CERVICAL CANCER
SCREENING, DIAGNOSIS AND MANAGEMENT

DATE: APRIL 2022
PRESENTER: DR. LILY PROCTOR
Disclosures

• None
Objectives

• To review the principles of screening for cervical cancer
• To review the HPV virus and its role in cervical cancer
• To review the diagnosis and management of cervical dysplasia
• To review the diagnosis and management of cervical cancer
Programmatic Screening

Screening for disease is the examination of asymptomatic individuals in order to classify them as likely or unlikely to have the disease that is the object of screening.

People who appear likely to have the disease are investigated further to arrive at a final diagnosis. Those people who are found to have the disease are then treated.

Principles of Programmatic Screening

- Evidence from well-conducted studies that early detection improves health outcomes;
- There is accepted treatment for patients with recognised disease;
- There is an effective test available;
- Facilities exist for diagnosis and treatment;
- The benefits of screening outweigh any potential harms;
- Prevalence of the disease is high enough to justify the effort and costs of screening.

- World Health Organization
What Causes Cervical Cancer?

**Human Papilloma Virus**

- 99.7% of cervical cancer is caused by the persistence of HR-HPV
- HPV 16 and 18 – 71% of cases
- HPV 31, 33, 45, 52, 58 – 19% of cases
- Previous exposure does not protect against future exposure.
Normal immunology

• Pathogen enters host, usually has contact with blood

• Innate immune system (phagocytes, cytokines, complement) detects pathogen and attempts to neutralize

• Innate immune system activates the adaptive immune response (antibodies, cytotoxic effector cells) <- memory is created
The HPV life cycle: A sophisticated immune evasion mechanism

- Poor exposure to antigen presenting cells
- Uses natural lifecycle of epithelial cells to release new viruses
- Does not cause cell death
- Enters basal epithelial cell, integrates DNA in host cell
- Replicates in cells; remains intraepithelial
- Local infection
- Infects the epithelium through micro abrasions
- Infection with HPV is not reliably protective against future infection

Landmark observational measurement: Previous exposure does not protect against future exposure

HPV-seropositive women have similar rates of HPV infections as HPV-seronegative women\(^1\)

Viscidi R, et al. 2004

10,049 women Guanacaste, Costa Rica NCI Study

![Graph showing the rate of type-specific HPV infections](Viscidi_R,_et_al._2004)
Summary: HPV immunology

• Immune response to HPV is complex and incompletely understood
• Natural infection -> low antibody levels; does not reliably protect against future infection
• High levels of antibodies produced in response to HPV vaccination neutralize virus and prevent entry into cells
# Cervical Cancer Screening Program

<table>
<thead>
<tr>
<th><strong>PROGRAM OBJECTIVE</strong></th>
<th>To reduce cervical cancer incidence and mortality by finding pre-cancers and cancer at an early stage through routine screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TARGET POPULATION</strong></td>
<td>Women age 25-69 years</td>
</tr>
<tr>
<td><strong>SCREENING TEST</strong></td>
<td>Cytology</td>
</tr>
<tr>
<td></td>
<td><em>Pap test is provided by health care providers across BC; specimens sent to central lab in Vancouver for processing and reporting</em></td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
<td>Lab sends results to health care provider, lab results are available to patients through myehealth</td>
</tr>
<tr>
<td></td>
<td>Program mails notice to patients recommended for colposcopy, cytology in 6 months or unsatisfactory results needing repeat</td>
</tr>
<tr>
<td><strong>REMINDER</strong></td>
<td>Mailed notice to patient 8 weeks before being due, then at due date if no result received</td>
</tr>
<tr>
<td></td>
<td>Notice sent to provider when patient is 12 weeks overdue</td>
</tr>
</tbody>
</table>
Poll question

• What age do we start cervical cancer screening in BC?

