

TRICHOMONAS VAGINALIS

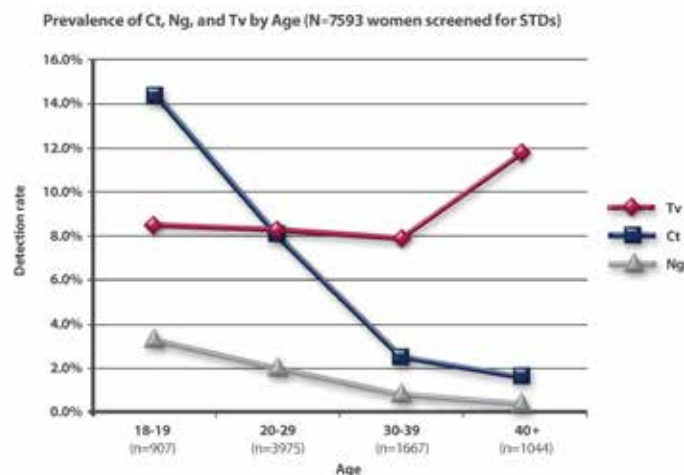


Detect More Infections with Nucleic Acid Amplification

Each year, approximately 7.4 million new cases of *Trichomonas vaginalis* (Tv) occur in women and men, making it more prevalent than Chlamydia and gonorrhea combined.^{1,2}

The Unrecognized Infection

Tv is not commonly tested for, diagnosed, and/or treated. In fact, among a sample set of women between the ages of 18 and 89 who were tested for Chlamydia and gonorrhea, prevalence of Ct, Ng, and Tv varied by age.³ Out of the 7593 women screened for STDs, Tv was detected in 8.7% of the study population and Tv was most prevalent in the 40+ age group (n=1044).³ See chart below.



Among a sample set of women between the ages of 18 and 89 who were tested for Ct/Ng, prevalence of Ct, Ng, and Tv varied by age.³

Detect and Treat Infections

The Centers for Disease Control and Prevention (CDC) guidelines recommend that women who present with vaginal discharge should be tested for Tv, and women at high risk for Tv infection (for example, women who have new or multiple partners, or who have a history of STDs) can be considered for screening.⁴

Presentation and Untreated Consequences

Tv infection in women is frequently asymptomatic but may present as vaginitis. Similarly, a recent study found 72% of male partners of women with Tv were also positive for the infection, but 75% were asymptomatic.⁵

Untreated Tv can lead to pelvic inflammatory disease (PID),⁶ a leading cause of infertility in women. Tv infection may also lead to pregnancy complications, such as premature rupture of the membranes, preterm delivery, and low birth weight.^{4,6} Evidence has shown HIV-infected women who are also infected with Tv may have an increased chance of HIV transmission.^{1,4} Untreated Tv in men is associated with increased risk of urethritis, prostatitis, and infertility.⁵

Antibiotic treatment for Tv can usually cure the infection, ie, in a single dose, given orally, of metronidazole or tinidazole.^{1,4}

Traditional Testing Methods

Traditional methods of testing for Tv fail to detect many infections. Poor sensitivity of wet mount has been cited as the greatest impediment to effective treatment of Tv infections.⁸ While highly specific, traditional test methods have limited sensitivity for Tv in females.

Diagnostic Method	Sensitivity
BD Affirm VPIII	46.3% ⁷
Papanicolaou smear	24% ⁸
Wet Mount	52% to 60% ^{2,8,9}
Culture	75% to >90% ^{2,8,9}

Percentages are approximate and based on specific studies; see individual references.

Scientific Advancements and Detection Rates

LabCorp offers the APTIMA[®] *Trichomonas vaginalis* assay that employs nucleic acid amplification technology (NAAT) and has improved sensitivity compared to existing methods. NAAT is highly sensitive for Tv and detects more infections than wet-mount microscopy.⁴ For practices performing in-office wet mount, use of the APTIMA[®] *Trichomonas vaginalis* assay may be considered for female patients at risk for Tv infection who have negative wet-mount results.²

APTIMA[®] *Trichomonas vaginalis* assay performance was established by a prospective, multicenter trial of 1025 women.¹⁰

Specimen Type	Sensitivity (95% Confidence Interval) ¹⁰	Specificity ¹⁰
Vaginal swab	100% (96.7% – 100%)	99.0%
Endocervical swab	100% (96.7% – 100%)	99.4%
ThinPrep [®] liquid-based Pap	100% (96.0% – 100%)	99.6%
Urine	95.2% (88.4% – 98.1%)	98.9%

