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Cervical Cancer Screening for the Primary Care Physician
Clinical Practice Guidelines
June 2013

General Principles: The Papanicolaou (Pap) smear is widely credited with reducing mortality from cervical cancer, and remains the single best method for the early detection of cervical intraepithelial neoplasia. Since the introduction of the Pap smear in 1943, substantial advancements have been made in the understanding, evaluation and treatment of the disease process that can result in cervical cancer.
These clinical practice guidelines for Pap Smear Screening assist primary care clinicians by providing an evidence-based analytical framework for the evaluation and treatment of patients. They are not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition.

1. Recommendations

Cervical Cancer Screening: see attached guidelines Cervical Cancer Screening for Average-Risk Women

- The attached published guidelines are generally consistent: American Cancer Society (ACS), American Society for Colposcopy and Cervical Pathology (ASCCP), American Society for Clinical Pathology (ASCP), U.S. Preventive Services Task Force (USPSTF) and the American Congress of Obstetricians and Gynecologists (ACOG).
- All women (average-risk) should begin cervical cancer screening when they are 21 years old. Cervical cytology screening prior to age 21 should be avoided.
- Screening should be done using either of the following cytological techniques:
    1. **Pap test:** using a broom-type (brush) device or plastic spatula and endocervical brush combination, smearing the cytological sample directly onto a microscope slide,
    2. **ThinPrep ®**Thin-layer cytology is a new technology for processing cytological samples. The sample is collected as in the conventional Pap but then the brush suspends the sample cells in a fixative solution, disperses them, and then selectively collects cells on a filter. The cells are then transferred to a microscope slide for cytological interpretation. Because cytological samples are fixed immediately after collection, there are fewer artifacts in cellular morphology. Clinical studies of the ThinPrep® 2000 (Cytyc Corporation, Boxborough, MA) have shown that test sensitivity is improved compared with conventional Pap smears. The improvement in sensitivity appears to be greater in populations with a low incidence of cytological abnormalities. (*Evaluation of Cervical Cytology.* 1999)
- For women 21—29 years of age: Cervical cytology screening (either conventional or liquid-based) is recommended every 3 years. HPV co-test is not recommended in this age group.
- For women 30-65 years of age: Women who have had 3 normal Pap tests results in a row may get screened every 3 years. Another option is to do a Pap test every 5 years (either conventional or liquid-based) with concomitant HPV co-test screening. HPV testing alone is not recommended in most clinical settings.

- For women >65 years of age: Cervical cytology screening may stop for those women with adequate screening history (no history of CIN, risk factors for cervical cancer, at least 3 consecutive negative Pap smears or no abnormal tests in past 10 years).
- For women post-total hysterectomy (removal of uterus and cervix): Cervical cytology screening may stop for those women **without** history of high-grade CIN 2-3 or cancer. For those women **with a history of CIN or cancer**, Pap smear screening should continue regardless of whether the cervix is present or absent.
- Screening among those women immunized against HPV 16/18: Continue to screen according to the age-specific recommendations for the general population.
- Revised cervical screening guidelines recommendations do not at all mean the end of the annual gynecological visit, as the visit is an opportunity to discuss other health problems and preventive measures. Annual gynecologic examinations are still appropriate. **See reference: ACOG Primary and Preventive Care Guidelines For Women**

Guidelines for Ordering Pap Smears and Concomitant HPV Testing

	Age <21	Age 21-29	Age 30-64	Age >65
Pap and reflex high-risk HPV when **ASCUS**		+		
Pap with high-risk HPV testing			+	+
Frequency	Avoid Screening	Every 2 years with liquid based Pap test	Every 3 years, ONLY • If 3 consecutive normal paps, no hx/o CIN 2-3 or HIV or • If low risk for cervical cancer with negative Pap and negative HPV testing	• May discontinue (if consecutive normal paps and no abnormal in past 10 years) • Medicare- every 2 years (or yearly if high risk).

Comments: Add CT/NG as necessary to above testing recommendations

Women/Adolescents with risk factors for Cervical Neoplasia and high-risk medical conditions may require annual Pap Smear monitoring, especially those women with:

1. HIV
2. Immuno-compromised Patients: Ex. S/P organ transplants or those patients with long- term steroid Use
3. Women exposed to DES (Diethylstilbestrol) in utero
4. Women previously treated for CIN2, CIN3
5. Women on chemotherapy

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Risk Factors for Cervical Neoplasia

Early age of first intercourse (before age 20)
Multiple (two or more) sexual partners*
High risk sexual partners
Persistent Human Papilloma Virus infection
Smoking
Immunosuppression (including HIV infection)
Other* low socioeconomic status, early first pregnancy, other STDs,DES exposure

***Less well=proven, uncommon or difficult to separate from other more important factors**

Classification System: Bethesda System

The Bethesda System was the creation of a standardized framework for laboratory reports that included a descriptive diagnosis and an evaluation of specimen adequacy.

