

Human papillomavirus (HPV) self-sampling as part of cervical cancer screening

Cervical cancer prevention and screening

- 99% of cervical cancer cases are linked to infection with 'high-risk' types of human papillomavirus (HPV), which is sexually transmitted.
- WHO recommends three methods for cervical cancer screening: HPV testing from cervico- vaginal samples, visual inspection with acetic acid (VIA) and cytology.
- When diagnosed early and managed effectively, cervical cancer is one of the most successfully treatable forms of cancer.


Current challenges to health systems to screen for cervical cancer

- In many countries, a majority of women do not have access to screening services. Women aged 30 and above need to be screened regularly, as pre-cancerous lesions can take many years to develop.
- When good services are available, women may not get screened regularly. Barriers include fear or shame, cultural or religious considerations, time in and distance to services.




HPV SELF-SAMPLING IMPROVES SCREENING FOR CERVICAL CANCER

Cervical cancer is the 4th most frequent cancer in women.






This can contribute to **ELIMINATING CERVICAL CANCER** as a public health problem by **2030**.



HPV self-sampling is:

- ✓ Easy
- ✓ Convenient
- ✓ Private
- ✓ Painless
- ✓ Cheap

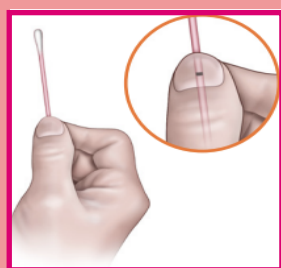




How does HPV self-sampling as part of cervical cancer screening work?

Self-sampling involves an individual obtaining a kit and collecting one's own vaginal sample. Collection can be done alone in private, in a health facility or another location. The individual (or a health worker) sends it to a laboratory for testing and the results of the test are returned to the individual. In the case of positive test result, the individual is linked to follow-up clinical assessments and treatment.

There are now kits which allow people to collect their own samples to be tested. These methods include a single-use swab or cervical brush with a tube containing collection/ transport medium.

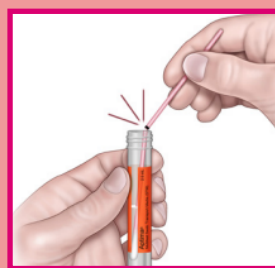
Self-sampling can help reach a global target of 70% coverage of screening by 2030. Women may feel more comfortable taking their own samples, rather than going to see a health worker for cervical cancer screening



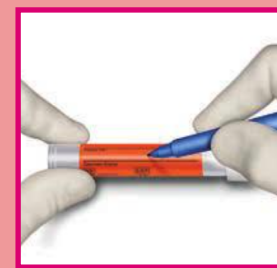
Hold swab, placing thumb and forefinger in the middle of swab shaft over black score line.



Carefully insert swab into opening of the vagina, gently rotate swab for 10 to 30 seconds.



Immediately place swab into transport tube so black score line is at top of tube. Align score line with top edge of tube and carefully break swab shaft.



Discard top portion of shaft. Tightly screw cap onto tube. Return tube as instructed by your healthcare provider.

Cervical cancer prevention among long-term screening non-attendees by vaginal self-collected samples for hr-HPV mRNA detection.

Cancer prevention among long-term screening non-attendees by vaginal self-collected samples for hr-HPV mRNA detection

Table 1 Response rate by age groups and prevalence of hr-HPV mRNA stratified by age groups

Age group	Hr-HPV positive samples		Hr-HPV negative samples		Total HPV-tested samples		HPV prevalence %
	n	%	n	%	n	%	
≤39	1	1.3	11	1.5	12	1.5	8.3
40-49	12	15.2	73	10.2	85	10.7	14.1
50-59	16	20.3	170	23.7	186	23.4	8.6
60-69	40	50.6	375	52.3	415	52.1	9.6
70 and 71	10	12.7	88	12.3	98	12.3	10.2
Total	79	100	717	100	796	100	9.9

The rate of histologically confirmed severe dysplasia or cancer in the whole group of responders was 1.3% (10/796), 0.4% (3/ 796) were diagnosed with cervical cancer

- The self-collected vaginal samples for hr-HPV mRNA testing was a promising strategy to increase participation in the cervical cancer screening among long-term non-attendees.
- The prevalence of cervical cancer was almost seven times higher among long-term non-attendees (0.4%) than in the organized screening population in Sweden 2016 (0.06%).

- WHO REFERENCE NUMBER WHO/SRH/20.12 © World Health Organization 2020
- Ernstson, A., Urdell, A., Forslund, O., Borgfeldt, C. Cervical cancer prevention among long-term screening non-attendees by vaginal self-collected samples for hr-HPV mRNA detection. Infect Agent Cancer 2020, 15, 10.