

THE RISK OF STI TRANSMISSION WITHIN OBSTETRICS AND GYNAECOLOGY

Globally, more than one million sexually transmitted infections occur each day¹

Ultrasound probes are used to examine the female reproductive organs, the rectum, and nearby structures. Due to where ultrasound probes are used, they risk transmitting pathogens that are associated with sexually transmitted infections (STIs) to patients and healthcare workers.

HUMAN PAPILLOMAVIRUS (HPV)

- Globally, more than 300 million women have an HPV infection¹.
- There are over 200 types of HPV², of which 14 types are considered high-risk as they are linked to causing 99% of cervical cancer cases³.
- HPV infections cause an estimated 570,000 cases of cervical cancer yearly¹.

HERPES SIMPLEX VIRUS (HSV)

- Can be caused by two viruses, herpes simplex virus type 1 and type 2⁴.
- An estimated 500 million people have an HSV genital infection worldwide¹.
- There are often no symptoms associated with HSV, or very mild symptoms that are frequently dismissed as other skin conditions⁴.

CHLAMYDIA (CHLAMYDIA TRACHOMATIS)

- Can cause serious, permanent damage to women's reproductive system, leading to the inability to become pregnant⁵.
- An estimated 127 million new cases of Chlamydia occur yearly¹.
- The foetus can be infected with Chlamydia during childbirth⁵.
- Is able to survive on surfaces for up to 30 hours⁶.

GARDNERELLA VAGINALIS AND BACTERIAL VAGINOSIS (BV)

- *G. vaginalis* can be common in the vaginal flora and is one of the causative agents of BV, a vaginal infection that can affect up to 70% of women of reproductive age⁷.
- *G. vaginalis* symptoms are usually asymptomatic unless BV occurs, where the most common symptom includes vaginal discharge with a "fishy" odour⁷.
- Factors that may influence the development of BV include: frequent baths, douching, multiple sex partners and increased frequency of sexual intercourse⁷.

MYCOPLASMA GENITALIUM

- Infection can lead to complications such as urethra and cervix inflammation, endometritis, fallopian tube inflammation, tubal infertility and pre-term birth⁸.
- Testing for *M. genitalium* infection can be difficult and time consuming, due to its slow growing nature⁹. Isolation and culture is impractical when immediate treatment is needed⁹.
- Infections are often asymptomatic. Symptomatic women can present with pelvic inflammatory disease (PID)⁸ which is also a symptom of Chlamydia and Gonorrhoea infections, therefore misdiagnosis can occur.

GONORRHOEA (NEISSERIA GONORRHOEAE)

- An estimated 87 million new cases of Gonorrhoea occur yearly¹.
- Is able to survive on surfaces for up to three days⁶.
- Treatment failure with the last resort antibiotic against Gonorrhoea has occurred in at least 10 countries¹⁰.

TRICHOMONAS VAGINALIS

- This protozoan parasite causes Trichomoniasis which increases the risk of getting and spreading other STIs¹¹.
- About 70% of people infected do not have any signs or symptoms¹¹.
- An estimated 156 million new cases of Trichomoniasis occur yearly¹.

SYPHILIS (TREPONEMA PALLIDUM)

- Also called "The Great Pretender" as the symptoms are similar to other diseases¹², often leading to misdiagnosis.
- An estimated 6.3 million new cases of Syphilis occur yearly¹.
- There are 473 cases of congenital Syphilis to every 100,000 live births¹³.

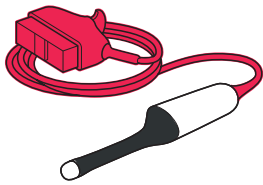
READ ON TO DISCOVER THE TRISTEL PRODUCTS DESIGNED TO PREVENT THE SPREAD OF INFECTION

TRISTEL TRIO & DUO ARE THE ONLY DISINFECTANTS PROVEN EFFECTIVE AGAINST HPV TYPES 16 & 18 IN 30 SECONDS

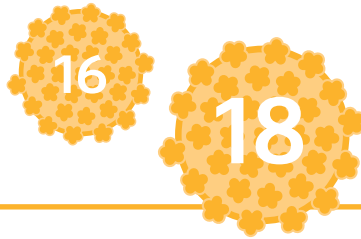
Meyers, C., Milici, J., Robison, R. (2020) 'The Ability of Two Chlorine Dioxide Chemistries to Inactivate Human Papillomavirus-contaminated Endocavity Ultrasound Probes and Nasendoscopes'. Published in the Journal of Medical Virology. Read the full article here: bit.ly/HPVARTICLE

A new scientific study by Meyers, et al. (2020) demonstrates that the Tristel Trio Wipes System and Tristel Duo possess efficacy against infectious HPV types 16 and 18 on an endocavity ultrasound probe in 30 seconds.

