

# Manitoba Cervical Cancer Screening Program

## Operations & Statistical Report

2005 and 2006



# **MANITOBA CERVICAL CANCER SCREENING PROGRAM**

## **2005 and 2006 Operations & Statistical Report**

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# Manitoba Cervical Cancer Screening Program

## 2005 and 2006 Operations and Statistical Report

### Introduction

The Manitoba Cervical Cancer Screening Program (MCCSP) was established in January 2000 with a mandate to ensure that Manitoba women receive organized, high quality cervical cancer screening services. The MCCSP is supported by Manitoba Health and managed by CancerCare Manitoba. On April 27, 2001, an amendment to the Public Health Act requiring the reporting of all cervical cancer screening tests to the MCCSP commenced operation of the MCCSP Registry. The Registry is a central and confidential record of Pap test, colposcopy, and biopsy results.

The goal of the Manitoba Cervical Cancer Screening Program is to reduce the incidence of and mortality from invasive cervical cancer. To accomplish this goal, the MCCSP is guided by the following five objectives:

1. Increase Pap test utilization province-wide.
2. Develop and maintain a population-based information system and registry.
3. Facilitate and support quality assurance for cervical cancer screening services.
4. Facilitate and support a common laboratory network.
5. Establish monitoring and evaluation methodology.

MCCSP recommends that cervical cancer screening with the Pap test be initiated with the onset of sexual activity. The recommended screening interval is three annual Pap tests for any woman initiating screening. If all three results are negative, screening should continue every two years. Evidence does not define an upper age when Pap tests should be stopped. Women who have regular negative Pap tests up to the age of 70 and have no change in their partner can stop.

Regular Pap tests and following through with recommended medical care after an abnormal Pap test result reduces the risk of developing invasive cervical cancer. The MCCSP promotes the importance of Pap tests as a screen for the early detection of cervical cancer and the detection of its precursors. The MCCSP supports and expands alternative service delivery models which increase the number of women attending for Pap tests, and actively monitors and facilitates follow up for Manitoba women with abnormal Pap test results.

The 2005 and 2006 operations and statistical report provides a program update and statistics for the period January 01, 2005 to December 31, 2006. MCCSP results are reported for women who are Manitoba residents between the ages of 18 and 69. Statistical data is presented for cytology diagnostic results, participation rates by regional health authority (RHA) and age, screening rates for women with negative results, volume of colposcopy reports by reason for referral, and cytology-histology correlation.

## 2005-2006 Program Highlights

In 2005 and 2006, MCCSP expanded access to service for Pap tests through strategic partnerships with RHAs, physicians groups, and community clinics.

### ***Education***

- ◆ Produced Pap Test Video in partnership with Mt. Carmel Clinic, Sexuality Education Resource Centre, Klinik, Aboriginal Health and Wellness, First Nations Inuit Health Branch – Health Canada, North Eastman Regional Health Authority, and Health Action Centre.
- ◆ Translated Pap Test Video and Colposcopy Client Education Video into 11 languages: Hindi, Urdu, Punjabi, Cree, Ojibway, French, Chinese, Vietnamese, Spanish, Filipino, and Portuguese. The videos in all languages are available for viewing from [www.cancercare.mb.ca](http://www.cancercare.mb.ca).
- ◆ Developed HPV brochure in partnership with Regional Health Authorities, Literacy Partners of Manitoba, Merck Pharmaceuticals, and the Assembly of Manitoba Chiefs – Health Directors. Partners tested the brochure throughout the province prior to publication and distribution.
- ◆ Coordinated *Eradicating Cervical Cancer Conference* in partnership with the University of Manitoba, Faculty of Medicine, Continuing Medical Education Department. More than 400 health care providers attended in Winnipeg or via 18 telehealth linked sites for education about the role of HPV and Pap tests in the context of Manitoba health care.
- ◆ Developed and distributed HPV Clinician Fact Sheet and MCCSP Management Guidelines (Appendix A).

### ***Access to Pap Screening***

#### Walk-In Clinics

In an effort to improve screening rates, the Manitoba Cervical Cancer Screening Program has partnered with clinics in Manitoba starting in 2001 to offer a one-day, walk-in, Pap test service every October. This easy access alternative has successfully reached many women who are at a higher risk of developing cervical cancer.

As in previous years, the rate of unscreened and underscreened women who had a Pap test during the week was high. Measurement of past screening patterns is taken from the MCCSP Registry. Underscreened women are defined as those who have not had a Pap test in the previous three years; unscreened women are those who have not had a Pap test in five years or more. 2006 is the first year that the program can report unscreened rates for at least five years.

- ◆ Winnipeg Pap Clinic Week 2005 partnered with 16 community clinics and physicians offices to offer walk-in Pap clinics.
  - 503 women attended one of the 16 Winnipeg Pap clinic sites.
  - 23% reported their ethnic background as Aboriginal.
  - 38% reported their ethnic background as Asian, Aboriginal, African, or Latin American.
  - 58% of the women had not had a Pap test in the previous 3 years.
  - 38% of the women had not had a Pap test in four years or more.

- 30% of the women indicated that their preferred language was not English.
- Top two reasons women accessed this service were the clinic was easy to get to and no appointment was needed.
- ◆ Expanded Pap Clinic Week across the province in 2006; 78 community clinics, physicians' offices, nursing stations, and health centres offered walk-in Pap Clinics during the week from October 23-27, 2006.
  - 1578 women attended a clinic for a Pap test.
  - 20% of the women identified themselves as First Nation Status, First Nations Non-Status, or Métis. Another 12% of the women identified themselves as Asian.
  - 52% of these women had not had a Pap test in the previous three years.
  - 38% had not had a Pap test in five years or more.
  - Top two reasons women accessed this service were no appointment was needed and they saw or heard an advertisement.

### Multicultural Initiatives

Participated in Health Canada funded Multi-Cultural Screening Outreach Project in partnership with Health Action Centre, Klinik, Sexuality Education Resource Centre and Manitoba Breast Screening Program to improve access for women in five ethnic communities.