1. At the onset of sexual activity irrespective of age
2. Age 21
3. Age 25
4. Age 30
# Screening Policy Comparison

<table>
<thead>
<tr>
<th>CERVICAL CANCER SCREENING</th>
<th>POLICY SINCE JUNE 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>START AGE</td>
<td>Age 25</td>
</tr>
<tr>
<td>CERVICAL CANCER SCREENING INTERVAL</td>
<td>3 years</td>
</tr>
<tr>
<td>CERVICAL CANCER SCREENING STOP AGE</td>
<td>Age 69</td>
</tr>
<tr>
<td>TRIAGE OF POSITIVE RESULTS</td>
<td>Refer to colposcopy if ASC-H, AGC or HSIL+</td>
</tr>
<tr>
<td></td>
<td>Repeat every 6 months for 1 year if ASCUS or LSIL</td>
</tr>
</tbody>
</table>
Screening Policy

• Why is it important for patients to repeat their pap test every 3 years?
Poll question

- What is the sensitivity of a pap test (ie. What percentage of patients with cervical dysplasia will have an abnormal pap test)
  - 1. 95%
  - 2. 75%
  - 3. 55%
  - 4. 35%
Screening Policy

• Why is it important to for patients to repeating their pap test every 3 years

  **Sensitivity of a pap test – 55%**
  Specificity of a pap test – 95%
## BC’s Cervical Cancer Screening Policy

<table>
<thead>
<tr>
<th></th>
<th>RECOMMENDATION</th>
<th>SCREENING INTERVAL</th>
<th>BALANCE OF HARMS &amp; BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AVERAGE RISK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 25-69</td>
<td>Screen</td>
<td>3 years</td>
<td>Benefits outweigh harms</td>
</tr>
<tr>
<td>Never had sexual contact*</td>
<td>Do not screen</td>
<td>N/A</td>
<td>Harms outweigh benefits</td>
</tr>
<tr>
<td>Received the HPV Vaccine</td>
<td>Screen</td>
<td>3 years</td>
<td>Benefits outweigh harms</td>
</tr>
<tr>
<td>In same sex relationships</td>
<td>Screen</td>
<td>3 years</td>
<td>Benefits outweigh harms</td>
</tr>
<tr>
<td>Transgender with a cervix</td>
<td>Screen</td>
<td>3 years</td>
<td>Benefits outweigh harms</td>
</tr>
<tr>
<td>After TOTAL hysterectomy</td>
<td>Do not screen</td>
<td>N/A</td>
<td>Harms outweigh benefits</td>
</tr>
<tr>
<td>Age &lt;25</td>
<td>Do not screen</td>
<td>N/A</td>
<td>Harms outweigh benefits</td>
</tr>
<tr>
<td>Age &gt;69</td>
<td>Do not screen</td>
<td>N/A</td>
<td>Harms outweigh benefits</td>
</tr>
<tr>
<td><strong>HIGHER THAN AVERAGE RISK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunocompromised women</td>
<td>Screen</td>
<td>Annual</td>
<td>Benefits outweigh harms</td>
</tr>
</tbody>
</table>
| History of pre-cancerous lesions or cervical cancer | Screen | Annual  
Until 25 years after diagnosis with at least 5 negative cytology in last 10 years | Benefits outweigh harms     |

*Sexual contact includes intercourse as well as digital or oral sexual contact involving the genital area of a partner of either gender*
Age to Start Screening

Evidence suggests four well founded reasons for initiating screening at age 25:

• Invasive cervical cancers in women younger than age 25 are rare;
• Screening is relatively ineffective in younger women;
• Women under 25 have a higher prevalence of lesions that often clear without treatment;
• There are risks associated with unnecessary follow-up and treatments, many of which may have long-term consequences for pregnancy or cause undue anxiety and distress.
Age to Start Screening

Cancers in women younger than age 25 are rare
Age to Start Screening

Invasive cervical cancers in women younger than age 25 are rare

Cases of and deaths from cervical cancer, with associated incidence and mortality (rates per 100 000 women), among Canadian women (2002–2006) by age group.
Age to Start Screening

