

Nucleic Acid Amplification Tests (NAATs) – chlamydia and gonorrhoea

Nucleic Acid Amplification Tests (NAATs) allow joint *Neisseria gonorrhoeae* and *Chlamydia trachomatis* testing in the community. They have now been in widespread use for over 10 years and sensitivity and specificity are very high.

NAATs do not routinely provide organism antibiotic sensitivities for gonorrhoea (although we are on the threshold of introducing a NAAT based test for ciprofloxacin resistance in Lothian).

Our routine practice is to take samples for culture in all patients with suspected/ proven gonorrhoea (e.g. attending with symptoms, attending as a contact, positive on microscopy or positive on NAATs) prior to initiating antibiotic therapy. This is more difficult to perform in the community so we recommend that all patients with a diagnosis of gonorrhoea on NAAT are referred to Chalmers Sexual Health Centre or Howden for culture, treatment and partner notification. [See RefHelp Gonorrhoea for more detail](#)

Please note that to help with STI testing generally, GPOC-ICE now has an STI testing array, which will both recommend tests and print appropriate labels.

TAKING SWABS.

Lothian laboratories use the Abbott testing kit with the **orange**-topped bottle:



Please do NOT use the red-topped virology transport medium – although that also mentions chlamydia on its packaging.

Due to the high sensitivity of all NAAT testing, extra care must be taken in both the clinical and laboratory settings to prevent contamination of samples (and thus false positive results).

WOMEN:

- A self (or clinician) taken low vaginal swab, which can be taken without a speculum (SOLV- Self-Obtained Low Vaginal Swab)
- A low vaginal swab is preferred even if speculum examination is being performed (there is good evidence that a low vaginal swab is **MORE** sensitive than a clinician taken endocervical swab for chlamydia)
- Swabs can also be taken from the pharynx and rectum where indicated by the sexual history.

Please note that most gonococcal NAAT platforms have lower sensitivity for urine samples from women and these are therefore not recommended.

MEN:

- A first void urine (FVU) sample ie collection of the initial part of the urinary stream (there is no need for this to be an early morning urine sample and no need for the urine to have been held for any fixed time before the sample is collected)
- The testing kits contain a plastic pipette to transfer urine from the collection container (eg universal container) to the orange-topped sample bottle.
- Swabs can also be taken from the pharynx and rectum where indicated by the sexual history and we recommend that they are routinely taken in all MSM.

There is minimal validation data on the use of GC NAATs on extragenital specimens such as eye swabs. However, taking a swab in cases where extragenital infection is suspected is appropriate. We're always happy to help with complex cases, so please get in touch to discuss if required:

See [What to Refer and How](#) for more details

Urgent: the Medical hub – GUM and SRH seniors 0131 536 1585

Chalmers email advice line – 48 hour turnaround Chalmers.ClinicalAdv@nhslothian.scot.nhs.uk