### Training

Partnered with Women's Health Clinic to offer Pap Test Training to 21 nurses from five Regional Health Authorities to increase the number of health care providers providing Pap test screening in Manitoba.

### ***Partnerships with Communities***

- ◆ Provided support for four projects with the goal of increasing the number of under and unscreened women having Pap tests in hard to reach populations.
  - **Brandon Regional Health Authority** 7<sup>th</sup> Street Health Access Centre Women's Health Day provided Pap tests to 29 women. 69% were unscreened or underscreened.
  - **Parkland Regional Health Authority** provided 16 nurse managed Pap Clinics in 5 communities. 115 women were screened and 50% of these women had not had a Pap test in the previous 4 years.
  - **Poplar River Nursing Station** utilized community-based personal contact to recruit hard to reach women due for Pap screening. As a result, the overall number of women screened over a five month period increased from 18.67% prior to the project to 32.26%.
  - **Youville Centre** provided nurse managed clinics targeting new immigrant and refugee women living in their community. All of the women who attended the clinics were underscreened and represented the target population.

### ***Follow up of High Grade Abnormal Cytology Results***

The program ensures follow up of high grade abnormal Pap test results through letters to health care providers and where necessary letters directly to women. The program distributes letters when there is no evidence of colposcopy follow up in the MCCSP Registry for all women with a high grade cytology result.

- ◆ 2005 follow up and monitoring results:
  - 573 women had outstanding follow up representing 16.9% of all women diagnosed with a high grade abnormal Pap test in the province.
  - Based on follow up letter responses by health care providers, 113 women (3.3%) were sent a letter from the program explaining their results and encouraging them to contact their health care provider for recommended management.
  - 62 (1.8%) women were considered lost to follow up at the conclusion of follow up interventions.
- ◆ 2006 follow up and monitoring results:
  - 552 women had outstanding follow up representing 15.2% of all women diagnosed with a high grade abnormal Pap test in the province.
  - Based on follow up letter responses by health care providers, 106 women (2.9%) received a letter from the program explaining their results and encouraging them to contact their health care provider for recommended management.
  - 84 (2.3%) women were considered lost to follow up at the conclusion of follow up interventions.



## 2005-2006 Statistics

The statistics presented in the following tables reflect Pap test and colposcopy results reported to the MCCSP. Appendix B contains tables with more detailed supplementary data.

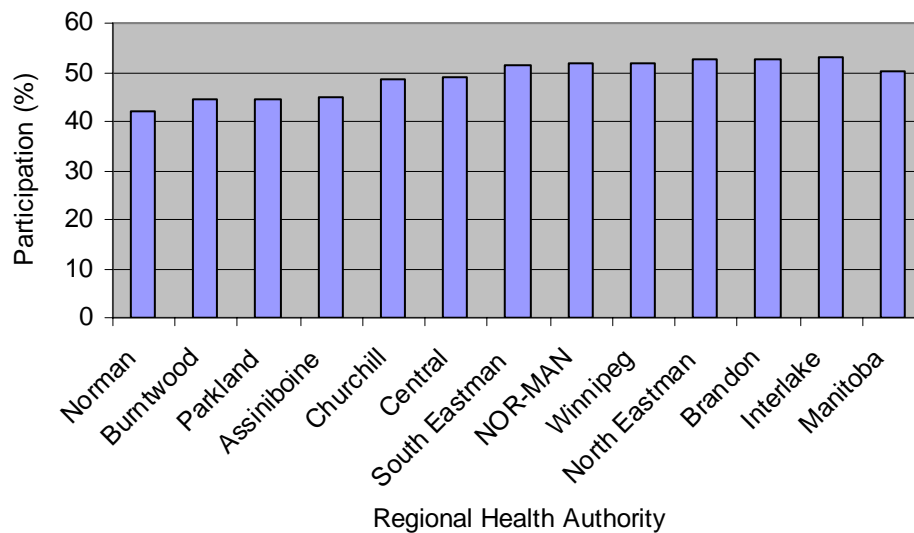
Cervical cancer screening participation rates remain stable in Manitoba. The two year participation rate (2005 and 2006) was 50% for women between the ages of 18 and 69. The three year participation rate (2004, 2005, 2006) was 58% for women between the ages of 18 and 69. While the screening rates have not shown improvement when compared with earlier reporting time frames, the program has been successful with initiatives to improve access and uptake from underscreened and unscreened women in the province. The decline in provincial participation rates may be related to a decrease in women who are overscreened as the guidelines for frequency are integrated into health service practice.

### *Two Year Participation Rates*

Two year participation rates are presented and reflect programmatic guidelines of regular screening: following three negative Pap tests one year apart, screening should be conducted every two years. Figure 1 illustrates the two year participation rates by regional health authority and the province. The proportion of women 18 to 69 years of age who had at least one Pap test during 2005-2006 was 50.2% for Manitoba. Interlake RHA had the highest participation rate at 53.0% and NORMAN RHA had the lowest participation rate at 42.2%.

Screening rates for 2005-2006 were slightly lower than 2003-2004 (52.7%). In 2003 and 2004, participation rates ranged from 44% in NORMAN to 61% in Brandon.

