Boston Medical Center Maternity Care Guideline
Guideline: Pap Smear Screening and Follow Up
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Introduction

One in four women will have an abnormal cervical cancer screening test during her lifetime. 12,000 women in the United States are diagnosed with cervical cancer and 4000 die from cervical cancer every year. 20% of cervical cancers are diagnosed in women over the age of 65, most of whom did not have adequate screening before they stopped getting tests. Cervical cancer screening guidelines are improving to include both traditional Pap testing and HPV testing so that women with normal results can safely be screened at longer intervals, and women with abnormal results can be managed more precisely and safely. These guidelines represent the ASCCP guidelines, but distilled into what we hope is a more user-friendly document.

Please note that screening guidelines apply only to asymptomatic women. Symptomatic women (i.e. women with abnormal vaginal bleeding) should have a pap smear as part of their workup.

In summary, the following applies to all women regardless of immune status and prior cervical dysplasia history:

Screen every woman every 3 years with pap until 30 and every 3 years with co-testing thereafter and refer every abnormality to GYN for discussion of need for colpo.

I. Age based cervical cancer screening recommendations:

<21 No pap testing (unless symptomatic or abnormal exam or immune compromised)
**Recommended: annual STD screening,(i.e., urine GC/CT testing) OR cervical GC/CT with pelvic exam in symptomatic women*
**Vaccinate for HPV regardless of pap or sexual history*

21-29 Pap (with reflex to HPV) every 3 years
**Annual STD screening recommended through age 25; to continue annually after 25 for women with any new sex partners, partner who is not monogamous, drug use, pregnancy, other risk factors*
**Vaccinate for HPV through age 26 regardless of pap or sexual history*

30-64 Pap and HPV co-testing every 3 years
** Note: **Every 5 years Pap and co-testing is acceptable for LOW RISK women***

- *Low Risk = confirmed >10 year h/o of normal paps and at least one negative HPV test.*
- *These are the only women for whom the 5 year screening interval applies in the ASCCP guidelines.*

65+ May exit screening ONLY if following criteria are met.

- *H/o adequate negative screening—defined as 3 consecutive negative cytology results or 2 consecutive negative co-tests within the last 10 years and most recent test occurring within the past 5 years*
- *No current immunosuppression*
- *No history of CIN2+ in past 20 years*

** Note: **20% of cervical cancers occur in women over 65, most of whom are unscreened or under screened**.)*
**If a patient is ill such that she would not undergo colpo if needed, don't do the pap test*

**After screening discontinued, do not resume screening even if patient has a new partner (only indication for Pap after discontinuation of screening is as workup of post-menopausal bleeding/abnormal vaginal discharge/mass)*

II. Management of Results:

A. Normal Pap Results:

NILM (Negative for intra-epithelial lesion or malignancy):	Follow **Normal Screening**
No Endocervical component (i.e. no transitional cells). Now considered NILM	Follow **Normal Screening**

B. Other "Abnormal" Pap Results:

Unsatisfactory (i.e. insufficient cellularity) and HPV Negative or or HPV not done	Repeat pap and HPV in 2-4 months taking sample twice (use 2 cytobrushes) ** If repeat pap unsatisfactory, refer to GYN to repeat pap; if GYN unable to obtain adequate specimen → colposcopy*
Unsatisfactory (i.e. insufficient cellularity) and HPV+	Either repeat pap in two months or colposcopy
Endometrial cells on a pap test	Post-menopausal patient → Endometrial biopsy Pre-menopausal patient → No action necesary

**Lower cellularity specimens may be acceptable in women who have undergone hysterectomy for malignancies, chemotherapy, or radiation therapy.*

C. **Abnormal Pap and HPV results in non- pregnant women > 25yo (including HIV positive)**

COLPO NOW	ASCUS HPV+ LSIL LSIL HPV+ AGC* ASC-H HSIL HPV 16/18/45+ (regardless of pap result)
REPEAT Pap/HPV CO-TESTING IN 1 YEAR, THEN COLPO UNLESS repeat co-test HAS REVERTED TO NILM/HPV NEG	ASCUS HPV neg LSIL HPV neg NILM HPV positive →Note that BMC uses hybrid capture 2 which does not specify which HPV type is present. →Other health centers may specify HPV positive, but testing for HPV 16/18/and 45 is negative **HPV+ with negative 16/18/45 testing indicates infection with one or more of 11 oncogenic HPV types, excluding 16/18/45*

**Evaluation of patients with AGC: Age < 35 Colposcopy with ECC regardless of HPV status, Age 35+ or other risk factors for endometrial CA (e.g. morbid obesity, diabetes) endometrial biopsy in addition to colposcopy with ECC*

D. Abnormal Pap Results during Pregnancy

ASCUS HPV+ or LSIL	Defer repeat Pap/colposcopy to 6 weeks post-partum unless has prior abnormal pap that was never evaluated, in which case do colpo in pregnancy. *And please do the pap at the PP visit even if has upcoming colposcopy appointment as many patients do not come to their colpo*
HSIL, ASC-H and AGC	Colposcopy every trimester during pregnancy

