BC Cancer Agency
CARE & RESEARCH

An agency of the Provincial Health Services Authority

CERVICAL CANCER SCREENING PROGRAM

2004 ANNUAL REPORT

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CERVICAL CANCER SCREENING PROGRAM

CCSP 2004 ANNUAL REPORT
Evaluation Form

An Annual Report is a document that should impart the results, activities and philosophies of an organization to its members, affiliates and supporters. The information contained therein should be concise, easily understood, clearly laid out, attractive and informative.

What is your opinion of the 2004 Annual Report?

1. INSTANT REACTION

   Excellent ☐ Good ☐ Fair ☐ Poor ☐

2. CONTENT INFORMATION

   Excellent ☐ Good ☐ Fair ☐ Poor ☐

3. READABILITY

   Excellent ☐ Good ☐ Fair ☐ Poor ☐

4. LAYOUT OF INFORMATION

   Excellent ☐ Good ☐ Fair ☐ Poor ☐

5. ATTRACTIVENESS OF DESIGN

   Excellent ☐ Good ☐ Fair ☐ Poor ☐

6. What do you feel is the most important information in the Annual Report?

_____

_____

7. What other information would you like to see included in next year's Annual Report?

_____

_____

8. How would you improve the Annual Report?

_____

_____

Please return this form to:

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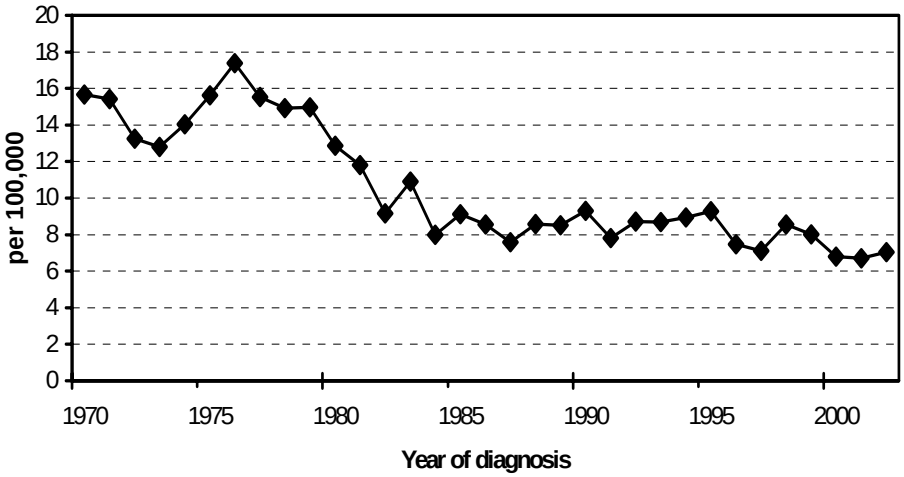
Cervical carcinoma is the 12th most common malignancy diagnosed in women of British Columbia. The incidence rate in BC has declined by over 70% since the introduction of the Cervical Cancer Screening Program (CCSP) in 1960. The age standardized incidence rate averaged around 9 per 100,000 in the mid-1980s, and has decreased further to 7 per 100,000 in the recent years. In 2002, 166 women in BC were diagnosed with invasive carcinoma of the cervix.

Figure 1
Age Standardized Incidence Rate of Invasive Cervical Cancer in BC



* Rates are standardized to the 1991 Canadian population.

The current 30-month screening participation rate is 58%, and is estimated to be 71% after correcting for women with hysterectomy. However, CCSP review of available patient information shows that over 50% of invasive squamous cell carcinoma of the cervix was diagnosed in women who did not have a Pap smear in the last 7 years. This underscores the importance of improving screening participation. An initiative to invite women who have not had a Pap test for 5 or more years, was started in 2004. Obtaining access to women's addresses continues to be the main challenge. It is hoped that by reducing the number of under-screened women, the number of invasive cervical cancers will reduce in time.

Clinical studies have proven that human papilloma virus (HPV) testing will enhance detection of existing cervical carcinoma precursors. HPV testing offers an opportunity to identify those at risk of disease earlier, and to extend the screening interval. The Pan-Canadian Forum on Cervical Screening (Ottawa, November 21-22, 2003) recommended that combined cytology-HPV testing, in primary screening of women age 30-69 be evaluated in the context of an adequate Canadian organized screening program. Proposal for implementation of cytology-HPV co-testing in the CCSP is under development.

The CCSP has conducted a feasibility study to assess the operational implications of using liquid based cytology (LBC) for cervical screening. This study involved 8,700 samples submitted by 99 smear-takers located mainly in urban centers of the province. The final analysis and report has been completed.

The CCSP has implemented several initiatives over the years to promote effective utilization of Pap cervical screening. These activities have reduced over-utilization while increasing the appropriate screening participation. Turnaround time (from the date the smear is received in the laboratory to the date the finalized report is issued) is currently averaging around 22 days, an improvement of 5 days from 2003.

Continuous quality improvement is the key to Program success. The CCSP supports performance improvement through constant cycle of education, evaluation and feedback. Approximately 3% of the total technologist time in 2004 has been devoted to educational and performance support activities.

Lastly, the CCSP would like to acknowledge the retirement of Ms. Marie Kumpa, Chief Technologists, after 33 years of service at the BC Cancer Agency. As the Chief Technologist for the CCSP over the last 2½ years, she was instrumental in the development of the current technologist performance support program. We hope that her retirement in Southern France will be fulfilling. The CCSP would also like to recognize and thank Zohra Mohammed (CCSP Clerk), a long-term employee who retired this year. Their contributions are greatly appreciated.

SCHOOL OF CYTOTECHNOLOGY

Established in 1963, the School of Cytotechnology program at the BC Cancer Agency offers a 23-month training program in Cytotechnology.

Program Director's Comments

Overall, the program is operating well. BCIT decided not to pursue funding for a BCIT-based Cytotechnology program after projections of demand for new technologists were revised downward; a result of training increases in other provinces and CCSP initiatives that lead to decreased Pap smear volume. This decision along with re-accreditation have reaffirmed the school structure and function and allowed school staff to focus on academic and program improvements.

Students

Once again the school has had the good fortune of attracting excellent candidates for our program. The school currently has seven students; three in the second year and four in the first year of the program.

Recent Graduates

Four students graduated in 2004 and passed the national CSMLS Diagnostic Cytology certification examination with above average marks. All four graduates are successfully employed with the Cervical Cancer Screening Program.

School Staff

The school has three full-time instructors and receives teaching, supervision and support from cytology staff of gynecological and diagnostic cytology at the BCCA, the cytology laboratory at St Paul's Hospital, histopathology laboratory at the Royal Columbian Hospital, BCCA pathologists, BCIT instructors and the BCCA histology laboratory. Instructors have taken advantage of continuing education programs offered by the American Society of Cytology (ASC) and American Society of Clinical Pathology (ASCP) teleconferences. Staff attended a CSMLS exam question workshop. One instructor attended Preceptor training courses offered at BCIT and BCC&W hospital.

Program Updates

With a view to 'instructing the instructors' BCCA cytopathologists are holding multihead microscope sessions with school staff on a regular basis. A new preceptor training program is underway to improve guidance and provide support to the important preceptor staff that assist in the training of students. The Royal Columbian Hospital histology experience has been revised and additional training in immunohistochemistry initiated at the BCCA laboratory. The CCSP gynecology training has been increased to three weeks in the second year of the program and an introductory week has been continued in the first year.

Administration/Quality Assurance

Our committees allow regular review of the program and stakeholder evaluation tools allow ongoing critical review of the program with appropriate improvements. Feedback from our students and stakeholders suggests we are doing a reasonable but not perfect job. The program liaison with BCIT has been strengthened with the appointment of Dr. John Emes as the School's BCIT contact. Dr. Emes will also be a member of the School Faculty Liaison committee.

SCHOOL COMMITTEES

Educational Advisory Committee

Dr. Tom Thomson, Chair
Alicia Sabarre
Cori-Ann Greene, St. Paul's Hospital
Dr. James Cupples, Royal Columbian Hospital
Jane Lo
Margaret Bangen
Marianne Kurlak
Zelma Edgar
Current Student
Recent Graduate

Faculty Liaison Committee

Marianne Kurlak, Chair
Alicia Sabarre
Brenda Smith
Cori-Ann Greene, St. Paul's Hospital
Dr. John Emes, BCIT
Kevin Flynn
Zelma Edgar

PROVINCIAL COLPOSCOPY SERVICE

The Provincial Colposcopy Service was developed to act in a complimentary manner to the Provincial Cervical Cancer Screening Program (CCSP). This service currently consists of 24 hospital-based clinics located throughout the province. Their locations and the community gynecologists who staff them are listed in the Appendix.

Colposcopy is a clinical examination method whereby low-powered magnification of the cervix is used to identify those areas that may be responsible for clinical symptoms or for the noted cytological abnormalities. Colposcopy is the pivotal point in the diagnostic triage of a woman who presents an abnormal cervical or vaginal cytology. Once colposcopic abnormalities are identified, small representative biopsies are taken for histological confirmation of the suspected lesion and for correlation with the presenting cytology.

The majority of all diagnostic colposcopic examinations in the province are performed through regional, hospital-based clinics. Individuals who are affiliated with the provincial colposcopy service essentially confine their colposcopic practices to the hospital-based clinics. All participating individuals use a uniform reporting system with standardized terminology. Their results are incorporated into the CCSP database, and are summarized for the annual continuing medical education workshop in colposcopy, held by the BC Cancer Agency.

In September 2003, the Medical Director of the BC Provincial Colposcopy Service initiated the changes to bring a new certification and accreditation system for the affiliating colposcopists in line with the accreditation systems used throughout North America. The goal is to introduce the following over the next 4 years:

1. Implement Provincial Practice Guidelines for colposcopy
2. Establish a supervised training program for new colposcopists which would include a formal assessment of their knowledge and skills in colposcopy
3. Foster ongoing Continuing Medical Education opportunities for colposcopists including incentives for updating knowledge
4. Enhance quality assurance audits and support lifelong learning strategies

Over the past year we have formalized the certification and recertification requirements for colposcopists.