Women under 25 have a higher prevalence of lesions that clear without treatment

Regression of Cervical Intraepithelial Neoplasia 2 in Young Women

Cancer incidence (Australia)  
Women 20 to 24

## Age to Start Screening
There are risks associated with unnecessary follow-up and treatments

<table>
<thead>
<tr>
<th>Outcome (# studies)</th>
<th>Cases</th>
<th>Controls</th>
<th>Pooled relative risk (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd trimester loss (4)</td>
<td>1.6%</td>
<td>0.4%</td>
<td>2.60 (1.45-4.67)</td>
</tr>
<tr>
<td>Preterm birth &lt; 34/40 (5)</td>
<td>2.9%</td>
<td>2.3%</td>
<td>2.21 (1.33-3.67)</td>
</tr>
<tr>
<td>PPROM (6)</td>
<td>5.1%</td>
<td>2.5%</td>
<td>2.37 (1.64-3.44)</td>
</tr>
<tr>
<td>Preterm birth &lt;37/40 vs. no dysplasia (15)</td>
<td>8.6%</td>
<td>4.6%</td>
<td>1.86 (1.58-2.21)</td>
</tr>
<tr>
<td>vs. dysplasia untreated (4)</td>
<td>10.0%</td>
<td>7.2%</td>
<td>1.08 (0.88-1.33)</td>
</tr>
</tbody>
</table>

Kyrgiou et al, Cochrane Database Syst Rev 2015 Sep 29:9
Conner et al, Obstet Gynecol 2014;123(4):752-61
## Age to Start Screening

There are risks associated with unnecessary follow-up and treatments

### LEEP and preterm births

<table>
<thead>
<tr>
<th>Depth of LEEP</th>
<th>% preterm births</th>
<th>Odds ratio for preterm birth (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12 mm</td>
<td>5.3%</td>
<td>1.00</td>
</tr>
<tr>
<td>13-15</td>
<td>4.4%</td>
<td>0.82 (0.55-1.23)</td>
</tr>
<tr>
<td>16-19</td>
<td>7.2%</td>
<td>1.44 (0.96-2.16)</td>
</tr>
<tr>
<td>&gt;20</td>
<td>9.0%</td>
<td>1.76 (1.21-2.55)</td>
</tr>
<tr>
<td>&lt;10 vs. &gt;10 mm</td>
<td></td>
<td>2.61 (1.28-5.34)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of LEEPs</th>
<th>2 vs. none</th>
<th>11.4%</th>
<th>3.78 (2.58-5.53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 vs. 1</td>
<td></td>
<td></td>
<td>1.88 (1.27-2.78)</td>
</tr>
</tbody>
</table>

Noehr et al, Obstet Gynecol 2009;114(6):1232-8
Kyrgiou et al, Lancet 2006;367(9509):489-498
Four weeks later her Pap smear result returns to your office. The Pap reports a "high grade squamous intra-epithelial neoplasia (HSIL)."

Mrs. Smith is "on the line" waiting for the results of her test. You explain the result and she has a number of questions:

- "Is this common?"
- "Could there be a mistake in the Pap smear report?"
- Why don't we just repeat the Pap smear?
- "What causes this?"
- "What if I quit smoking would it go away?"
What happens after an abnormal Pap Test?

Table 4: Positive Predictive Value of Cytology Result

<table>
<thead>
<tr>
<th>Cytology Result</th>
<th>PPV for CIN 2, CIN3 or Cancer</th>
<th>PPV for CIN 3 or Cancer</th>
<th>PPV for Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCUS</td>
<td>20.20%</td>
<td>9.02%</td>
<td>0.08%</td>
</tr>
<tr>
<td>LSIL</td>
<td>27.25%</td>
<td>11.99%</td>
<td>0.05%</td>
</tr>
<tr>
<td>ASC-H</td>
<td>53.99%</td>
<td>35.19%</td>
<td>0.90%</td>
</tr>
<tr>
<td>HSIL (moderate dysplasia)</td>
<td>67.00%</td>
<td>39.16%</td>
<td>0.42%</td>
</tr>
<tr>
<td>HSIL (severe dysplasia)</td>
<td>88.36%</td>
<td>75.35%</td>
<td>4.18%</td>
</tr>
<tr>
<td>AGC-NOS</td>
<td>18.60%</td>
<td>14.14%</td>
<td>2.42%</td>
</tr>
<tr>
<td>AGC-FN</td>
<td>70.13%</td>
<td>66.23%</td>
<td>23.12%</td>
</tr>
<tr>
<td>AIS</td>
<td>81.82%</td>
<td>81.82%</td>
<td>36.36%</td>
</tr>
<tr>
<td>Squamous cell carcinoma</td>
<td>90.79%</td>
<td>90.79%</td>
<td>34.21%</td>
</tr>
<tr>
<td>Adenocarcinoma</td>
<td>67.86%</td>
<td>67.86%</td>
<td>42.86%</td>
</tr>
</tbody>
</table>
What happens after an abnormal Pap Test?