Convenient Test Options

LabCorp offers Ct, Ng, and Tv test options off of numerous collection devices, giving clinicians and patients convenient options. ThinPrep[®] Liquid-based Pap; SurePath[™] Liquid-based Pap; APTIMA[®] Unisex or Vaginal swabs (Note: For unisex swabs; male urethral or female endocervical specimens accepted; vaginal swab may be patient-collected); APTIMA[®] Urine (Male or Female)

	Test N ^o	Test Name
Pap Tests	196502	Gynecologic Pap Test (Image-guided), Liquid-based Preparation and <i>Chlamydia/Gonococcus/Trichomonas</i> , NAA
	196527	Gynecologic Pap Test (Image-guided), Liquid-based Preparation and <i>Chlamydia/Gonococcus/Trichomonas</i> , NAA With Reflex to Human Papillomavirus (HPV) High-risk DNA Detection When ASC-U
	196599	Gynecologic Pap Test (Image-guided), Liquid-based Preparation and <i>Chlamydia/Gonococcus/Trichomonas</i> , NAA and Human Papillomavirus (HPV) High-risk DNA Detection With Reflex to HPV Genotypes 16 and 18
Other Pap test options are available. Ask your representative or visit www.LabCorp.com .		
Other Tests	188052	<i>Trichomonas vaginalis</i> , NAA
	183160	<i>Chlamydia trachomatis</i> , <i>Neisseria gonorrhoeae</i> , and <i>Trichomonas vaginalis</i> , NAA
	180039	NuSwab [®] VG (Test includes: Bacterial vaginosis: <i>Atopobium vaginae</i> , BVAB-2, <i>Megasphaera-1</i> ; <i>C albicans</i> and <i>C glabrata</i> ; <i>Trichomonas</i>)
	180021	NuSwab [®] VG+ (Test includes: Bacterial vaginosis: <i>Atopobium vaginae</i> , BVAB-2, <i>Megasphaera-1</i> ; <i>C albicans</i> and <i>C glabrata</i> ; <i>Trichomonas</i> ; <i>Chlamydia</i> ; <i>Gonorrhea</i>)

Visit the online Test Menu at www.LabCorp.com for full test information, including CPT codes and specimen collection requirements.

References

- Centers for Disease Control and Prevention. Trichomoniasis fact sheet. Available at: <http://cdc.gov/std/trichomonas/STDFact-Trichomoniasis.htm>. Accessed January 14, 2011.
- Nye MB, Schwebke JR, Body BA. Comparison of APTIMA *Trichomonas vaginalis* transcription-mediated amplification to wet mount microscopy, culture, and polymerase chain reaction for the diagnosis of trichomoniasis in men and women. *Am J Obstet Gynecol*. 2009;200:188.e1-188.e7.
- Ginocchio CC, Chapin K, Smith JS et al. Prevalence of *Trichomonas vaginalis* and co-infection with *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in the USA as determined by the APTIMA *Trichomonas vaginalis* nucleic amplification assay. *J Clin Microbiol*. 2012 May 23. [Epub ahead of print]
- Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. *MMWR*. 2015 June 5; 64(3):1-138.
- Chapin K, Andrea S. APTIMA *Trichomonas vaginalis*, a transcription-mediated amplification assay for detection of *Trichomonas vaginalis* in urogenital specimens. *Expert Rev Mol Diagn*. 2011; 11(7):679-688.
- Moodley P, Wilkinson D, Connolly C, Moodley J, Sturm AW. *Trichomonas vaginalis* is associated with pelvic inflammatory disease in women infected with human immunodeficiency virus. *Clin Infect Dis*. 2002;34:519-522.
- Cartwright CP, Lembke BD, et al. Comparison of nucleic acid amplification assays with BD Affirm VPIII for diagnosis of vaginitis in symptomatic women. *J Clin Microbiol*. 2013;51(11):3694-3699.
- Wendel KA, Erbdelding EJ, Gaydos CA, Rompalo AM. *Trichomonas vaginalis* polymerase chain reaction compared with standard diagnostic and therapeutic protocols for detection and treatment of vaginal trichomoniasis. *Clin Infect Dis*. 2002;35:576-580.
- The American College of Obstetricians and Gynecologists. Vaginitis. ACOG Practice Bulletin No. 72. *Obstet Gynecol*. 2006;107:1195-1206.
- APTIMA[®] *Trichomonas vaginalis* Assay [package insert]. San Diego, Calif: Gen-Probe Incorporated; 2009-2011.



www.LabCorp.com

Visit the online Test Menu at www.LabCorp.com for full test information, including specimen collection requirements.