Figure 1. Percentage of Manitoba women, aged 18-69, who had a Pap test in 2005-2006 by Regional Health Authority



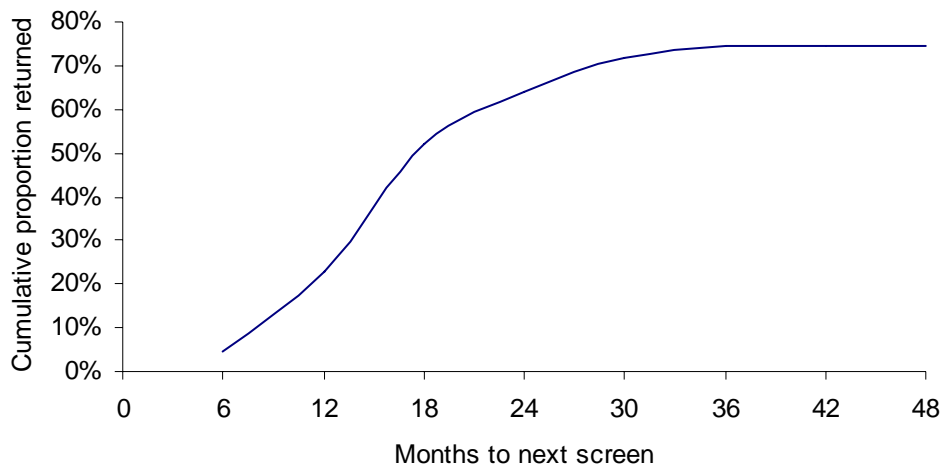
### ***Three year participation rates***

Three year participation rates reflect the screening frequency recommended by the International Agency for Cancer Research (2005). The three year participation rate for 2004, 2005, and 2006 was 58% for Manitoba. Extending the period of evaluation from two to three years increases the capture rate of women who had at least one Pap test during that time frame. The three year participation rate for all RHAs for 2002 to 2004 was 62.3%.

### ***Rescreening Rate***

The rescreening rate is the proportion of women who return for a Pap test. To allow sufficient time to measure rescreening from an index negative Pap test result, the index negative Pap test is identified for January 01, 2004 to December 31, 2004. Figure 2 illustrates the cumulative probability of returning for a Pap test for women who had a Pap test in 2004 that was negative for an intraepithelial lesion or malignancy. Fifty-two percent of women had a subsequent Pap test within 18 months, 64% within 24 months, and 75% within 36 months.

Figure 2. Cumulative probability of returning for a Pap test for women who had a negative Pap test result in 2004 (n=157,439)



### ***Cytology Results***

In 2005, a total of 175,765 Pap tests were processed for all Manitoba women 18 to 69 years of age. This increased to 181,092 for 2006.

Tables 1 and 2 show Pap test results for 2005 and 2006 by age group and cytologic diagnostic category (Appendix C). The breakdown of results by cytologic diagnostic category is similar for both years and to those previously reported in 2003 and 2004. Ninety-two percent of women received a negative Pap test result in the calendar years 2005 and 2006.

Table 1. Number of Pap tests by age group and cytologic diagnostic category, 2005

<i>Age Group</i>	<i>Negative</i>	<i>ASC</i>	<i>AGC</i>	<i>LSIL</i>	<i>HSIL</i>	<i>Cancer</i>	<i>Unspecified</i>	<i>Unsatisfactory</i>	<i>Total</i>
18-19	4,692	378	1	518	205	0	0	128	5,922
20-29	36,844	2,314	21	2,139	1,139	6	0	964	43,427
30-39	35,683	1,303	49	789	484	7	4	789	39,108
40-49	36,587	1,281	72	594	298	15	82	678	39,607
50-59	29,438	811	75	265	156	17	42	553	31,357
60-69	15,476	276	34	84	58	14	7	395	16,344
<b>Total</b>	158,720	6,363	252	4,389	2,340	59	135	3,507	17,5765
<b>%</b>	92.14	3.69	0.15	2.55	1.36	0.03	0.08	2.04	100.0%

Notes: 2005, all Regional Health Authorities, Manitoba Health insured, all providers.  
 If a woman has more than one Pap test during the time period, the most severe diagnostic result is counted. Cytology diagnostic categories follow Bethesda 2001 reporting guidelines. Full description of reporting terminology is provided in Appendix C.

Table 2. Number of Pap tests by age group and cytologic diagnostic category, 2006

<i>Age Group</i>	<i>Negative</i>	<i>ASC</i>	<i>AGC</i>	<i>LSIL</i>	<i>HSIL</i>	<i>Cancer</i>	<i>Unspecified</i>	<i>Unsatisfactory</i>	<i>Total</i>
18-19	4,782	395	2	491	198	0	1	170	6,039
20-29	37,409	2,537	18	2,280	1,267	5	0	1,178	44,694
30-39	35,985	1,424	54	832	566	7	0	939	39,807
40-49	36,907	1,398	61	694	311	12	60	695	40,138
50-59	30,710	745	63	328	172	6	42	613	32,679
60-69	16,785	311	34	101	68	8	6	422	17,735
<b>Total</b>	162,578	6,810	232	4,726	2,582	38	109	4,017	181,092
<b>%</b>	91.81	3.85	0.13	2.67	1.46	0.02	0.06	2.27	100.0%

Notes: 2006, all Regional Health Authorities, Manitoba Health insured, all providers.  
 If a woman has more than one Pap test during the time period, the most severe diagnostic result is counted. Cytology diagnostic categories follow Bethesda 2001 reporting guidelines. Full description of reporting terminology is provided in Appendix C.

Table 3 shows the proportion of Manitoba women who had a high grade abnormal Pap test by RHA between 2004 and 2006. A high grade result includes AGC and HSIL cytology results. The percentage of women with a high grade result varied from a low of 1.8% in Assiniboine RHA to a high of 5.0% in Burntwood RHA.

Table 3. Proportion of Manitoba women 18-69 years of age who had a high grade abnormal Pap test, by Regional Health Authority, 2004-2006

<i>Regional Health Authority</i>	<i>Number of women who had a high grade Pap test result</i>	<i>Number of women who had a Pap test</i>	<i>% high grade result</i>
Assiniboine	224	12,259	1.8
Brandon	255	12,020	2.1
Burntwood	397	7,985	5.0
Central	482	19,580	2.5
Churchill	10	210	4.8
Interlake	445	17,188	2.6
NOR-MAN	174	4,393	4.0
North Eastman	182	8,770	2.1
Parkland	192	7,464	2.6
South Eastman	243	12,652	1.9
Winnipeg	3,370	150,096	2.2
<b>Provincial Total</b>	<b>5,974</b>	<b>252,617</b>	<b>2.4</b>

Notes: All laboratories, Manitoba Health insured. Statistics are not corrected for hysterectomy, migration, death, or cervical cancer. 19,831 women could not be attributed to an RHA due to incomplete postal code data. These are not included in the statistics and reflect 7.4% of all women who had a Pap test during this time period.

