

# Frequently Asked Questions about Cervical Cancer Screening

## What is cervical cancer and how is it caused?

Cervical cancer is a type of cancer that affects the cervix (located at the opening of the uterus), and is caused by an infection with certain types of Human Papillomavirus (HPV). An HPV infection is transmitted through intimate sexual contact and causes cells to change in the cervix. Cervical cancer occurs when these cells do not change back to normal and undergo changes to become cancers over a longer period of time. Most women with an HPV infection do not develop cervical cancer because the cells change back to normal within a few years.

## What is a Pap test?

Screening for cervical cancer is done with a Pap test to identify abnormal changes in the cells of the cervix. An instrument, called a speculum, is inserted in the vagina so the cervix can be seen. Cells are taken from the cervix with a spatula and are sent to a lab to be examined under a microscope. Pap tests detect abnormal cells in the cervix that could potentially lead to cervical cancer. This test allows for early detection and treatment of these abnormalities, which will prevent cancer from developing. Cervical cancer may also be found early and treated. The test is not used to detect other cancers in the reproductive organs (e.g. uterus) or find sexually transmitted diseases like chlamydia, gonorrhea, or human immunodeficiency virus (HIV).

## What is an abnormal Pap test result?

Sometimes cells detected by a Pap test look different from normal cells when viewed under a microscope. These abnormal cells are usually caused by HPV infection. It is very common for any person, male or female, to become infected with HPV in their lifetime. Usually the infection is overcome by our immune system, and the cells become normal again. However, if abnormal cells are detected, they require follow-up tests to understand why the cells changed in the first place. After an abnormal Pap test result, women may need a colposcopy, which involves using a magnifying instrument to see the cervix in more detail. Women may also have a biopsy, which involves taking a tissue sample from the cervix for further examination in a laboratory. Most women who have an abnormal Pap test result and who have proper follow-up tests do not get cervical cancer.

## Why is the Canadian Task Force on Preventive Health Care (CTFPHC) recommending screening every 3 years?

Regular screening can reduce the chance of getting cervical cancer by over 80%. However, screening more often than every 3 years leads to a greater chance of having a “false positive” result—i.e. the Pap test result is abnormal but the cells are only infected with a virus, not cancer cells. A false positive result requires additional follow-up testing and can expose women to the harms of these tests. Getting a Pap test every 3 years balances the benefits and potential harms of screening. Screening more frequently offers little additional benefit but can increase potential harms.

## Why is the CTFPHC not providing different recommendations for women who are vaccinated against HPV?

While there is a population of younger women who have had an HPV vaccination, this vaccine only protects against the two main types of HPV, which cause about 70% of cervical cancers. Because it was introduced recently, there is currently not enough evidence for providing different recommendations for HPV-vaccinated women. We will only be sure of the long-term effectiveness of the vaccines on cervical cancer in approximately 20 years, when we can measure how much long-term immunity these women have against HPV. For now, we recommend that HPV-vaccinated women should start screening like others, every three years from the age of 25.

## Why is the CTFPHC increasing the age of screening to 25?

When women start cervical cancer screening from a young age, Pap tests have a very small chance of detecting anything important, but a high chance of having a “false positive”. These results lead to unnecessary follow-up tests such as colposcopy and/or biopsy, which are associated with certain harms. Colposcopy can cause anxiety and/or stress, and biopsy may cause bleeding or discharge for up to a few weeks. Given the increased understanding of the harms and benefits of cervical cancer screening, more Canadian provinces and international countries are choosing to begin screening at a later age.



# Knowing the Facts about Cervical Cancer Screening

The Canadian Task Force on Preventive Health Care (CTFPHC) recommends that women between the ages of 25 and 69 be screened for cervical cancer with a Pap test every 3 years.



