINING CENTER

Sensitivity of Pap Smear

	Sensitivity	Specificity
Pap smear	55 -80%	96.8%
HPV test	94.6%	94.1%

	CIN 2+	CIN3+	Cervical cancer
Neg cytology along	0.68%	0.26%	0.025%
Pap neg, HPV neg	0.27%	0.08%	0.011%
Pap neg, HPV pos	10%	4.5%	0.34%

Katki et al, JLGTD 2013

HPV Testing – how to order it

- **Reflexive (RNA/DNA)** - done with ASCUS result
- **Cotesting (RNA/DNA)**– done along with cytology every 5 years for age ≥30
- **HPV genotyping –** specifically looking for 16/18 strains triage to colposcopy
- **Primary HPV testing (DNA) –** preferred by ACS

- All HPV tests are FDA approved for co-testing
- Primary HPV testing is specific to two vendors

TABLE 3. Cervical Cancer Screening Tests

TEST	DEFINITION	FDA-APPROVED TEST	GENOTYPE
Cytology (also known as Pap test or Pap smear)	Examination of the cells in a sample taken from the cervix under a microscope to check for the presence of abnormal cells (abnormal cells may be precancerous or cancerous cells)		
Primary HPV test	A test to detect the DNA of oncogenic (high-risk) types of HPV in a sample taken from the cervix	cobas® HPV (approved 2014)	HPV types 16 and 18
	HPV is the causal agents of almost all cervical cancers	Onclarity HPV (approved 2018)	HPV types 16, 18, 45, 31, 51, 52, 33+58, 35+39+68, 56+59+66
Cotest (cytology and HPV test administered together)	A test that combines cytology to look at cells under a microscope and test for HPV DNA in the same sample taken from the cervix	Digene HC2 (approved 2003)	No
		Cervista HPV HR (approved 2009)	No
		Cervista HPV16/18 (approved 2009)	HPV types 16 and 18
		Aptima HPV (approved 2011)	No
		Aptima HPV16 and 18/45 (approved 2012)	HPV types 16 and 18/45
		cobas HPV (approved 2011)	HPV types 16 and 18
		Onclarity HPV (approved 2018)	HPV types 16, 18, 45, 31, 51, 52, 33+58, 35+39+68, and 56+59+66

Abbreviations: Aptima HPV, human papillomavirus assay from Hologic, Inc; Cervista HPV HR, high-risk human papillomavirus test (Cervista; cobas HPV, human papillomavirus test (cobas; Digene HC2, hybrid capture 2 test (Digene; FDA, US Food and Drug Administration; Hologic, Inc); HPV, human papillomavirus; Onclarity HPV, human papillomavirus assay from Becton, Dickinson & Company; Pap, Papanicolaou; Qiagen); Roche Molecular Systems).
Adapted from: US Food and Drug Administration. FDA Executive Summary: New Approaches in the Evaluation for High-Risk Human Papillomavirus Nucleic Acid Detection Devices. Prepared for the March 8, 2019 meeting of the Microbiology Devices Panel of the Medical Devices Advisory Committee (see FDA 2019[14]).

Sampling Challenges

- **Vaginal atrophy**
  - Vaginal fornices are obliterated
    - Perform bimanual exam (confirm has a cervix)
    - Improve visualization – ensure adequate abduction, elevate sacrum (bedpan, folded towel)
- **Cervical stenosis**
    - Perform pap during menses (slightly dilates cervix) – menstrual blood not an issue for LBC
    - Grasp anterior lip with single tooth tenaculum so provides traction against endocervical brush
    - Paracervical block/small dilators
    - Only need 10 endocervical cells to be adequate specimen (may still obtain even with absent EC/TZ component

HIV Positivity, Immunosuppression

- **START:** year after sexual activity and no later than age 21:
  - Cervical cytology every 12 months x 3.
  - If the three consecutive cervical cytology tests are normal, screening with cervical cytology is recommended every 3 years along with inspection of anus, perineum, vulva, vagina and cervix.

- 30 years of age and older COTEST every three years is recommended.
  - Primary HPV screening is not recommended for patients with HIV.

- **DO NOT STOP** at age 65.