An electronic charting imaging system for the colposcopy clinic at VGH was introduced in July 2003. This system has proven to be extremely well received and is looked upon as a model for electronic data collection within the Vancouver Coastal Health Care Region ambulatory clinics. We have also had serious enquiries from Ontario to bring the system to that province. The current plan is to make the software even more scalable and a provincial rollout to all colposcopy clinics is currently being discussed by the Provincial Health Services Authority. The plan is to expand this software to all colposcopy clinics to facilitate quality improvement, research and clinical progress in this area and to further the role of BC as a model for integrated cervical cancer prevention and diagnostics in the world.

PROGRAM RESULTS

Utilization

The Cervical Cancer Screening Program (CCSP) received a total of 607,387 gynecological smears from BC health care professionals in 2003. Health care professionals who submitted smears include gynecologists, general practitioners, midwives, naturopaths, nurses, etc. An additional 8,288 smears were submitted from outside of BC, of which the majority originated in the Yukon Territory. The following program results include smears from British Columbia only.

Table I
Smears Received by Age Group: 2003

	Age (years)							All Ages
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
Number of Smears	27,896	121,907	151,419	149,327	98,323	46,492	12,023	607,387
Smears from Cervix/Endocervix (%)	27,864 (99.9)	121,654 (99.8)	150,011 (99.1)	143,054 (95.8)	87,980 (89.5)	38,766 (83.4)	8,389 (69.8)	577,718 (95.1)
Smears from Other Sites (%)	32 (0.1)	253 (0.2)	1,408 (0.9)	6,273 (4.2)	10,343 (10.5)	7,726 (16.6)	3,634 (30.2)	29,669 (4.9)

Table I shows the number of smears received and age distribution in 2003: 95.1% of all smears were taken from the cervix or endocervix, and 4.9% were from other non-cervical sites (e.g. vaginal wall, vaginal vault, endometrial aspirate, etc.) There were approximately 4,700 fewer non-cervical smears than in the previous year. The population of women screened by the CCSP includes clinically asymptomatic women (routine screening), follow-up screening for women with previously detected abnormalities, and a small percentage of symptomatic women.

Table II
Patients by Age Group: 2003

	Age (years)							All Ages
	<20	20-29	30-39	40-49	50-59	60-69	70+	
Number of Patients	25,364	110,500	138,908	140,683	93,841	44,504	11,285	565,085
With Smears from Cervix/Endocervix Site (%)	25,354 (99.9)	110,383 (99.9)	137,740 (99.2)	134,918 (95.9)	84,199 (89.7)	37,361 (83.9)	8,066 (71.5)	538,021 (95.2)
With Smears from non Cervix/Endocervix Site (%)	10 (0.1)	117 (0.1)	1,168 (0.8)	5,765 (4.1)	9,642 (10.3)	7,143 (16.1)	3,219 (28.5)	27,064 (4.8)

565,085 women provided the total of 607,387 smears submitted to the CCSP in 2003. Table II shows that 538,021 (95.2%) women had one or more smears taken from the cervix/endocervix.

Table III
Number of Smears in Patients With Cervical/Endocervical Smears: 2003

	Age (years)							All Ages
	<20	20-29	30-39	40-49	50-59	60-69	70+	
Number of Patients								
with 1 Smear (%)	23,333 (92.1)	99,954 (90.6)	125,815 (91.4)	126,983 (94.2)	80,318 (95.4)	35,965 (96.3)	7,733 (95.8)	500,101 (93.0)
with 2 Smears (%)	1,945 (7.7)	9,964 (9.0)	11,359 (8.2)	7,577 (5.6)	3,745 (4.5)	1,327 (3.6)	307 (3.9)	36,224 (6.7)
with 3+ Smears (%)	76 (0.2)	465 (0.4)	566 (0.4)	358 (0.2)	136 (0.1)	69 (0.1)	26 (0.3)	1,696 (0.3)
New Patients (%)	12,338 (48.7)	15,239 (13.8)	7,325 (5.3)	4,096 (3.0)	1,986 (2.4)	1,122 (3.0)	400 (5.0)	42,506 (7.9)

Table III shows that of the women with cervical/endocervical smears in 2003, 93% of participants had one smear, 6.7% had two smears, 0.3% had three or more smears; 7.9% were new patients to the CCSP.

Participation Rates

The CCSP recommends that women begin Pap smear screening for cervical abnormality when they become sexually active or soon thereafter, and stop screening at age 69 if no significant abnormality was detected during their screening history. Most women follow a one-year to two-year screening interval. Thus, participation rates for the CCSP are calculated as the percent of women with at least one cervical/endocervical smear in a 30-month period.

The CCSP does not currently collect patient residential information from the health care providers who submit the Pap smears for interpretation. Linkage with the Ministry of Health Client Registry is necessary to provide the data to calculate the regional participation rates. Unfortunately, this linkage was not possible this year. Thus, only province-wide participation rates are available.

Table IV
Participation Rates (%) by Age Groups
July 2001 - December 2003

	Age (years)							Age
	<20	20-29	30-39	40-49	50-59	60-69	70+	20-69
British Columbia overall	8.2	63.1	69.5	60.9	49.3	37.1	8.6	58.0
Adjusted for Hysterectomy	8.2	63.1	75.5	77.9	73.6	59.9	13.5	71.1

Notes:

- 2003 population estimates: BC STATS, BC Ministry of Finance and Corporate Relations
- Population data was acquired through the Health Data Warehouse, BC Ministry of Health
- Hysterectomy rates were estimated from a population sample of an epidemiological study conducted in 1995

Table IV lists the 10-year age group breakdown of participation rates for the 30-month period ending December 31, 2003. The overall participation is highest for women aged 20-29 and 30-39: 63% and 70% respectively. Based on the estimated age specific hysterectomy rates, the participation rates were adjusted to exclude women without a cervix. Table IV shows that the adjusted participation rate for the BC female population age 20-69 is 71%, with the rate remaining above 70% for age 30-39, 40-49 and 50-59.

Screening Interval

Repeat interval recommendations were given based primarily on the current smear result and cytology history, but might be influenced by the patient's clinical condition. In order to have sufficient follow-up time, the last smear per patient taken in 2000 was used in the screening interval analyses.

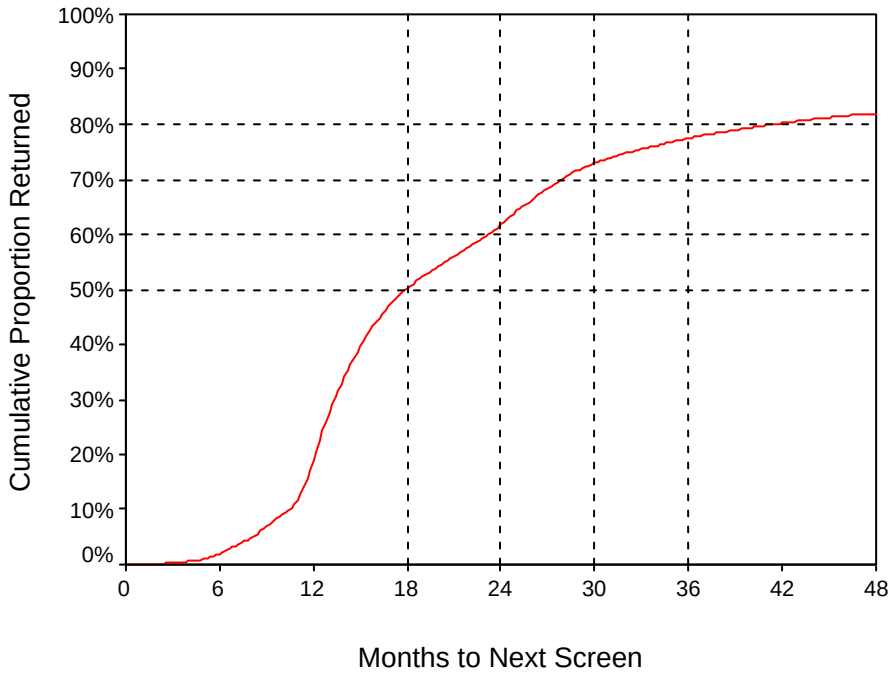
Table V
Months to Next Smear following Unsatisfactory Smear by Age Group: 2000

	Age (years)							All Ages
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
Number of Patients With Unsatisfactory Last Smear	550	2,368	2,256	1,514	1,481	1,355	902	10,426
Repeated Smear Within:								
6 months (%)	69 (12.5)	348 (14.7)	388 (17.2)	279 (18.4)	209 (14.1)	150 (11.1)	58 (6.4)	1,501 (14.4)
12 months (%)	191 (34.7)	991 (41.8)	1,001 (44.4)	541 (35.7)	455 (30.7)	332 (24.5)	115 (12.7)	3,626 (34.7)
18 months (%)	301 (54.7)	1,456 (61.5)	1,421 (63.0)	836 (55.2)	787 (53.1)	622 (45.9)	275 (30.5)	5,698 (54.6)
24 months (%)	355 (64.5)	1,676 (70.8)	1,613 (71.5)	975 (64.4)	897 (60.6)	700 (51.7)	315 (34.9)	6,531 (62.6)
36 months (%)	371 (67.5)	1,758 (74.2)	1,674 (74.2)	1,031 (68.1)	949 (64.1)	737 (54.4)	331 (36.7)	6,851 (65.7)

Smears that cannot be interpreted because of unsatisfactory quality were not assigned a repeat interval recommendation in 2000. Table V shows the proportion of patients who returned after an unsatisfactory smear, by 10-year age group. Overall, 34.7% of patients returned by 12 months, with younger women returning sooner than older women.

Patients with a cytological finding of moderate or higher atypia have a recommendation for further investigation. Thus, the rescreening rate was examined for patients with no moderate or higher atypia finding.

