The Abnormal Pap: Updated Management Guidelines from the ASCCP and more…

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Section Head of Gynecology, Minimally Invasive Gynecology & Gynecologic Oncology

What's New in Medicine - Tri Cities WA
September 9, 2023

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Our Physicians and APPs

Gynecologic Oncology

Allison Barrie MD & Amy Brockmeyer MD

Minimally Invasive Benign Gynecology

Marisa Dahlman MD, Megan Loring MD & Elena Wagner MD

Advanced Practice Providers

Kate Behning ARNP, Katie Conkling ANRP, Jan Dwight ARNP, Beth Kern ARNP & Tania Tibercio ARNP

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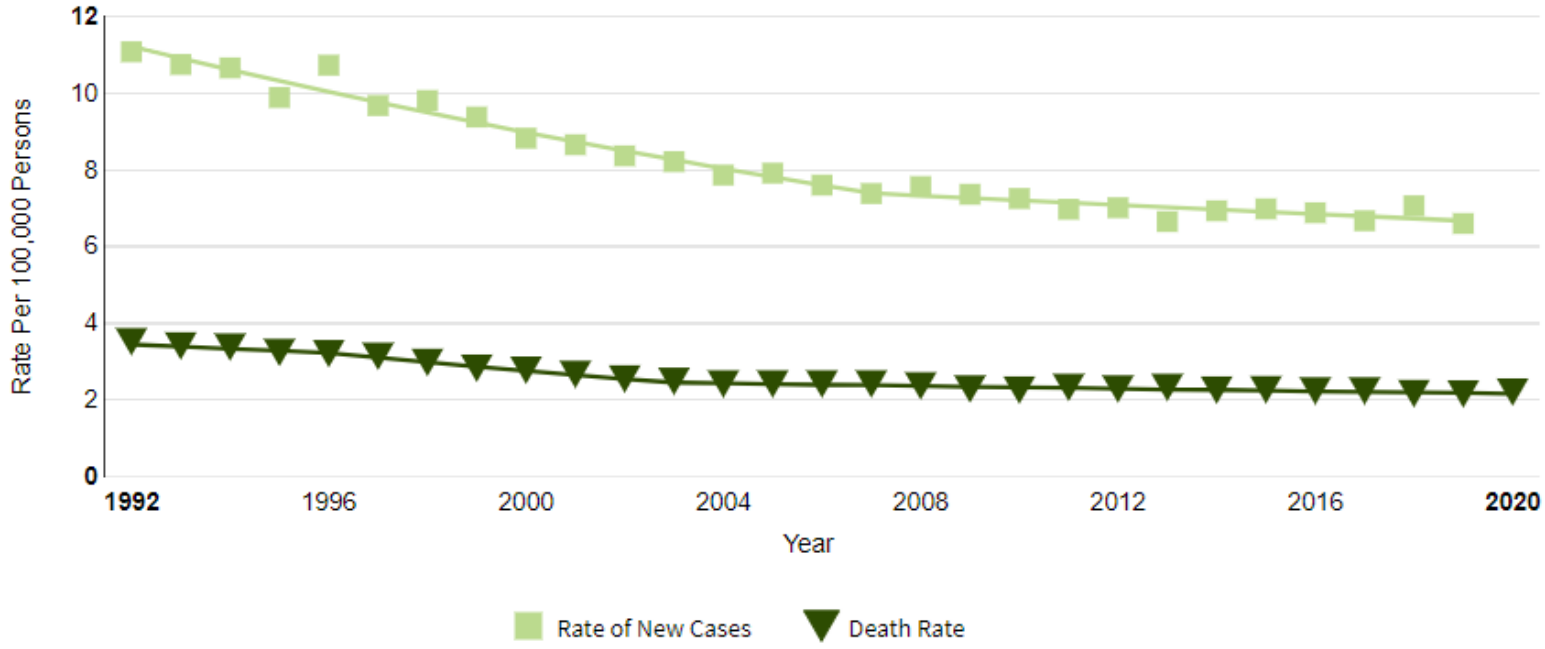
Learning Objectives

- Understand why screening works.
- Know the vaccination recommendations
- Understand why The American Society for Colposcopy and Cervical Pathology (ASCCP) Consensus Guidelines were updated in 2019.
- Understand how to incorporate recommendations into your clinical practice
- Recognize racial determinants of cervical cancer mortality

Cervical Cancer Incidence 2022

- Estimated new cases of cervical cancer in the US in 2022 is 14,100 with 4,280 deaths.



New cases come from SEER 12. Deaths come from U.S. Mortality.
All Races, Females. Rates are Age-Adjusted.
Modeled trend lines were calculated from the underlying rates using the Joinpoint Trend Analysis Software.

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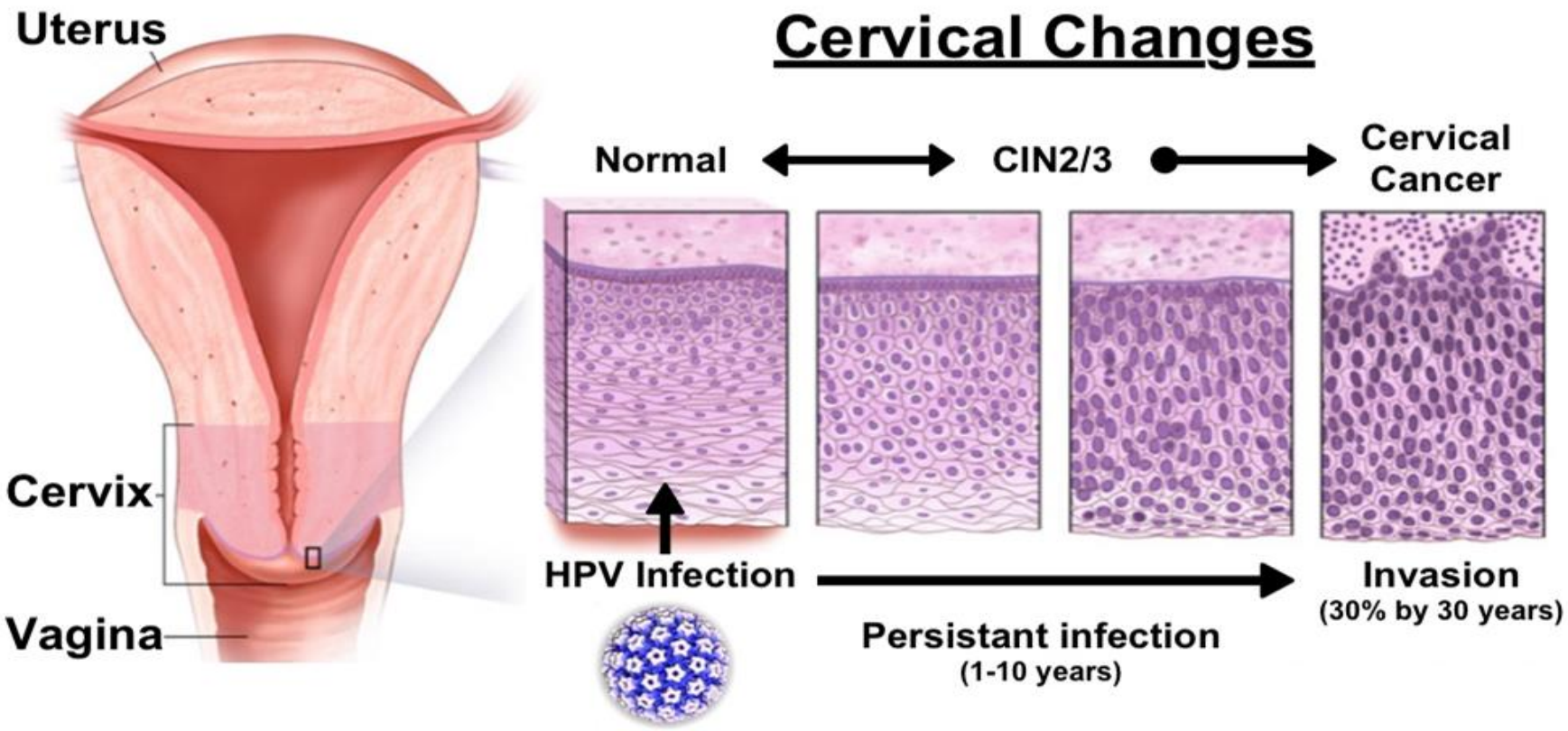
Cervical cancer has a long precancer stage.



