



NCSP Guidelines for Cervical Screening

HPV testing: smear taker responsibilities

(Updated 28 September 2009)

HPV triage of women 30 years and over

The smear taker is responsible for informing women about the role of high-risk human papillomavirus testing (HPV testing) in the pathogenesis of cervical cancer and the use of HPV testing as an adjunctive test. Every woman 30 years and over without a recent abnormal smear should be informed that, on the slight chance her smear result is mildly abnormal (ASC-US or LSIL), the laboratory will do an HPV test using some liquid taken from the same LBC sample (this is called 'reflex testing'). The woman does not have to return to the clinic to have another sample taken for HPV testing.

It is the responsibility of the laboratory not the smear taker to identify the need for an HPV test for these women. If the laboratory does do a reflex HPV test they will report the result to the smear taker along with the cytology result.

Recommendation for further management (surveillance or colposcopy) then depends on the result of the HPV test (*refer to Flowchart HPV testing Guidance 1 in the Guidelines*).

The smear taker is responsible for explaining the meaning of a positive/negative HPV test result to the woman (*refer to HPV testing fact sheet*). Women who test positive for high-risk types of HPV may experience anxiety about developing cancer despite being at very low risk.

The smear taker needs to inform women that all HPV testing results will be sent to the NCSP-Register (unless the woman has withdrawn from the Programme).

HPV testing for women following treatment of high-grade lesions

In this case, the smear taker has a responsibility to identify if a woman has previously been treated for CIN 2/3 and is on annual smears, and to offer her an HPV test with her smear. HPV testing will mean it may be possible for her to return to a normal three yearly screening interval, if her test results are negative for both cytology and high risk HPV on two consecutive occasions, 12 months apart (*refer to Flowchart HPV testing Guidance 2 in the Guidelines*). However, some women may choose to continue to have annual smears without HPV testing.

Note:

- HPV testing should not be carried out sooner than 12 months after treatment of high grade lesions.
- This application of HPV testing also applies to women who have had a high grade smear result in the past and are who are having annual smears with negative results.

The smear taker needs to inform women that all HPV testing results will be sent to the NCSP-Register (unless the woman has withdrawn).

The smear taker must indicate on the laboratory request form that an HPV test is required, once this has been discussed with a woman.

The smear taker is responsible for explaining the meaning of a positive/negative HPV test result to the woman

HPV testing for management of women with 'discordant' cytology/colposcopy results

In this case the HPV test is usually requested by a specialist. There are no specific responsibilities for the primary care smear taker aside from helping women to understand the results of their HPV test and following up with any ongoing management.

Questions and Answers

How will the HPV test be reported?

The laboratory will report the HPV test result to the smear taker as 'detected', 'not detected' or 'invalid', at the same time as the cytology result. Where an 'invalid' result is due to an insufficient sample (not enough cells), it is not recommended that the woman is brought back for a repeat HPV sample. The woman can be managed based on no HPV test being performed, according to the Guidelines.

The turnaround time for HPV testing should be no longer than for cytological testing. The results of the HPV test and cytology should be reported together.

What is being detected by the HPV test?

The HPV test detects whether HPV genetic material (DNA) from any of the 14 types of HPV most commonly associated with cervical cancer is present in the specimen. These 'high-risk' types include type 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68 (and sometimes 66). The high-risk HPV types have different carcinogenic potential.

A positive HPV DNA test indicates the presence of any of these high-risk types of HPV. Note that it does not specify which type is present (this would require an HPV genotyping test).

The test uses 2-4 ml of the liquid from an LBC sample.

Do different laboratories use different types of HPV tests?

Yes. The NSU requires these tests to be approved by a recognised international body (or equivalent validation) and to have gone through a validation process to ensure the method is working in the laboratory as expected.

What types of HPV testing are there?

There are two broad types of testing for high-risk HPV:

- 'Signal amplification' tests (eg Digene's *Hybrid Capture II*® or Hologic's *Cervista*™). This method produces light signals roughly proportional to the amount of HPV DNA present in the specimen.
- 'PCR based' tests (eg Roche's *Amplikor HPV*, Abbott's *RealTime High Risk HPV assay*) where minute amounts of DNA are replicated rapidly and become easy to detect.

How reliable is HPV testing?

HPV testing is an objective test that does not depend on human interpretation. Very occasionally there are false negatives and false positives for HPV testing. However, with a 'not detected' HPV test result, a woman can be reassured that she is extremely unlikely to be at risk of developing cervical cancer in the next few years. Regular smear tests must be reinforced.

Refer also to the *HPV Testing Fact Sheet* for women available on www.nsu.govt.nz