Cervical Cancer Screening Lab (CCSL) – Cervix Screening Test

About the Cervical Cancer Screening Laboratory

The Cervical Cancer Screening Laboratory (CCSL) is funded by the Provincial Health Services Authority (PHSA) to provide cervical cancer screening testing to all eligible women in British Columbia. CCSL is accredited by the College of American Pathologists and by the Diagnostic Accreditation Program of British Columbia.

Current Cervix Cancer Screening Guidelines

Cervix Cancer Screening Guidelines are developed by the BC Cancer Gynecologic tumour group and approved by the BC Ministry of Health. Current guidelines can be found on the BC Cancer website at www.screeningbc.ca.

Provider registration

Cervical cancer screening testing can be performed by

1) Physicians currently registered by the College of Physicians of British Columbia
2) Registered nurses and nurse practitioners: Registered nurses who carry out pelvic exams or cervical cancer screening must possess the competencies established by the Provincial Health Services Authority (PHSA) and follow decision support tools established by PHSA as indicated in the Scope of Practice document: https://www.bccnp.ca/Standards/RN_NP/StandardResources/RN_ScopeofPractice.pdf

To request registration as a new provider, please contact the laboratory at CCSLClientServices@phsa.ca
Specimen collection

When possible, the sample should be obtained at mid-cycle as applicable.

1) Ensure direct visualization of the cervix.
2) Gently insert a sterile, pre-warmed speculum to visualize cervix. A small (tiny) amount of lubricant may be used on the lower bill of the speculum for post-menopausal women.
3) Gently cleanse the cervix with cotton pledget if obscured with discharge or secretions.
4) Identify extent of transformation zone and probable squamocolumnar junction.

Variation in Cervical Transformation Zone

A major cause of a false negative test is failure to sample the transformation zone (squamocolumnar junction).

The transformation zone is the region lying between the columnar epithelium of the endocervix and the mature squamous epithelium of the ectocervix. It is here that carcinogens act upon the squamous metaplastic cells of the transformation zone to cause squamous dysplasia and squamous carcinoma.

The location of the squamocolumnar junction is dependent on the woman’s age, parity, hormonal status and any previous surgery. Generally, during the reproductive years, the transformation zone lies on the ectocervix. Post-menopausally, it recedes within the endocervix.

If the squamocolumnar junction is visible, sample with a spatula.
If not visible (i.e. in the canal), first use a spatula for the exocervical specimen. Then use a cytobrush or the elongated end of the spatula.

a) Reproductive age group, nulligravida; squamocolumnar junction often visible on ectocervix lateral to os, which is small, round or oval. Sample with a spatula.

b) Reproductive age group, parous; squamocolumnar junction often at or near external os. Sample with a spatula.

c) Post menopause; Squamocolumnar junction often in canal. Cervical os often smaller. Sample with the elongated end of a spatula and cytobrush.
**Single Slide Method**

Please use the single slide method for the Pap sample. Multiple slides from one woman are not necessary or cost effective. Women with a double cervix are the obvious exception. If two sites are sampled (i.e. cervix and endocervix), they can be applied side-by-side on the same side of a single slide.

**Obtaining the sample**

*If Squamocolumnar Junction is Visible*

- Rotate a spatula 360° once to obtain a single sample.
- Smear the sample onto the labeled slide.
- Fix the sample immediately (before it is air-dried) using a cytology spray fixative. Hold the fixative 15-20 cm (6 to 8 inches) away from the slide and evenly spray the slide by depressing the plunger 2 or 3 times. (See Step 2 below).

*If Squamocolumnar Junction is Not Visible*

- First use a spatula for the exocervical specimen.
- Then use a cytobrush or the elongated end of the spatula for the endocervical sample. Rotate cytobrush 180° only.
- Place both specimens side-by-side lengthwise on a single slide and fix immediately.

**Cautions**

- Use of the cytobrush is not recommended in pregnant women.
- If a clinically suspicious lesion is seen, biopsy immediately.
- If the patient is menstruating or infection is present reschedule the exam.
- Irregular bleeding may be a symptom of gynecological malignancy. Pelvic examination with lower genital tract and appropriate investigation is indicated.

**Slide Labeling is Mandatory**

Use a pencil to print the woman’s date of birth and surname on the frosted end of the slide. Include at least the first seven letters if the surname has more than 7 letters. The name and DOB must be easy to read, written correctly and match the name and DOB on the requisition. DOB (dd/mm/yyyy) must match DOB registered with the Medical Service Plan.

A Pap sample will be rejected when surname and DOB are not written on the slide, or when there is a discrepancy in the DOB, or the spelling of the surname.
Laboratory Requisition

To ensure the woman’s demographics are up-to-date, the laboratory requires:

- Current surname, ensuring correct spelling and enter first and middle names, if applicable. The name on the Requisition Form and the name on the slide must match exactly.
- Personal Health Number (PHN).
- Date of birth (day/month/year) on the Requisition Form and on the slide must match exactly.
- Sex: options are Female, Transmale, Other. Please note gender other than female will be reflected on the report as ‘U’ (unknown) due to limitations of the laboratory information system.

To ensure optimum evaluation of specimens, the laboratory requires:

- Sample date
- Date of the patient’s last menstrual period (LMP).
- Reason for test e.g. asymptomatic screening, clinical abnormality, follow-up.
- Relevant clinical information e.g., hormonal or contraceptive status, immunocompromised status, medications.
- Relevant past history, such as the reason for total hysterectomy procedures or previous histologically proven cervical abnormalities. This information helps determine appropriate follow-up recommendations.
- Please print clinical comments clearly on requisitions to ensure they are legible.