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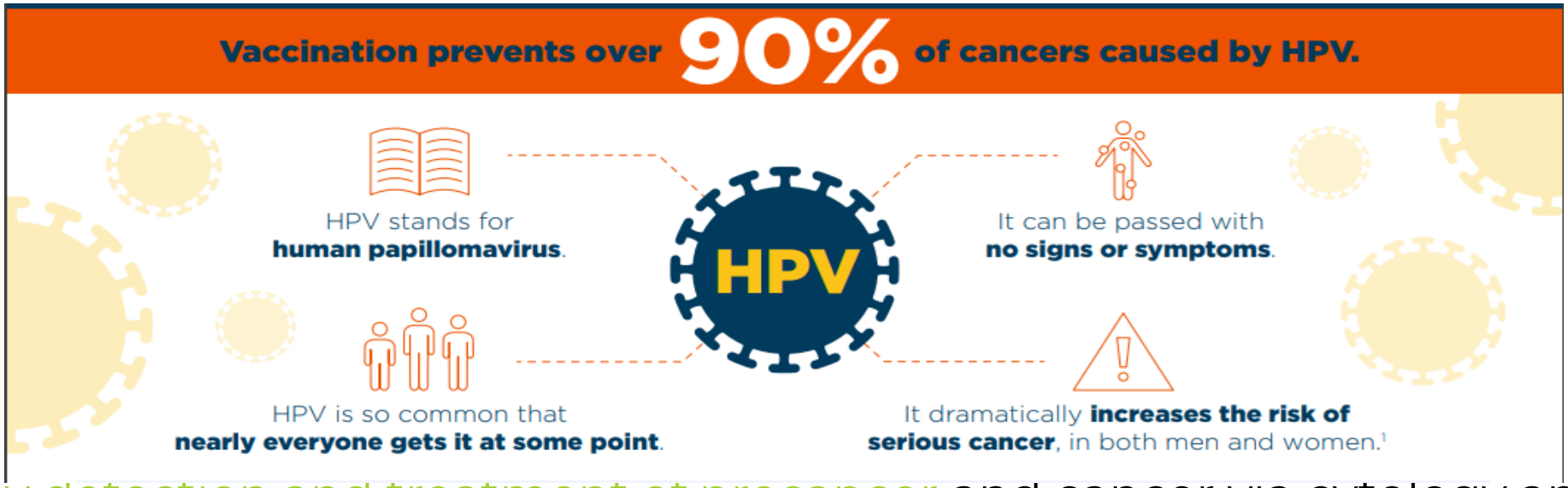
Two targets for cervical cancer prevention

- HPV Vaccination to prevent HPV infection that causes cervical cancer



- Early detection and treatment of precancer and cancer via cytology and HPV detection

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CDC 24/7: Saving Lives, Protecting People™

HPV Vaccination

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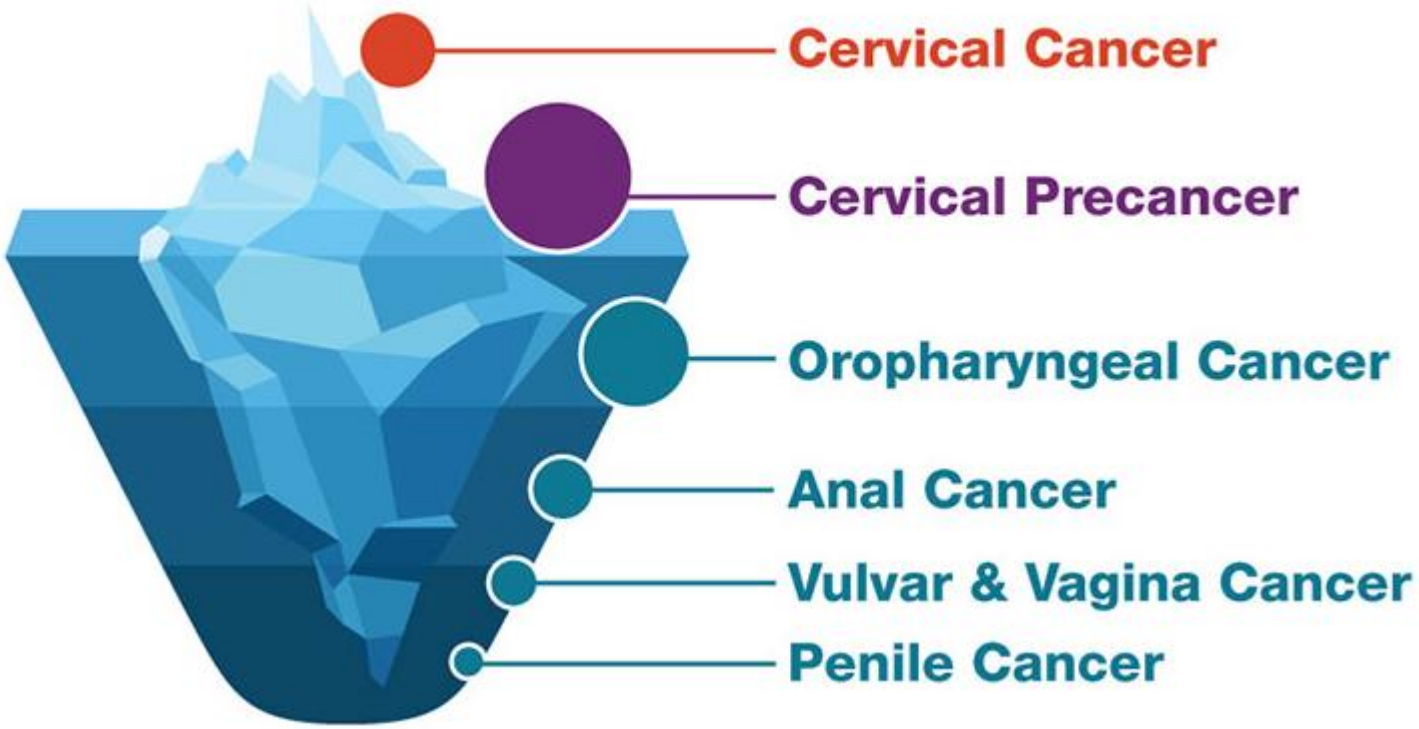
Cancers caused by HPV are preventable.



