

Ontario Cervical Screening Program Guidance for Vaginal Vault Testing Frequently Asked Questions (FAQs)

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Overview

Population-based screening for vaginal cancer is not recommended as part of the Ontario Cervical Screening Program (OCSP) because vaginal cancer is rare and the effectiveness of treating its precursor has not been established. However, people who have their cervix removed via hysterectomy are still at risk for human papillomavirus (HPV)-related cancers, including vaginal cancer. Therefore, the OCSP has developed guidance on vaginal vault testing that will be released at the same time as the launch of HPV testing with reflex cytology in cervical screening and in colposcopy for screening-related abnormalities. This guidance is described in the Ontario Cervical Screening Program Guidance for Vaginal Vault Testing document available on the HPV testing implementation resource hub at ontariohealth.ca/hpvhub.

To support this change, FAQs have been developed for providers who may be involved in vaginal vault testing. The FAQs describe which populations to consider testing for, why and how to perform testing, and how to manage test results.

Glossary

Colposcopy: An examination of the cervix or vagina used to rule out the presence of pre-cancer or cancer. If a pre-cancer has been detected, treatment can be performed in colposcopy. Multiple visits in colposcopy may be required over an episode of care, depending on the results of the vaginal vault test or initial colposcopy visit, including whether treatment was required.

Human papillomavirus (HPV): A family of common viruses. There are over 100 types of HPV. Some types are oncogenic (cancer-causing).

Human papillomavirus (HPV) test of the vaginal vault: A test performed on a sample from the vaginal vault to check for the presence of oncogenic types of HPV.

Reflex test: A test performed by a laboratory when the results of a previous test indicate that additional testing is required. The additional test is performed without requiring another order (requisition) from a health care provider. For the purposes of this document, a reflex test refers to vaginal cytology performed on a specimen that tests positive for HPV.

Vaginal vault cytology test: A test that looks for abnormal cell changes in the vaginal vault.

Eligibility for vaginal vault testing in the Ontario Cervical Screening Program

1. Does everyone need vaginal vault testing post-hysterectomy?

No. The majority of people will not benefit from vaginal vault testing after a hysterectomy.
 However, the Ontario Cervical Screening Program has identified some people who are eligible for vaginal vault testing based on the results of their hysterectomy specimen and their history of cervical cancer.

2. Which populations are out of scope for the Ontario Cervical Screening Program Guidance for Vaginal Vault Testing?

- Populations out of scope for the guidance include:
 - People who have been treated for cervical cancer stage 1A2 and beyond;
 - People who have been treated with chemotherapy, radiation, or radical trachelectomy;
 - People who are under surveillance in the cancer system

3. Who is eligible for vaginal vault testing?

- Only people who are at the highest risk of developing vaginal intraepithelial neoplasia and vaginal cancer post-hysterectomy are eligible for vaginal vault testing.
- This group consists of two types of people (including women, transmasculine people and nonbinary people) who have had a hysterectomy:
 - People with evidence of any of the following histologies in their cervix at hysterectomy (i.e., in the hysterectomy specimen), regardless of margin status or known HPV status:
 - low-grade squamous intraepithelial lesion (LSIL)
 - high-grade squamous intraepithelial lesion (HSIL)
 - adenocarcinoma in situ (AIS)
 - People with a history of early cervical cancer (microinvasive cervical cancer, stage 1A1 only), regardless of whether there is still evidence of cancer or pre-cancer at hysterectomy (i.e., may have been excised with a loop electrosurgical excision procedure (LEEP) or cone prior to hysterectomy).

4. Who is not eligible for vaginal vault testing?

- The group not eligible for vaginal vault testing consists of anyone who does not meet the following eligibility criteria:
 - Evidence of low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL) or adenocarcinoma in situ (AIS) histology in the cervix at hysterectomy (i.e., in the hysterectomy specimen), regardless of margin status; or
 - A history of early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only)
 regardless of whether there is still evidence of cancer or pre-cancer at hysterectomy.

- This includes people with a history of LSIL, HSIL or AIS histology in the cervix but no evidence
 of it in the hysterectomy specimen and people with an unknown or no screening history
 (including transmasculine and nonbinary people who did not get cervical screening before
 their hysterectomy).
- HPV positivity in someone's screening history is not an indication for vaginal vault testing.

