3 Cervical Cancer Screening in Canada

3.1 History of Cervical Cancer Screening

In Canada, the history of cervical cancer screening dates back to 1960, when the province of British Columbia introduced a provincial cervical cancer screening program. In 1973, the Conference of Deputy Ministers of Health identified the need for comprehensive cervical cancer screening programs, and the ensuing Walton Report recommended that health authorities support the development of these programs[28]. A 1980 survey concluded that the recommendations of the Task Force had not been implemented at the provincial level[29]. The Walton Task Force was reconvened in 1980 in response to the lack of implementation and to concerns about changing sociosexual patterns[30]. Recommendations at this meeting related to frequency of screening, laboratory quality control and follow-up mechanisms. In addition, the 1980 task force also concluded that improving the quality and sensitivity of screening and including women who had never been screened would reduce mortality more effectively than attempts to increase screening frequency.

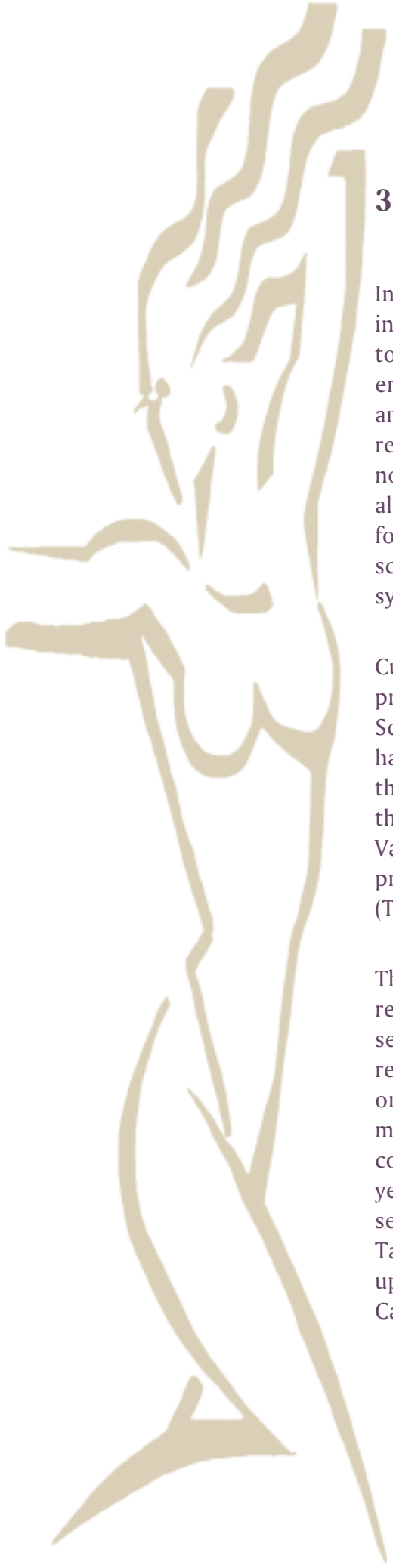
In a National Workshop on Screening for Cancer of the Cervix (1989)[31], previous recommendations on screening were reviewed and it was recognized that programs in Canada were not as effective as they could be. Not only were some women at risk not being screened but also smears were not being taken adequately and women with abnormalities were not receiving appropriate follow-up and management. Conversely, some women were being screened too frequently, resulting in inappropriate use of resources. Participants at the workshop concluded that the following issues needed to be addressed:

- the frequency of screening;
- the management of abnormalities;
- information systems;
- training and quality control requirements for laboratories and programs.

The need for an organized approach to screening was emphasized. In November 1990 the recommendations from this workshop were accepted by the Deputy Ministers of Health, who requested that a regular review of developments be made to them.

In 1995, Health Canada supported a workshop entitled *Interchange '95* to review the situation within the provinces, identify factors affecting the implementation of comprehensive cervical cancer screening programs and determine whether previous recommendations were still appropriate. The participants outlined three specific but interrelated components required of a comprehensive cervical cancer screening program: information systems, quality management and recruitment. It was at *Interchange '95* that participants felt the need to have a forum for the exchange of information. Thus the provinces and territories were invited to participate in a Cervical Cancer Prevention Network (CCPN), an informal association of federal, provincial and territorial representatives together with representation from professional societies and the community. The purpose of the CCPN is to continue to reduce the morbidity and mortality associated with cervical cancer and its precursors in Canada by facilitating the implementation of organized screening programs. Three working groups were formed to focus on the development of the three components of organized screening programs: effective recruitment, information systems and quality management. Since the formation of the CCPN in 1995, Health Canada has continued to sponsor meetings for information exchange and to foster collaboration on components of organized screening programs among jurisdictions.