Specimen Adequacy	
• Satisfactory • Unsatisfactory	
General Categorization	**Interpretation/Result**
A. Negative for intraepithelial lesion or malignancy Includes: • "Within normal limits" • "benign cellular changes"	Organisms *Trichomonas vaginalis* Fungal organisms morphologically consistent with *candida* species Shift in flora suggestive of bacterial vaginosis Bacteria morphologically consistent with *Actinomyces* species Cellular changes consistent with herpes simplex virus Other non-neoplastic findings (*optional to report; list not comprehensive*) Reactive cellular changes associated with Inflammation (includes typical repair) Radiation
B. Epithelial cell abnormality	**Squamous cell** Atypical squamous cells (ASC) • Of undetermined significance (ASC-US) Low-grade squamous intraepithelial lesion (LSIL) • Cannot exclude HSIL (ASC-H) High-grade squamous intraepithelial lesion (HSIL) Encompassing: human papillomavirus/mild dysplasia/cervical intraepithelial neoplasia

	(CIN) 1 Encompassing: moderate and severe dysplasia, carcinoma in situ; CIN 2 and CIN 3 Squamous cell carcinoma **Glandular cell** Atypical glandular cells (AGC) (*specify endocervical, Endometrial, or not otherwise specified)* □ Atypical glandular cells, favor neoplastic (*specify endocervical or not otherwise specified*) □ Endocervical adenocarcinoma in situ (AIS) Adenocarcinoma
C. Others	Cases in which there are no morphological abnormalities in the cells per se; however, the findings may indicate some increased risk: for example, benign-appearing "Endometrial cells in a woman 40 years of age"

3 **Abnormal Pap Smears That Require Gynecology Consultation for Close Monitoring and/or Colposcopy: See attached reference ACOG Practice Bulletin #99, Management of Abnormal Cervical Cytology and Histology December 2008, reaffirmed 2010**

- Hyperkeratosis/Parakeratosis- in high risk patients
- ASCUS Dysplasia or Dysplasia
- ASCUS Reactive/Inflammation in a non-compliant patient
- LSIL (low grade squamous intraepithelial lesions)
- HSIL (high grade squamous intraepithelial lesions)
- Endocervical ASCUS (AGUS) - Atypical Glandular cells of Undetermined Significance
- CIN
- Carcinoma in situ
- Persistent abnormal PAP Smear following treatment for infection, inflammation, ASCUS or hyperkeratosis or parakeratosis

Patient Education/Counseling:
Suggested literature:

"What is a Pap Smear" (Office of Population Affairs, this can be obtained free call 1-301-654-6190 item # FP-110068). Understanding Abnormal Pap Smear Test Results (ACOG

ISSN 1074-8601)

"Frequently Asked Questions: Understanding Abnormal Pap Test Results, ACOG FAQ 161: Copyright May 2011

References

1. American Cancer Society (ACS), American Society for Colposcopy and Cervical Pathology (ASCCP), American Society for Clinical Pathology (ASCP) Screening Guidelines for the Prevention and Early Detection of Cervical Cancer: CA Cancer J Clin 2012 Mar 14: **www.cancer.org**
2. U.S. Preventive Services Task Force (USPSTF): 2012 Screening for Cervical Cancer: **www.uspreventiveservicestaskforce.org**
3. American Congress of Obstetricians and Gynecologists(ACOG): Practice Bulletin: Number 131, Screening for Cervical Cancer, November 2012: **www.acog.com**
4. American Congress of Obstetricians and Gynecologists (ACOG): Committee Opinion Number 463: Cervical Cancer in Adolescents: Screening, Evaluation and Management, August 2010
5. American Congress of Obstetricians and Gynecologists (ACOG): Practice Bulletin: Number 99: Management of Abnormal Cervical Cytology and Histology, December 2008, Reaffirmed 2010
6. American Congress of Obstetricians and Gynecologists (ACOG): Primary and Preventive Care: Annual Women's Healthcare, 2012

Clinical Practice Guideline initiated 1997as Management of Abnormal Pap Smear.

Clinical Guidelines are reviewed every two years by a committee of experts in the field. Updates to guidelines occur more frequently as needed when new scientific evidence or national standards are published.