E. Abnormal pap tests, Age <25

ASCUS/ HPV+ or LSIL or LSIL HPV+	Repeat Pap in 1 year; if repeat Pap ASCUS/ HPV+/LSIL or less, repeat in another year. If still ASCUS HPV+/LSIL at 2 years (or if becomes 25), refer for colposcopy **Vaccinate for HPV regardless of pap or sexual history*
HSIL, ASC-H	Refer for colposcopy

III. Management after Colposcopy

Pap before Colpo	**Colpo result**	**Management Post Colpo**
ASCUS/LSIL/NILM	CIN1 or less	1) Repeat Pap and HPV co-test in 1 year → if anything is abnormal re-colpo. 2) Repeat this cycle annually until co-test is negative, then co-test q3 years for at least 10 years (even if >65) as their risk remains too high for a 5 year return
HSIL, ASC-H, AGC	CIN 1 or less	1) Repeat Pap (with HPV if 30+) and colposcopy in 6 months and 12 months 2) If all negative, co-test at 24 months→ if anything is abnormal re-colpo. 3) If all negative, co-test q3 years for at least 20 years (even if >65)
Any	CIN2/3	LEEP* Then, for surveillance after the LEEP: 1) Co-test at 6 months, 1 year, 2 years, and 3 years from the time of LEEP, then every 3 years for at least 20 years. **Screening should continue even if the patient is over age 65* 2) If anything is abnormal re-colpo **Including results that would normally be a 1 year return (i.e. ASCUS HPV neg, NILM HPV+) as their baseline risk is too high to watch these results*

**"Young" women with CIN2 desiring future children may be eligible for observation with q6 month pap and colpo for 1 year*

IV. Special populations – Screening recommendations:

A. HIV+ *New recommendations:*
Pap test when
- first diagnosed or
- first seek prenatal care or
- Within a year of onset of sexual activity
- *After 3 consecutive normal annual Paps* (or for HIV+ women 30+, 2 consecutive annual negative co-tests)
- Every 3 years with Pap only if <30
- Every 3 years with co-test in 30+

Any abnormal cytology result or HPV+(x2) → colposcopy

B. Immunosuppressed (i.e., organ transplant, autoimmune disease on immunosuppressant medications)
- recommend HIV+ guidelines

C. DES Exposed:
- Annual paps without reflex to HPV (as long as they remain in good health—i.e. with life expectancy > 10 years) DES-exposed women are at risk for vaginal cancer that is not caused by HPV.

D. Hysterectomy:
- Discontinue screening after total hysterectomy (i.e., cervix was removed) for benign disease (anything other than cancer or CIN2-3).
- If hysterectomy done for CIN 2-3, continue vaginal paps as recommended for LEEP follow-up (see below).

Logistical Practice for BMC and CHC providers

- Refer patients to General OBGYN using the E-portal or Epic Referral or Faxed referral form. If you do not have access to the E-portal, please fax the referral form to:
  - 617-414-5798
- Follow up for CHC provider's: The provider's office who performed the pap should call patients and tell them to expect a call from OB/ GYN Colpo Coordinator who will call the patient to schedule the appointment
- Results from the colposcopy will be sent back to the provider's office. The patient will be contacted (by the provider or nurse) with the results and the plan.
- If you have questions, call the Colpo Coordinator at 617-414-3458

Patient Education Materials

Materials will be sent to patient by BMC at time of booking with appointment letter

ACNM Share with Women: HPV, Cervical Cancer and You
http://onlinelibrary.wiley.com/doi/10.1016/j.jmwh.2008.02.011/pdf

Appendix

Table 1 – ACRONYMS

NILM	Negative for intraepithelial lesion or malignancy (i.e. NORMAL)
ASCUS	Atypical squamous cells of unknown significance
HPV+	HPV (high risk types) is present. [note that we never test for low risk HPV types as it is of no clinical relevance] ***HPV+ at BMC*** means that the patient has HPV but we do NOT know which genotype. ***HPV 16/18/45*** refers to results at other institutions where the HPV genotype is specified. (16/18/45 are among the highest risk HPVs)
AGC	Atypical GLANDULAR cells of unknown significance. (This is NOT the same as ASCUS) (needs colpo regardless of HPV results, needs endometrial sampling based on risk factors and age.)
LSIL	(or LGSIL) low grade squamous intraepithelial lesion (minimally abnormal pap test)
HSIL	(or HGSIL) high grade squamous intraepithelial lesion
ASC-H	Atypical squamous cell, cannot rule out a high grade lesion.
Reflex HPV testing	Testing for HPV to triage management of the ASCUS Pap test. (ASCUS HPV+ is treated differently from ASCUS HPV-, see above)
Co-testing	Simultaneously running the liquid cytology specimen for BOTH Pap test interpretation as well as testing for the presence of HPV.

References:

ASCCP Guidelines, 2013

Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Available at http://aidsinfo.nih.gove/contentfiles/lvguidelines/adult_oi.pdf. Accessed May 1, 2016. P-3.

Kinney, Walter, et al, Increased Cervical Cancer Risk Associated with Screening at Longer Intervals, Ob& Gyn. 125(2):311-315, February 2015