Guidelines for PAP Smears & HPV Testing

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Which of the following statements is FALSE?

1. Most HPV infections are transient.
2. Persistence in HPV infections lead to cervical cancer.
3. Most women under age 21 are able to clear an HPV infection in 1 – 2 years.
4. Most HPV-related lesions progress to cancer slowly.
5. HPV is most common in women over age 30.
One of the most common causes of cancer death for American women prior to Pap test.

Since the Pap test, cervical cancer mortality declined by almost 70%.

Most cervical cancers occur in unscreened or inadequately screened women.

Cervical Cancer Statistics
American Cancer Society estimates:

More than 12,000 new cases of invasive cervical cancer

More than 4,000 deaths from cervical cancer

Cervical Cancer Statistics
Most cases diagnosed in women younger than 50

More than 20% diagnosed over 65

In the U.S., Hispanic women most likely to get cervical cancer, followed by African-Americans, Asians, Pacific Islanders, and Whites.

Cervical Cancer Statistics
Most HPV infections are transient

Persistence in HPV infections leads to cervical cancer

Most common in teens and women in 20’s

Most women are able to clear the infection in 1–2 years

HPV Background
Women over 30, HPV infections more likely to be persistent and high-grade

Most HPV-related lesions progress slowly to cervical cancer

Takes 3 – 7 years on average for severe dysplasia to progress to invasive cancer

HPV Background
HPV 16 (55 – 60%) and HPV 18 (10 – 15%) account for the majority of world wide cervical cancers.

About 10 other HPV genotypes cause remaining 25 – 35% cervical cancers.

99% of HPV-related lesions arise within the transformation zone of the cervix
New Cervical Cancer Screening Recommendations

- U.S Preventive Services Task Force (USPSTF), March 2012

- American Cancer Society/American Society for Colposcopy and Cervical Pathology/American Society for Clinical Pathology (ACS/ASCCP/ASCP), March 2012

- American Congress of Obstetricians and Gynecologists (ACOG), May 2013
NO HPV SCREENING BEFORE AGE 21

Women 21 – 29
Cytology ONLY every 3 years

Women 30 – 65
Cytology and high risk HPV DNA every 5 years
OR
Cytology alone every 3 years

When to Start Screening
When to Start Screening

Women 65+
Future screening based on previous results

With previous negatives, no more screening is needed!

“Negative”
3 consecutive negative cytology results  
OR
2 consecutive negative co-testing results within 10 years, with most recent test within 5 years
Women 65+
Future screening based on previous results

Women with CIN 2, 3, or adenocarcinoma must continue screening

When to Start Screening
After Hysterectomy
No Screening without cervix and without history of CIN 2 or greater

History of CIN 2 or greater
Routine screening for 20 years (even after hysterectomy)

When to Start Screening
When to Start Screening

- HPV positive
  Twice in the first year after diagnosis, then annually

- Immunocompromised
  Annually

- DES in utero
  Annually

- HPV vaccination
  Follow age-specific guidelines (same as unvaccinated)
<table>
<thead>
<tr>
<th>Cytology Results</th>
<th>Age</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
<td>Any</td>
<td>Repeat PAP 2 – 4 months OR if &gt;30 and HPV +, may colpo</td>
</tr>
<tr>
<td>Cytology Results</td>
<td>Age</td>
<td>Recommendations</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>------------------------------------------------------</td>
</tr>
<tr>
<td>NILM, EC/TZ insufficient</td>
<td>21 – 29</td>
<td>Routine screening</td>
</tr>
<tr>
<td></td>
<td>&gt;30</td>
<td>If HPV-, routine screening</td>
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<tr>
<td></td>
<td></td>
<td>If HPV+, PAP &amp; HPV in 1 yr. OR HPV genotype for 16/18</td>
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<tr>
<td></td>
<td></td>
<td>If HPV unk, HPV testing OR PAP in 3 yrs</td>
</tr>
<tr>
<td>Cytology Results</td>
<td>Age</td>
<td>Recommendations</td>
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<tr>
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</tr>
<tr>
<td>NILM &amp; HPV+</td>
<td>&gt;30</td>
<td>HPV genotype for 16/18 OR repeat PAP &amp; HPV in 1 yr. If repeat PAP &gt; ASC or HPV+, colpo</td>
</tr>
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**Referral Guidelines**
<table>
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<tr>
<th>Cytology Results</th>
<th>Age</th>
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</tr>
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<tbody>
<tr>
<td>ASCUS, HPV unk</td>
<td>Any</td>
<td>HPV testing OR repeat PAP in 1 yr. If repeat PAP is NILM, routine screening, otherwise colpo</td>
</tr>
<tr>
<td>ASCUS, HPV -</td>
<td>21 – 24</td>
<td>Routine screening</td>
</tr>
<tr>
<td></td>
<td>&gt;25</td>
<td>PAP &amp; HPV in 3 yrs</td>
</tr>
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<td>Cytology Results</td>
<td>Age</td>
<td>Recommendations</td>
</tr>
<tr>
<td>----------------------------------</td>
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<tr>
<td>ASCUS, HPV+ or LSIL</td>
<td>21–24</td>
<td>PAP in 1 yr. If NILM, ASC, or LSIL, repeat PAP again in 1 yr. If 2\textsuperscript{nd} repeat PAP is &gt;ASC, then colpo. Return to routine screening after NILM x 2</td>
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<tr>
<td>&gt;25</td>
<td></td>
<td>Colpo</td>
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<td></td>
<td></td>
<td>If pregnant, colpo now (preferred) or at least 6 weeks postpartum</td>
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<td>-----------------------------------------</td>
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<tr>
<td>LGSIL, HPV-</td>
<td>Any</td>
<td>PAP &amp; HPV in 1 yr. (preferred) If NILM, HPV-, repeat PAP &amp; HPV in 3 yrs, otherwise colpo OR immediate colpo</td>
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<tr>
<td>ASC-H or HSIL</td>
<td>Any</td>
<td>Colpo OR if HSIL &amp; &gt;25 &amp; not pregnant, may do immediate LEEP</td>
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<tr>
<td>AGC or Atypical Endocervical Cells</td>
<td>Any</td>
<td>Colpo, ECC, and EmBx if .35 or chronic anovulation or unexplained vaginal bleeding</td>
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<td>Atypical Endometrial Cells</td>
<td>Any</td>
<td>ECC and EmBx. Colpo if both negative</td>
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ASCCP Cytology Algorithms 2013


American Cancer Society. What are the key statistics about cervical cancer? 2013.

References
Which of the following statements is FALSE?

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2. Persistence in HPV infections lead to cervical cancer.
3. Most women under age 21 are able to clear an HPV infection in 1 – 2 years.
4. Most HPV-related lesions progress to cancer slowly.
5. HPV is most common in women over age 30.

Post test
Which of the following statements is FALSE?

A. Most HPV infections are transient.
B. Persistence in HPV infections lead to cervical cancer.
C. Most women under age 21 are able to clear an HPV infection in 1 – 2 years.
D. Most HPV-related lesions progress to cancer slowly.
E. HPV is most common in women over age 30.
Which of the following statements is FALSE?

<table>
<thead>
<tr>
<th>Statement</th>
<th>First Slide</th>
<th>Second Slide</th>
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<tr>
<td>Most HPV infections are transient.</td>
<td>20%</td>
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