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HPV Vaccination Schedule and Dosing

Routine vaccination	Age **11–12 years**; can be started at age 9 years
Catch-up Vaccination*	Age **13–26 years**, if not adequately vaccinated
Shared clinical decision-making*	Some adults age **27–45 years**, if not adequately vaccinated

*MMWR. 2019;68(32);698-702

About 85% of people will get an HPV infection in their lifetime. Vaccinating all 11–12-year-olds can protect them long before they are ever exposed.

CDC recommends two doses of HPV vaccine for all adolescents at age 11 or 12 years.

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Successful vaccination uptake decreases cancer

HPV vaccine cutting cervical cancer by nearly 90%

BBC NEWS Sign in

4 November 2021

The New York Times

In Australia, Cervical Cancer Could Soon Be Eliminated

Professor Ian Frazer, a co-creator of the HPV vaccine, Gardasil, said he hoped other countries would follow Australia's lead. David Maurice Smith for The New York Times

World Health Organization

Cervical Cancer Elimination Initiative

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

Each country should meet the 90-70-90 targets by 2030 to get on the path to eliminate cervical cancer within the next century.

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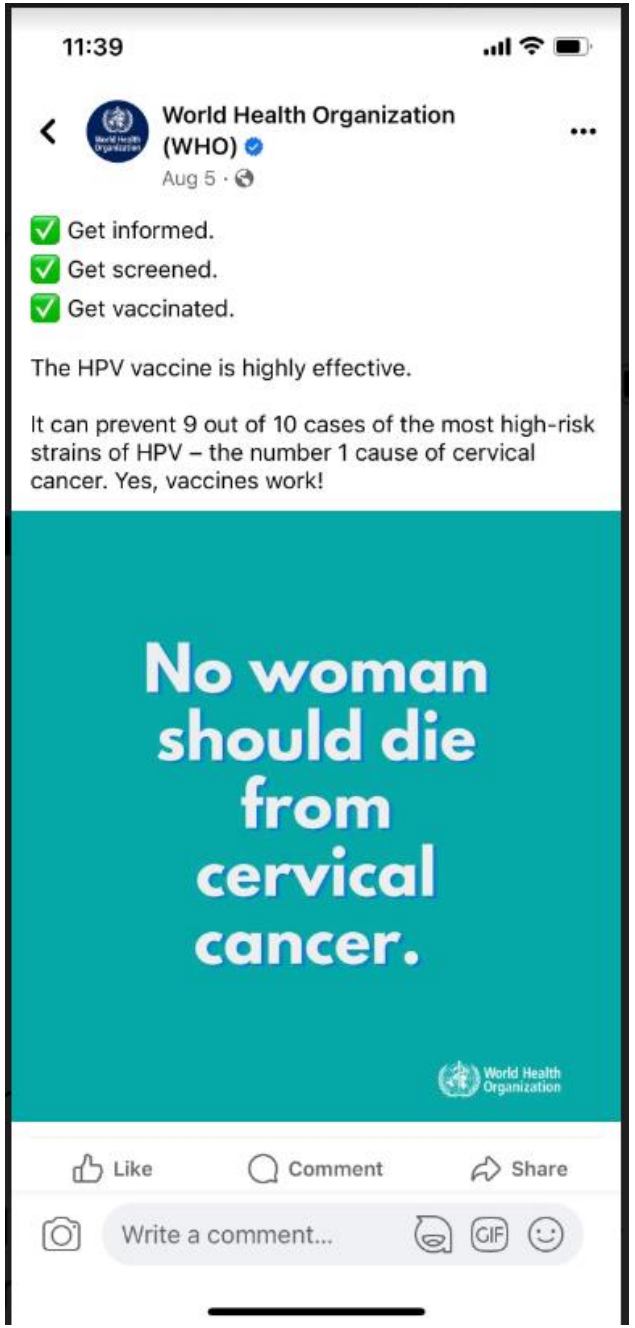

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REVIEWS

Barriers to and Facilitators of Human Papillomavirus Vaccination Among People Aged 9 to 26 Years: A Systematic Review

Zheng, Luyan MD; Wu, Jie PhD; Zheng, Min PhD

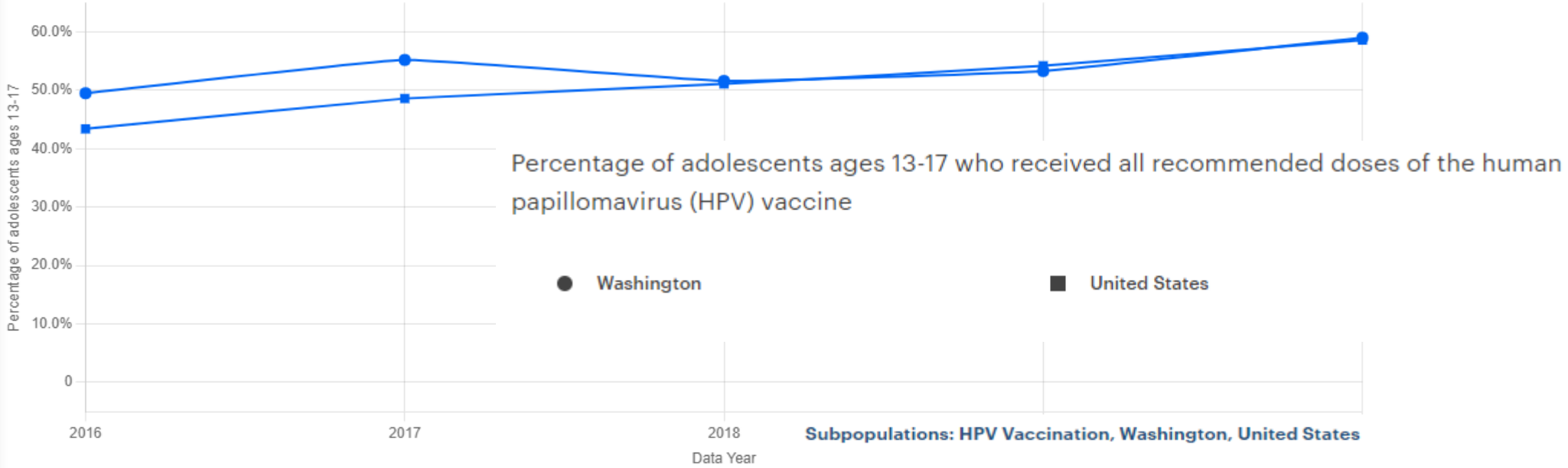
Author Information

Sexually Transmitted Diseases
JOURNAL OF THE AMERICAN SEXUALLY TRANSMITTED DISEASES ASSOCIATION

- Perceived Barriers
  - Policy-level (non-mandatory, incomplete insurance coverage)
  - Fear about safety and efficacy of the vaccine
  - Fear about not being able to pay for the vaccine
  - Discrimination (religious authority against STD education)
  - Other (lack of time, fear of pain, negative vaccine experience)
- Facilitators
  - Clinician recommendations help uptake

How are we doing in US? WA state?

