



***Mycoplasma genitalium* testing at Micropathology Ltd.**

Mycoplasma genitalium is part of the class Mollicutes and is the smallest free-living bacterium with a genome of only 580 kb.

Mycoplasma genitalium is not easily identified by Gram staining or culture due to their lack of cell wall and fastidious nature. *Mycoplasma genitalium* can be found in the genito-urinary, rectal and respiratory tract (although throat carriage is rare). The majority of people infected with *Mycoplasma genitalium* in the genital tract do not present with symptoms.

In males, where symptoms are present, individuals may present with urethral discharge, dysuria, penile irritation, urethral discomfort and urethritis (*Mycoplasma genitalium* has a strong association with non-gonococcal urethritis present in 15-25% of cases)¹. Complications of *Mycoplasma genitalium* infection include sexually acquired reactive arthritis and epididymo-orchitis. In males, BASHH guidelines recommend that *Mycoplasma genitalium* is tested for in individuals with non-gonococcal urethritis, epididymo-orchitis and sexually acquired proctitis.

In females, where symptoms are present, individuals may present with dysuria, post-coital bleeding, painful inter-menstrual bleeding and cervicitis. Complications may include pelvic inflammatory disease, tubal factor infertility, sexually acquired reactive arthritis and pre-term delivery. BASHH guidelines recommend testing for *Mycoplasma genitalium* in people with signs and symptoms suggestive of PID and mucopurulent cervitis (particularly post-coital bleeding).

Transmission is primarily by genital-genital contact although transmission can also occur through genital and ano-rectal contact¹.

Macrolide resistance in *Mycoplasma genitalium* is becoming increasingly widespread and BASHH now recommend testing for macrolide resistance-mediating mutations on all positive *Mycoplasma genitalium* samples. Furthermore, fluoroquinolone resistance, while less common than macrolide, is also becoming increasingly relevant. Resistance testing for both of these antibiotics is available at Micropathology Ltd.

NAATs (nucleic acid amplification tests) are the preferred diagnostic method for *Mycoplasma genitalium* and the sample types recommended by BASHH are first-catch urine (FCU) for cisgender males, vulvo-vaginal swabs for cisgender woman, and rectal swabs in cases of proctitis, as these have been demonstrated to have the greatest sensitivity. Urethral swabs for men and cervical swabs for women are also considered

acceptable as they have only slightly reduced sensitivity. Female urine samples are not recommended as studies suggest their sensitivity may be as low as 58%, compared with 95.7% for vulvo-vaginal swabs.

**UKAS accredited specimen types for this assay are male urine and genital swabs.
Unaccredited sample type may be tested and reported along with a caveat stating
that the assay is not UKAS accredited for testing of alternative sample types.**

¹BASHH, British Association for Sexual Health and HIV national guideline for the management of infection with *Mycoplasma genitalium* (2018) *International journal of STD & AIDS* Vol 3(10)938-950
<https://www.bashhguidelines.org/media/1198/mg-2018.pdf>