- When to refer for abnormal pap
  - For LSIL or worse, referral to colposcopy is recommended regardless of HPV result.
  - For ASCUS HPV +, patients should be referred to colposcopy irrespective of age.

- Screening should occur throughout the individual's lifetime (and not discontinue at age 65).

Interpreting a Pap Test

- Specimen Adequacy
  - Satisfactory for evaluation - endocervical cells present
  - Unsatisfactory for evaluation - specimen rejected/not processed vs. processed but unsatisfactory
- Interpretation/Result –
  - NILM – organisms, reactive changes, atrophy
    - Candida
    - Actinomyces with IUD
    - Bacterial vaginosis, Trichomonas
  - Epithelial cell abnormalities
- Comment if case done by automated device and result

Bethesda 2014, ASCCP 2015.

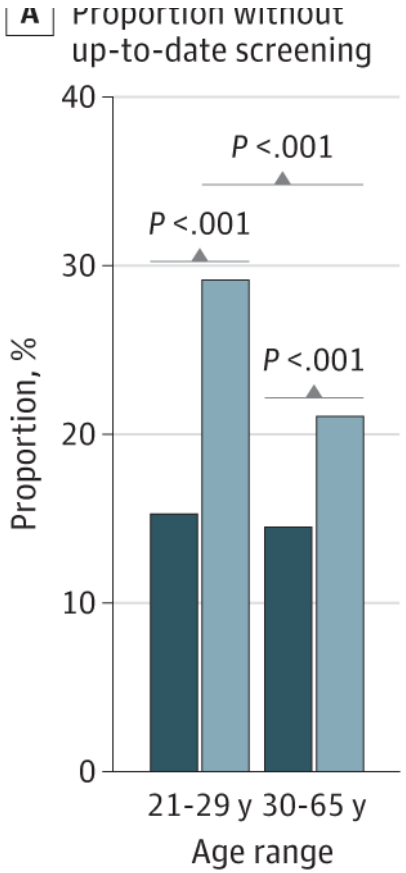
How to deal with unsatisfactory paps

Result	Action
Cytology unsatisfactory, HPV neg or unknown	Repeat cytology/cotest in 2-4 months
Cytology unsatisfactory, HPV HR +, not 16-18	Repeat cotest in 2-4 months
Cytology unsatisfactory, infection seen	Treat infection before repeating cytology
Cytology unsatisfactory, atrophy seen	PMP women without contraindication, consider low dose vaginal estrogen and STOP 1 week before repeat cytology
Two unsatisfactory paps	Refer for colposcopy