Trend: HPV Vaccination, Washington, United States



Subpopulations: HPV Vaccination, Washington, United States

GENDER

Source:

- CDC, National Immunization Survey-Teen

AMERICA'S HEALTH RANKINGS
UNITED HEALTH FOUNDATION

Screening Recommendations: when to start and how often

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2018 USPSTF Cervical Cancer Screening Recommendations for Average-Risk Women

Apply to

- All individuals with a cervix
- Asymptomatic patients/normal exam
- US population

Do NOT apply

- Previous high-grade lesion
- History of DES exposure
- Immunocompromised

Table 1. 2018 USPSTF Cervical Cancer Screening Recommendations for Average-Risk Women

Population*	Recommendation	Recommendation Grade†
Women aged <21 years	No screening	D
Women aged 21 – 29 years	Cervical cytology alone every 3 years	A
Women aged 30 – 65 years	Cervical cytology alone every 3 years **OR** hrHPV testing‡ alone every 5 years **OR** Co-testing (hrHPV testing‡ and cervical cytology) every 5 years	A
Women aged >65 years with adequate prior screening	No screening	D
Women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade cervical precancerous lesion or cervical cancer	No screening	D

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2015 Primary HPV screening Algorithm

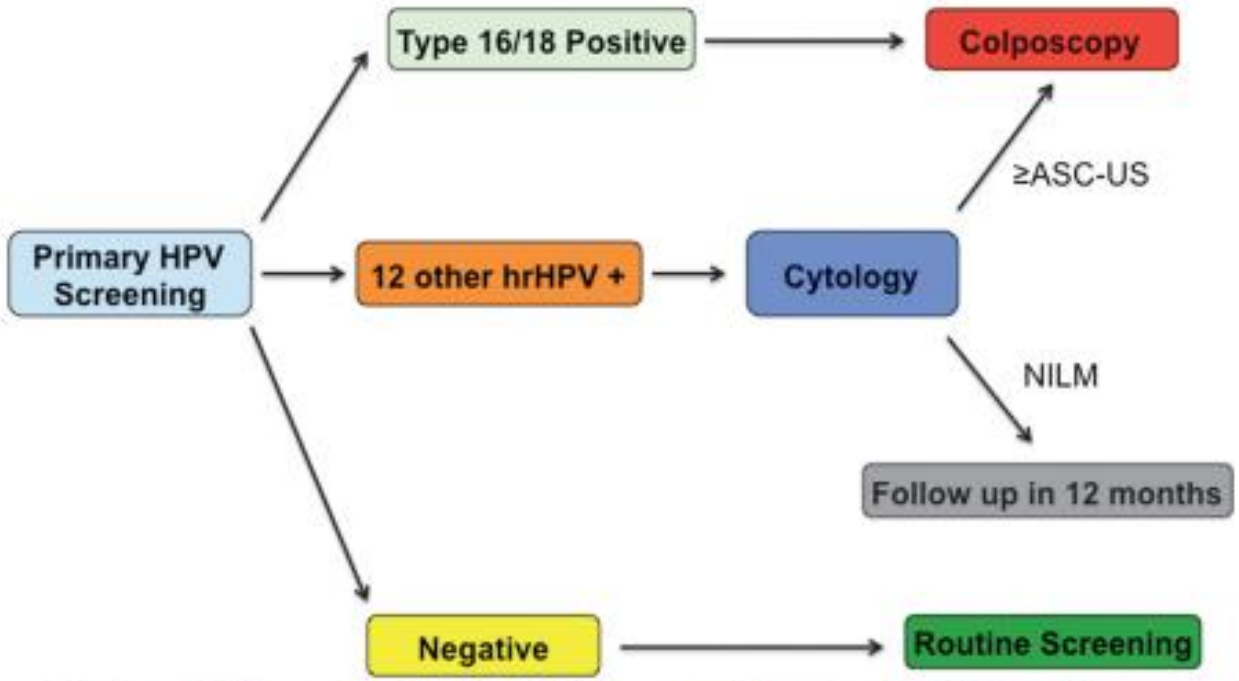

FIGURE 1. Recommended primary HPV screening algorithm. HPV, human papillomavirus; hrHPV, high-risk human papillomavirus; ASC-US, atypical squamous cells of undetermined significance; NILM, negative for intraepithelial lesion or malignancy.

- "All positive primary HPV testing… should have additional triage testing performed from the same lab system." (Thin prep at VM)
- Some studies show hrHPV neg with CIN3*
- Follow institutional practice/guideline based care

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2012 Guidelines Relied on algorithms that were updated every 5-10 years and rapidly could be out of date

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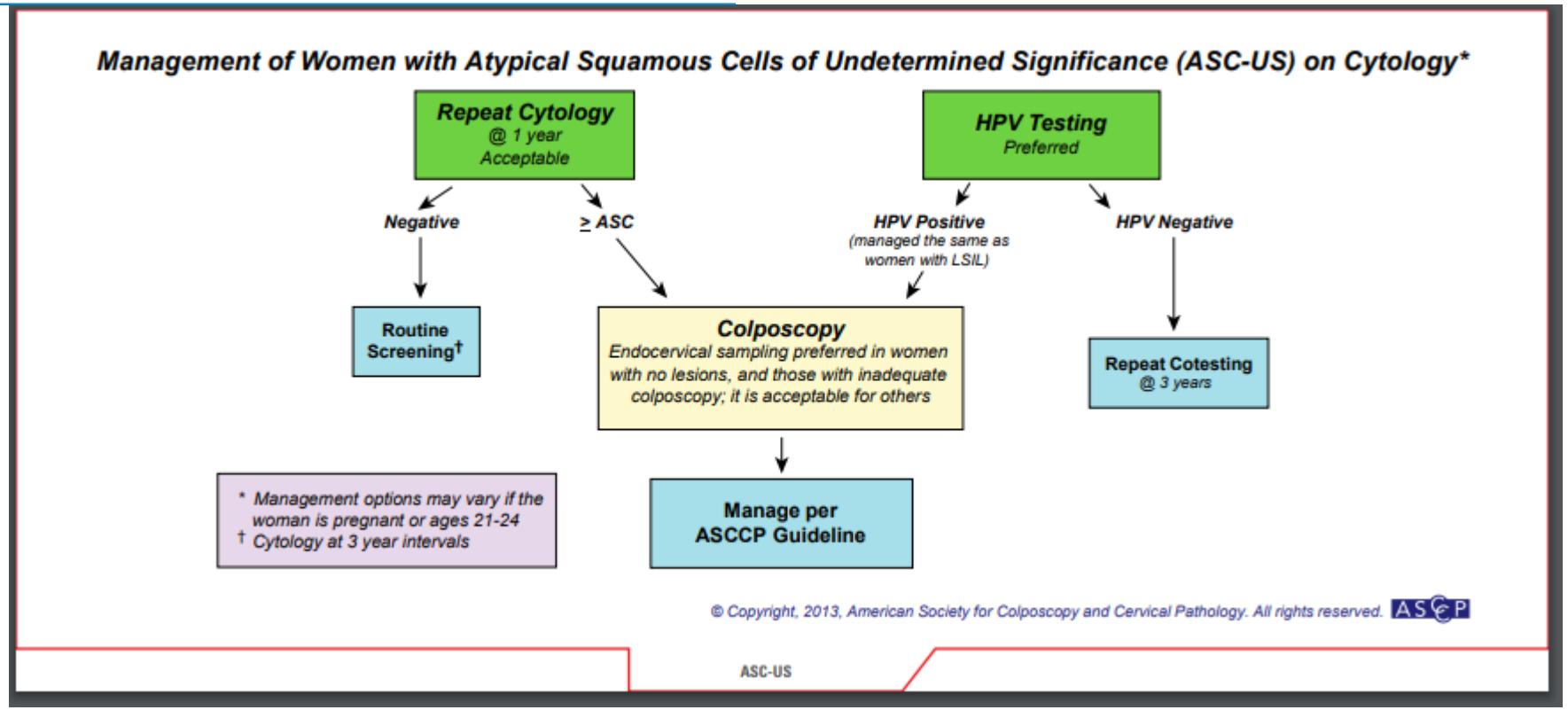

ASCCP.org/management-guidelines

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Updated ASCCP management guidelines are enduring because they estimate risk.