With the formation of the CCPN in 1995, considerable progress has been made towards information exchange on resources and materials that support planning and implementation of organized cervical cancer screening programs in the provinces and territories. Meetings of the CCPN were held in 1998 and, most recently, in January 2001.



3.2 Recommended Guidelines and Current Provincial Status

In Canada, opportunistic screening, which has occurred since the introduction of the Pap test, is by far the most frequent method used to screen women. Opportunistic screening, however, tends to encourage overscreening of women at all ages, especially the young, and the overtreatment of abnormalities that otherwise would have regressed spontaneously. Recognizing that effective organization will not only reduce the cost of screening programs in the long run but also improve their effectiveness, recommendations have been put forward numerous times in Canada for the development of organized screening programs that incorporate a computerized information system, population-based recruitment and quality management.

Currently, two provinces in Canada have well-established, organized programs for cervical cancer screening: British Columbia and Nova Scotia. Recently, Alberta, Manitoba, Ontario, and Prince Edward Island have also launched programs. Provincial programs target all women in their population in a specified age range (usually 18-69); however, at this time no province encompasses population-based recruitment. Variation among provinces in their implementation of screening program components reflects maturity of program development (Table 1).

The Canadian Task Force on Preventive Health Care (1991)[32] recommends annual screening with the Pap smear after initiation of sexual activity or at age 18. The annual screening frequency may be reduced to every 3 years, until age 69, after two normal tests and if an organized program is in place with appropriate quality control measures and information systems. More frequent testing may be considered for women at high risk (first intercourse at less than18 years of age, multiple sexual partners, partner who has had multiple sexual partners, smoking, low socio-economic status). The Canadian Task Force on Preventive Health Care recommendations are based upon the recommendations from the National Workshop on Cervical Cancer Screening, held in 1989[31].

Table 1: Cervical Cancer Screening Programs and Practices, Canada, 2001

Province	Program	Year of Inception	Computerized Information System*	Target Age Group	Screening Frequency
Newfoundland	No	–	✓	18+	Annual
Nova Scotia	Yes	1991	✓	18+	Annual
Prince Edward Island	Yes	2001	✓	20-69	After three normal annual Pap smears, screening should be continued at least every 2 years.
New Brunswick	No	–	–	–	–
Quebec	No	–	–	18-69	Annual
Ontario	Yes	2000	✓	20-69	After three normal annual Pap smears, screening should be continued every 2 years.
Manitoba	Yes	1999	✓	18-69	After three normal annual Pap smears, screening should be continued every 2 years.
Saskatchewan	No	–	–	–	–

*Has a provincial computerized information system for cytology, which may have been implemented before inception of full program.

Table 1: Cervical Cancer Screening Programs and Practices, Canada, 2001 (continued)

Province	Program	Year of Inception	Computerized Information System*	Target Age Group	Screening Frequency
Alberta	Yes	2000	Under development	18-69	Annual (to be reviewed when all components of program in place)
British Columbia	Yes	1960	✓	18-69	After three normal annual Pap smears, screening should be continued every 2 years. If high risk, continue annually.
Northwest Territories	No	–	–	18+	After three normal annual Pap smears, screening should be continued every 2 years.
Yukon	No	–	–	18+	After three normal annual Pap smears, screening should be continued every 2 years.
Nunavut	No	–	–	18+	After three normal annual Pap smears, screening should be continued every 2 years. If high risk, continue annually.

*Has a provincial computerized information system for cytology, which may have been implemented before inception of full program.

Summary Recommendations from the National Workshop on Cervical Cancer Screening, 1989

Highlights of the recommendations from the 1989 National Workshop on Screening for Cancer of the Cervix[31] are as follows :

- Pap screening to start at age 18 or at initiation of sexual activity.
- A second smear should, in general, be taken after 1 year, especially for women who begin screening after age 20.
- If the first two smears are satisfactory and show no significant epithelial abnormality, women should, in general, be advised to be rescreened every 3 years to age 69.
- Screening should occur at this frequency in areas where a population-based information system exists for identifying women and allowing notification and recall. In the absence of such a system, it is advisable to repeat Pap smears annually.
- Women over the age of 69 who have had at least two satisfactory smears and no significant epithelial abnormality in the last 9 years and who have never had biopsy-confirmed severe dysplasia or carcinoma in situ can be dropped from the cervical cytology screening program.
- If mild dysplasia (cytologic equivalent of cervical intraepithelial neoplasia [CIN] grade 1, or low-grade squamous intraepithelial lesion [LSIL]) is found, the smear is to be repeated every 6 months for 2 years.
- If the lesion persists or progresses to moderate or severe dysplasia (CIN grades 2 and 3, or high-grade SIL), the patient must be referred for colposcopy.
- Women do not need to be screened if they have never had sexual intercourse or have had a hysterectomy for benign conditions with adequate pathological documentation that the cervical epithelium has been totally removed and previous smears have been normal.