To ensure accurate report delivery, the laboratory requires:

- Practitioner’s full address, including postal code and telephone number.
- Practitioner’s MSC Number.
- Practitioner or clinic responsible for follow up, if different from above.

Mandatory fields …
Prevent delays or rejection of samples by ensuring all mandatory sections in red on the requisition are completed.

Did you know …
Approximately 1% of submitted requisitions to CCSL do not have sufficient ordering provider information in order to deliver a test result. That is roughly 3,500 per year!
Specimen Transportation

To ensure that the slides arrive at the Cervical Cancer Screening Laboratory:

- The labeled slides, which must have a minimum of the first 7 letters of the surnames and the dates of birth written in pencil on the frosted end of each slide, should be placed in the mailing containers provided.

- The completed CCSL requisition should be folded, wrapped around each slide-mailing container and secured with an elastic band. There is no need to apply a patient identification label to the mailing container.

- Pap samples requiring expedited processing due to clinical concerns should be marked URGENT on the sample’s outer packaging using a red marker in addition to writing URGENT on the requisition.

- The slide and requisition should be sent by courier or Canada Post addressed to the laboratory (Slides may be collected and sent in weekly batches):

  Cervical Cancer Screening Laboratory  
  c/o Central Processing and Receiving  
  655 West 12th Avenue  
  Vancouver, BC V5Z 4R4  
  Phone: 1-877-747-2522 (1-877-PHSA LAB)

Unacceptable Samples and Sample Rejection

Cervical Cancer Screening samples will be rejected for reporting for the following reasons:

1) Samples that lack the appropriate labelling of patient identifiers or were labelled with discrepant identifiers
2) Requisition forms lacking patient identifiers or discrepant information
3) Samples not accompanied by an appropriate requisition form
4) Samples that exceeded a reasonable time period between the sampling date and the sample received date
5) Broken slides that cannot be reconstructed or have insufficient sample material

Health care providers are advised when a new sample needs to be collected.

Criteria for an adequate cervical cancer screening test

The presence of endocervical cells, metaplastic cells, and squamous cells suggest that the transformation zone has been sampled, which is generally considered optimal. Cervical smears without a transformation zone component show abnormalities at a similar rate of smears without this component, and will still be reported as adequate for interpretation.

Smears are regarded as unsatisfactory if:

- 75% or more of the test is obscured by inflammatory exudate or blood or
- Smear too thick with 75% or more cellular material overlap.
• Too few cells are present on the test (generally less than 8,000 well-preserved, well-visualized squamous cells)
• Sample consists mainly of endocervical glandular cells (sample mainly from the endocervical canal and not representative of the transformation zone)

Reporting of Results

Cervical Cancer Screening results will be reported through the laboratory information system using the Excelleris distribution system. Reporting directly to Electronic Medical Records is preferred. Urgent results and those showing features diagnostic or suspicious for invasive carcinoma are faxed in addition to the usual distribution channel.

The healthcare provider identified as responsible for follow up will be considered as the primary provider. Reports will be sent to all ‘copy to’ providers, provided they have a registered address in our system. If the provider has multiple addresses in our system and have not indicated which specific address should be used, the default address will be used. If no provider was entered on the requisition, the patient will be informed directly by registered letter, using the current address identified in the medical services plan patient record. This process does not negate the primary physician’s responsibility supply accurate contact details.

Reports will also be routed to the My eHealth portal for those patients who are registered with this service. For normal results, the patient will receive a verbatim copy of the report. For abnormal results the patient will be instructed to contact her provider.

Where supported by the EMR vendor, reports will be flagged for specific review by healthcare provider in the following way:

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Recommendation</th>
<th>Flagged</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-H, AGC, HSIL+</td>
<td>Colposcopy</td>
<td>Y</td>
</tr>
<tr>
<td>ASCUS, LSIL</td>
<td>6m repeat or Colposcopy</td>
<td>Y</td>
</tr>
<tr>
<td>NILM</td>
<td>6m repeat or Colposcopy</td>
<td>N</td>
</tr>
<tr>
<td>NILM, endometrial cells in a woman &gt;45 years</td>
<td>6m, 12m, or 36m</td>
<td>N</td>
</tr>
</tbody>
</table>

Provider Responsibility for Follow-up

It is the provider’s responsibility to ensure that a follow-up pathway for recall or follow up to specialist as appropriate is in place.
### Supplies and Equipment

<table>
<thead>
<tr>
<th>Equipment and supplies</th>
<th>Order from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination table</td>
<td>Medical Supplier</td>
</tr>
<tr>
<td>Good illumination</td>
<td></td>
</tr>
<tr>
<td>Bi-valve speculum (various sizes)</td>
<td></td>
</tr>
<tr>
<td>Endocervical brush</td>
<td></td>
</tr>
<tr>
<td>Extended-tip spatula</td>
<td>Cervical Cancer Screening Laboratory (supplied free of charge)</td>
</tr>
<tr>
<td>Glass microscope slide with frosted end</td>
<td></td>
</tr>
<tr>
<td>Container for transporting slide to lab</td>
<td></td>
</tr>
<tr>
<td>Requisition form</td>
<td></td>
</tr>
<tr>
<td>Lead pencil for labeling slide</td>
<td>Stationary supplier</td>
</tr>
</tbody>
</table>

- Download the supply order form: [http://www.bccancer.bc.ca/health-professionals/clinical-resources/laboratory-services/cervical-cancer-screening](http://www.bccancer.bc.ca/health-professionals/clinical-resources/laboratory-services/cervical-cancer-screening)
- Fax order form to **604-707-2606**

A copy of the requisition can also be downloaded here

---

### Contact us:

**Phone:** 1-877-747-2522 (1-877-PHSA LAB)