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Goals of Updated Guidelines

- Collaboration amongst 19 groups and patient advocates
- Increase accuracy and reduce complexity for providers and patients
  - Optimal Risk estimation incorporates current results AND past history
- Allow for easier dissemination of updated information

Medical Professional Societies
- ASCCP
- American Academy of Family Physicians
- American Cancer Society
- American College of Nurse-Midwives
- American College of Obstetricians and Gynecologists
- American Society for Clinical Pathology
- American Society of Cytopathology
- College of American Pathologists
- Nurses for Sexual and Reproductive Health
- Nurse Practitioners in Women's Health
- Papanicolaou Society of Cytopathology
- Society of Gynecologic Oncology
- Women Veterans Health Strategic Healthcare Group

Patient Advocacy Organizations
- American Sexual Health Association
- Cervivor
- Latino Cancer Institute
- Team Maureen

Federal Agencies
- Centers for Disease Control and Prevention
- National Cancer Institute

JOURNAL OF LOWER GENITAL TRACT DISEASE

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New 2019 Principles estimate CIN3+ risk

- HPV-based testing
  - Either primary HPV testing alone
  - HPV testing with cytology (co-testing)
- Personalized risk management is possible with knowledge of current results and past history.
  - Special populations have different recommendations

How was/is risk of CIN 3+ determined?

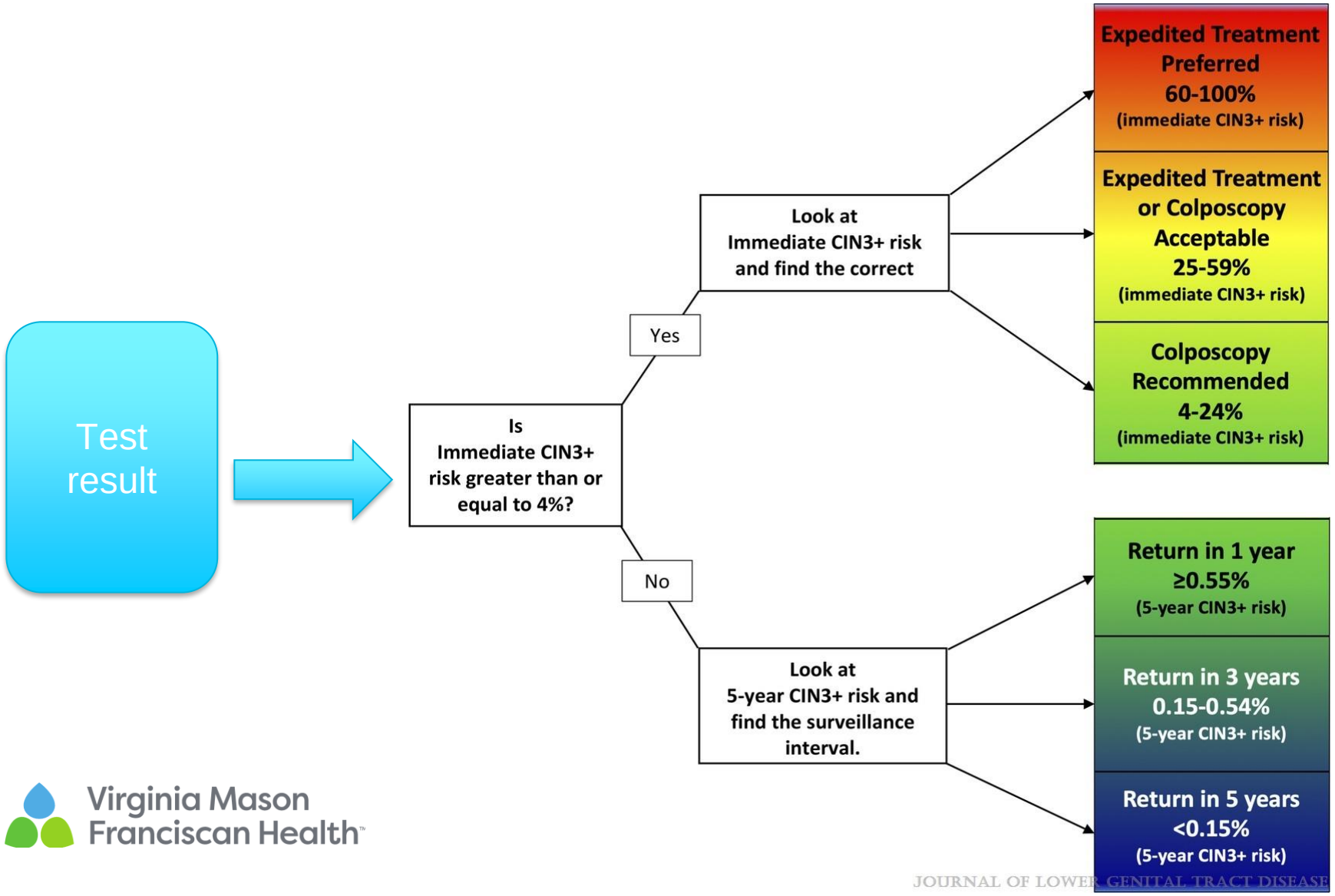
- Multiple large prospective longitudinal US databases following patients of diverse racial, ethnic, and socioeconomic strata to assure relevance to all women.
  - KPNC, Clinical trials, New Mexico HPV Pap Registry, Others
  - Encompass diverse populations because we know CIN 3+ prevalence is driven by geographic location, race, ethnicity & socioeconomic status
- Patients with similar test results and screening history combinations have largely the same risk of CIN 3+
- In cases where the data could not predict risk, literature review or prior consensus data was used.

asccp.org/management-guidelines
Data tables (5+ tables, 68 rows x 82 columns)