5. Should people who are human papillomavirus (HPV)-positive receive vaginal vault testing?

- HPV-positive status alone is not an indication for vaginal vault testing.
- People who are at highest risk of developing vaginal intraepithelial neoplasia and vaginal
 cancer post-hysterectomy may benefit from vaginal vault testing. This includes people who
 have evidence of low-grade squamous intraepithelial lesion (LSIL), high-grade squamous
 intraepithelial lesion (HSIL) or adenocarcinoma in situ (AIS) histology in the cervix at
 hysterectomy (i.e., in the hysterectomy specimen), regardless of margin status. It also
 includes people with a history of early cervical cancer (i.e., microinvasive cervical cancer,
 stage 1A1 only) regardless of whether there is still evidence of cancer or pre-cancer at
 hysterectomy (i.e., may have been excised with a loop electrosurgical excision procedure
 (LEEP) or cone prior to hysterectomy).
- For people not in this group, the potential risks of vaginal vault testing (e.g., discomfort, anxiety related to positive test results, over-testing and overtreatment) likely outweigh the potential benefits.
- Vaginal cancer is rare in Ontario. Additionally, the effectiveness of treating its precursor to prevent to vaginal cancer has not been established. These are two of the key reasons the Ontario Cervical Screening Program does not recommend population-level screening.

Performing vaginal vault testing

6. Who should perform the vaginal vault test?

- Multiple types of providers can perform the test, including:
 - Primary care providers;
 - Colposcopists; and
 - Gynecologists or surgeons who perform hysterectomy.
- A primary care provider may wish to seek guidance from the gynecologist who performed the
 hysterectomy and who has the relevant pathology results to determine whether a vaginal
 vault test is warranted. Pathology reports may also be accessible on provincial databases,
 such as <u>Connecting Ontario</u>, the Ontario Laboratory Information System (OLIS) or electronic
 medical records.

- For those who are eligible, vaginal vault HPV testing (with reflex cytology) should be performed approximately six to 12 months after hysterectomy, or at the first post-operative visit, if preferred. Because the risk of vaginal intraepithelial neoplasia (VaIN) 2/3 or vaginal cancer is greatest in the two years immediately following hysterectomy, it is not necessary to do an exhaustive search for old hysterectomy specimen results that could have low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL) or adenocarcinoma in situ (AIS) histology. Ontario data indicate that 55 per cent of people who were diagnosed with VaIN2/3 or vaginal cancer after having HSIL of the cervix (defined in the study as cervical intraepithelial neoplasia [CIN]3+) and a hysterectomy received their VaIN2/3 or vaginal cancer diagnosis within two years of their hysterectomy¹.
- If a patient's hysterectomy specimen results are unknown and they do not have a history of early cervical cancer (microinvasive cervical cancer, stage 1A1 only), vaginal vault testing should not be performed.

7. What if I do not have access to the results of a patient's hysterectomy specimen?

- If a patient's hysterectomy specimen results are unknown and they do not have a history of early cervical cancer (microinvasive cervical cancer, stage 1A1 only), vaginal vault testing should not be performed.
- Because the risk of vaginal intraepithelial neoplasia (VaIN) 2/3 or vaginal cancer is greatest in the two years immediately following hysterectomy, it is not necessary to do an exhaustive search for old hysterectomy specimen results that could have low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL), adenocarcinoma in situ (AIS) or early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) histology. Ontario data indicate that 55 per cent of people who were diagnosed with VaIN2/3 or vaginal cancer after having HSIL of the cervix (defined in the study as cervical intraepithelial neoplasia [CIN]3+) and a hysterectomy received their VaIN2/3 or vaginal cancer diagnosis within two years of their hysterectomy².
- Only people who are at highest risk of developing vaginal intraepithelial neoplasia and vaginal cancer post-hysterectomy should be tested approximately six to 12 months after hysterectomy, or at the first post-operative visit, if preferred. This includes people with evidence of LSIL, HSIL or AIS histology in the cervix at hysterectomy (i.e., in the hysterectomy specimen), regardless of margin status. It also includes people with a history of early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) regardless of whether there is still evidence of cancer or pre-cancer at hysterectomy (i.e., may have been excised with a loop electrosurgical excision procedure (LEEP) or cone prior to hysterectomy).
- 8. Should I stop testing people who have been receiving regular vaginal vault cytology tests after hysterectomy prior to the launch of human papillomavirus (HPV) testing in the Ontario Cervical Screening Program (OCSP)?
 - No further testing is required for people who have been receiving vaginal vault cytology tests after a hysterectomy and have had normal results.