Upon clinical review, more than 60% of the women diagnosed with invasive cervical cancer did not have a Pap test in the previous four years or the screening interval was greater than two years as demonstrated in Table 4. Other factors include inappropriate management, refusal of treatment, and cell types with rapid biologic cell proliferation.

Table 4. Carcinoma of the cervix and prior screening history, Manitoba, 2004-2006

<i>Pap Test History</i>	<i>2004 (N = 53)</i>	<i>2005 (N = 54)</i>	<i>2006 (N = 45)</i>
Never been screened/ No Pap test $\geq$ 4 years	29 (54.7%)	37 (68.5%)	24 (53.3%)
Screening interval too long ( $q > 2$ years)	5 (9.4%)	9 (16.6%)	12 (26.7%)

### ***Colposcopy Reports***

A total of 12,763 colposcopy reports were reported to the registry in 2005 and 12,790 reports in 2006. Figure 3 shows the reason for the colposcopy for 2005 and 2006. Twenty-nine percent of colposcopy appointments were for the primary evaluation of an abnormal cytology. The majority of colposcopy appointments are for follow up procedures and evaluation (67.4%).

Figure 3. Reason for colposcopy 2005, 2006

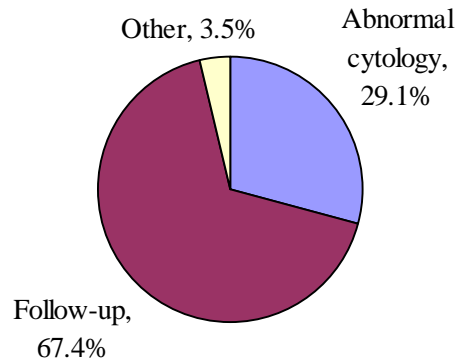
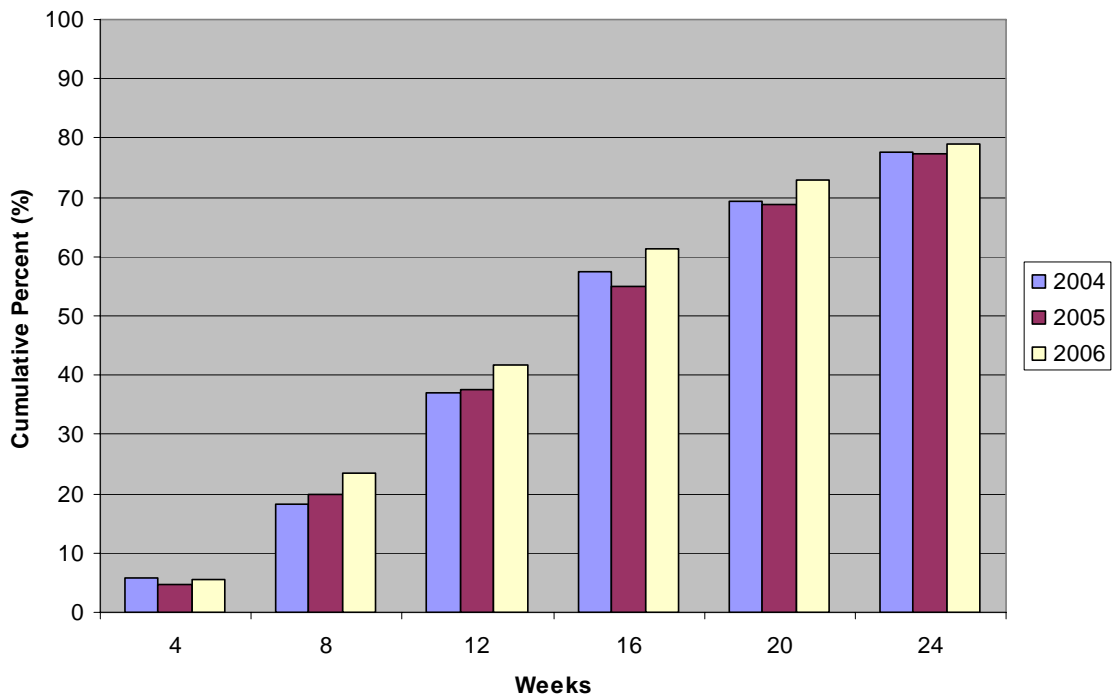


Figure 4 illustrates that 37% in 2004 and 2005 and 42% in 2006 of all first colposcopy procedures occurred within 12 weeks of the date of the abnormal index Pap test. Twenty-two percent, 23%, and 21% of all first colposcopy procedures occurred greater than six months after the abnormal index Pap test in 2004, 2005, and 2006 respectively. Index abnormal Pap tests include ASC-US, LSIL, AGC, and HSIL cytology results.

Figure 4. Time from the date the Pap test was performed to the date the colposcopy was performed for 2004, 2005, and 2006



### ***Cytology-Histology Correlation***

Table 5 shows the correlation of index cytology results with histology results reported through colposcopy reports for all laboratories in the province over a four year period from 2003 to 2006. Correlated results occur when the cytology diagnosis corresponds to the histology. Undercalled results occur when the cytology diagnosis was as a lower grade than histology diagnosis and overcalled results occur when the cytology diagnosis was a higher grade than that reported histologically. Reports not correlated reflect an absence of histology results, or unsatisfactory or inflammatory results on colposcopy reports such that a correlation could not be made.