## I am a woman between the ages of 25 and 69. Why should I be screened every 3 years?

Among women **who do not screen**, the lifetime risk of dying from cervical cancer is about **1 in 100**

Among women **who screen every 3 years**, the lifetime risk of dying from cervical cancer is about **1 in 500**

Among women **who screen annually**, the lifetime risk of dying from cervical cancer is about **1 in 588**

**A**fter the age of 25, the likelihood of being diagnosed with cervical cancer increases dramatically. 86% of women who get cervical cancer are between the ages of 25 and 69. Screening with a Pap test improves a woman's chances of survival from cervical cancer. However, screening more often than every 3 years may not add any additional benefits and may expose women to more frequent "false positive" or abnormal Pap test results. About 3% of women over the age of 30 will have an abnormal Pap test result, which may lead to additional unnecessary tests (see "What else should I know about cervical cancer screening?" below).

## I am a woman 24 years of age or younger. Should I be screened for cervical cancer?

About **1%** of women who get cervical cancer are 24 years of age or younger

Women 20 to 24 years of age have a **less than 1 in 500 000** chance of dying from cervical cancer

**B**ecause there is such a small risk of being diagnosed with and dying from cervical cancer, young women are very unlikely to benefit from cervical cancer screening. Additionally, about 10% of young women have an abnormal Pap test result. This makes young women 24 years of age or younger more likely than older women to be exposed to additional testing that may be unnecessary (see "What else should I know about cervical cancer screening?" below).

### What else should I know about cervical cancer screening?

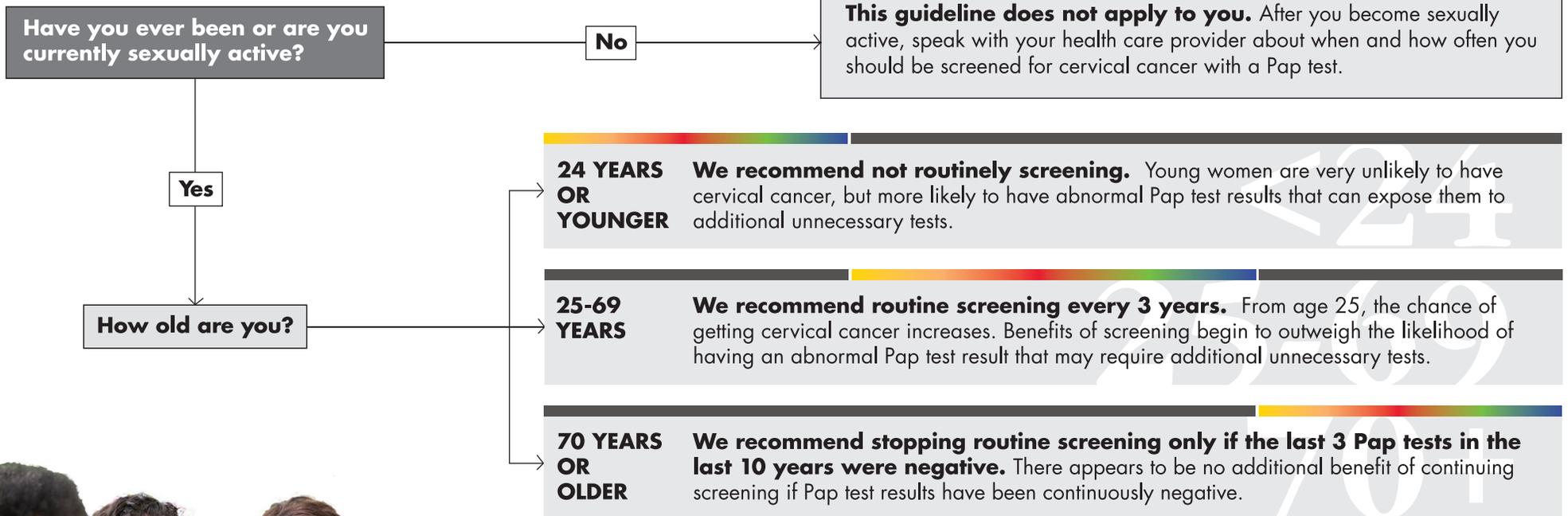
Sometimes a Pap test shows abnormal cells in the cervix. An abnormal test result does not mean you have cervical cancer, but will need follow-up with either a repeat Pap test or additional follow-up tests such as colposcopy (examination of cervix with a magnifying instrument) and/or biopsies (removing a sample of cells with an instrument in minor surgery) to check under the microscope. Waiting for the outcome of an abnormal test result may cause anxiety and/or stress.