Figure 2
Rescreening Rate for 2000 Patients

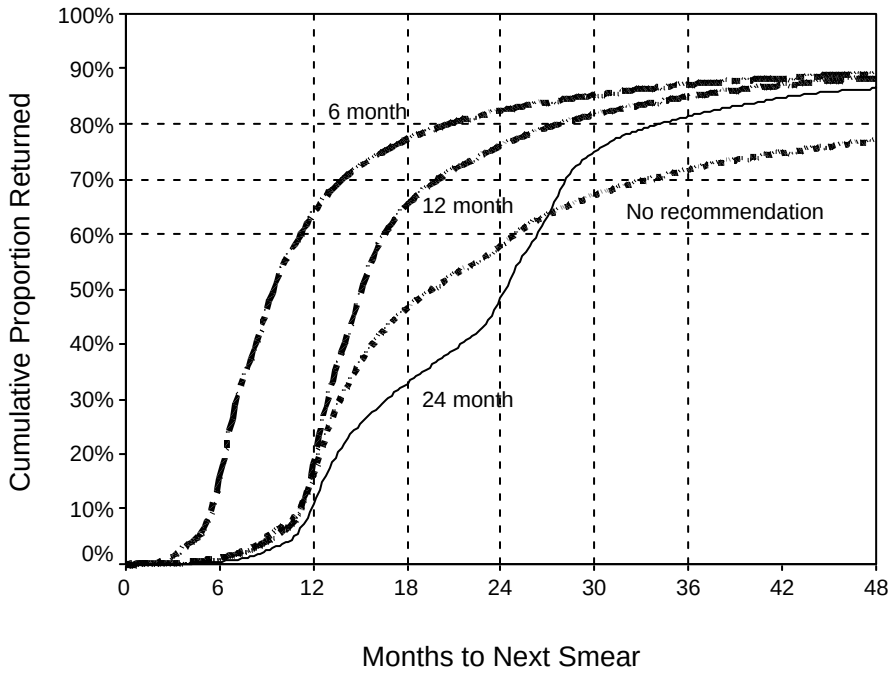


*Patients with unsatisfactory or moderate+ atypia smears were excluded

Figure 2 shows that of the patient cohort from 2000, 50% had returned by 18 months, 70% by 28 months, 80% by 42 months, and 82% by 48 months.

In the 2000 cohort used for this analysis, 19% of patients with no significant atypia smear result were given a 24-month recommendation, 22% were given a 12-month recommendation, and 53% were not given any specific interval recommendation. As of 2001, CCSP provides specific interval recommendations for most patients.

Figure 3
Rescreening Rate for 2000 Patients by Recommended Interval



*Patients with unstatisfactory or moderate+ atypia smears were excluded

Figure 3 shows the return rate by specific repeat interval recommendation. Patients with mild atypia were generally given a 6-month repeat recommendation. Of those patients given a 6-month repeat recommendation, 75% returned by 17 months and 80% by 21 months. Of those patients given a 12-month recommendation, 75% returned by 24 months and 80% by 28 months. Of those patients given a 24-month recommendation, 75% returned by 30 months and 80% by 35 months. By 48 months, over 86% of patients with specific interval recommendations returned, comparing to 77% of those patients without specific interval recommendation. As expected, those recommended to return earlier did return earlier. Those with no recommendation had the lowest long-term return rates.

Quality of Smears

Adequacy of smear for interpretation is assessed as follows: satisfactory for interpretation, satisfactory but limited for interpretation, and unsatisfactory. The "unsatisfactory" category is used when the smear quality is inadequate for an interpretation. In general, the "satisfactory but limited" category is used when the smear quality is not ideal but still possible to interpret. In previous reportings of CCSP smear quality, "no endocervical cells" was considered "satisfactory but limited" for interpretation. This has been summarized in the "satisfactory" category since the last report. The absence of endocervical, transformation zone component continues to be noted on the cytology report.

Table VI
Smear Quality by Age Group: 2003

	Age (years)							All Ages
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
Cervical/Endo cervical Smears	27,864	121,654	150,011	143,054	87,980	38,766	8,389	577,718
Unsatisfactory (%)	399 (1.4)	1,662 (1.4)	1,930 (1.3)	1,334 (0.9)	1,166 (1.3)	755 (1.9)	191 (2.3)	7,437 (1.4)
Limited for Interpretation (%)	668 (2.4)	3,504 (2.9)	4,324 (2.9)	3,434 (2.4)	1,833 (2.1)	807 (2.1)	165 (2.0)	14,735 (2.6)
Non Cervical Smears	32	253	1,408	6,273	10,343	7,726	3,634	29,669
Unsatisfactory (%)	0 (0.0)	6 (2.4)	18 (1.3)	109 (1.7)	315 (3.0)	351 (4.5)	168 (4.6)	967 (3.3)
Limited for Interpretation (%)	1 (3.1)	1 (0.4)	19 (1.3)	79 (1.3)	193 (1.9)	191 (2.5)	112 (3.1)	596 (2.0)

Table VI summarizes smear quality by 10-year age groups separately for cervical and non-cervical smears.

Table VII
Unsatisfactory Cervical/Endocervical Smears by Age Group: 2003

	Age (years)							All Ages
	<20	20-29	30-39	40-49	50-59	60-69	70+	
Number of Unsatisfactory Smears	399	1,662	1,930	1,334	1,166	755	191	7,437
Factors Cited:								
Scanty Smear (%)	272 (68.2)	1,158 (69.7)	1,317 (68.2)	907 (68.0)	954 (81.8)	656 (86.9)	168 (88.0)	5,432 (73.0)
Inflammatory Exudate (%)	69 (17.3)	402 (24.2)	487 (25.2)	293 (22.0)	178 (15.3)	96 (12.7)	23 (12.0)	1,548 (20.8)
Mainly Endocervical Cells (%)	57 (14.3)	113 (6.8)	112 (5.8)	96 (7.2)	25 (2.1)	8 (1.1)	0 (0.0)	411 (5.5)
Bloody (%)	3 (0.8)	40 (2.4)	72 (3.7)	49 (3.7)	21 (1.8)	6 (0.8)	4 (2.1)	195 (2.6)
Poorly Preserved (%)	7 (1.8)	24 (1.4)	31 (1.6)	32 (2.4)	23 (2.0)	11 (1.5)	2 (1.0)	130 (1.7)
Too Thick (%)	2 (0.5)	0 (0.0)	1 (0.1)	5 (0.4)	0 (0.00)	1 (0.1)	1 (0.5)	10 (0.1)

Of the 577,718 cervical/endocervical smears in 2003, 7,437 (1.3%) were deemed unsatisfactory for interpretation. Table VII presents the limiting factors by age. The most commonly cited factors were scanty smear (73.0%), inflammatory exudate (20.8%), and mainly endocervical cells (5.5%). Multiple factors may be cited. Scanty smear material was especially common in the older age groups.

Table VIII
Limited for Interpretation Cervical/Endocervical Smears by Age Group: 2003

	Age (years)							All Ages
	<20	20-29	30-39	40-49	50-59	60-69	70+	
Number of Limited for Interpretation Smears	668	3,504	4,324	3,434	1,833	807	165	14,735
Factors Cited:								
Scanty Smear (%)	259 (38.7)	1,104 (31.5)	1,406 (32.5)	1,093 (31.8)	722 (39.3)	405 (50.1)	82 (49.6)	5,071 (34.4)
Inflammatory Exudate (%)	373 (55.8)	2,082 (59.4)	2,531 (58.5)	1,963 (57.1)	923 (50.3)	350 (43.3)	70 (42.4)	8,292 (56.2)
Mainly Endocervical Cells (%)	9 (1.3)	35 (0.9)	36 (0.8)	26 (0.7)	9 (0.4)	5 (0.6)	0 (0.0)	120 (0.8)
Bloody (%)	32 (4.7)	238 (6.7)	281 (6.4)	278 (8.0)	127 (6.9)	38 (4.7)	8 (4.8)	1,002 (6.8)
Poorly Preserved (%)	26 (3.8)	172 (4.9)	184 (4.2)	190 (5.5)	103 (5.6)	29 (3.5)	11 (6.6)	715 (4.8)
Too Thick (%)	1 (0.1)	6 (0.1)	15 (0.3)	6 (0.1)	6 (0.3)	3 (0.3)	2 (1.2)	39 (0.2)
Insufficient Clinical Information (%)	0 (0.0)	0 (0.0)	2 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.0)

Of the 577,718 cervical/endocervical smears in 2003, 14,735 (2.6%) were classified as being limited for interpretation. Table VIII presents the limiting factors by age. The most commonly cited factors were inflammatory exudate (56.2%) and scanty smear (34.4%).

Cervical Smear Results

Results of last cervical/endocervical smears in 2003 from 538,021 women are summarized in Table IX. Whenever multiple atypia findings were reported on the same smear, the most severe finding was used in the result presentation.

Table IX
Distribution of Cytology Findings by Age Group Based on Patient's Last Cervical/Endocervical Smear in 2003

	Age (years)							All Ages
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
Number of Patients	25,354	110,383	137,740	134,918	84,199	37,361	8,066	538,021
Unsatisfactory (%)	283 (1.1)	1,159 (1.0)	1,283 (0.9)	875 (0.7)	765 (0.9)	532 (1.4)	142 (1.8)	5,039 (0.9)
Limited for interpretation (%)	515 (2.0)	2,647 (2.4)	3,421 (2.5)	2,730 (2.0)	1,474 (1.8)	706 (1.9)	122 (1.5)	11,615 (2.2)
Negative* (%)	21,682 (85.5)	95,046 (86.1)	121,726 (88.4)	118,054 (87.5)	75,235 (89.3)	34,224 (91.6)	7,356 (91.2)	473,323 (88.0)
"No endocervical cells "	1,928	9,072	12,038	13,281	1,653	10	.	37,982
Reactive changes (%)	731 (2.9)	3,158 (2.9)	4,095 (3.0)	5,057 (3.8)	2,832 (3.4)	907 (2.4)	209 (2.6)	16,989 (3.1)
Mild atypia (%)	1,713 (6.8)	6,091 (5.5)	5,664 (4.1)	7,082 (5.2)	3,359 (4.0)	802 (2.2)	147 (1.8)	24,858 (4.6)
*No significant atypia** in past 2 yrs*	*1,358*	*4,455*	*4,277*	*5,233*	*2,410*	*593*	*110*	*18,436*
*Significant atypia** in past 2 yrs*	*355*	*1,636*	*1,387*	*1,849*	*949*	*209*	*37*	*6,422*
Moderate or higher atypia (%)	430 (1.7)	2,282 (2.1)	1,551 (1.1)	1,120 (0.8)	534 (0.6)	190 (0.5)	90 (1.1)	6,197 (1.2)

* include "no endocervical cells"
** significant atypia – mild or higher atypia

Table IX shows that overall, there were 24,868 (4.6%) mild atypia, and 18,436 (3.4%) were new mild atypia. The overall rate of moderate or higher atypia was 1.2% with the higher rates in women under age 40. The rate of mild atypia has increased by 1.1% from 2002. The rate of moderate or higher atypia has increased by 0.4%, most acutely in women age 20-29. Further analysis is needed to understand this.

