Cervical Screening Initiatives Program

1-866-643-8719

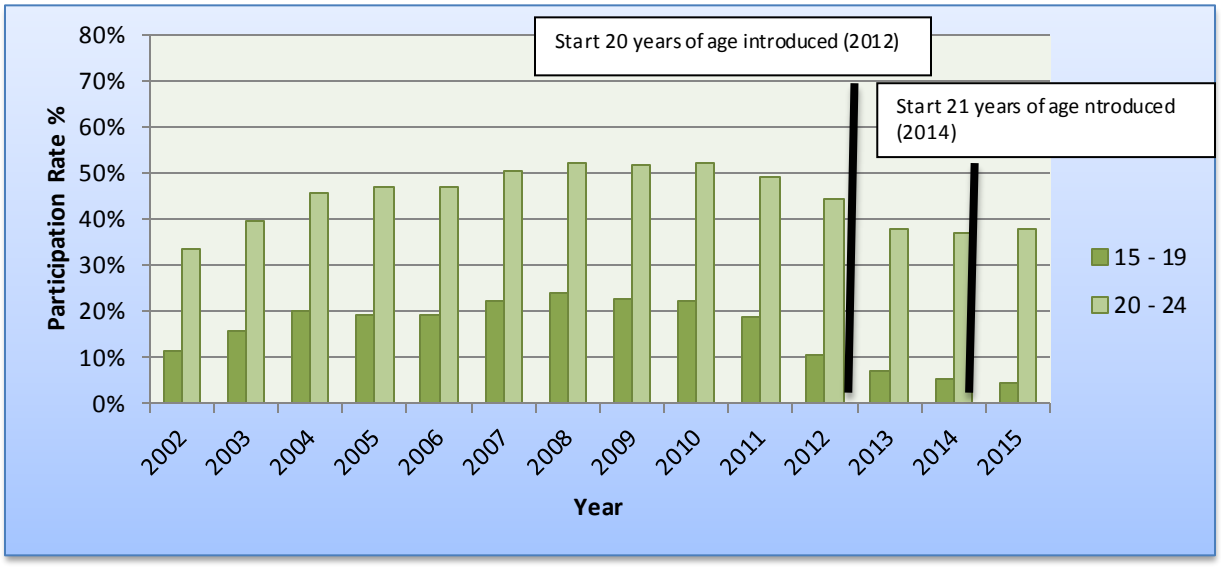
Newfoundland and Labrador Cervical Screening Initiatives Program: Report on Cervical Screening in Young Women (2016)

Report prepared by:
Patrick Fewer Policy Planning and Research Analyst

Newfoundland and Labrador Cervical Screening Initiatives Program: Report on Cervical Screening in Young Women (2016)

In recent years there is significant evidence indicating the benefits of screening less frequently for women under 21 years of age. The evidence indicates that less screening in younger women leads to a decrease in aggressive treatment and a decrease in harms associated cancer screening. [1-4] In 2012 the Newfoundland and Labrador (NL) Cervical Screening Initiatives (CSI) program made a commitment to decrease cervical screening in younger women by changing its clinical management guidelines (CMG) start age from 18 years of age to 20 years of age. Currently, the NL CSI program recommends starting cervical cancer screening for sexually active women at age 21 years of age. This recommendation is congruent with the Canadian Partnership Against Cancer, Canadian Task Force on Preventative Health Care and other jurisdictions and territories.[1-4] The Canadian Task Force in Preventative Health Care currently recommends, "For women aged less than 20 years, we recommend not routinely screening for cervical cancer. (Strong Recommendation; High-Quality Evidence)." [4] The purpose of this report is to provide an update on cervical screening in younger women and to provide a trend analysis on the annual cervical screening participation rates and abnormal cytology rates for women ages 15 to 19 and 20 to 24 in NL (Figure 1 and Figure 2).

Figure 1. Percentage of women 15 to 24 years of age who had a Pap test in a calendar year (Jan 1 to Dec 31) from 2002 to 2015.



Notes:

1. Rates not corrected for hysterectomy.
2. Population mid-point calculated using NL statistics agency population projections.

Historically, the NL CSI program has recommended starting cervical screening at 18 years of age or within three years of onset of sexually activity. Congruent with this recommendation, Figure 1 Illustrates a steady increase in cervical cancer screening participation rates from 2002 to 2010 in women ages 15 to

19 and 20 to 24. However, more recent evidence suggests that screening younger women may cause more harm than benefit including:

- Increased anxiety and psychological morbidity
- Over-diagnosis and over-treatment of low-grade abnormal cell changes
- Difficulties with future pregnancies from some colposcopy treatments. [1]

In addition to the associated harms, studies have found that approximately 90% of low-grade cervical abnormalities in younger women will regress within 2 years. Also, among 15 to 19 year olds living in Canada from 1970 to 2007 there were ≤ 0.3 per 100,000 women diagnosed with invasive cervical cancer. [1]