**Be informed! Talk to your health care provider about when and how often you should be screened for cervical cancer.**

# Should you be screened for Cervical Cancer?

Cervical cancer is a type of cancer that starts in the cervix, which is the lower part of the uterus. Screening for cervical cancer is done with a Pap test to identify abnormal changes in the cells of your cervix caused by viruses such as the Human Papillomavirus (HPV). In a few women, these abnormal cells develop into cancer. Cervical cancer screening can lead to early treatment, which can prevent the abnormal cells from developing into cancer, or can cure early cancer with simple treatment.

The Canadian Task Force on Preventive Health Care (CTFPHC) updated its recommendations on cervical cancer screening to ensure that women receive the greatest benefit from screening while reducing inconvenience, discomfort and unnecessary testing. The figure below can help you make an informed decision about when to screen for cervical cancer with a Pap test. For women who have received HPV vaccinations, we recommend the same screening schedule but talk to your health care provider further about HPV vaccination and cervical cancer risk. **Please note that these recommendations do NOT apply to women who have never been sexually active, have had a full hysterectomy for a benign (i.e. non-cancerous) disease, who have had a previous abnormal Pap test, and/or have a weakened immune system.**



Additional information on cervical cancer screening with a Pap test and the recommendations is provided on the other side of this page.



# Frequently Asked Questions about Cervical Cancer Screening

## Why did the Canadian Task Force on Preventive Health Care (CTFPHC) develop new cervical cancer screening guidelines?

The previous CTFPHC guidelines on cervical cancer screening were developed in 1994. With the introduction of new tests, updated research, and a Human Papillomavirus (HPV) vaccine, cervical cancer screening has become an area of interest for many women and their health care providers.

## Why is the CTFPHC increasing the age at which screening is recommended to 25?

The CTFPHC found no benefit for screening women under the age of 20 since the disease is extremely rare in this age group. However, young women are at an increased risk of high-grade abnormalities compared to older women, and are therefore more likely to experience unnecessary follow-up tests (e.g. colposcopy and biopsy). The vast majority of these “high-grade” abnormalities are caused by HPV infections that will regress due to active immune responses. As a result, the CTFPHC recommends not screening women under the age of 20.

For women 20-24 years of age, cervical cancer is rare and there is little, if any, reduction in mortality rates from screening. However, 10% of Pap tests in this group are abnormal, leading to further investigation and treatment. Therefore, the CTFPHC makes a weak recommendation not to screen women in this age cohort.

The prevalence of high-grade abnormalities steadily declines with age while cervical cancer incidence rises. Therefore, the proportion of abnormal Pap test results that may progress to cervical cancer is greater in women over the age of 25. The CTFPHC makes a weak recommendation for women 25-29 years of age and strong recommendation for women older than 30 years to screen for cervical cancer every 3 years.

## Why does the CTFPHC recommend a screening schedule of every three years?

Screening every three years offers about 80% to 90% protection against cervical cancer. Screening more frequently (e.g. annually) offers little additional benefit and increases the risk of detecting high-grade abnormalities that will likely regress without any treatment, yet patients will undergo additional follow-up testing and experience greater potential harms. By establishing a screening schedule every 3 years, women balance the benefits of cervical cancer screening with the potential harms.

## Some screening techniques for cervical cancer include HPV testing in combination with Pap tests. Why does the CTFPHC not include recommendations for this test?

Although the role of HPV in cervical cancer is well established, there is limited (though increasing) evidence available for HPV testing as a screening method. As a result, the CTFPHC has refrained from making a recommendation about HPV testing until more data are available. Given that this is a rapidly evolving field, the CTFPHC will revisit the cervical cancer recommendations in a few years as more research becomes available.

## Will women forget to come in for their annual check-ups if they do not need to attend for an annual Pap test?

Women will have their preventive health care needs best served if they attend for periodic health assessments at intervals that are based on the specific needs for their risk profile. The recommended interval should be discussed with each woman individually.

