



Sexually transmitted infections sample collection guide

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Introduction

Sexually transmitted infections (STIs) cause significant morbidity and mortality in South Africa each year. Control of STIs is a key intervention in the fight against HIV/AIDS and is one of the main areas of focus for the national strategic plan. Prevalent STIs include *Chlamydia trachomatis*, herpes simplex virus (HSV) Type 1 & 2, *Neisseria gonorrhoeae*, hepatitis B virus, human immunodeficiency virus (HIV), human papillomavirus (HPV) and syphilis (*Treponema pallidum*).

Clinical genital syndromes

- Male urethritis/discharge syndrome
- Vaginal discharge syndrome
- Genital ulcers
- Genital warts

STI testing available at Lancet Laboratories

*NOTE: Syphilis serology, hepatitis B surface antigen (sAg) and HIV testing are recommended for all STI syndromes.

*NOTE: Syphilis serology testing at Lancet Laboratories utilises the reverse algorithm where treponemal-specific testing (i.e. *T. pallidum* total Ab ELISA) is used to screen, and non-treponemal tests (i.e. RPR) are used to detect active disease if the screening test is positive.

TEST	ORGANISMS COMPONENTS	SAMPLE TYPES
STD/STI/Sexual Health screen (can be requested with or without HIV)	<p>Serology</p> <ul style="list-style-type: none"> - 4th generation HIV ELISA (antibodies + p24 Ag if requested) - Hepatitis B sAg - Syphilis serology* <p>Molecular/PCR</p> <ul style="list-style-type: none"> - <i>C. trachomatis</i> - <i>N. gonorrhoeae</i> - <i>M. genitalium</i> - <i>T. vaginalis</i> - HSV 1 & 2 	2 x SST (clotted) tube AND Urine or genital dry swab
Genital discharge screen / CTNG PCR	<ul style="list-style-type: none"> <i>C. trachomatis</i> <i>N. gonorrhoeae</i> <i>M. genitalium</i> <i>T. vaginalis</i> 	Urine or genital dry swab
Urethritis panel PCR	<ul style="list-style-type: none"> <i>C. trachomatis</i> <i>N. gonorrhoeae</i> <i>M. hominis</i> <i>M. genitalium</i> <i>U. urealyticum</i> <i>U. parvum</i> <i>T. vaginalis</i> 	Urine or genital dry swab Placental tissue

Genital MC&S	Microscopy - <i>T. vaginalis</i> - Bacterial vaginosis (females) Culture - <i>N. gonorrhoeae</i> - <i>Candida</i> spp - <i>M. hominis</i> - <i>U. urealyticum</i> NOTE: <i>C. trachomatis</i> cannot be detected on routine MC&S and requires PCR testing	Genital gel swab
Genital ulcer PCR	HSV 1 & 2 Cytomegalovirus (CMV) Varicella-zoster virus (VZV) <i>C. trachomatis</i> serovar L (lymphogranuloma venereum) <i>Treponema pallidum</i> (syphilis) <i>Haemophilus ducreyi</i> (chancroid)	Dry swab of ulcer (preferred sample) or LBC
Mpox (previously known as monkeypox) PCR	Monkeypox virus	Dry swab of lesion
Herpes simplex PCR	HSV 1 & 2	Urine or dry swab of lesion
HPV testing FEMALES	HPV high-risk genotypes	Liquid based cytology (LBC)
HPV testing MALES	HPV extended genotyping NOTE: Routine testing for men is not yet recommended. May consider anal testing for infection in high-risk patients.	<ul style="list-style-type: none"> Dry swab (need to swab shaft of penis and scrotum/perineal area). Swab of other sites (i.e. oral/anal*) is also accepted.

* NOTE: Anal-specific brushes with LBC collection bottles are available on request for sampling of the ano-rectal junction.

References

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