

HPV testing more sensitive than cytology for cervical screening

Clinical Question	Compared to cytological testing (liquid-based and conventional), how effective is human papilloma virus (HPV) testing for detecting histologically confirmed cervical intraepithelial neoplasia (CIN) of grade 2 or worse (CIN 2+), including adenocarcinoma in situ, in women participating in primary cervical cancer screening?
Bottom Line	For every 1000 women screened, around 20 women will have precancerous changes. The HPV test correctly identified 16 of these women (but would miss four). Cervical cytology identified 12 of the women (but would miss eight). For every 1000 women screened, there will be 980 women who will not have precancerous changes. The HPV test correctly identified 879 women (but 101 women would be incorrectly told that they have a lesion). Cervical cytology correctly identified 951 women (but 29 would be incorrectly told that they have a lesion). Overall, the quality of the evidence for the sensitivity of the tests was moderate, and high for the specificity.
Caveat	Some of the results from the studies were different from each other. For example, tests were more accurate in studies in Europe than in Asia or Central or South America. Overall, the quality of the evidence was moderate to high.
Context	Cervical cancer screening has traditionally been based on cervical cytology. Given the aetiological relationship between HPV infection and cervical carcinogenesis, HPV testing has been proposed as an alternative screening test.
Cochrane Systematic Review	Koliopoulos G et al. Cytology versus HPV testing for cervical cancer screening in the general population. Cochrane Reviews, 2017, Issue 8. Art. No.: CD008587.DOI: 10.1002/14651858. CD008587.pub2. This review contains 40 studies involving 140,000

participants.

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