Table X
Significant Atypia Rates (per 1000) by Age Group
Based on Patient's Last Cervical/Endocervical Smear in 2003

	Age (years)							All Ages
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
Number of Patients	25,354	110,383	137,740	134,918	84,199	37,361	8,066	538,021
Squamous:								
Mild (LSIL)	66.2	51.8	34.1	39.4	28.5	15.5	10.4	38.1
Moderate+ (HSIL)	16.7	19.8	9.9	6.3	3.9	2.7	5.2	9.8
Atypical (of unspecified significance)	0.2	0.2	0.2	0.4	1.6	2.5	4.9	0.7
Glandular:								
Mild	1.1	3.0	6.6	12.4	10.7	5.2	6.8	7.6
Moderate	0.0	0.1	0.4	1.1	1.4	1.2	2.6	0.7
Marked+ (High grade)	0.0	0.0	0.0	0.1	0.3	0.4	1.8	0.1
Epithelial:								
Mild (Low grade)	0.1	0.2	0.2	0.5	0.5	0.5	0.9	0.4
Moderate+ (High grade)	0.1	0.6	0.7	0.6	0.6	0.6	1.4	0.6

LSIL – low grade squamous intraepithelial lesion
HSIL – high grade squamous intraepithelial lesion

Table X shows the significant atypia rates (per 1000 patients) by 10-year age group. Rates are presented by cell type and level of significance. As expected, squamous cell type was the most common (48.6 per 1000 patients overall). Low-grade squamous intraepithelial lesion (LSIL) was more frequently reported in the younger women.

Follow-up of Abnormals

Follow-up Recommendation

The current CCSP practice is to follow mild atypia with repeat smear at 6-month intervals for up to two years. Patients with persistent mild atypia are then advised to have a colposcopy. Other procedures may be recommended on the basis of patient's clinical condition and cytology history.

Table XI
Follow-up Recommendation by Age Group
Based on Patients with Finding of Mild or Higher Atypia in 2003

	Age (years)							All Ages
	<20	20-29	30-39	40-49	50-59	60-69	70+	
Patients With Mild Atypia on Last Smear	1,713	6,091	5,664	7,082	3,359	802	147	24,858
Repeat in 6 months (%)	1,633	5,662	5,245	6,274	2,862	676	99	22,451
	(95.3)	(93.0)	(92.6)	(88.6)	(85.2)	(84.3)	(67.3)	(90.3)
Other investigation* (%)	80	429	419	808	497	126	48	2,407
	(4.7)	(7.0)	(7.4)	(11.4)	(14.8)	(15.7)	(32.7)	(9.7)
Patients with Moderate or Higher Atypia	430	2,282	1,551	1,120	534	190	90	6,197
Colposcopy and/or ECC (%)	376	2,128	1,436	934	388	118	42	5,422
	(87.5)	(93.2)	(92.6)	(83.4)	(72.7)	(62.1)	(46.7)	(87.5)
Other investigation (%)	54	154	115	186	146	72	48	775
	(12.5)	(6.7)	(7.4)	(16.6)	(27.3)	(37.8)	(53.3)	(12.5)

*The predominant recommendation was colposcopy investigation.

Table XI shows that 90.3% of patients with mild atypia on the last cervical/endocervical smear in 2003 were recommended to have a repeat smear in 6 months as majority of these patients had the finding for the first time. 87.5 % of patients with moderate or higher atypia on the last cervical/endocervical smear in 2003 were advised to have a colposcopy and/or endocervical curettage. Follow-up recommendation given varied by age.

Compliance to Colposcopy Recommendations

The following figure presents age-specific compliance to colposcopy recommendations for patients with cervix/endocervix smears in 2003. Compliance is defined as having been achieved when a colposcopy examination was conducted within 1 week to 9 months of being recommended. Colposcopy examinations performed within one week of recommendation are not likely to be prompted by that recommendation.

Figure 4
Level of Compliance to Colposcopy Recommendation by Age Group
Patient's Last Cervical/Endocervical Smear in 2003

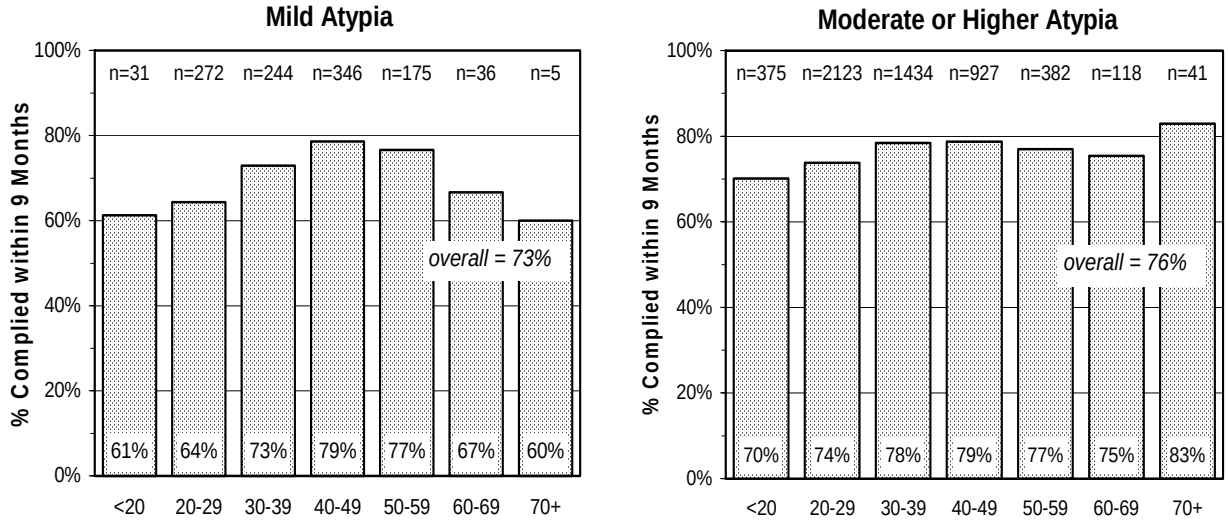


Figure 4 showed that the overall compliance to colposcopy recommendation was similar for patients with mild atypia (73%) and moderate or higher atypia results (76%). Women aged 30-59 had the highest rates of compliance for both mild atypia or moderate of higher atypia.

Overall, compliance has remained stable in comparison to the previous year. Last year's compliance for mild atypia was 74% and for moderate or higher atypia it was 76%. By age category, the only significant difference this year was an improvement in compliance for women aged 70 and over with moderate or higher atypia, 83% complied this year vs 61% last year.

Colposcopy Clinics

A total of 12,732 colposcopy examinations were provided by the Provincial Colposcopy Service in 2003, 81% of which were initiated as a result of abnormal cytology (see Figure 5).

Figure 6 shows that the cervix was the primary site of investigation in 93% of the examinations performed.

Figure 5
Reason for Referral to Colposcopy Clinic: 2003

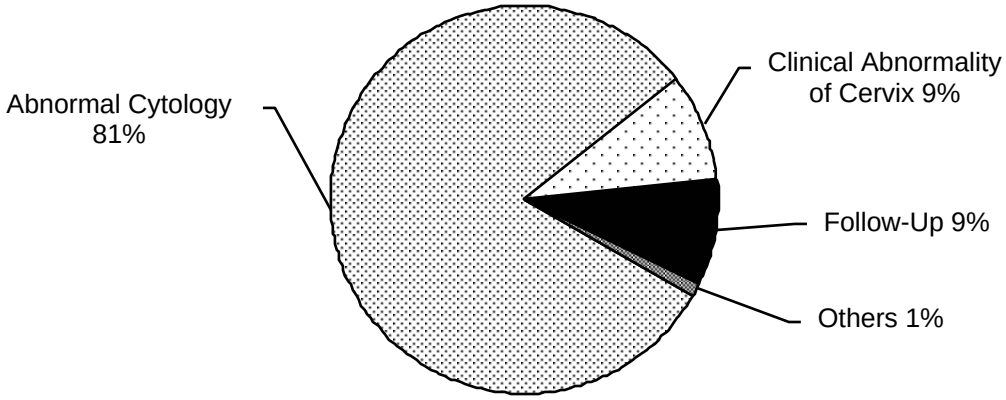
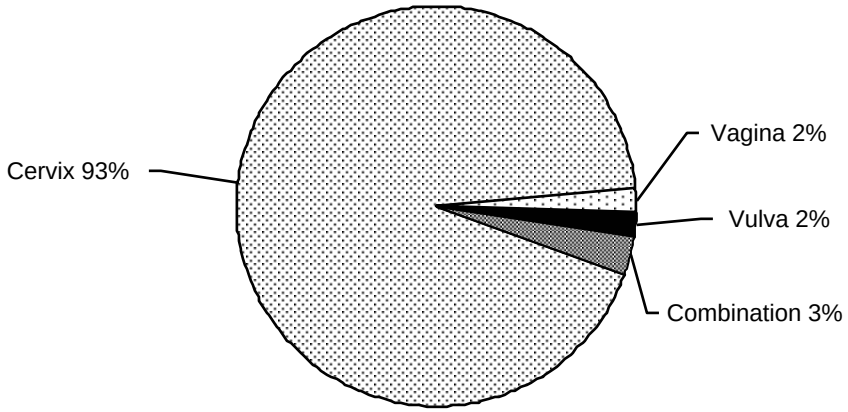


Figure 6
Site of Colposcopic Investigation: 2003



Results of all colposcopic examinations are recorded on a standardized form including a suggested course of follow-up action. Copies of this form are sent to both the referring physician and to the CCSP for incorporation into the provincial database. This data collection process forms the basis of a provincial quality assurance program.