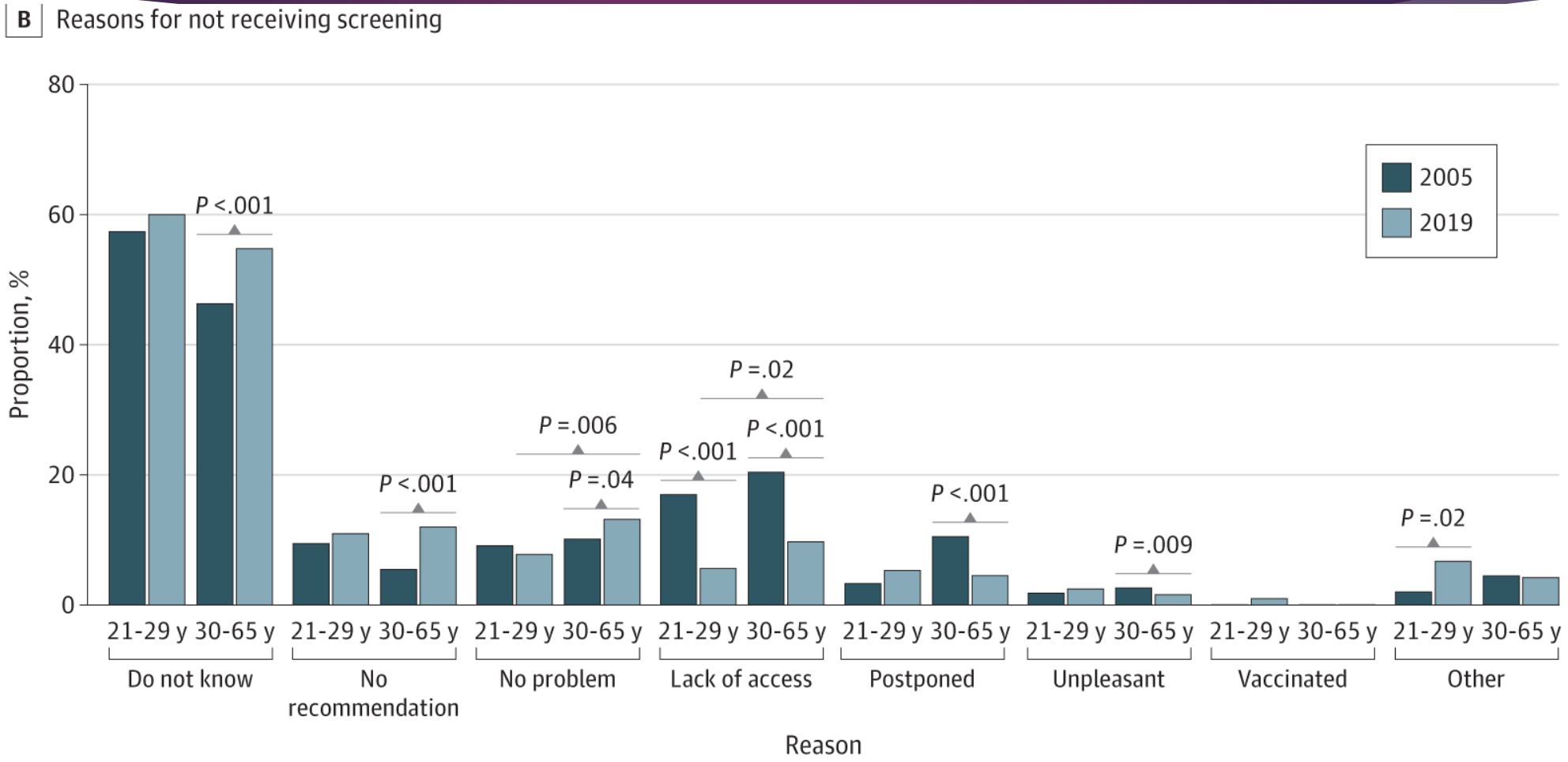
How well are we doing?

- Assessment of USPSTF Screening Guideline Adherence – 2005 and 2019
  - Reviewed cross sectional day from the National Health Interview Survey (n=20,557)
  - 2005: screening q3 years (21-65yo)
  - 2019: q3 year (21-29), cotest 5 years (30-65)

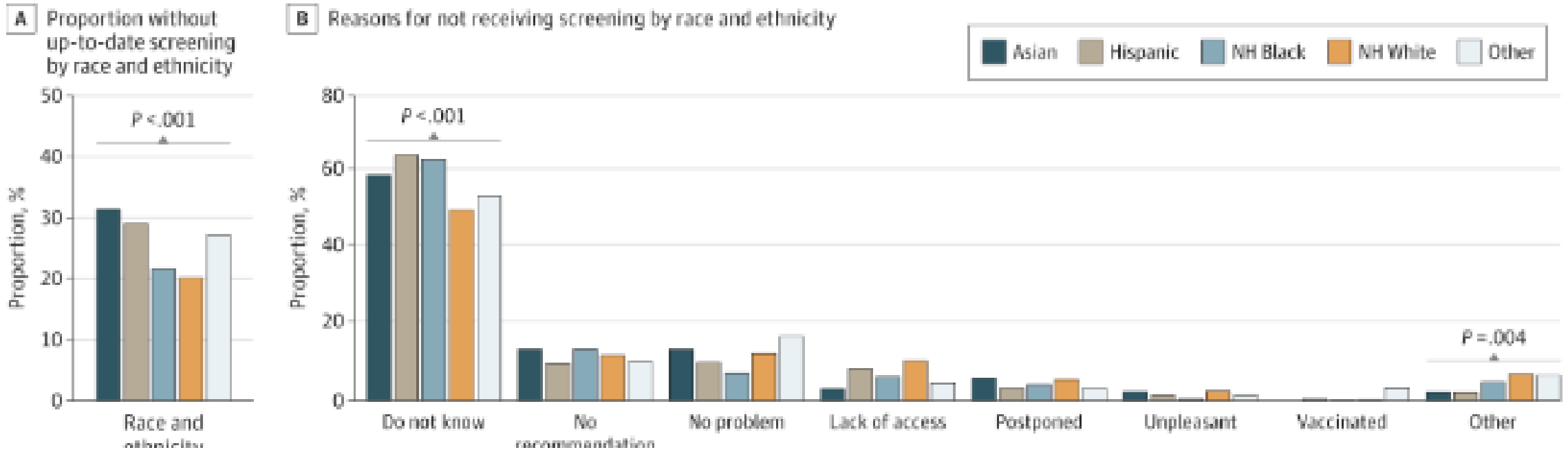
- **23%** of women have not had up to date screening