COLPOSCOPY:
- Microscopic Visualization and Directed Biopsies
CIN1
CIN2
CIN3
Management of CIN2+

- LEEP Excision

http://www.bccancer.bc.ca/screening/cervix/results/leep
Pap Smear, Colpo and LEEP = Secondary Prevention

What if we miss this opportunity and Exam or Colposcopy Shows Cancer
CERVICAL CANCER

• Cancer of the uterine cervix is the 13th most common cancer in Canadian women, with an estimated 1500 new diagnoses per year

• 99.7% of cervical cancer is caused by the persistence of HR-HPV
Types of cervical cancer

- There are two main types of cervical cancer
  - squamous cell carcinomas (70%)
  - adenocarcinomas (25%)

Staging of cervix cancer

<table>
<thead>
<tr>
<th>Stage</th>
<th>0</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of tumor</td>
<td>Carcinoma in-situ</td>
<td>Confined to cervix</td>
<td>Disease beyond cervix but not to pelvic wall or lower 1/3 of vagina</td>
<td>Disease to pelvic wall or lower 1/3 vagina</td>
<td>Invades bladder rectum or metastasis</td>
</tr>
<tr>
<td>5-year survival</td>
<td>100%</td>
<td>85%</td>
<td>65%</td>
<td>35%</td>
<td>7%</td>
</tr>
<tr>
<td>Stage at presentation</td>
<td>47%</td>
<td>28%</td>
<td>21%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>


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Management of Cervical Cancer

Primary Radical Surgery
+- adjuvant ct/RT

Primary Radical Ct/Radiation
Poll Question

• Patient X has stage 1B2 SCC cervix (2cm, no extension beyond the cervix). Which treatment is associated with a higher chance of cure
  
• 1. Surgery
• 2. Radiation
Randomised study of radical surgery versus radiotherapy for stage Ib–IIa cervical cancer

F Landoni, A Maneo, A Colombo, F Placa, R Milani, P Perego, G Favini, L Ferri, C Mangioni

Affiliations + expand

PMID: 9284774 DOI: 10.1016/S0140-6736(97)02250-2

Stromal invasion >=3mm and tumor less than 4cm in size
Randomised study of radical surgery versus radiotherapy for stage Ib–IIa cervical cancer

F Landoni, A Maneo, A Colombo, F Placa, R Milani, P Perego, G Favini, L Ferri, C Mangioni

Affiliations + expand
PMID: 9284774 DOI: 10.1016/S0140-6736(97)02250-2

<table>
<thead>
<tr>
<th></th>
<th>Surgery only</th>
<th>Surgery plus radiotherapy</th>
<th>Total</th>
<th>Radiotherapy group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤4 cm</td>
<td>&gt;4 cm</td>
<td>≤4 cm</td>
<td>&gt;4 cm</td>
</tr>
<tr>
<td>Number of patients</td>
<td>53</td>
<td>9</td>
<td>62</td>
<td>46</td>
</tr>
<tr>
<td>Relapses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvic</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Distant</td>
<td>3</td>
<td>.</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Morbidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 2–3†</td>
<td>16</td>
<td>3</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Short-term</td>
<td>10</td>
<td>.</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Long-term</td>
<td>15</td>
<td>.</td>
<td>31</td>
<td>29</td>
</tr>
</tbody>
</table>

*Parentheses show number of patients who actually received this treatment instead of intention to treat. †% calculated for number of patients who actually received treatment.

Table 3: Relapses and morbidity
Investigations

• MRI looks for:
  – Depth of stromal invasion
  – Tumor diameter
  – Parametrial extension
  – Vaginal extension
  – Nodal involvement
Investigations

• PET looks for:
  – Distant metastasis
  – Nodal involvement
Surgery for Stage 1 Cervical Cancer
Radical Hysterectomy and Sentinel Node Biopsy
Radiation for Stage 1b2 + Cervical Cancer
How Can You Prevent Cervical Cancer

• Screening effectiveness depends on:
  – Women’s participation
  – Sample quality
  – Adequate management and treatment of abnormal results
  – Laboratory performance
Screening Rates

% of Women Aged 25-69 Participating in Cervical Screening Every Three Years

- 2014/15 - 2017/18: 67.2%
- 2015/16 - 2018/19: 66.5%
- 2016/17 - 2019/20: 64.9%
- 2017/18 - 2020/21: 61.9%
- 2018/19 - 2021/22: 60.0%

Target: 70%
42-Month Retention Rate by Age Group Over Time, 2011 – 2015
How can I fight cervical cancer?