Table XII
Percent Agreement* Between Presenting Cytology and Colposcopy Findings: 2003
Restricted to Cervix Only Examinations on Patients New to the Colposcopy Clinic

	Colposcopic Examination	
Presenting Cytology vs.	Unsatisfactory	Satisfactory
Colposcopic Impression	78%	89%
Colposcopic Directed Biopsy	65%	79%
Colposcopic Evaluation	78%	87%

Notes:

- Presenting Cytology – refers to the most abnormal cytology leading to the colposcopic examination
- Colposcopic Impression – refers to the severity of lesions seen by the colposcopist
- Colposcopic Directed Biopsy – refers to the most advanced histopathology noted on the biopsy performed at colposcopy
- Colposcopic Evaluation – refers to the diagnosis based on an assessment of cytology, colposcopic impression and biopsy
- *Agreement = ± 1 category

Table XII summarizes the level of agreement between the presenting cytology and all related colposcopic findings. The presenting cytologic finding is defined as the most severe abnormal cytology, which leads to the colposcopic examination. Results of a colposcopic examination are reported in the following terms:

1. Colposcopic Impression - the severity of lesions as seen by the colposcopist.
2. Colposcopic Directed Biopsy Findings - the most advanced histopathology noted on the biopsy performed at colposcopy.
3. Colposcopic Evaluation - the colposcopist's working diagnosis which is based on the assessment of cytology, colposcopic impression and the colposcopic directed biopsy.

Colposcopic examinations are further divided into "satisfactory" and "unsatisfactory". A "satisfactory" classification refers to a case in which: a) the entire squamocolumnar junction is visible, b) all the margins of any lesion seen are fully visible, and c) any endocervical extension of the lesion is fully visible for assessment and evaluation. The frequency of "unsatisfactory" examinations is higher among older women. Table XII indicates that the level of agreement between cytologic and colposcopic findings was higher within "satisfactory" examinations, and was highest when cytology and colposcopic impressions are being compared.

Cancer Statistics

New invasive cervical cancers diagnosed in 2000 to 2002 were identified from the British Columbia Cancer Registry and data collected by the CCSP. The cancer counts and incidence rates for 2000-2002 are presented in Table XIII.

Table XIII
Invasive Cervical Cancers by Age Group

		Age (Years)						Age 20+
		20-29	30-39	40-49	50-59	60-69	70+	
2002	Number of cases							
	All cell types	9	35	45	23	17	36	165
	Squamous cell only	6	26	31	16	15	27	121
	Incidence rate *(per 100,000)*							
	All cell types	*3.3*	*10.8*	*13.0*	*8.7*	*10.1*	*15.7*	*10.3*
	Squamous cell only	*2.2*	*8.1*	*9.0*	*6.0*	*9.0*	*11.8*	*7.6*
2001	Number of cases							
	All cell types	13	29	51	17	19	24	153
	Squamous cell only	12	21	40	12	9	21	115
	Incidence rate *(per 100,000)*							
	All cell types	*4.8*	*8.9*	*15.0*	*6.7*	*11.6*	*10.7*	*9.7*
	Squamous cell only	*4.4*	*6.4*	*11.8*	*4.7*	*5.5*	*9.3*	*7.3*
2000	Number of cases							
	All cell types	16	40	30	20	24	16	146
	Squamous cell only	11	31	15	13	21	11	102
	Incidence rate *(per 100,000)*							
	All cell types	*5.9*	*12.2*	*9.0*	*8.2*	*15.0*	*7.3*	*9.4*
	Squamous cell only	*4.1*	*9.4*	*4.5*	*5.3*	*13.1*	*5.0*	*6.6*

Notes:

1. Population estimates: BC STATS, BC Ministry of Finance and Corporate Relations
2. Population data was acquired through the Health Data Warehouse, BC Ministry of Health
3. Cancer data source: BC Cancer Registry and Cervical Cancer Screening Program of BC Cancer Agency

Squamous cell type constituted the majority of all invasive cervical cancers diagnosed. Cervical cancer incidence rates are higher for women age 30 and over. The overall age-specific incidence rate is similar to the rate in 2001. One case of invasive cervical cancer was diagnosed in a woman under 20 years of age.

Table XIV
Histology of Invasive Cervical Cancer by Age Group: 2002

	Age (years)						All Cancers
	20-29	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
No. of Invasive Cervical Cancers	9	35	45	23	17	36	165
Squamous cell carcinoma (%)	6 (66.7)	26 (74.2)	31 (68.8)	16 (69.5)	15 (88.2)	27 (75.0)	121 (73.3)
Adenocarcinoma (%)	2 (22.2)	7 (20.0)	13 (28.8)	6 (26.1)	2 (11.7)	4 (11.1)	34 (20.6)
Other/ unknown (%)	1 (11.1)	2 (5.7)	1 (2.2)	1 (4.3)	. .	5 (13.8)	10 (6.1)

Table XIV shows the distribution of invasive cervical cancers diagnosed in 2002 by histologic type. Invasive squamous carcinoma was most often reported. Adenocarcinoma is the next most frequently reported histological type. Included under "Other/unknown" are 6 adenosquamous carcinomas, 1 small cell carcinomas, 1 adenoid basal carcinoma, and 2 carcinomas of unknown histology.

Invasive Squamous Carcinoma: 2002

Patient history review of the 122 invasive squamous cell carcinomas diagnosed in 2002 is summarized in Table XV. 65 patients (53.3%) were not screened by the CCSP within the last 7 years. Of the remaining 57 patients, 39 (68.4%) were detected by screening.

Table XV
Screening History for Invasive Squamous Cell Cervical Cancer
Patients by Age Group: 2002

	Age (years)							All Cancers
	<20	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	
No. of Invasive Squamous Cell Cancers	1	6	26	31	16	15	27	122
Never screened (%)	0 .	0	2 (7.7)	2 (6.5)	4 (25.0)	2 (13.3)	8 (29.6)	18 (14.8)
Screened >7 years prior (%)	0	1 (16.7)	4 (15.4)	8 (25.8)	3 (18.8)	6 (40.0)	8 (29.6)	30 (24.6)
Detected at first screen (%)	0 .	0	3 (11.5)	4 (12.9)	2 (12.5)	5 (33.3)	3 (11.1)	17 (13.9)
Screened within 7 years Detected at screen (%)	1 (100.0)	5 (83.3)	14 (53.9)	10 (32.3)	2 (12.5)	1 (6.7)	6 (22.2)	39 (31.9)
Detected due to signs and symptoms (%)	0 .	0 .	3 (11.5)	7 (22.5)	5 (31.2)	1 (6.7)	2 (7.5)	18 (14.8)

Adenocarcinoma: 2002

Patient history review on the 34 invasive adenocarcinomas diagnosed in 2002 is summarized in Table XVI. 12 patients (35.3%) were not screened by the CCSP within the last 7 years. Of the remaining 22 patients, 11 (50%) were detected by screening.

Table XVI
Screening History for Invasive Adenocarcinoma Cervical Cancer
Patients by Age Group: 2002

	Age (years)						All Cancers
	20-29	30-39	40-49	50-59	60-69	70+	
No. of Invasive Adenocarcinomas	3	7	13	5	2	4	34
Never screened (%)	. .	. .	. .	1 (20.0)	1 (50.0)	1 (25.0)	3 (8.8)
Screened >7 years prior (%)	. .	1 (14.3)	2 (15.4)	1 (20.0)	1 (50.0)	3 (75.0)	8 (23.5)
Detected at first (%)	. .	. .	1 (7.6)	. .	. .	. .	1 (2.9)
Screened within 7 years Detected at screen (%)	1 (33.3)	2 (28.6)	6 (46.2)	2 (40.0)	. .	. .	11 (32.4)
Detected due to signs and symptoms (%)	2 (66.7)	4 (57.1)	4 (30.8)	1 (20.0)	. .	. .	11 (32.4)

False Negatives

The true state of an individual can only be known when there is a clinical investigation. Individuals with normal Pap smears are not routinely investigated. Routine reviews of the previous smears are triggered by the detection of subsequent cytologic abnormalities or upon diagnosis of cervical cancer. Screening interval analysis results indicated that about 78% of individuals with "negative" results[1] return for repeat smear by 36 months. Thus, a 36-month lag is needed to ensure that there is sufficient opportunity to identify smears previously classified as "negative" for review. However, smears from up to seven years prior to the initiating smear may be reviewed. Thus, false negative statistics for smears from 3 to 5 years prior to the reporting year will be presented.

Table XVII
Reviews of Previous Smears Triggered by Current Abnormal Findings

	1999	2000	2001
No. of moderate or high atypia originally identified	8,272	6,344	6,376
No. of negative smears reviewed in 2004	6,647	7,406	8,999
No. reclassified as false negative	397	551	587
Proportion misclassified	6.0%	7.4%	6.5%
False negative fraction	4.6%	8.0%	8.4%

Table XVII presents the false negative results of smears from 1999, 2000 and 2001.

Among the reviewed, the proportion of "negative" reclassified as "non-negative" was 6.0%, 7.4% and 6.5% respectively. The cases reviewed were selected precisely because of their current cytological abnormality. Thus, this sample is not representative of the general "negative" smears. Furthermore, reviewers had knowledge of the current smear result at the time of re-screening. These factors contribute to an over-estimation of the true misclassification rate.

An alternative statistical calculation used in the literature is the false-negative fraction. In this case, the number of "negatives" reclassified as "non-negatives" is expressed as a percentage of the total "non-negatives" (i.e. "non-negatives" that were initially classified, or subsequently reclassified as such). CCSP has a false-negative fraction estimate of 4.6%, 8.0% and 8.4% for 1999, 2000 and 2001 respectively.

[1] Recommendations in BC indicate that follow-up colposcopy should occur if mild atypia persists for 2 years, or if the current Pap smear result is moderate or more severe dysplasia. Since the finding of moderate dysplasia is a trigger for immediate action, it is used as the cut-point between "negative" and "positive" result.

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The Cervical Cancer Screening Program would like to thank its partners who have supported and contributed to the Program over the years.

The success of the Program depends on an integrated system of:

- Community facilities providing space and personnel to support regional colposcopy clinics
- Community health professionals taking the cervical smears (Pap smear slides)
- Dedicated and highly trained staff to process and read the slides
- Medical specialists to provide colposcopy follow-up and treatment

We would also like to thank the following organizations for their ongoing support:

- All hospitals participating in the Provincial Colposcopy Service
- BC Medical Association
- BC Ministry of Health
- BC Women's Health Centre
- Canadian Cancer Society
- College of Physicians and Surgeons
- Provincial Health Services Authority
- Women's Health Bureau

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APPENDIX

SCREENING PROGRAM OVERVIEW

Definition of Screening

Primary prevention of cancer involves changes of behavior or habits that reduce a risk e.g. stop smoking, low fat diet etc. Screening for cancer is a secondary prevention strategy.