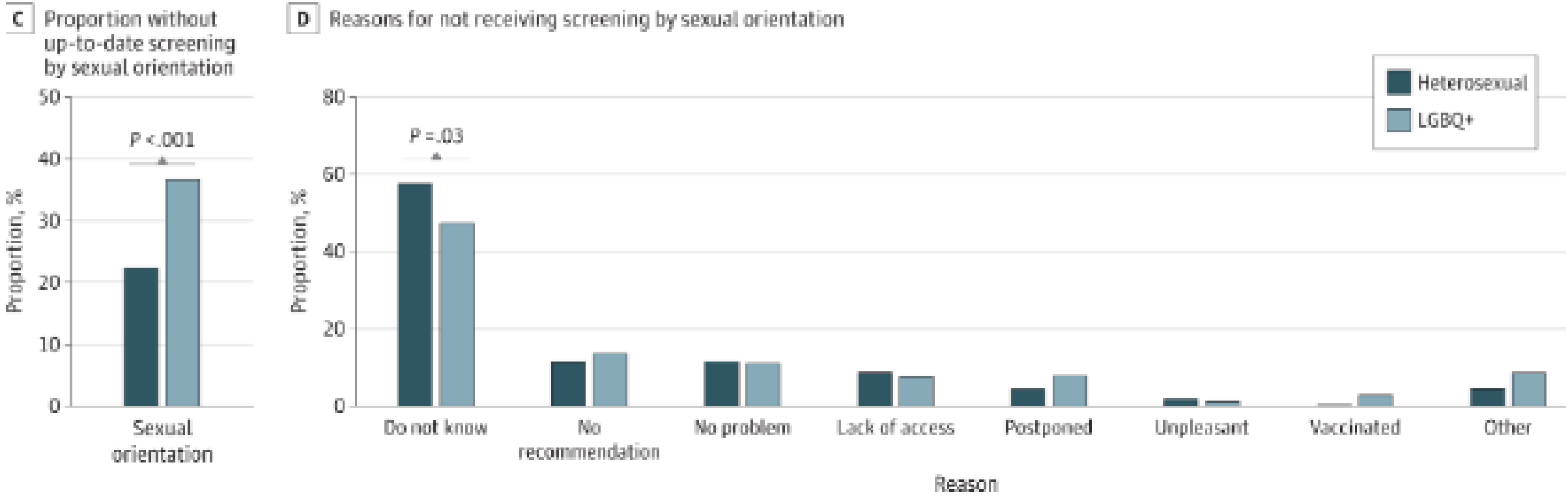
23%: Individuals without updated screening



