

## Cervical cancer screening: Change in HPV PCR reporting

Virtually all cases of cervical cancer are caused by persistent infection with high-risk types of human papilloma virus (HPV), most notably HPV-16 and HPV-18.<sup>1,2</sup> Cervical cancer is largely preventable through primary prevention measures (such as safe sexual practices and HPV vaccination) and secondary prevention strategies (screening for and treatment of precancerous lesions). This is particularly important for HIV-positive women, who are six times more likely to develop cervical cancer than women without HIV.<sup>1</sup>

HPV-16 and HPV-18 are responsible for approximately 70% of cervical cancer cases globally, while types 31, 33, 45, 52, and 58 account for an additional 20%. Furthermore, HPV-16 and HPV-18 cause nearly 90% of anal cancers as well as a substantial proportion of oropharyngeal, vulvar, vaginal and penile cancers.<sup>3</sup>

Current South African guidelines recommend a universal cervical cancer screening strategy for both HIV positive and HIV negative women using the HPV polymerase chain reaction (PCR) test with partial genotyping.<sup>3</sup>

AmPath previously reported HPV-16 and HPV-18 individually, while reporting the remaining high risk HPV types (31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68) as a combined group. We have now expanded our HPV PCR testing and reporting capabilities. When a sample tests positive for “other high risk” HPV genotypes, we will additionally genotype and report HPV types 31, 33, 45, 52, and 58 individually.

The cost of the HPV PCR remains unchanged and can continue to be ordered using the mnemonic HPV. The test can either be performed on flocculated vaginal swabs (which also allows for patient self-collection) or liquid based cytology, which allows for co-testing or reflex testing based on HPV PCR result. Please refer to our HPV PCR Testing Fact Sheet for more information on HPV PCR test recommendations at the following link: [Fast Facts: HPV PCR in Cervical cancer screening](#) Table 1 summarises the HPV PCR test details.

**TABLE 1: HPV PCR TEST DETAILS**

Test name	Human papilloma virus PCR
Test mnemonic	<b>HPV</b>
Specimen types	<ul style="list-style-type: none"> <li>Liquid based cytology</li> <li>Dry vaginal swab (including self-collected specimens)</li> </ul>
Test details	<p>Individually reports high risk HPV types</p> <ul style="list-style-type: none"> <li>HPV 16</li> <li>HPV 18</li> <li>HPV 45</li> </ul> <p>Screens for the other high risk HPV types (as a group)</p> <ul style="list-style-type: none"> <li>HPV 31, HPV 33, HPV 35, HPV 39, HPV 51, HPV 52, HPV 56, HPV 58, HPV 59, HPV 66, and HPV 68</li> </ul> <p>In cases where the screen for other high risk HPV types are positive we further differentiate the following HPV types most commonly associated with cervical cancer</p> <ul style="list-style-type: none"> <li>HPV 31</li> <li>HPV 33</li> <li>HPV 45</li> <li>HPV 52/ 58</li> </ul>
Turn-around -time	48 hours

## References:

1. World Health Organization. Cervical cancer. Last updated 5 March 2024. Available at: <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer#:~:text=Prophylactic%20vaccination%20against%20HPV%20and,early%20stage%20and%20treated%20promptly>.
2. United States of America National Cancer Institute. Cervical cancer. Last updated 18 August 2023. Available at: <https://www.cancer.gov/types/cervical/causes-risk-prevention>
3. Botha MH, Mabenge M, Makua M, Mbodi ML, Rogers LJ, Sebitloane M, Smith TH, Van der Merwe FH, Williamson A, Whittaker J, Dreyer G. Cervical Cancer Screening Guidelines for South Africa. African Journal of Obstetrics and Gynaecology. 2023 Sep 1;1(1):27-31