Table 5. Cytology-histology correlation, all laboratories, 2003 – 2006

<i>Year</i>	<i>Correlated %</i>	<i>Under correlated %</i>	<i>Over correlated %</i>	<i>Total number of reports</i>	<i>Number reports not correlated</i>
2003	41.0	27.2	31.8	1,576	915
2004	41.2	27.6	31.2	1,758	977
2005	42.9	24.3	32.8	1,688	891
2006	42.9	24.8	32.9	1,403	726

Notes: Correlated – the cytology was the same grade of diagnosis as the histology

Under Correlated – the cytology was a lower grade of diagnosis than the histology

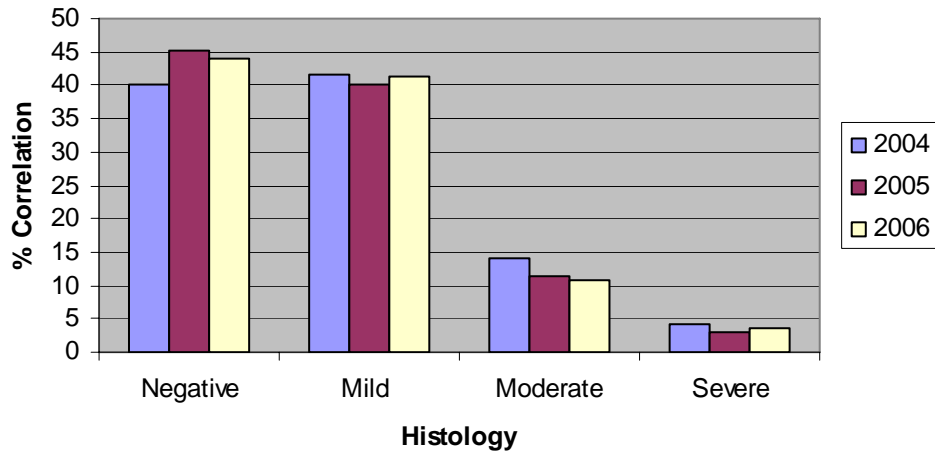
Over Correlated – the cytology was a higher grade of diagnosis than the histology

During the time period from 2003 to 2006, the rate of correlated reports among all laboratories in the province remained consistent. There was a slight improvement in the rate of undercorrelated reports. Consistent rates of over correlation were also evident among all the laboratories in Manitoba, with a slight increase from 31.8% in 2003 to 32.9% in 2006.

The MCCSP can also correlate histology with the severity of the index Pap test. Histology may not be available if no lesion was seen at colposcopy, the patient was pregnant, or the patient did not attend subsequent appointments when histology collection was planned.

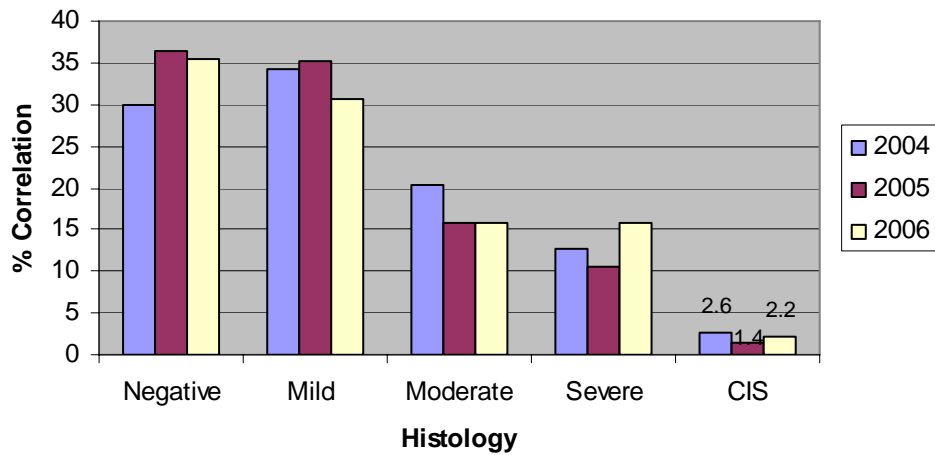
Analysis of cytology to histology correlation by cytological category is provided by the program to the laboratories to support their quality assurance activities. Tables six to 10 demonstrate the correlation reports which have been developed for specific cytology outcomes.

Table. 6. Correlation of ASC-US cytology by histology breakdown, 2004-2006



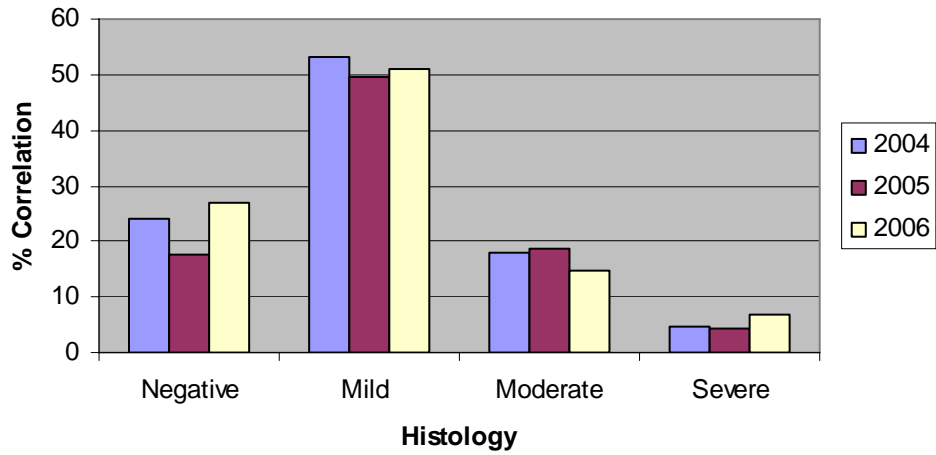
Note: Carcinoma in situ, squamous invasion, and glandular invasion were less than 1.0%.

Table 7. Correlation of ASC-H cytology by histology breakdown, 2004-2006



Note: Squamous invasion and glandular invasion were less than 1.0%.

Table 8. Correlation of LSIL cytology by histology breakdown, 2004-2006



Note: Carcinoma in situ, squamous invasion, and glandular invasion were less than 1.0%.