## Many of my patients have been vaccinated against HPV. Why is the CTFPHC not providing different recommendations for these women?

Because the HPV vaccine was only recently introduced, there is currently insufficient evidence to support providing alternative screening recommendations for HPV-vaccinated women. The long-term effectiveness of the HPV vaccine in preventing cervical cancer will not be known for many years. Therefore, the CTFPHC currently recommends that HPV-vaccinated women commence regular Pap testing every 3 years from the age of 25.

## Did cost effectiveness play any role in the development of the CTFPHC recommendations?

No, cost-effectiveness was not factored into the development of the CTFPHC recommendations.

The current recommendations were made specifically to:

- Bring Canadian practices in line with global best practices;
- Provide current and clear public health information to target audiences about cervical cancer screening; and
- Balance the demonstrated benefits of screening with its potential harms in women of different ages.

## Why are Provincial/Territorial recommendations different than those found in the guideline?

The CTFPHC examined the latest available evidence for cervical cancer screening and has made recommendations to provide guidance for women and their health care providers around the optimal use and frequency of screening, based on that science.

Every province/territory has its own set of guidelines.

Provincial guidelines are reviewed and updated periodically in all jurisdictions. Most provinces have been moving towards a later start age and longer screening interval in the past few years. It will be up to the individual provinces/territories to decide if and how the guideline changes their approach to screening. The CTFPHC guideline is there to help clarify the discussion on cervical cancer screening and assist in the decision making process.

## Are there special recommendations for specific groups, such as Aboriginal women?

The CTFPHC searched for evidence to inform recommendations for screening Aboriginal women. They examined whether these women have a higher risk of invasive cervical cancer or a greater risk of harms (of screening), and if so, whether there was evidence that screening policies should be different for them. No evidence was found to support the need for differential screening in Aboriginal women (i.e., more or less frequent screening or different ages of starting/stopping).

The important issue is to ensure that screening is used by Aboriginal women and other groups who may have reduced access to health care, which may require creative and culturally sensitive strategies.

## Who are the CTFPHC?

The CTFPHC is an independent panel of clinicians and methodologists that develop clinical practice guidelines for preventive health. Guidelines are based on a rigorous, systematic review of the most current available scientific evidence. These guidelines are aimed at primary care providers and other health care professionals, developers of preventive programs, policy-makers, and Canadian citizens.

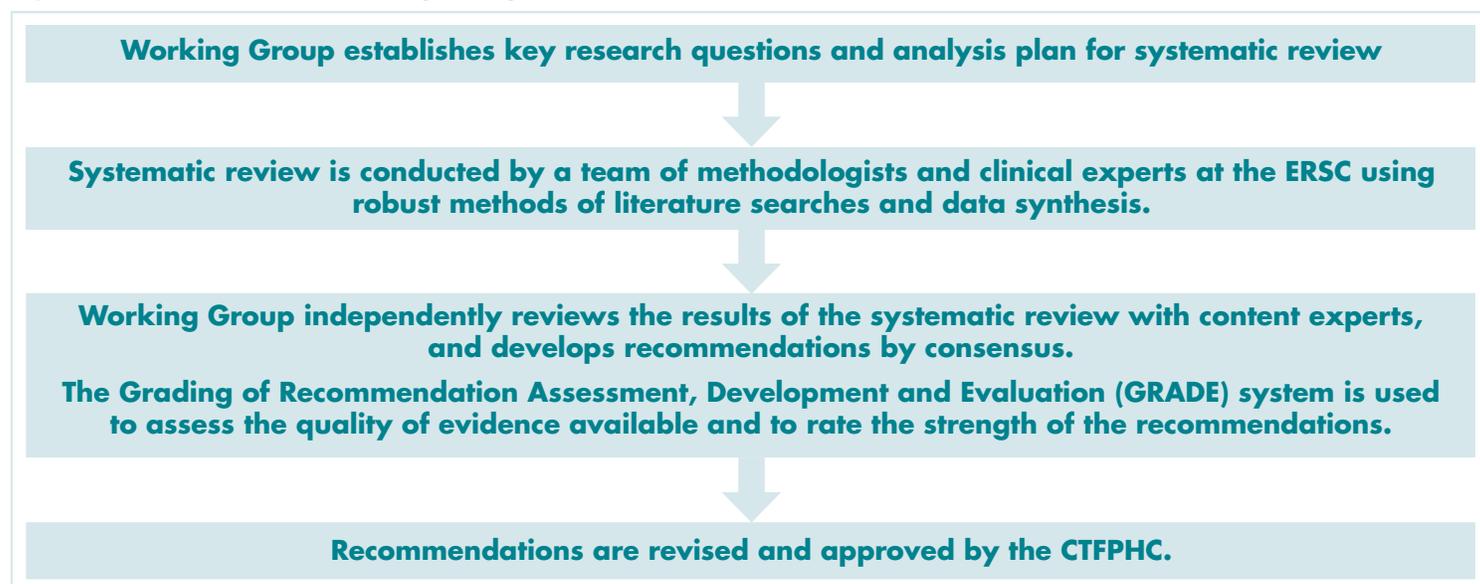
## How were the cervical cancer screening recommendations created?

