This information is to help sample takers answer questions about human papillomavirus (HPV) primary screening. HPV primary screening will be in place in the NHS Cervical Screening Programme by April 2019.

**HPV and cervical cancer**

Almost all cervical cancers (99.7%) contain high risk (HR) HPV. HR-HPV infection is common, especially in women under 35. In most cases, the woman’s immune system clears the virus. But in 20% to 30% of women, this does not happen. This group has a higher risk of cervical abnormalities which may turn into cancer.

The risk of cervical cancer increases in women who:

- became sexually active at a young age
- have had many sexual partners
- do not attend for screening
- smoke

**Transmission of HR-HPV**

HR-HPV passes on during sexual contact between men and women and between same-sex partners. Be aware that:

- HR-HPV has no symptoms
- someone can have it for many years without knowing
- HR-HPV infection need not mean infidelity or promiscuity by either partner

**Primary screening for HPV**

HPV primary screening uses HR-HPV testing as the first test on the cervical screening sample. Cytology becomes the triage test, only used when we find HR-HPV.

HPV primary screening is more sensitive than cytology for high grade cervical intraepithelial neoplasia (CIN). It has a high negative predictive value, which means fewer ‘false negative’ results. This means that women may not need cervical screening so often in future.

**The test process**

We carry out cervical screening in the usual way, taking a single sample of cells. We process the sample to look for any viral DNA or RNA in the cells. If we find HR-HPV, we use the same sample to prepare a cytology slide for examination under a microscope.

The same laboratory performs both tests, and issues a single report with all results.
Results from HPV primary screening

Most women (around 85 to 90%) will receive a negative HR-HPV result. This means their sample will not have cytology carried out. We return these women to routine recall.


Women who test positive for HR-HPV will have cytology carried out on their screening sample.

Possible outcomes from this are:

- an abnormal result = referral to colposcopy
- a normal result = asked to return for repeat screening in 12 months (due to the presence of HR-HPV)

If a woman is still HR-HPV positive with normal cytology at the 12 month repeat test, we recommend a further test in another 12 months.

At this second repeat test, the possible outcomes are:

- HR-HPV positive = referred for colposcopy (regardless of cytology result)
- HR-HPV negative = returned to routine recall

Some laboratories use HPV genotyping for HR-HPV types 16 and 18 to help manage women with persistent HPV infection and normal cytology. The laboratory will refer women to colposcopy if they test positive for types 16 or 18 at the initial and 12-month repeat tests.

Routine recall is every 3 years for women aged 25 to 49, and every 5 years for women aged 50 to 64.

Management following colposcopy

Follow-up of women after colposcopy is based on HR-HPV testing with cytology triage. Details of the recommended management pathways are available at: www.gov.uk/government/publications/human-papillomavirus-hpv-primary-screening-colposcopy-management.

Treatment for HPV

There is currently no effective treatment for HR-HPV. For most women, their immune system clears the virus. Protective antibodies may develop to prevent infection again with the same HR-HPV type. This does not happen in all cases though. Women who have cleared one type of HR-HPV can also get infected later with a different type.

HPV prevention

The national HR-HPV immunisation programme for girls aged 12 to 13 protects against HR-HPV types 16 and 18. Around 75% of cervical cancers contain one of these types. But other types of HR-HPV exist, so vaccinated women will still need screening in the future.