Table 9. Correlation of AGC cytology by histology breakdown, 2004-2006

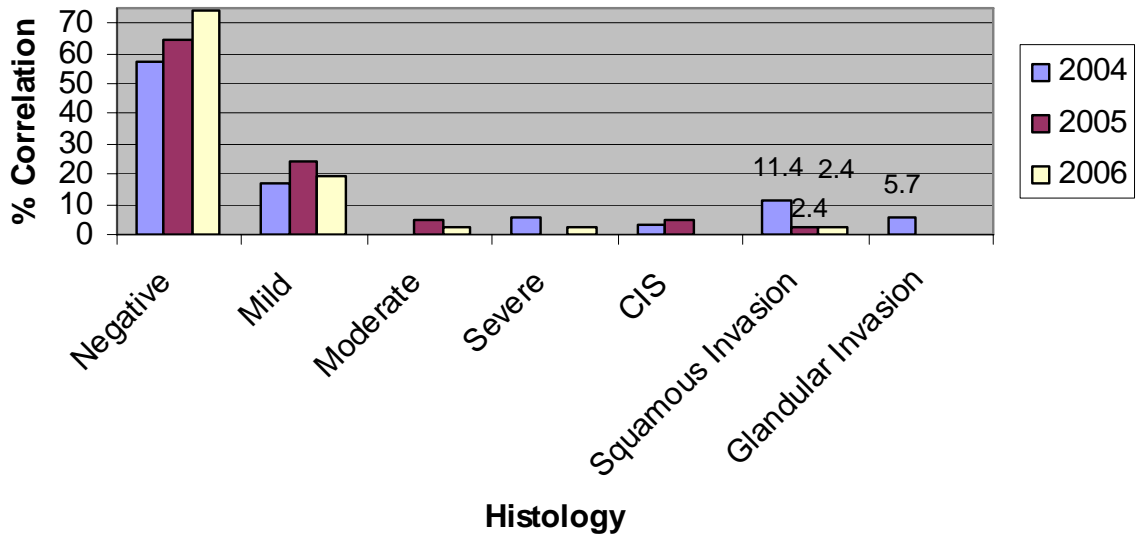
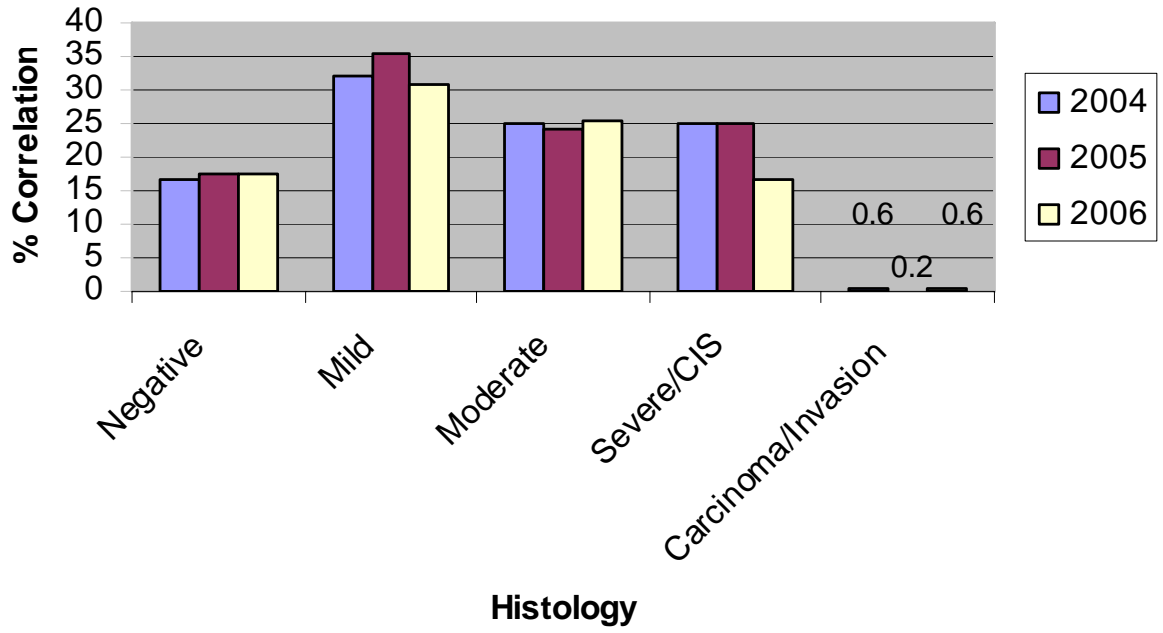




Table 10. Correlation of HSIL cytology by histology breakdown, 2004-2006



Note: Squamous invasion and glandular invasion were less than 1.0%.

## Appendix A Management Guidelines

### Manitoba Cervical Cancer Screening Program (MCCSP)

## Management Guidelines

- A Pap test is a screening test for cervical cancer and cervical dysplasia in an asymptomatic individual with a grossly normal cervix.
- Women of all ages who are or ever have been sexually active should be screened.
- Any visual abnormalities of the cervix and/or abnormal symptoms should be appropriately investigated regardless of the findings on cytology.
- After three negative for intraepithelial results at one year intervals, screening should be continued every two years.
- Women who have had previous high grade abnormal results should continue with annual screening.
- The MCCSP will monitor Manitoba women 18 to 69 for the purposes of quality assurance. However, a fail-safe mechanism will be applied to all women (regardless of age) having Pap tests. Health care providers will be contacted if follow up of any abnormality is incomplete.
- The MCCSP can provide health care providers screening histories for Manitoban women to April 2001, PHINs to facilitate Pap tests and educational materials (available in 24 languages).