Secondary prevention can reduce cancer morbidity and mortality by diagnosing invasive disease at an earlier, more favorable prognostic stage and detecting precursor lesions associated with some cancers that once eliminated, prevent progression to invasive disease.

Screening is "the application of various tests to apparently healthy individuals to sort out those who probably have risk factors or are in the early stages of specified conditions."[1]

Limitations of Screening

The decision to screen an at-risk population for preclinical signs of cancer is based on well-established criteria related to the disease in question and the screening tests that re-used to identify individuals who may have occult disease.[2,3,4] Although the overall objective of a screening program is to reduce morbidity and mortality from cancer, the goal of screening per se is the "application of a relatively simple, inexpensive test to a large number of persons in order to classify them as likely, or unlikely to have the cancer which is the object of the screen." The emphasis on likelihood underscores the limits of what should be expected from screening (i.e screening tests are not diagnostic tests). A person with an abnormal screening test does not have a definitive diagnosis until additional, more sophisticated diagnostic tests are completed. The emphasis on likelihood also is important because screening tests are inherently limited in their accuracy, which varies by test, cancer site, and individual characteristics. Although most of screening interpretations are accurate, it is inevitable that some individuals are identified as possibly having cancer when they do not, and screening tests fail to identify some individuals who do have the disease.[5] The comparative evaluation of accuracy versus error cannot be considered in absolute terms but rather should be evaluated in terms of the relative consequences on the other kind of error.

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Organized Population Screening Program

To reduce morbidity and mortality from cancer in a population by screening, there must be coordinated and effective strategies to ensure acceptance and utilization of the established screening test. Since screening is targeted at asymptomatic women, the fine balance between maximizing benefits and minimizing undesirable effects must be maintained.

An organized approach to screening ensures that the target population has access to the screening service, and that it accepts and uses the services offered. This is achieved by including the following six program components:

1. Health Promotion
2. Professional Development/Education
3. Recruitment & Retention
4. Screening Test & Reporting
5. Follow-up
6. Evaluation/Research Partnerships

The success of screening is a shared responsibility of the team of individuals who work together to develop goals, set standards, monitor progress, and continue improvement in each of the six components.

Screening Program Administration

Population & Preventive Oncology of the BC Cancer Agency (BCCA), under the auspices of the Provincial Health Services Authority (PHSA), focuses on early detection and prevention of cancer, and the development and provision of cancer information. Its areas of responsibilities include:

1. Cancer Control Research (Epidemiology)
2. Surveillance and Outcomes Unit (Data and Evaluation)
3. Cancer Information Centre (Libraries)
4. Hereditary Cancer Program
5. Provincial Cancer Screening Programs

The Division of Population and Preventive Oncology is responsible for the administration of two population screening programs: the Cervical Cancer Screening Program (CCSP), and the Screening Mammography Program of BC (SMPBC). Currently, there are two administrative positions with responsibilities for both programs:

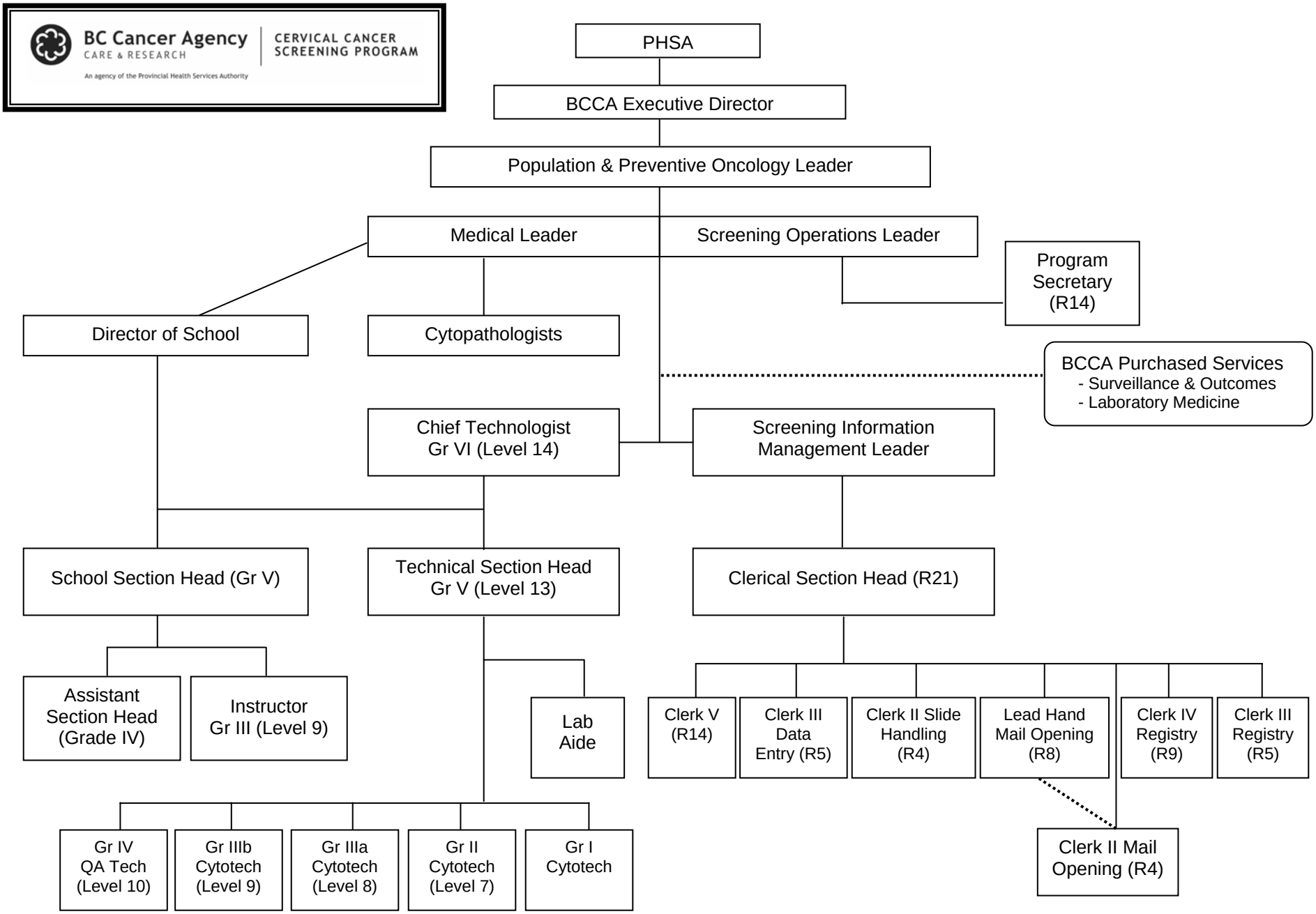
Screening Operations Leader (SOL)

> Accountable to the Population and Preventive Oncology Leader, provides leadership in the coordination of the Cancer Screening Program processes within the B.C. Cancer Agency in collaboration with the various process representatives, oversees resource requirements such as staffing, equipment and space and is responsible for the planning, preparation and monitoring of the Screening Program budgets.

Screening Information Management Leader (SIML)

> A key member of the provincial Screening Leadership team involved in the Population & Preventative Oncology Process and responsible for leadership related to the Provincial Breast and Cervical Screening databases, data process and systems. Works closely with the Information Technology team to ensure operational functionality for both provincial screening processes, the development of appropriate information systems, as well as the implementation of information management policies/procedures.

Data and Evaluation support for screening programs is provided by the Surveillance and Outcomes Unit.


BC Cancer Agency
CARE & RESEARCH
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CERVICAL CANCER SCREENING PROGRAM
PHSA
BCCA Executive Director
Population & Preventive Oncology Leader
Medical Leader
Screening Operations Leader
Program Secretary (R14)
Director of School
Cytopathologists
BCCA Purchased Services
- Surveillance & Outcomes
- Laboratory Medicine
Chief Technologist Gr VI (Level 14)
Screening Information Management Leader
School Section Head (Gr V)
Technical Section Head Gr V (Level 13)
Clerical Section Head (R21)
Assistant Section Head (Grade IV)
Instructor Gr III (Level 9)
Lab Aide
Clerk V (R14)
Clerk III Data Entry (R5)
Clerk II Slide Handling (R4)
Lead Hand Mail Opening (R8)
Clerk IV Registry (R9)
Clerk III Registry (R5)
Gr IV QA Tech (Level 10)
Gr IIIb Cytotech (Level 9)
Gr IIIa Cytotech (Level 8)
Gr II Cytotech (Level 7)
Gr I Cytotech
Clerk II Mail Opening (R4)

