



Laboratory and Other Studies for Primary Syphilis

Test	Notes
RPR, VDRL, TP-PA	Nontreponemal tests to detect antibodies to cross-reactive antigens present in host or in <i>T. pallidum</i> ; Are initial screening tests for primary syphilis but lack specificity.
FTA-ABS	Treponemal antibody test specific (98%) for treponemal antigens; required to confirm infection.
Dark-field microscopy	Highly presumptive test for primary syphilis performed on scrapings from chancre. Cannot be used for testing oral lesions, due to the presence of nonpathogenic treponemes in the oral flora. Result can be falsely negative if too few organisms are present, or if previous exposure to systemic or topical antibiotics. The sensitivity of this test is related to the duration of chancre; early lesions yield higher sensitivities, whereas old lesions have lower sensitivity.
DFA-TP	Definitive test for primary syphilis performed on scraping of chancre (100% specific). Uses fluorescent-tagged antibodies to specific treponemal antigens. Scraping is then assessed under a fluorescent microscope.

DFA-TP = direct fluorescent antibody-*Treponema pallidum*; FTA-ABS = fluorescent treponemal antibody absorption; RPR = rapid plasma reagin; TP-PA = *Treponema pallidum* particle agglutination; VDRL = Venereal Disease Research Laboratory (test).

Table adapted from *Physicians Information and Education Resource (PIER), Primary and Secondary Syphilis* module.