- If someone's most recent vaginal vault cytology result was abnormal, manage them according to the cytology result (for details, refer to the Ontario Cervical Screening Program Guidance for Vaginal Vault Testing document available on the HPV testing implementation resource hub at ontariohealth.ca/hpvhub).
- Only people who are at the highest risk of developing vaginal intraepithelial neoplasia and vaginal cancer post-hysterectomy should receive vaginal vault testing. This includes people with evidence of low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL) or adenocarcinoma in situ (AIS) histology in the cervix at hysterectomy (i.e., in the hysterectomy specimen), regardless of margin status. It also includes people with a history of early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) regardless of whether there is still evidence of cancer or pre-cancer at hysterectomy (i.e., may have been excised with a loop electrosurgical excision procedure (LEEP) or cone prior to hysterectomy).

9. Should vaginal vault testing be done annually for people who are eligible?

- No. If the first vaginal vault human papillomavirus (HPV) test is negative, testing should stop.
 Research shows that people who have had a hysterectomy and one negative HPV test have a
 very low risk of vaginal disease (i.e., vaginal intraepithelial neoplasia or squamous cell
 carcinoma)³.
- If someone's HPV test if positive, refer them directly to colposcopy, regardless of HPV type or cytology result.
- If someone is discharged from colposcopy back to primary care, the colposcopist should provide primary care providers with clear instructions for next steps (e.g., no further vaginal vault testing required). If this has not been done, primary care providers may contact the colposcopist for this information.
- In most cases, people who have been discharged from colposcopy will be able to stop vaginal vault testing.

10. Why do a reflex cytology test when anyone who is human papillomavirus (HPV)-positive should be referred to colposcopy?

 Cytology results can help determine management in colposcopy and supports fewer colposcopy visits because the cytology will be known at first visit.

Understanding the Ontario Cervical Screening Program's vaginal vault testing guidance

- 11. Is the vaginal vault testing guidance different for people who have squamous (low-grade squamous intraepithelial lesion (LSIL) or high-grade squamous intraepithelial (HSIL) lesion) versus glandular (adenocarcinoma in situ [AIS]) histology on their hysterectomy specimen?
 - No. The guidance is the same whether someone has squamous or glandular histology on their hysterectomy specimen.

The guidance is to perform a human papillomavirus (HPV) test (with reflex cytology for people
with HPV-positive results) approximately six to 12 months after hysterectomy, or at the first
post-operative visit, if preferred. Vaginal vault testing can be stopped after one negative HPV
test result. Anyone with an HPV-positive test result should be referred directly to colposcopy,
regardless of HPV type or cytology result.

12. Is it appropriate to stop vaginal vault testing after one negative human papillomavirus (HPV) test?

- Yes. Research shows that people who have had a hysterectomy and one negative HPV test have a very low risk of vaginal disease (i.e., vaginal intraepithelial neoplasia or squamous cell carcinoma)⁴.
- Given the low risk of disease for people who have a negative HPV test result, risks of ongoing testing (e.g., discomfort, anxiety related to positive test results, over-testing and overtreatment) likely outweigh the benefits.

13. What is the guidance from the Ontario Cervical Screening Program (OCSP) based on?

- The OCSP's vaginal vault testing guidance is based on:
 - The limited available published evidence*;
 - Ontario registry data that suggests that the risk for vaginal intraepithelial neoplasia and vaginal cancer post-hysterectomy is very low, including among people with a history of cervical dysplasia; and
 - Expert opinion gathered via expert panel.
- * If new evidence becomes available, the OCSP will consider updating its guidance.
- 14. If someone has a history of high-grade squamous intraepithelial lesion (HSIL) histology or is human papillomavirus (HPV)-positive, and has no evidence of low-grade squamous intraepithelial lesion (LSIL), HSIL or adenocarcinoma in situ (AIS) histology in the cervix at hysterectomy, is it appropriate not to test them?
 - Yes. The limited available evidence^{5,6,7} suggests that it is appropriate to omit HPV testing in the vaginal vault after hysterectomy for people without evidence of LSIL, HSIL or AIS histology on their hysterectomy specimen, even if they have a history of HSIL histology or are HPVpositive.
 - The benefits of vaginal vault testing must be weighed against potential risks. Given the rarity
 of vaginal intraepithelial neoplasia and vaginal cancer, a large number of people need to be
 tested to prevent one invasive vaginal cancer.
 - People with a history of early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) regardless of whether there is still evidence of cancer or pre-cancer at hysterectomy (i.e., may have been excised with a loop electrosurgical excision procedure (LEEP) or cone prior to hysterectomy) are at higher risk and may be considered for vaginal vault testing.