Age	Pre-Colpo Test Result	Post-Colpo Test Result - PAST HISTORY	Current HPV Resul	Current PAP Result	UL95 4-ye	CANCER 5 year risk (%)	SE 5-year	LL95 5-yea	UL95 5-ye	Management
25-65	Low Grade		HPV-negative	ALL	0.06	0.05	0.02	0.01	0.09	3-year follow-up
25-65	High Grade		HPV-negative	ALL	0.22	0.15	0.08	0.00	0.30	1-year follow-up
25-65	Low Grade	Cotest-negative	HPV-negative	NILM	0.08	0.04	0.03	-0.01	0.09	3-year follow-up
25-65	High Grade	Cotest-negative	HPV-negative	NILM	0.35	0.15	0.10	-0.06	0.35	3-year follow-up
25-65	Low Grade	HPV-negative	HPV-negative	ALL	0.07	0.03	0.02	-0.01	0.07	3-year follow-up
25-65	High Grade	HPV-negative	HPV-negative	ALL	0.39	0.18	0.10	-0.02	0.39	3-year follow-up
25-65	Low Grade	Cotest-negative	HPV-negative	ASC-US/LSIL	NA	0.00	NA	NA	NA	3-year follow-up
25-65	Low Grade	Cotest-negative	HPV-positive	NILM	NA	0.47	NA	NA	NA	1-year follow-up
25-65	Low Grade	Cotest-negative	HPV-positive	ASC-US/LSIL	NA	0.00	NA	NA	NA	1-year follow-up
25-65	Low Grade	Cotest-negative	HPV-negative	High Grade	NA	0.00	NA	NA	NA	Colposcopy
25-65	Low Grade	Cotest-negative	HPV-positive	High Grade	NA	0.00	NA	NA	NA	Colposcopy
25-65	High Grade	Cotest-negative	HPV-negative	ASC-US/LSIL	0.00	0.00	0.00	0.00	0.00	3-year follow-up
25-65	High Grade	Cotest-negative	HPV-positive	NILM	0.00	0.00	0.00	0.00	0.00	1-year follow-up
25-65	High Grade	Cotest-negative	HPV-positive	ASC-US/LSIL	0.00	0.00	0.00	0.00	0.00	1-year follow-up
25-65	Low Grade	HPV-negative/ASCUS/LSIL	HPV-negative	NILM	0.00	0.00	0.00	0.00	0.00	3-year follow-up
25-65	Low Grade	HPV-negative/ASCUS/LSIL	HPV-negative	ASC-US/LSIL	0.00	0.00	0.00	0.00	0.00	1-year follow-up
25-65	High Grade	HPV-negative x2	HPV-negative	ALL	0.42	0.14	0.14	-0.14	0.42	3-year follow-up
25-65	Low Grade	HPV-negative x2	HPV-negative	ALL	0.00	0.00	0.00	0.00	0.00	5-year follow-up
25-65	Low Grade	Cotest-negative x2	HPV-negative	NILM	0.00	0.00	0.00	0.00	0.00	5-year follow-up
25-65	High Grade	Cotest-negative x2	HPV-negative	NILM	0.00	0.00	0.00	0.00	0.00	3-year follow-up

How do we use this in our clinics?

Risk prediction and Action Thresholds



Journal of Lower Genital Tract Disease24(2):102-131, April 2020.

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Mobile App for iOS and Android & Web-based (free) Platforms

Management Guidelines

New Management Guidelines Are Here

ASCCP Risk-Based Management Consensus Guidelines for abnormal cervical cancer screening tests and cancer precursors have been published.

The new iOS & Android mobile apps and the Web application, to streamline navigation of the guidelines, have launched.

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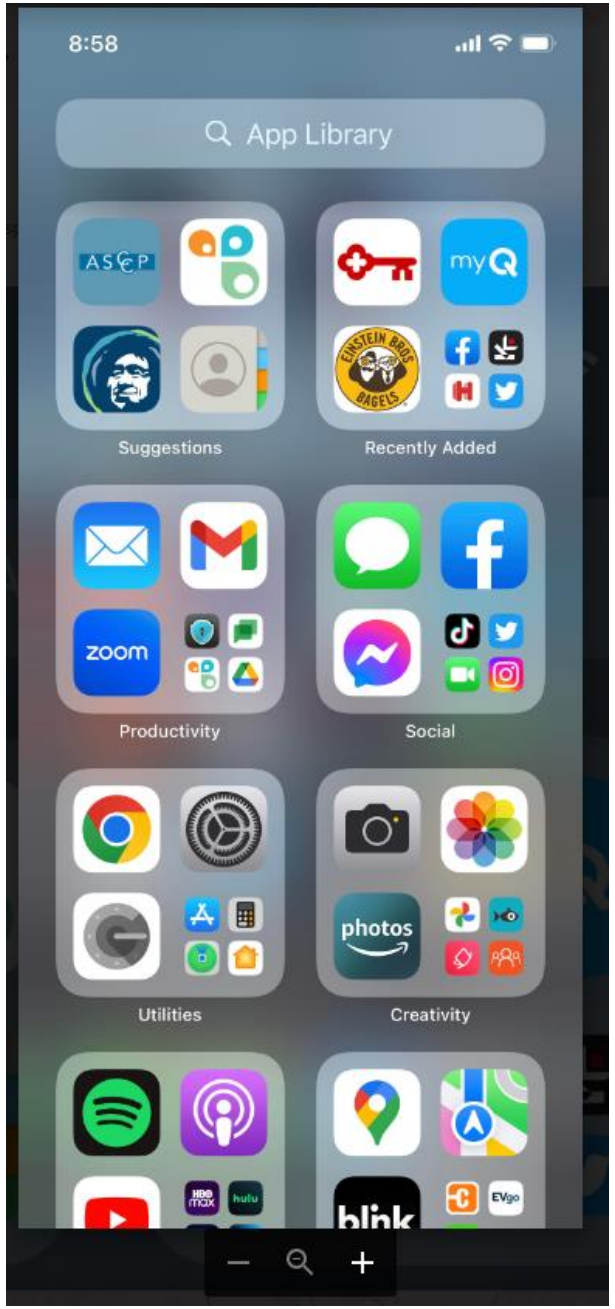
Case 1

- 47 year old
- Current pap ASCUS with HPV 16 +, HPV 18+
- Prior pap NIL and HPV negative



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12:03
◂ Search

ASCCP

Screening | Management | Publications | Definition

Clinical Situation | Testing | Recommendation

Current testing

HPV

None | Negative | Positive (untyped) | Positive (genotyped)

HPV DNA

HPV 16 | HPV 18 | HPV Other

Cytology

ASC-US | LSIL | ASC-H | AGC

Does the patient have previous screening

12:03
◂ Search

ASCCP

Screening | Management | Publications | Definition

test results?

Yes | No

Prior testing

HPV

None | Negative | Positive

Cytology

None | Normal | ASC-US | LSIL

Does the patient have previous screening test results?

Yes | No

← Back | Next →

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Screening | Management | Publications | Definition

Clinical Situation | Testing | Recommendation

Confirmation

Routine screening (within past 5 years)

Age: 30 to 65

Current results

Cotest with a HPV16 positive result and abnormal cytology result of ASC-US

Prior results

Cotest with negative HPV and normal cytology

← Back | Next →

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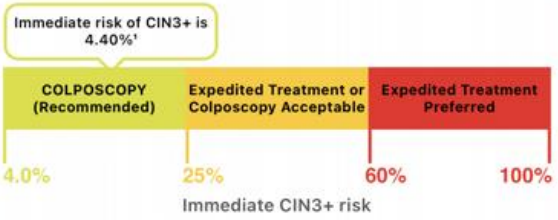
Screening | Management | Publications | Definition

Clinical Situation | Testing | Recommendation

Recommendation

Colposcopy[1]