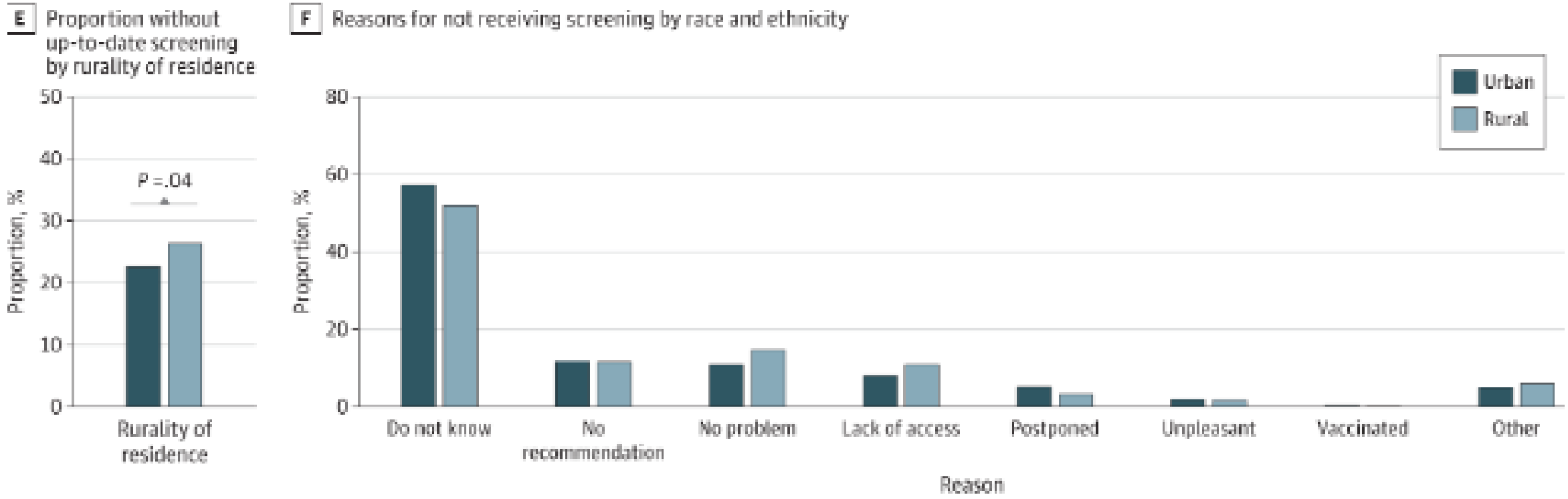
Reasons for underscreening - Ethnicity



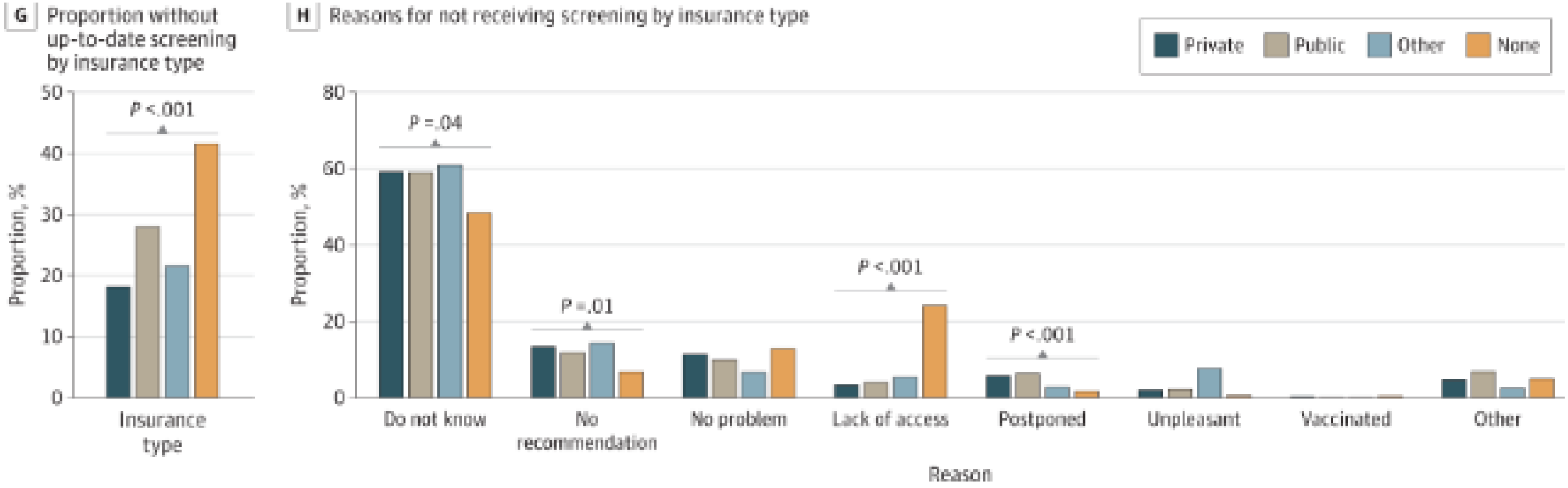
Reasons for underscreening – Sexual Orientation