- 15. If someone has no screening history, and has no evidence of low-grade squamous intraepithelial lesion (LSIL), high-grade squamous intraepithelial lesion (HSIL), adenocarcinoma in situ (AIS) or early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) histology in the cervix at the time of hysterectomy, is it appropriate not to test them?
 - Yes. The limited available evidence suggests that it is appropriate to omit human papillomavirus (HPV) testing in the vaginal vault after hysterectomy for people without evidence of LSIL, HSIL, AIS or early cervical cancer (i.e., microinvasive cervical cancer, stage 1A1 only) histology on their hysterectomy specimen, even if they have not had cervical screening prior to the hysterectomy (e.g., people who have undergone gender affirming hysterectomy before onset of screening).
 - The benefits of vaginal vault testing must be weighed against potential risks. Given the rarity
 of vaginal intraepithelial neoplasia and vaginal cancer, a large number of people need to be
 tested to prevent one invasive vaginal cancer.

Vaginal vault testing and colposcopy

- 16. Does the Ontario Cervical Screening Program (OCSP) provide any guidance for managing people with abnormal vaginal vault tests in colposcopy?
 - People with a positive human papillomavirus vaginal vault test should be referred to colposcopy as per the Ontario Cervical Screening Program Guidance for Vaginal Vault Testing available on the HPV testing implementation resource hub at ontariohealth.ca/hpvhub.
 - The OCSP does not have guidance on management in colposcopy. Care is provided at the colposcopist's discretion.
 - When discharging people back to primary care, colposcopists should provide primary care providers with clear instructions for next steps.
- 17. How should primary care providers manage people who are discharged from colposcopy after referral for a positive vaginal vault human papillomavirus test result?
 - When discharging people back to primary care, colposcopists should provide primary care
 providers with clear instructions for next steps (e.g., no further vaginal vault testing required).
 If this has not been done, primary care providers may contact the colposcopist for this
 information.
 - In most cases, people who have been discharged from colposcopy will be able to stop vaginal vault testing.

Administrative information

- 18. Will the Ontario Cervical Screening Program (OCSP) laboratory reports advise providers to stop testing following a negative vaginal vault human papillomavirus (HPV) test?
 - Yes. As with the cervical screening laboratory reports, the vaginal vault laboratory reports will
 include test results and recommended next steps.
 - There will be a separate vaginal vault test indication on the new OCSP screening requisition, which will enable the laboratories to identify vaginal vault tests and tailor the result messaging and next steps to the vaginal vault testing guidance.
- 19. Will people who are eligible for vaginal vault testing receive correspondence from the Ontario Cervical Screening Program (OCSP) like they do with routine cervical screening?
 - No. People without a cervix will not receive correspondence from the OCSP, even if they are eligible for vaginal vault testing.
 - Providers will need to advise eligible people that vaginal vault testing is appropriate for them and notify them of their results.

REFERENCES:

Need this information in an accessible format? 1-877-280-8538, TTY 1-800-855-0511, info@ontariohealth.ca.

Ce document est disponible en anglais seulement en raison de son exemption de la traduction en vertu de la Loi sur les services en français.

¹ Ontario Health (Cancer Care Ontario). Internal Data Analysis: Incidence rates of ValN2/3 and vaginal cancer for people for people who had a hysterectomy after a diagnosis of CIN3+ in Ontario. Toronto; 2021.

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³ Cao D, Wu D, Xu Y. Vaginal intraepithelial neoplasia in patients after total hysterectomy. Curr Probl Cancer [Internet]. Elsevier Inc.; 2021;45(3):100687. Available from: https://doi.org/10.1016/j.currproblcancer.2020.100687.

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