Risk



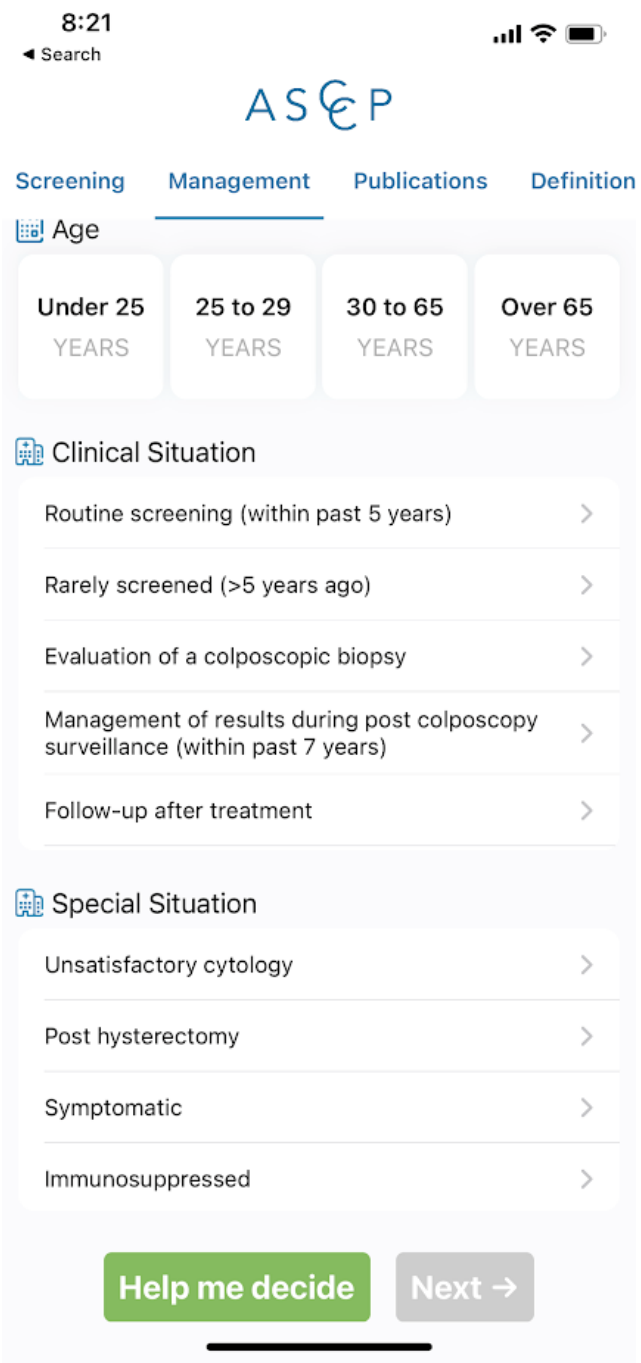
Immediate risk of CIN3+ is **4.40%**[1]

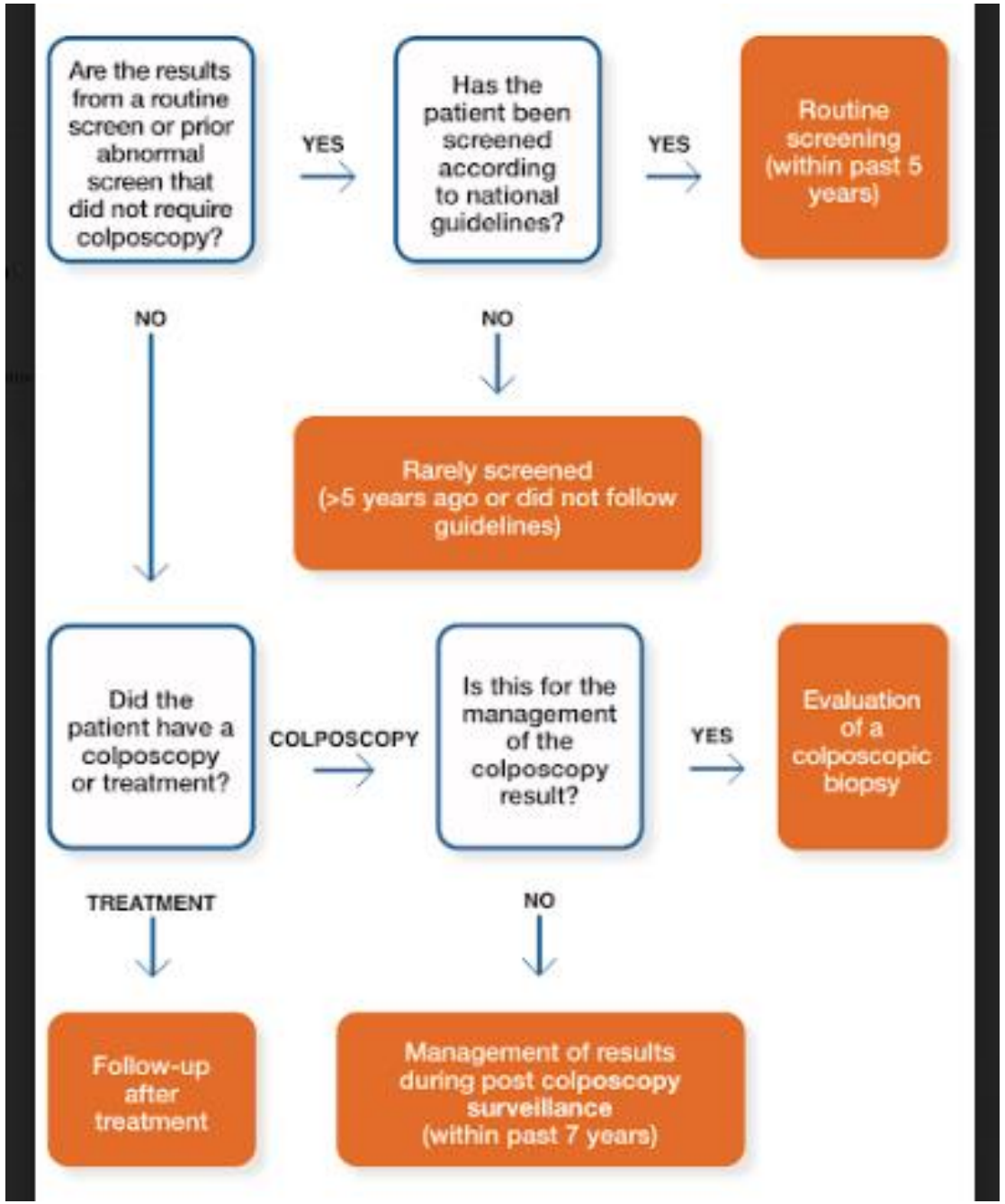
← Back | Start Over

References

1. Risk estimates supporting the 2019 ASCCP Risk-Based Management Consensus Guidelines. https://cervixca.nlm.nih.gov/RiskTables/

Pro Tip: Choose the correct scenario





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Special populations/ Exceptions

Symptomatic patients

- Abnormal bleeding, visibly or palpably abnormal cervix
- REQUIRES a DIAGNOSTIC TEST and physical examination
- Consider referral to gynecology or gynecologic oncology

Immunosuppressed patients

- Baseline higher risk for CIN 3+ exists
- Earlier treatment and quicker follow up may be recommended
- Consider referral to gynecology or gynecologic oncology