<b>Initiation of Screening</b>	Pap test screening should begin within two years of first sexual activity. If a woman has never been sexually active the focus should be on discussing the benefits of having regular Pap tests once she does become sexually active and prevention of STIs.
<b>Screening Interval</b>	After three negative for intraepithelial results at one-year intervals, screening should be continued every two years. Women who have not been screened in more than two years should be screened annually until there are three consecutive Pap tests. Women who have had previously abnormal Pap tests should continue with annual screening.
<b>Cessation of Screening</b>	Evidence does not define an upper age when Pap tests should be stopped. Women who have regular negative Pap tests up to 70 and have no change in their partner can stop.
<b>Previous Hysterectomy</b>	Women who have had a total hysterectomy for benign disease (confirmed on pathology) and if they have no past history of cervical dysplasia can stop. Women who have had a subtotal hysterectomy should continue screening according to guidelines.
<b>Immunocompromised or HIV Positive</b>	Annual screening.
<b>Pregnancy</b>	Screening indications should be the same as for women who are not pregnant. A combined Pap test should be performed using a spatula and saline moistened cotton swab.
<b>Women having sex with women</b>	Indication for screening intervals should be the same as for women having sex with men.

#### A specimen may be rejected for one of the following reasons:

- The specimen slide is improperly labeled
- Failure to identify the slide with the patient's name when the patient is a non-Manitoba resident or, if for any other reason has not been issued a PHIN
- Discrepancy of information between the specimen and the requisition
- The slide is broken beyond repair
- The slide is received without accompanying requisition

*Repeat Pap test in 3 months.  
Let patient know repeat is not due to abnormal findings.*

#### Transformation Zone

The presence of squamous metaplastic cells and/or dysplastic cells and/or endocervical cells is generally regarded as evidence of adequate sampling of the transformation zone. If the transformation zone is absent in a satisfactory pap test you may not need to repeat the Pap test. The decision to repeat the pap test is based on the cytology diagnosis and not the presence or absence of transformation zone cells.

## MCCSP Guidelines - Management of Abnormal Cytology

<b>Unsatisfactory</b>	Repeat cytology in 3 months	If result is negative, continue with routine screening If result is unsatisfactory or $\geq$ ASC-US*, refer for colposcopy	
<b>ASC-US</b> (A typical Squamous Cells of Undetermined Significance)	Repeat cytology in 6 months	If result is negative, repeat cytology in 6 months.  If result is $\geq$ ASC-US*, refer for colposcopy	If result is negative, continue with routine screening If result is $\geq$ ASC-US*, refer for colposcopy
<i>Referral to colposcopy may be appropriate if patient is unreliable or anxious.</i>			
<b>ASC-H</b> (Atypical Squamous Cells, Cannot exclude HSIL)	Refer for colposcopy		
<b>LSIL</b> (Low-grade Squamous Intraepithelial Lesion)	Repeat cytology in 6 months	If result is negative, repeat cytology in 6 months  If result is $\geq$ ASC-US*, refer for colposcopy	If result is negative, continue with routine screening If result is $\geq$ ASC-US*, refer for colposcopy
<i>Referral to colposcopy may be appropriate if patient is unreliable or anxious.</i>			
<b>HSIL</b> (High-grade Squamous Intraepithelial Lesion)	Refer for colposcopy		
<b>AGC</b> (Atypical Glandular Cells)	Refer for colposcopy, endocervical curettage, and if $\geq$ 35 years old or has abnormal bleeding, refer for endometrial biopsy		
<b>AIS</b> (Adenocarcinoma in Situ)	Refer for colposcopy, endocervical curettage		
<b>Squamous Carcinoma</b> <b>Adenocarcinoma</b> Other malignancy	Refer for colposcopy and oncology		

### Endometrial Cells:

Refer for Endometrial biopsy if:

1. Out of cycle in a woman over 40 with no history of hormones or IUCD
2. Woman over 40, menstrual history not known
3. Post menopausal woman with no history given of HRT

\*  $\geq$ ASC-US refers to any of the following results: ASC-US, ASC-H, LSIL, HSIL, AGC, AIS, Squamous Carcinoma, Adenocarcinoma or other malignancy.



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## Appendix B Statistical Reports

Table 1. Proportion of women who had at least one Pap test by age and Regional Health Authority, 2005

Age group	Assiniboine	Brandon	Burntwood	Central	Churchill	Interlake	NOR-MAN	North Eastman	Parkland	South Eastman	Winnipeg	Manitoba
18-19	26.1	34.1	36.6	22.6	18.0	31.6	33.1	31.4	27.8	22.7	29.6	29.5
20-29	35.0	41.3	40.0	37.5	45.7	41.1	34.2	39.2	34.3	38.7	40.3	39.5
30-39	31.3	36.0	30.2	34.1	32.3	39.2	25.7	37.6	30.1	38.1	37.6	36.5
40-49	27.2	32.5	25.4	31.7	15.4	36.3	24.2	35.6	25.5	35.6	36.9	34.8
50-59	26.5	33.9	19.5	29.8	34.5	34.1	23.3	34.2	24.6	32.8	35.8	33.5
60-69	21.7	29.3	11.9	25.2	10.3	28.4	19.3	31.8	22.0	28.2	31.5	29.4
All ages	28.3	35.4	29.6	31.9	29.8	35.9	26.5	35.5	27.3	34.9	36.7	35.0

Notes: All laboratories, Manitoba Health insured. Statistics are not corrected for hysterectomy, migration, death, or cervical cancer. 12,262 women could not be attributed to an RHA due to incomplete postal code data. These are not included in the statistics and reflect 7.8% of all women who had a Pap test during this time period.

Table 2. Proportion of women who had at least one Pap test by age and Regional Health Authority, 2006

Age group	Assiniboine	Brandon	Burntwood	Central	Churchill	Interlake	NOR-MAN	North Eastman	Parkland	South Eastman	Winnipeg	Manitoba
18-19	28.6	34.5	39.1	23.4	40.0	36.5	36.6	34.1	29.8	20.8	29.3	30.0
20-29	35.4	42.5	41.2	37.1	49.3	43.1	35.9	40.0	39.6	38.2	40.0	38.7
30-39	31.1	35.7	31.5	34.9	29.1	39.7	26.3	38.2	29.3	36.3	36.9	35.3
40-49	28.2	33.9	24.8	31.8	25.6	37.2	24.9	35.6	27.2	33.8	36.5	34.3
50-59	28.8	35.3	19.6	32.1	29.3	34.4	23.4	34.4	26.5	33.5	35.5	33.3
60-69	23.3	31.1	11.7	25.8	24.1	29.8	20.0	31.8	25.4	28.5	30.8	28.8
All ages	29.3	36.3	30.1	32.5	32.3	36.7	27.3	35.9	29.5	34.1	36.1	34.4

Notes: all laboratories, Manitoba Health insured. Statistics are not corrected for hysterectomy, migration, death, or cervical cancer. 11,731 women could not be attributed to an RHA due to incomplete postal code data. These are not included in the statistics and reflect 7.3% of all women who had a Pap test during this time period.