Reasons for underscreening – Location



Reasons for underscreening - Insurance



Barriers to access to care associated with cervical cancer deaths

- Over **50%** of cervical cancer deaths are in women who have never been screened or screened over 5 years ago.
  - Access
  - Less knowledge/health literacy
  - Cultural beliefs
- *DPH/OWH- Health Indicators for Women in Los Angeles County 2017*

LA County	Asian	Black	Latina	White
21-65yo who had pap test within past 3 years	73.9%	89.3%	85.7%	86.6%
Incidence cervical cancer – age adjusted per 100,000	6.5	10.5	8.0	7.3

Pandemic effect

FIGURE 3

Cervical Cancer Screening Volumes

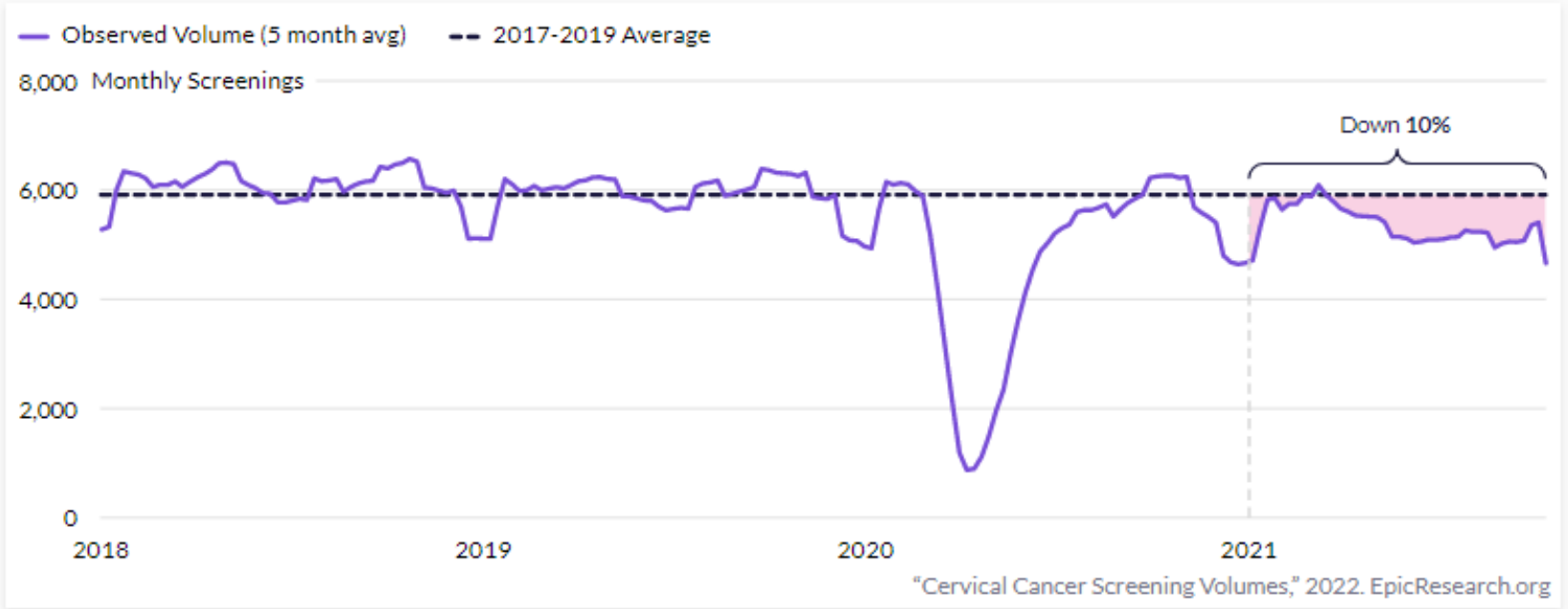


Figure 3. Cervical cancer screenings from January 2018 through October 2021, compared to the historical weekly average.