• Identify eligible women for screening
• Look for people in your practice less likely to participate in screening
  – New immigrants
  – South East Asian and Chinese populations
  – First Nation, Inuit and Metis people
  – Trans, gender diverse and non-binary people
  – People with a low income
  – People who do not speak the language that the service is being provided in
How can I fight cervical cancer?

• Obtain high quality smears
  • SINGLE slide
  • Cytobrush! – think glandular cells (Adenoca)
  • LABEL the slide in PENCIL
    • NAME and DOB
    • 2,000 smears per day!!!
  • Use cytospray IMMEDIATELY
    • 10 seconds makes a difference
    • By 1 minute – largely air dried
How can I fight cervical cancer?

- Obtain high quality smears
How can I fight cervical cancer?

• Support people to access a female provider when needed
• Let people know that if follow-up is needed they will be contacted for an appointment and will receive a notice in the mail
• Ensure referrals have gone on for those recommended for colposcopy (notice of referral from BC Cancer)
How can I fight cervical cancer?

Encourage Retention:
• Culturally safe care
• Trauma informed care
• Non binary approach to gender identity and health
  – Transgender men 37% less likely to be UTD with pap screening compared to cisgender women

Address Risk Factors:
• Encourage smoking cessation
• Encourage and provide HPV vaccination
Screening Challenges in B.C.

• 10% of eligible women have NEVER had a Pap smear
• >20% of women have had inadequate screening
• >50% of women with cancer had inadequate screening
Screening Challenges in B.C.

• Poorly screened women
  – More advanced disease
  – Higher mortality

• Rate of cervical cancer is up to 4-6 times higher in First Nations women
Cervical cancer is almost entirely preventable through:

1) Primary Prevention (Vaccination):
   - HPV vaccination is ideally given to people before they become sexually active and are exposed to HPV
   - HPV vaccine offers the best immune response when given to those under the age of 15, but still effective if given later
   - Recommended post treatment for cervical dysplasia to prevent recurrence
   - It’s never too late to receive the vaccine

2) Secondary Prevention (Screening):
   - Detecting and treating pre-cancer before it becomes invasive
The strongest statistical relationship ever identified in cancer epidemiology
Is not just cervical cancer.

**CDC: Top HPV-Associated Cancer Is Now Oropharyngeal**

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Average Annual Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical</td>
<td>-1.6</td>
</tr>
<tr>
<td>Vaginal</td>
<td>-0.6</td>
</tr>
<tr>
<td>Oropharyngeal in men</td>
<td>2.7</td>
</tr>
<tr>
<td>Oropharyngeal in women</td>
<td>0.8</td>
</tr>
<tr>
<td>Anal in men</td>
<td>2.1</td>
</tr>
<tr>
<td>Anal in women</td>
<td>2.9</td>
</tr>
<tr>
<td>Vulvar</td>
<td>1.3</td>
</tr>
</tbody>
</table>

MMWR Morb Mortal Wkly Rep. 2018;67:918-924
Healthcare Professional’s Recommendation

Communication
Explaining the need for immunization
- Clearly conveying the risks
- Strong physician/provider recommendation

Recommendation is critical

- Reinforce key points about each vaccine
- Discuss vaccine safety
- Address the risks encountered by unvaccinated people

2. PHAC 2006 Canadian Adult Immunization Coverage Survey.
• Patient brochures in multiple languages (English, Punjabi, Chinese)
  – Is Cervical Cancer Screening Right for You?
  – Abnormal Cervical Cancer Screening Result
Resources

- “After Your Cervical Cancer Screening” tear-off pad

**After Your Cervical Cancer Screening What Happens Next?**

Your results will be sent to your doctor within four weeks.

**If Your Results Are Normal**
You should be tested again in three years unless your doctor tells you otherwise.

**If Your Results Are Abnormal**

Don't be alarmed. Abnormal cervical cancer screening results are common and do not mean you have cancer:

- An abnormal result means that cells have been found on your cervix that do not look normal.
- It is important to discuss the result with your doctor and attend all follow-up appointments for tests or treatment.

www.screeningbc.ca/cervix

**After Your Cervical Cancer Screening What You Should Know**

- Women ages 25-69 should have a cervical cancer screening (Pap test) every three years.
- Screening can find abnormal cells in the cervix, which, if treated early, can stop the cancer from developing.
- By having a cervical cancer screening every three years you can reduce your risk of cervical cancer by 70%.