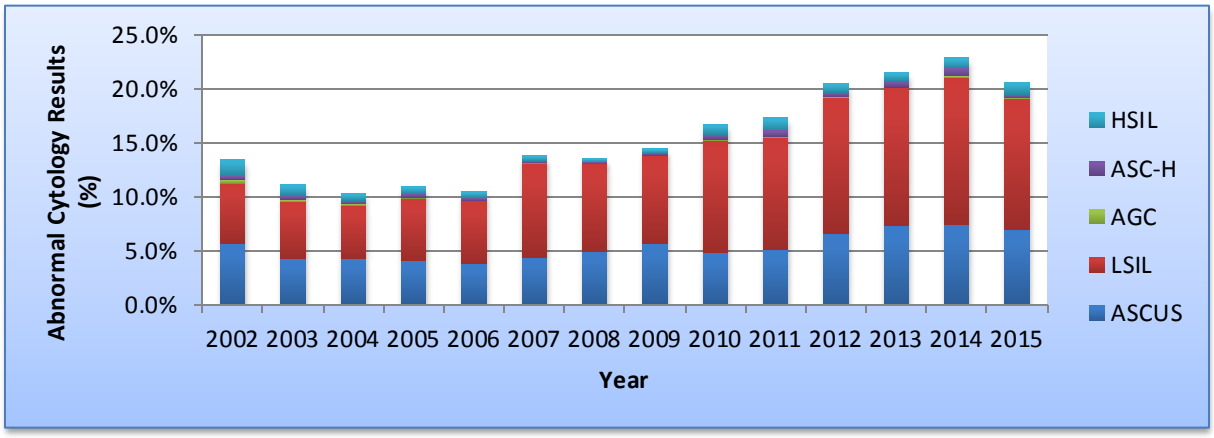
Considering recent evidence the CSI program made an informed decision to change the Clinical Management Guidelines (CMG) in 2012 to start screening at age 20 and again in 2014 to start screening at age 21. This change in CMG's clearly affected the participation rates with significant decreases in participation rates for women aged 15 to 19. In 2010 the participation rate for women ages 15 to 19 was 23 % and in 2015 the participation rates for women ages 15 to 19 was 4 % (Figure 1).

Minimizing the possible harm of cervical screening in younger women is a priority of the CSI program. It is reassuring that in the last 5 years the cervical screening participation rates in women 15 to 19 years of age is decreasing. In the future, the CSI program will continue to monitor the participation rates of younger women and continue to make evidence based changes to the Clinical Management Guidelines.

Abnormal Rates in women ages 15 to 24

The percentage of women who had an abnormal cytology test (Pap test) result varied, but the majority of Pap tests for young women are low-grade (ASC-US and LSIL) abnormalities. It is important to note, that higher low-grade abnormal rates are expected in younger women due to the increase prevalence of HPV. [1]

Figure 2. Percentage of women 15 to 24 years of age by most severe abnormal Pap test result



Note: ASC-US (Atypical squamous cells of undetermined significance); LSIL (Low-grade squamous intraepithelial lesion); AGC (Atypical glandular cells); ASC-H (Atypical squamous cells, cannot rule out high-grade); HSIL+ (High-grade squamous intraepithelial lesion or more severe)

Figure 2 illustrates an increasing trend of abnormal cytology, particularly low-grade abnormalities, from 2002 to 2015. Low-grade abnormalities in 15 to 24 year olds ranged from 9.1 % in 2004 to 21% in 2014. The increasing trend of low-grade abnormalities is concerning and therefore important to trend over time; however, the risk of invasive cervical cancer is very low in younger women. [1] There is no clear indication why there is an increase in low-grade abnormal cytology, but this may be due to pathologist interpretation, decreasing volume of cytology (due to extending cervical screening interval) and changing technology (The CSI program changed from conventional cytology to liquid based cytology in 2008).

Figure 2 also illustrates the percentage of high-grade (ASC-H and HSIL+) abnormalities which range from as low as 0.3 % in 2008 to as high as 1.8 % in 2002. There is no observable trend in the high-grade abnormal rates over time.

From an organized cervical cancer screening program perspective, it is import to trend this data since the percentage of both low-grade and high-grade abnormalities influences colposcopy volumes and wait times. Also the HPV vaccinated cohort will begin screening and in 2014 it is expected that there will be fewer abnormalities, particularly high-grade abnormalities.

References

1 Pan-Canadian Cervical Screening Network. Cervical Cancer Screening in Canada: Monitoring and of Quality Indicators, Results Report, January 2011 to December 2013. Toronto: Canadian Partnership Against Cancer; January, 2016.

2 Toward Optimized Practice. Cervical Cancer Screening: Summary of the clinical practice guideline. Organized cancer screening in Alberta 2015. Calgary: Alberta Health Services; 2015. Available: www.screeningforlife.ca/ (accessed 2016 Nov. 3).

3 International Agency for Research on Cancer. European Guidelines for Quality Assurance in Cervical Cancer Screening, 2nd Edition. Lyon, France: IARC; 2008

4 Canadian Task Force on Preventive Health Care. Recommendations on screening for cervical cancer. CMAJ. 2013;185(1):35-45.