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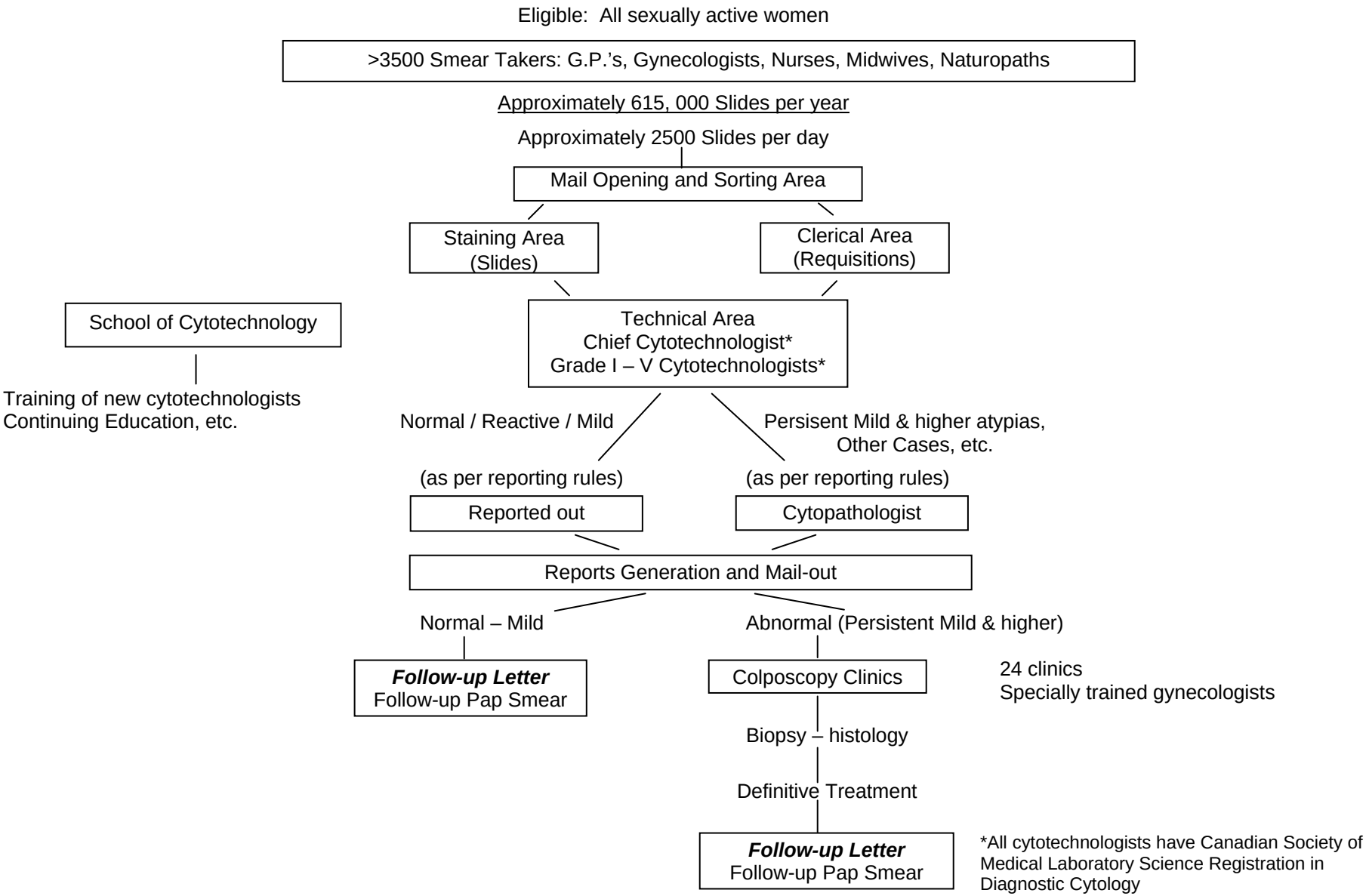
CERVICAL CANCER SCREENING PROGRAM

Cervical Cancer Screening Program Process



CCSP SCREENING RECOMMENDATIONS

Criteria	Recommended Action
Onset of sexual activity or soon after	Start regular Pap smear screening
Negative or benign changes	Repeat smear in 12 months until there are 3 consecutive **normal** smears then continue at 24-month intervals
Mild atypia (dyskaryosis) squamous and/or glandular	Repeat in 6 months Colposcopy examination is recommended, if mild atypia persists for 2 years **Recommendation for selected patient subgroup is under review*
Moderate or higher squamous or endocervical glandular atypia	Colposcopic examination is recommended
After age 69	Stop screening, if there are 3 or more **normal** smears in the last 10 years and no history of previous significant abnormality (moderate atypia or higher)
Pregnant Women	If no history of previous Pap smear, do Pap smear, otherwise follow guidelines as indicated in non-pregnant women
HIV Positive Women	Repeat smear in 6 months until there are 2 consecutive **normal** smears then continue at 12-month intervals

Post-Hysterectomy Screening Guidelines:

Screening of the vaginal vault is not necessary if the woman meets **all** of the following conditions:

- She has had a total hysterectomy (cervix removed) as opposed to a subtotal hysterectomy (cervix remains)
- The hysterectomy was performed for a benign condition and no significant dysplasia was found
- All previous Pap smears showed no significant abnormality (moderate atypia or higher)
- If no previous Pap smear record is available and hysterectomy pathology is benign, the patient should have two consecutive, negative smears one year apart before discontinuing screening.

Current BC Cancer Agency Colposcopy Program Guidelines

Indications for Cervical Smears in Colposcopy Clinics

- Pregnancy
- Referral cytology outside BC
- Clinical discretion
- No previous Pap smear history in BC

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CERVICAL CANCER
SCREENING PROGRAM

Current BC Cancer Agency Colposcopy Program Guidelines

Management of Women with Cervical Cytological Abnormalities

Mild Squamous Dyskariosis persistent over 2 Years

↓

Colposcopic Examination

Satisfactory colposcopy with lesion identified – endocervical sampling “acceptable”

Satisfactory colposcopy with no lesion identified – endocervical sampling “preferred”

Unsatisfactory colposcopy exam – endocervical sampling “preferred”

No CIN/Cancer	**CIN/Cancer**
↓	↓
Cytology in 6-12 mos with GP	Manage per guideline

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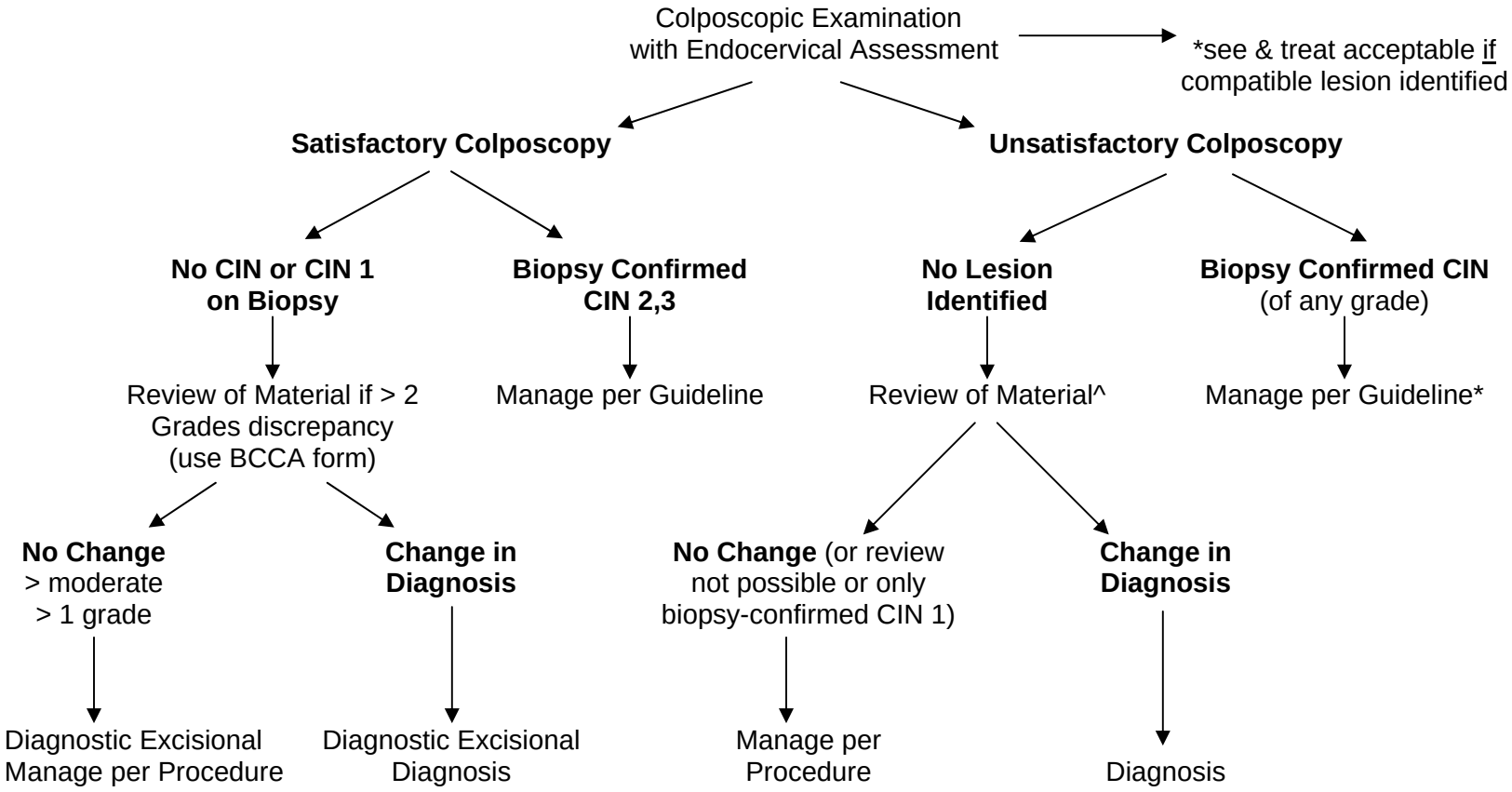
CERVICAL CANCER SCREENING PROGRAM

Current BC Cancer Agency Colposcopy Program Guidelines

Management of Women with Cervical Cytological Abnormalities >/= Moderate Squamous Dyskariosis



^includes referral cytology, colposcopic findings and all biopsies

*management options may vary if the woman pregnant, postmenopausal, or an adolescent