Table 3. Proportion of women who had at least one Pap test by age and Regional Health Authority, 2005, 2006

Age group	Assiniboine	Brandon	Burntwood	Central	Churchill	Interlake	NOR-MAN	North Eastman	Parkland	South Eastman	Winnipeg	Manitoba
18-19	42.1	51.5	54.2	35.7	50.0	49.4	52.6	49.7	44.4	34.7	45.3	45.1
20-29	49.6	58.5	56.7	53.3	66.7	59.0	49.8	55.8	54.2	55.0	55.6	54.1
30-39	47.1	52.4	46.4	52.1	53.1	57.4	41.8	56.4	46.8	55.2	52.4	51.2
40-49	42.5	51.0	34.5	50.2	36.1	54.5	40.5	53.3	41.8	53.3	53.6	51.3
50-59	44.0	52.0	31.9	48.1	45.7	50.6	39.1	50.8	42.0	50.1	51.7	49.3
60-69	36.1	45.3	18.8	39.4	25.0	43.2	31.9	45.7	38.4	43.4	44.4	43.0
All ages	44.5	52.7	44.4	48.8	48.5	53.0	42.2	52.5	44.6	51.6	52.0	50.2

Notes: all laboratories, Manitoba Health insured. Statistics are not corrected for hysterectomy, migration, death, or cervical cancer. 18,049 women could not be attributed to an RHA due to incomplete postal code data. These are not included in the statistics and reflect 7.8% of all women who had a Pap test during this time period.

Table 4. Proportion of women who had at least one Pap test by age and Regional Health Authority, 2004, 2005, 2006

Age group	Assiniboine	Brandon	Burntwood	Central	Churchill	Interlake	NOR-MAN	North Eastman	Parkland	South Eastman	Winnipeg	Manitoba
18-19	55.5	63.4	69.0	46.0	40.0	63.6	66.4	67.0	67.3	44.9	57.8	57.7
20-29	60.9	67.8	67.5	62.8	78.3	68.4	60.4	66.1	63.2	64.0	64.0	62.4
30-39	58.4	63.6	56.8	61.4	58.0	66.0	50.6	67.1	55.4	64.1	60.2	59.1
40-49	55.8	62.9	49.2	59.8	44.4	63.5	50.8	62.4	54.9	63.0	62.1	60.0
50-59	53.0	70.0	38.3	55.7	59.7	58.6	46.1	60.0	50.0	58.2	58.2	56.1
60-69	44.7	55.8	25.5	47.4	20.7	50.3	40.1	53.3	46.7	51.0	51.5	51.0
All ages	54.8	63.5	54.4	57.9	56.4	61.8	51.8	62.2	54.7	60.5	60.0	58.4

Notes: all laboratories, Manitoba Health insured. Statistics are not corrected for hysterectomy, migration, death, or cervical cancer. 19,831 women could not be attributed to an RHA due to incomplete postal code data. These are not included in the statistics and reflect 7.3% of all women who had a Pap test during this time period.

Table 5. Rescreening rate for women with a negative Pap test in 2004

<i>Time to rescreen in months</i>	<i>Number of Women</i>	<i>Percent %</i>	<i>Cumulative Percent %</i>
6	7,166	4.6	4.6
12	28,875	18.3	22.9
18	46,248	29.4	52.3
24	18,523	11.8	64.0
30	12,396	7.9	71.9
36	3,892	2.5	74.4
42	320	0.2	74.6
48	0	0.0	74.6
Not screened	40,019	25.4	100.0
<b>Total</b>	157,439		

Note: Includes all age groups and all women in MCCSP Registry and non-Manitoba residents.

## Appendix C Cytology Reporting Terminology

### *Bethesda System 2001*

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#### Specimen adequacy

- ◆ Satisfactory for evaluation
- ◆ Unsatisfactory for evaluation (specify reason)
  - Specimen rejected/not processed
  - Specimen processed or examined, but unsatisfactory for evaluation because of (specify reason)

#### Interpretation/diagnostic result

- ◆ NEGATIVE for intraepithelial lesion or malignancy
- ◆ SQUAMOUS CELL
  - ◆ Atypical Squamous Cells (ASC)
    - ASC-US Atypical Squamous Cells – Unknown Significance
    - ASC-H Atypical Squamous Cells – High Grade Squamous Intraepithelial Lesion
  - ◆ Low Grade Squamous Intraepithelial Lesion (LSIL)
    - Includes HPV/mild dysplasia/CIN I
  - ◆ High Grade Squamous Intraepithelial Lesion (HSIL)
    - Includes moderate and severe dysplasia, CIS/CIN 2 and CIN 3 with features suspicious for invasion (if invasions is suspected), carcinoma in-situ
  - ◆ Squamous Cell Carcinoma
- ◆ GLANDULAR CELL
  - ◆ Atypical Glandular Cells (AGC), Not otherwise specified
    - Endocervical cells (NOS or specify in comments)
    - Endometrial cells (NOS or specify in comments)
    - Glandular cells (NOS or specify in comments)
  - ◆ Atypical Glandular Cells (AGC), favour neoplastic
    - Endocervical cells, favour neoplastic
    - Glandular cells, favour neoplastic
  - ◆ Endocervical adenocarcinoma in situ
  - ◆ Adenocarcinoma
    - Endocervical
    - Endometrial
    - Estrauterine
    - Not otherwise specified (NOS)