Troubling Cancer Screening Rates Still Seen Nearly Two Years Into the Pandemic (epicresearch.org)

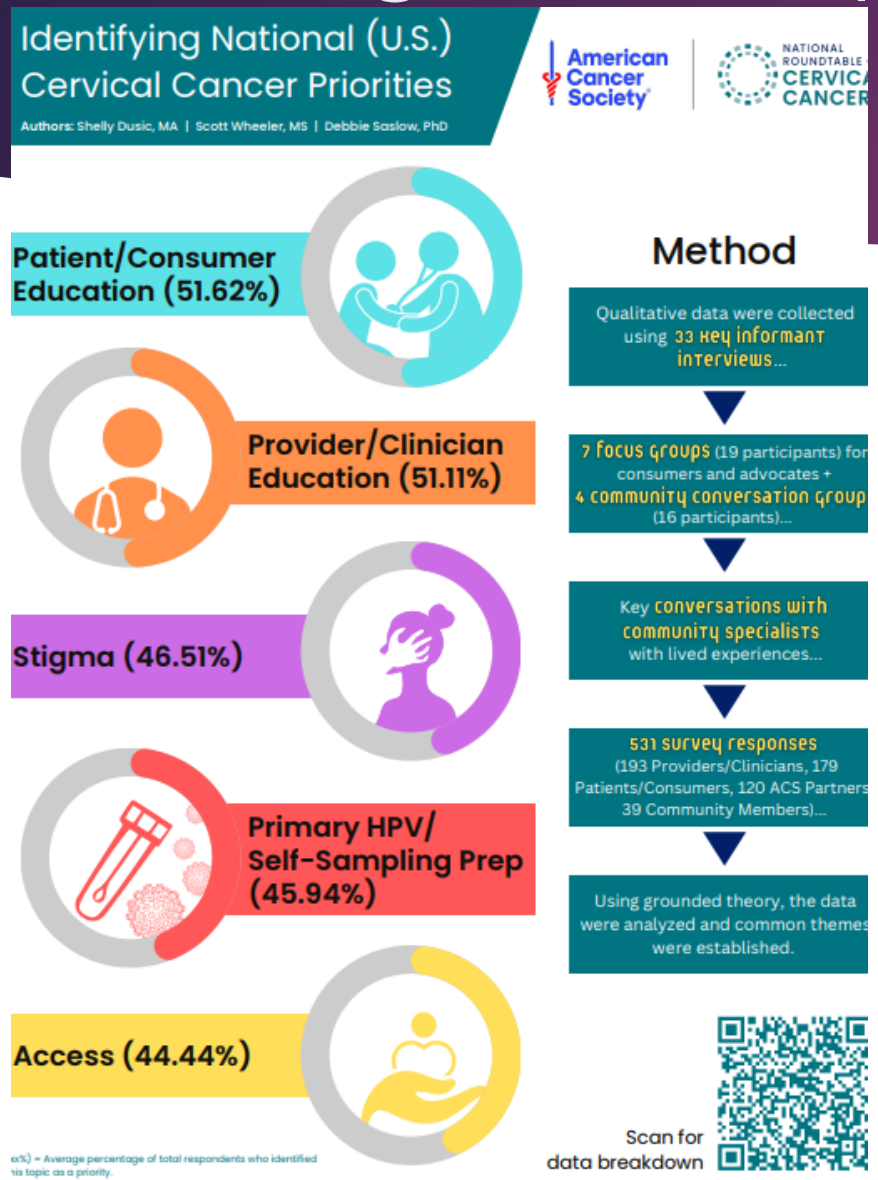
Future advancements

- Improve Vaccination rates: Single dose HPV vaccine
- Incorporation of p16/Ki-67 Dual Stain (triage for HPV positive)
- Extended genotyping
- Self collection pap tests
  - NCI Last Mile Initiative
  - SHIP Trial: **S**elf-sampling for **H**PV testing to **I**mprove Cervical Cancer **P**revention”

Success of mailed testing kits

- My Body My Test-3 Trial (NCI R01 grant)
  - Study: 665 women (ages 25-64) uninsured or enrolledi n Medicaid/Medicare from 22 counties in NC: 2/3 got mailed self test kits versus 1/3 got scheduling assistance.
  - Screening: 72% among women who got the mailed tests vs. 37%.
  - No difference regardless of age, race/ethnicity, time since last screening, education.