TESTED ON ENDOCAVITY ULTRASOUND PROBES WITHOUT SHEATHS



TESTED ON HPV TYPES 16 AND 18, THE CAUSE OF 70% OF CERVICAL CANCERS¹⁴



PROVEN EFFECTIVE IN A REALISTIC 30-SECOND CONTACT TIME



Due to the risk of STI transmission highlighted on the previous page, non-critical and semi-critical devices within obstetrics and gynaecology must undergo effective disinfection.

The Tristel Trio Wipes System (for semi-critical devices) and Tristel Duo NCU (for non-critical devices) are proven effective against the leading causes of STIs, in addition to possessing efficacy against HPV in 30 seconds.



TRISTEL TRIO WIPES SYSTEM

The world's most widely approved, validated, and used wipes system, for the decontamination of semi-critical medical devices such as endocavity ultrasound probes.

TRISTEL DUO NCU

A chlorine dioxide-based foam designed specifically for the intermediate-level disinfection of non-critical ultrasound probes and equipment such as skin surface transducers, cords, plugs, control panels and monitors.

REFERENCES

1. World Health Organization (WHO). 2019. Sexually Transmitted Infections (STIs). [online] Available at: <[https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-\(stis\)](https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis))> [Accessed 11 September 2020].
2. Burd, E. (2003). Human Papillomavirus and Cervical Cancer. *Clinical Microbiology Reviews*, 16(1), pp.1-17.
3. Jo's Cervical Cancer Trust. (2020). What is cervical cancer? [online] Available at: <https://www.jostrust.org.uk/information/cervical-cancer/about-cervical-cancer/what-is-cervical-cancer> [Accessed:11 September 2020].
4. Centers for Disease Control and Prevention (CDC). 2017. STD Facts - Genital Herpes. [online] Available at: <<https://www.cdc.gov/std/herpes/stdfact-herpes.htm>> [Accessed 11 September 2020].
5. Centers for Disease Control and Prevention. 2014. STD Facts - Chlamydia. [online] Available at: <<https://www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm>> [Accessed 8 September 2020].
6. Casalegno et al. (2012) High risk HPV contamination of endocavity vaginal ultrasound probes: an underestimated route of nosocomial infection? *PLoS One*, 7(10), e48137.
7. Kairys, N. and Garg, M., 2020. Gardnerella. [online] NCBI. Available at: <<https://www.ncbi.nlm.nih.gov/books/NBK459350/>> [Accessed 14 September 2020].
8. Conway, R., Cook, S. and Soni, S., 2019. Antibiotic treatment of Mycoplasma genitalium infection. *The Pharmaceutical Journal*, 303(7928).
9. Wong, C., 2017. Mycoplasma Genitalium: Challenges In Diagnosis And Treatment - Infectious Disease Advisor. [online] Infectious Disease Advisor. Available at: <<https://www.infectiousdiseaseadvisor.com/home/topics/sexually-transmitted-diseases/mycoplasma-genitalium-challenges-in-diagnosis-and-treatment/>> [Accessed 14 September 2020].
10. World Health Organization (WHO) (2018). Antimicrobial resistance. Available online at: <https://www.who.int/en/news-room/fact-sheets/detail/antimicrobial-resistance>. [Accessed:11 September 2020].
11. Centers for Disease Control and Prevention. 2020. STD Facts - Trichomoniasis. [online] Available at: <<https://www.cdc.gov/std/trichomonas/stdfact-trichomoniasis.htm>> [Accessed 8 September 2020].
12. Centers for Disease Control and Prevention (CDC). 2017. STD Facts - Syphilis (Detailed). [online] Available at: <<https://www.cdc.gov/std/syphilis/stdfact-syphilis-detailed.htm>> [Accessed 8 September 2020].
13. Report on global sexually transmitted infection surveillance, 2018. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO] <https://www.who.int/reproductivehealth/publications/stis-surveillance-2018/en/>
14. World Health Organization (WHO)(2019). Human Papillomavirus (HPV) And Cervical Cancer. [online] Available at: <[https://www.who.int/news-room/fact-sheets/detail/human-papillomavirus-\(hpv\)-and-cervical-cancer#:~:text=HPV%20is%20mainly%20transmitted%20through,and%20pre%20cancerous%20cervical%20lesions.](https://www.who.int/news-room/fact-sheets/detail/human-papillomavirus-(hpv)-and-cervical-cancer#:~:text=HPV%20is%20mainly%20transmitted%20through,and%20pre%20cancerous%20cervical%20lesions.)> [Accessed 25 September 2020].

TRIOLOGY

TRISTEL AUSTRALIA
1300 680 898 - mail-au@tristel.com

TRISTEL NEW ZEALAND
+64 7-577 1560 - mail-nz@tristel.com

Created by Tristel Solutions Ltd
T +44 (0) 1638 721500 - E.mail@tristel.com
W www.tristel.com

For Tristel patent information please visit: <http://www.our-patents.info/tristel>
Copyright © Tristel Solutions TRS-1378-1 - November 2020