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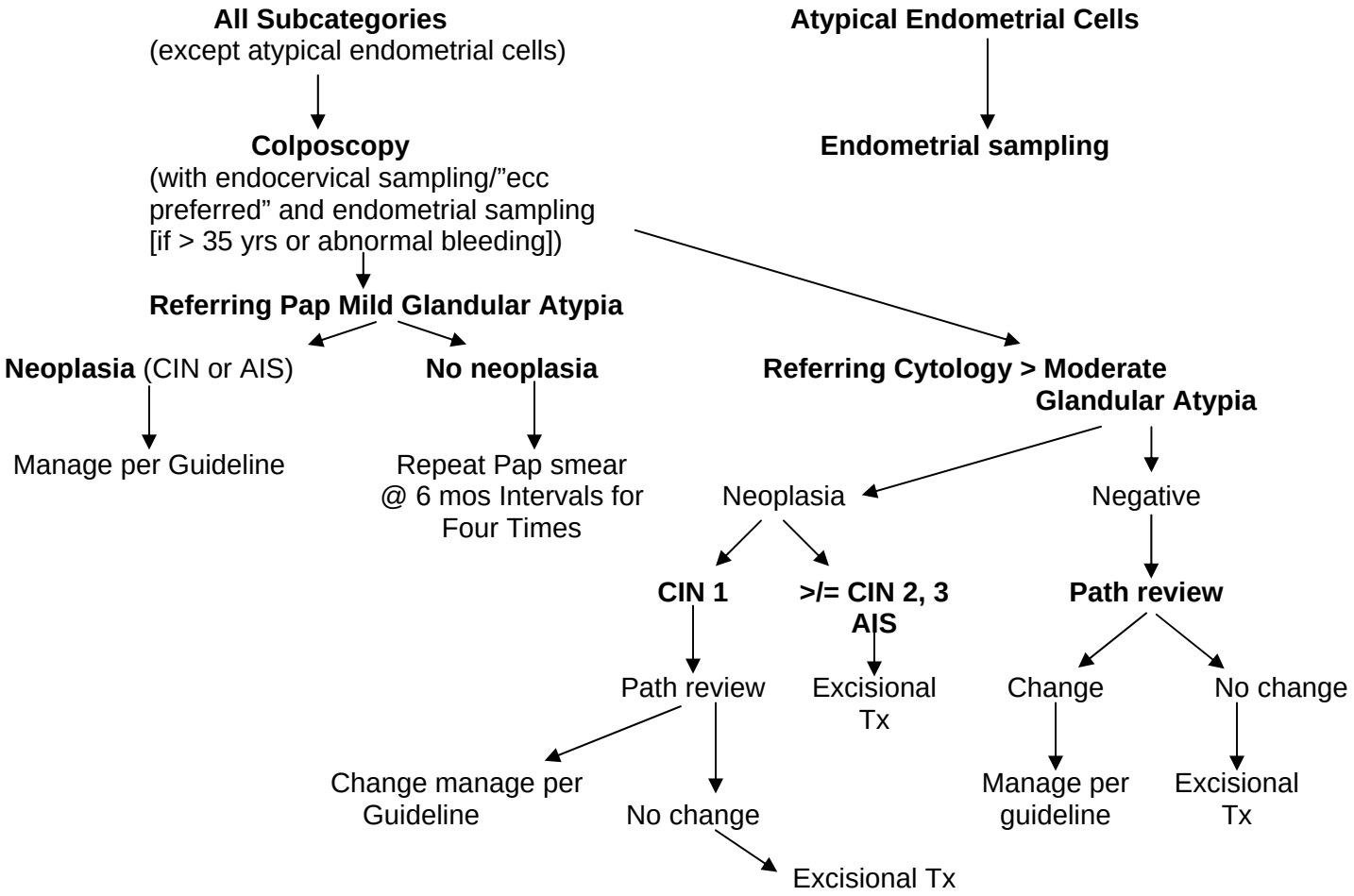
CERVICAL CANCER SCREENING PROGRAM

Current BC Cancer Agency Colposcopy Program Guidelines

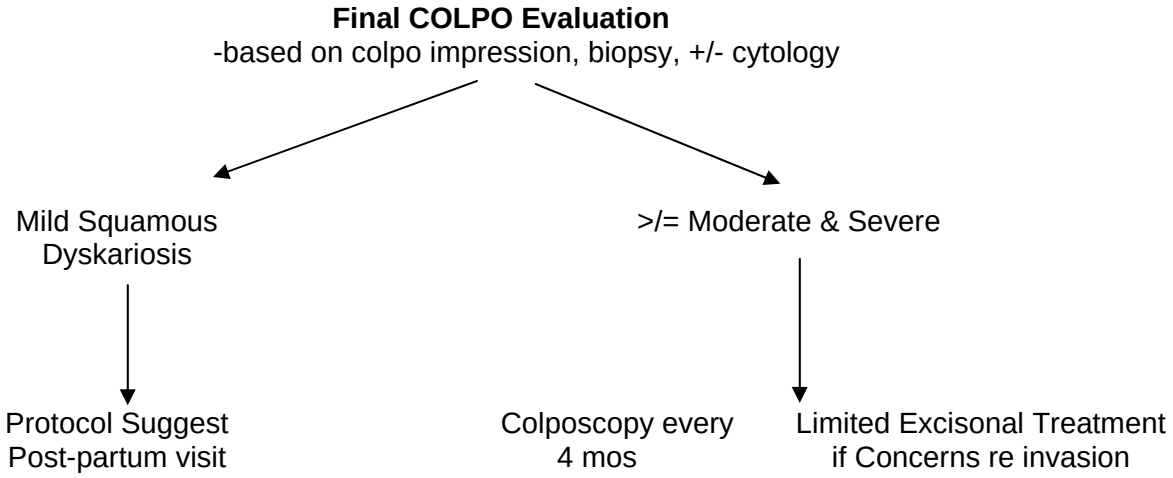
Management of Women with Cervical Cytological Abnormalities

Atypical Glandular Cells



Current BC Cancer Agency Colposcopy Program Guidelines

Management of Pregnant Women with Abnormal Cervical Cytology



-No treatment in pregnancy unless suspect invasion
-Cervical biopsy safe in pregnancy if required for diagnosis or suspicion of microinvasion/invasion

COLPOSCOPY CLINIC LOCATIONS AND PERSONNEL STAFFING

1/2. BCCA/VHHSC, Vancouver – Drs. T. Ehlen, D. Miller, L. Sadownik, M. Heywood (effective May 2005) and M. Plante (effective July 2005)

3. St. Paul's Hospital, Vancouver – Dr. G. Kinney

4. Richmond General Hospital, Richmond – Dr. H. Mackoff, Dr. H. Robson

5. Lions Gate Hospital, North Vancouver – Drs. E. Hoyer, V. Scali and R. Goodall

6. Ridge Meadows Hospital, Maple Ridge – Dr. W. Yeung

7. Royal Columbian Hospital, New Westminster – Drs. D. Allan, J. Turner and S. Pedersen

8. Surrey Memorial Hospital, Surrey – Drs. G. Doersam and P. Yeung

9. Langley Memorial Hospital, Langley – Dr. E. Mah

10. Peace Arch Memorial Hospital, White Rock – Drs. G. Jackson and J. Christilaw

11. Powell River General Hospital – Dr. P. Goeritz

12. Royal Jubilee Hospital, Victoria – Drs. E. McMurtrie, M. Rippington, D. Quinlan and H. Hunt

13. Cowichan District Hospital, Duncan – Dr. S. Hancock

14. Nanaimo Regional General Hospital, Nanaimo – Drs. P.J. Mitchell and A. Hunt

15. St. Joseph's General Hospital, Comox – Drs. D. Hartman and M. Bagdan

16. St. Mary's Hospital, Sechelt – Dr. R. Kellett

17. Trail Regional Hospital, Trail – Drs. K. Hale, M. Barclay and S. Moola (effective 2005)

18. Penticton Regional Hospital, Penticton – Dr. J. Henniger

19. Kelowna General Hospital, Kelowna – Drs. P. Wilson and M. Jones

20. Vernon Jubilee Hospital, Vernon – Dr. C. Hatfield

21. Royal Inland Hospital, Kamloops – Drs. A. Human and V. Malliah

22. Prince Rupert Regional Hospital, Prince Rupert – Dr. M. Pienaar

23. Mills Memorial Hospital, Terrace – Dr. L. Almas

24. Cariboo Memorial Hospital, Williams Lake – Drs. S. Raffard and G. Gill

25. MSA, Abbotsford – Dr. F. Ahman (effective in 2005 pending certification process)

26. Dawson Creek and District Hospital – **Non funded**

27. Prince George – **Non funded**

28. Whitehorse – Dr. W. MacNicol – **Non funded**

EDUCATIONAL MATERIAL

The following is a list of educational material relating to the Cervical Cancer Screening Program and/or Pap smear screening.

For A General Audience

- Questions & Answers About Screening for Cancer of the Cervix *(available in English & Chinese)*
- Understanding Pap Smear Results

For Smear Takers

- Laminated Card: Technique for Obtaining Cervical Smears
- Video: Speculum Exam and Pap Smear
- An Office Manual for Health Professionals – "Screening for Cancer of the Cervix"

For Cantonese & Mandarin Speaking Women

- Video motivating this 'hard-to reach' group to have regular Pap smears
- Slide series for health care providers to use with colleagues or the Cantonese/Mandarin public
- Pamphlet about Pap smear screening recommendations

*The material above was developed in collaboration with the Fred Hutchinson Cancer Research Centre in Seattle

Continuing Medical Education

Continuing Medical Education (CME) rounds or workshops can be arranged for groups through the offices of the provincial program leaders of the Cervical Cancer Screening Program and/or the Colposcopy Program. Contact Lisa Kan, Screening Operations Leader, at 604-877-6201 or Email lkan@bccancer.bc.ca for more information.

Pilot Project Report

"Community Development Pilot Projects – Screening Programs and Health Authority Partnership" This report describes the recent pilot project between the BC Cancer Agency and the Regional Health Authorities to work collaboratively to identify community mobilization strategies that will improve the participation rates in the Breast and Cervical Screening programs of women who are not part of the public health service delivery system, or who do not come for regular screening. A copy of the report is available free of charge by calling 604-877-6200.

Website: www.bccancer.bc.ca

Information for a general audience:

- Patient/Public Info
- Screening
- Cervical Cancer

Information for smear takers:

- Health Professionals Info
- Education
- Pap Smear Screening

REQUEST FOR EDUCATIONAL MATERIAL

Please call or fax this form to the CCSP to receive copies of the following free of charge:

Resources for a General Audience:

Number of Copies	Description
_____ English	Questions & Answers about Screening for Cancer of the Cervix – brochure
_____ Chinese	(available in English and Chinese)
_____	Understanding Pap Smear Results – brochure (available in English only)
_____	Motivational message for Cantonese & Mandarin speaking women to attend for screening – video (available with or without subtitles – produced in 2001)

Resources for Medical or Other Professionals:

Number of Copies	Description
_____	Technique for Obtaining Cervical Smears - laminated card
_____	Speculum Exam & Pap Smears – video (produced in 2000)
_____	Screening for Cancer of the Cervix - Office Manual for Health Professionals (available on Website)
_____	Community Development Pilot Projects – Screening Programs and Health Authority Partnership – report

Your name: _____

Your address: _____

_____

_____

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Your MSC #: _____

Return this form to:

Cervical Cancer Screening Program
Material Requests
8th Floor, 686 West Broadway
Vancouver, BC V5Z 1G1
Phone: 1-888-248-9508
Fax: 604-629-2510