Strategies to improve screening



Patients: Increase knowledge and awareness

Providers: Strong recommendations, decrease missed opportunities

Social Media: Reduce Stigma

Systems: Improve access, standardized workflows

WHO 2030: Enough is enough – global mission to ERADICATE cervical cancer

Few diseases reflect global inequities as much as cervical cancer. Cervical cancer is the fourth most common form of cancer among women worldwide.

More than
85%
OF THOSE AFFECTED ARE YOUNG
undereducated women who live in the world's poorest communities.

Furthermore,
90%
OF THE DEATHS
occur in low- and middle-income countries (LMICs)

OF THE 20 HARDEST HIT COUNTRIES, 19 ARE IN AFRICA

Even in high-income countries, the inequity of cervical cancer disproportionately afflicts women of color, minorities, and other marginalized communities.

The disease
KILLS MORE THAN
300 000
WOMEN EVERY YEAR,

Annually, it is
DIAGNOSED IN OVER
600 000
MORE,

Unless we take action, this preventable tragedy will only worsen. If we accept the status quo,

BY 2030

annual
DEATHS WILL RISE TO
400 000

the annual number of new cases is projected to **INCREASE TO**
700 000

- **90% of girls fully vaccinated with the HPV vaccine by the age of 15;**
- **70% of women screened using a high-performance test by the age of 35, and again by the age of 45;**
- **90% of women with pre-cancer treated and 90% of women with invasive cancer managed.**

Meeting and maintaining the 90-70-90 targets would yield significant returns in the coming century:

- **the median cervical cancer incidence rate will fall by 42% by 2045, and by 97% by 2120, averting more than 74 million new cases of cervical cancer; and**
- **the median cumulative number of cervical cancer deaths averted will be 300 000 by 2030, over 14 million by 2070, and over 62 million by 2120.**

Level of Prevention	Strategies
Primary	HPV vaccination, safe sex practices
Secondary	Pap and Colposcopy
Tertiary	Surgery, Chemo-radiation, immunotherapy

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Frequently Asked Questions (FAQs)

Q1: Should I still do a pap if I see a cervical mass on routine exam?

- A: Maybe. Pap test is a screening test for a presumably normal looking cervix. If a mass or cancer is suspected, recommend biopsy or referral to gynecology for evaluation/biopsy as a pap test may not be diagnostic.

Q2: My patient completed the HPV vaccine series. Does she still need to get cervical cancer screening routinely?

- A: Yes, current guidelines recommend same cervical cancer screening intervals regardless of prior HPV vaccination history

FAQs

Q3: My healthy 67 yr old patient who transferred her care from another country is asking if she still needs a pap smear as she states that she never had an abnormal pap smear. Is it ok to stop?

- A: Depends. If patient is not able to provide adequate screening over the preceding 10 years, would recommend ongoing screening until can document 3 consecutive negative liquid-based cytology test results or 2 consecutive negative primary HPV or co-tests (most recent test within 5 years).

Q4: I got an unsatisfactory pap test result but her HPV test was negative. Is it ok to just repeat it next year?

- A: No, unsatisfactory cytology should be repeated in 2-4 months. Also consider cause for unsatisfactory cytology (i.e. Infection, vaginal atrophy) and treat underlying cause before repeat pap test.

Thank you!

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Q & A Session

L.A. Care PCE Program Friendly Reminders

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Webinar participants will only have up to two weeks after webinar date to email Leilanie Mercurio at lmercurio@lacare.org to request the evaluation form if the online survey is not completed yet. No name, no survey or completed evaluation and less than 75 minutes attendance duration time via log in means No CME or CE credit, No CME or CE certificate.

Thank you!