In addition to screening every three years, you should look out for any unusual changes to your body. Check for any abnormal bleeding, persistent discharge or pain after sex. If you notice anything unusual, talk to your doctor.
Resources

- “What You Should Know” clinic poster

- “Screening for Cervical Cancer: Pap Test” animated video
  - Available in multiple languages (English, Cantonese, Mandarin and Punjabi)
If you have recently had an abnormal Pap test result, your health care provider may recommend a follow up colposcopy appointment.

What does an abnormal Pap test result mean?

An abnormal cervical cancer screening (Pap test) result means that cells have been found on your cervix that do not look normal. Abnormal results are common and do not mean that you have cancer or precancerous cells.

Abnormal results are common and do not mean that you have cancer or precancerous cells. Abnormal cervical cancer screening (Pap test) results mean that some cells on your cervix do not appear normal and require more testing.

What is colposcopy?

Colposcopy is a procedure used to examine your cervix and vagina. The doctor will use a special instrument called a colposcope to look for abnormalities. During the colposcopy, the doctor may take a biopsy of any areas that appear abnormal.

Colposcopy is a procedure used to examine your cervix and vagina for any abnormalities using a special instrument called a colposcope. During the colposcopy, the doctor may take a biopsy of any areas that appear abnormal.

Common Questions

What are the risks of having a colposcopy?

The risk of complications from a colposcopy is small, however, a biopsy can cause an infection or bleeding in rare instances.

Is the colposcopy procedure painful?

The colposcopy itself should not be painful, but it may be uncomfortable. If a biopsy is taken during the procedure, you may experience slight pricking or burning sensations.

What happens after the colposcopy?

There may be some spotting or a bloody discharge which should stop within the first 24-48 hours. A tampon can be used to protect from spotting but ensure it is removed 5-7 days after insertion.

What happens during my colposcopy?

1. The colposcopy exam will take less than 10 minutes to complete and will begin much like a Pap test.
2. The exam starts off just like a Pap test: a doctor (usually a gynaecologist or specially-trained general practitioner) will use a “speculum” to gently spread the vaginal walls to get a better look at the cervix.
3. The doctor will use vinegar or iodine on your cervix to make any abnormalities more visible. The doctor will then perform a biopsy (taking a small tissue sample) for testing.
4. A gynaecologist or specially-trained general practitioner will insert a speculum to gently spread the vaginal walls so as to get a better look at your cervix.
5. To make any abnormalities more visible, the doctor will place a small amount of vinegar or iodine on your cervix.
6. The doctor will then take a tissue sample, also known as a biopsy, from your cervix for additional testing.

Understanding the results of your colposcopy

My colposcopy results were abnormal, showing high-grade dysplasia (CIN2, CIN3). What should I do next?

High-grade dysplasia can become cancerous if left untreated. Your doctor will discuss the option for a Loop Electrosurgical Excision Procedure (LEEP), which can be performed in the colposcopy clinic.

If not treated, over time, high-grade dysplasia may become cancerous. The most common treatment is the Loop Electrosurgical Excision Procedure (LEEP). The LEEP can be done in the colposcopy clinic.

screeningbc.ca/cervix
Colposcopy

If you have recently had an abnormal Pap test result, your health care provider may recommend a follow up colposcopy appointment.

Colposcopy is a procedure used to examine your cervix and vagina.

Information for patients to be integrated into Screening BC Cervix Screening section.
For more information...

Visit [www.screeningbc.ca](http://www.screeningbc.ca)
Resources – Provider and Patient

- [http://www.bccancer.bc.ca/screening/health-professionals/cervix](http://www.bccancer.bc.ca/screening/health-professionals/cervix)
- [http://www.bccancer.bc.ca/screening/health-professionals/cervix/colposcopy#Resources](http://www.bccancer.bc.ca/screening/health-professionals/cervix/colposcopy#Resources)
- HPV FOCAL FAQ
- [www.sexualityandu.ca](http://www.sexualityandu.ca)
- [www.hpvinfo.ca](http://www.hpvinfo.ca)
- [http://immunizebc.ca/diseases-vaccinations/hpv](http://immunizebc.ca/diseases-vaccinations/hpv)
- NACI Guidelines:
THANK YOU!!