The cervical cancer screening recommendations were developed by a working group composed of six CTFPHC members, two members of the Pan-Canadian Cervical Screening Initiative, and scientific staff from the Public Health Agency of Canada. They were based on a systematic review conducted by members of the McMaster University Evidence Review and Synthesis Center (ERSC), and a new Canadian epidemiological analysis conducted for the working group.

The working group engaged in a standard and rigorous process utilized by the CTFPHC for all guideline development\* (Figure 1). The guidelines underwent internal and external peer review by experts in the field, and by stakeholders and partners.

\* A complete description of recommendation development methods can be found on the CTFPHC website: <http://canadiantaskforce.ca/methods/methods-manual/>

Figure 1. CTFPHC Guideline development process



# Who should be screened for Cervical Cancer?



The Canadian Task Force on Preventive Health Care (CTFPHC) updated its recommendations on cervical cancer screening to ensure that women receive the greatest benefit from screening, while reducing inconvenience, discomfort and unnecessary testing. **Clinicians must recognize that the appropriateness of the recommendations will vary according to the individual needs, values and preferences of their patients.**

## These recommendations do NOT apply to women who have:

- Never been sexually active
- Had a previous abnormal Pap test
- Had a full hysterectomy for a benign disease
- A weakened immune system

Age	Recommendation	Explanation	Grading of Recommendations*
19 or younger	Do not routinely screen	Even without screening, the incidence of invasive cervical cancer is very rare (0.3 per 100,000 per year). If screened, 10% of women in this age group will have an abnormal Pap test, resulting in additional unnecessary tests (e.g. colposcopy, biopsy).	Strong recommendation; high quality evidence
20-24	Do not routinely screen	Even without screening, the incidence of invasive cervical cancer is about 3 per 100,000 per year. If screened, 10% of women in this age group will have an abnormal Pap test, resulting in additional unnecessary tests (e.g. colposcopy, biopsy).	Weak recommendation; moderate quality evidence
25-29	Routine screening every 3 years	The incidence of invasive cervical cancer increases after age 25. Without screening, the incidence is about 9 per 100,000 per year. Benefits of screening may begin to outweigh the harms (i.e. additional unnecessary tests, such as colposcopy and biopsy).	Weak recommendation; moderate quality evidence
30-69	Routine screening every 3 years	After age 30, the incidence of invasive cervical cancer increases significantly up to 35 per 100,000 per year without screening, while rates of abnormal Pap tests decline. Benefits of screening outweigh the harms (i.e. additional unnecessary tests, such as colposcopy and biopsy).	Strong recommendation; high quality evidence
	Cease routine screening only if the last 3 Pap tests in the last		
70 or older	10 years were negative	There appears to be minimal additional benefit of continuing screening if Pap test results have been consistently negative.	Weak recommendation; low quality evidence

\*Recommendations are graded according to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system.