COVID-19 considerations

Age > 65/Rarely screened patients

Paps should continue after age 65 for some…

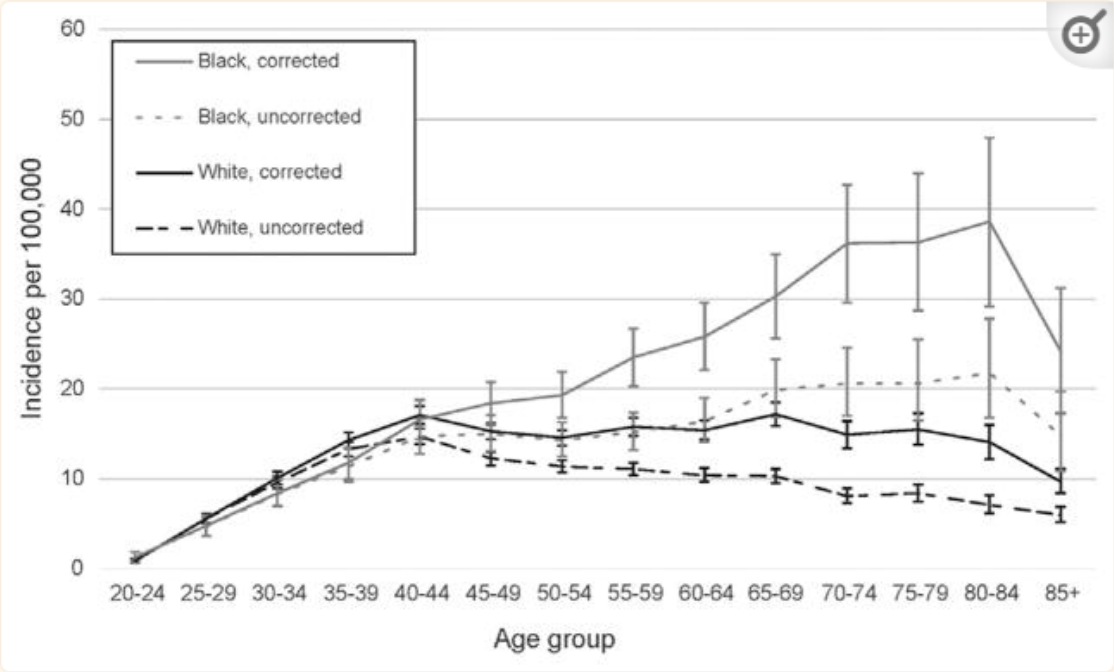

Figure 1

Age-specific incidence and 95% CI of cervical cancer in the U.S., 2013, corrected and uncorrected for hysterectomy, by race.

- Some of the highest incidence of is after age 65
- "Stopping age" applies only to the following for the 10 years prior to stopping:
  - 3 normal paps in a row for cytology alone
  - 2 normal pap/HPV for co-test
  - Lack of high risk feature
    - Previous high-grade lesion
    - History of DES exposure
    - Immunocompromised

Am J Prev Med. 2017 September ; 53(3): 392–395. doi:10.1016/j.amepre.2017.02.024.

Cervical Cancer Screening and Incidence by Age: Unmet Needs Near and After the Stopping Age for Screening

Mary C. White, ScD, **Meredith L. Shoemaker, MPH**, and **Vicki B. Benard, PhD**
Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia

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Racism is Serious Threat to the Public's health.

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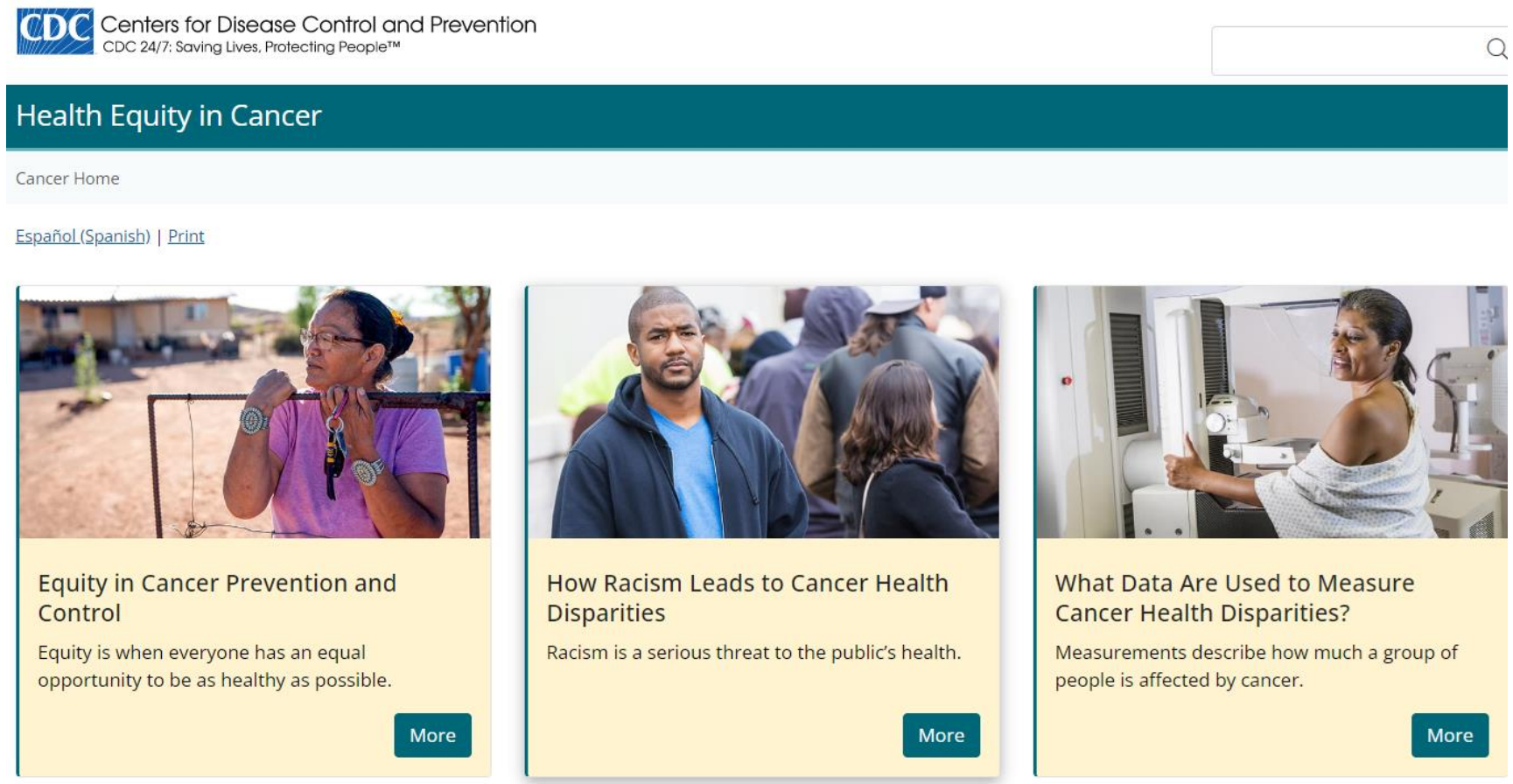
There is inequity in Cancer Prevention and control.

- Health equity is when everyone has equal opportunity to be as healthy as possible.
  - Some Americans can't make healthy choices because of where they live, their race or ethnicity, their education, their physical or mental abilities, their income.
- Social Determinants of health affect screening and include access to:
  - A good education
  - Healthy food
  - A safe home to live in
  - Reliable transportation
  - Clean air and water



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Access affects cancer risk. Being rarely or never screened is the major contributing factor to most cervical cancer deaths today.

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AMERICAN SOCIETY FOR COLPOSCOPY AND CERVICAL PATHOLOGY

Who are the Rarely and Never Screened

Descriptions

- People of color
- Low Socioeconomic status
- Foreign born
  - Living in the US < 10 years
- No usual source of health care

Where are the data?

- US Census
- CDC
  - National Center of Health Statistics
  - Behavioral Risk Factor Surveillance System
  - National Health Interview Survey

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Conclusion

- We have the tools to eliminate cervical cancer.
  - Vaccination for HPV for boys and girls before the age of 15 > 90%
  - Screening with pap + HPV or HPV alone as recommended
  - Identify and catch up those lapsed/not up to date
- Support public health measures to improve access/education
  - Consider advocating for policies that address disparities and inequity
    - write letters
    - vote

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Thank you.

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