Questions?

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## BC’s Cervical Cancer Screening Policy

Higher than Average Risk - NEW Implemented June 2016  

### CATEGORIES

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>SCREENING RECOMMENDATION</th>
<th>RETURN TO NORMAL SCREENING AFTER</th>
<th>SCREENING STOP AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunocompromised individuals:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Including those with human immunodeficiency virus (HIV/AIDS), lymphoproliferative disorders, organ transplants, and those under long-term immunosuppression therapy</td>
<td>Annual screening</td>
<td>Never</td>
<td>The benefits of screening beyond age 69 must be weighed in the context of the overall health of the patient</td>
</tr>
<tr>
<td>Previous cytological diagnosis of HSIL+ (or worse) or histological diagnosis of CIN 2+:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CIN 2+ (not including AIS): treated (cone, LEEP, ablative therapy), HPV negative, discharged from colposcopy</td>
<td>Follow average risk guidelines</td>
<td>N/A</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• CIN 2+ (not including AIS): treated (cone, LEEP, ablative therapy), HPV positive, discharged from colposcopy</td>
<td>Annual screening</td>
<td>At least 3 negative Paps in last 5 years</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• CIN 2+ (not including AIS): untreated (regressed and discharged)</td>
<td>Annual screening</td>
<td>At least 3 negative Paps in last 5 years</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• CIN 2+ (includes AIS): untreated and lost to follow-up</td>
<td>Refer to colposcopy for assessment</td>
<td>N/A</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• Adenocarcinoma in situ (AIS) treated with LEEP or cone biopsy and discharged from colposcopy</td>
<td>Annual screening</td>
<td>25 years after the most recent histological evidence of AIS</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• Invasive Cervical Cancer and Annual screening discharged from colposcopy or the BC Cancer Agency</td>
<td>Annual screening</td>
<td>At least 3 negative Paps in last 5 years</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
</tbody>
</table>

* significant abnormality is anything more severe than ASCUS/LSIL
### BC’s Cervical Cancer Screening Policy

**Higher than Average Risk - NEW Implemented June 2016**


#### Categories

<table>
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<tr>
<th>CATEGORIES</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Previous cytological diagnosis of HSIL + (or worse):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• HSIL: CIN 1 or negative at initial colposcopy, no subsequent biopsy or follow-up</td>
<td>Refer to colposcopy for assessment</td>
<td>N/A</td>
<td>Age 69 with at least 3 Paps with no significant abnormality* in last 10 years</td>
</tr>
<tr>
<td>• HSIL: CIN 1 or negative at colposcopy, discharged from colposcopy</td>
<td>Annual screening</td>
<td>At least 3 negative Paps in last 5 years</td>
<td>Age 69 with at least 3 Paps with no significant abnormality* in last 10 years</td>
</tr>
<tr>
<td>• Adenocarcinoma in situ (AIS) cytological diagnosis. CIN 1 or negative at colposcopy, discharged from colposcopy.</td>
<td>Annual screening</td>
<td>25 years after the most recent cytological evidence of AIS</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td><strong>Total hysterectomy (with the cervix removed) and a history of:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Invasive cervical cancer</td>
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<tr>
<td>• Histologically proven CIN 2+ (including AIS) at colposcopy or hysterectomy</td>
<td>Vaginal vault smear annually</td>
<td>At least 3 negative Paps in last 5 years</td>
<td>Age 69 or 25 years since most recent diagnosis with at least 3 Paps with no significant abnormality* in last 10 years – whichever occurs later</td>
</tr>
<tr>
<td>• Histologically proven VAIN 2+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cytological diagnosis of HSIL + (includes AIS): CIN 1 or negative at hysterectomy</td>
<td>Vaginal vault smear annually</td>
<td>N/A</td>
<td>At least 3 negative Paps in last 5 years</td>
</tr>
<tr>
<td><strong>High risk behaviors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Individuals who participate in high risk behaviors</td>
<td>Follow average risk guidelines</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*significant abnormality is anything more severe than ASCUS/LSIL