STD SCREENING GUIDELINES

Washington State Clinical Laboratory Advisory Council
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Who should be screened?

Asymptomatic Screening

Women
- *Chlamydia trachomatis*[a]*
- *Neisseria gonorrhoeae*[b] (if under age 25 or multiple sex partners)
- Cervical cancer[c] (Pap smear)

Pregnant women
- See back

Men Who Have Sex with Men
- Syphilis[d] (*Treponema pallidum*)
- Human Immunodeficiency Virus (HIV)[e]*
- *C. trachomatis* urethral and/or rectal infection (see Chlamydia Screening Guideline for test method by specimen type)
- *N. gonorrhoeae* urethral, rectal and/or pharyngeal infection
- Hepatitis A[f] and B[g]* (if immune status is unknown)

Symptomatic Testing (listed by symptom and organism/syndrome to consider testing for)

Urethritis/Cervicitis
- *C. trachomatis**
- *N. gonorrhoeae*
- Less frequent causes of urethritis: *Trichomonas vaginalis*[h], herpes simplex virus[i] (HSV), *Mycoplasma genitalium*

Genital Ulcers/Inguinal Lymphadenopathy
- Syphilis (*T. pallidum*)
- HSV
- Chancroid[j] (*Haemophilus ducreyi*) (rare†)
- Lymphogranuloma venereum[k] (*C. trachomatis* LGV serovars L1, L2 & L3) (rare†)
- Granuloma Inguinale[l] (Donovanosis) (rare†)

Vaginal Infection
- Trichomoniasis (*T. vaginalis*)
- Candidiasis (*Candida albicans*)[m]
- Bacterial vaginosis[n]

Genital Warts
- Human papillomavirus (HPV)[o]

HIV Disease (see HIV screening guidelines for tests)

Pelvic Inflammatory Disease
- *N. gonorrhoeae*
- *C. trachomatis**

Epididymitis
- *N. gonorrhoeae*
- *C. trachomatis**
- Enteric bacteria[p]

Proctitis/Proctocolitis/Enteritis
- *N. gonorrhoeae*
- *C. trachomatis*
- HSV
- Syphilis (*T. pallidum*)
- Enteric pathogens[q] - patients with HIV may require additional tests

Liver Disease/Syndrome
(see hepatitis screening and testing guidelines)

Ectoparasitic Infections
- Pediculosis pubis[r] (*Pthirus pubis*, pubic louse, "crabs")
- Scabies (*Sarcoptes scabiei*)

* See screening guidelines for this condition
† Consider consultation with infectious disease or STD expert

[a] *Chlamydia trachomatis* - nucleic acid amplification test (NAAT), nucleic acid hybridization, culture or antigen test (e.g., EIA, DFA)
[b] *Neisseria gonorrhoeae* - culture, nucleic acid amplification test (NAAT), or nucleic acid hybridization
[c] Cervical cancer - Pap test/Pap + HPV test
[d] Syphilis - nontreponemal antibody screening test (RPR or VDRL) with treponemal confirmatory test (TP-PA or MHA-TP), darkfield
[e] HIV - HIV antibody screening test with confirmatory test
[f] Hepatitis A - anti-HAV IgG
[g] Hepatitis B - hepatitis B surface antigen, core antibody, anti-HBs
[h] *Thrichomonas vaginalis* - wet mount, culture, DNA hybridization assay, rapid antigen detection test
[i] Herpes simplex virus - culture, non-rapid antigen detection test, Western blot
[j] Chancroid - culture
[k] Lymphogranuloma venereum - nucleic acid amplification, culture or complement fixation
[l] Granuloma inguinale - Giemsa or Wright stain
[m] Candidiasis - KOH preparation, wet mount, Gram stain, DNA hybridization, culture
[n] Bacterial vaginosis - at least three criteria present (homogenous discharge, pH>4.5, positive amine odor test, presence of clue cells - > 20% of epithelial cells)
[o] Human papillomavirus - clinical diagnosis, Pap smear, HPV screen, biopsy
[p] Enteric bacteria - urine culture
[q] Enteric pathogens - stool culture and ova and parasites examination, Giardia antigen
[r] *Pediculosis pubis* - presence of lice or nits (eggs) in pubic hair
[s] Scabies - presence of mites, eggs or feces in mineral oil preparation of skin scrapings

REFERENCE:
Centers for Disease Control and Prevention
Sexually Transmitted Diseases Treatment Guidelines
MMWR May 10, 2002; 51 (No. RR-6): 69-70.

FOR EDUCATIONAL PURPOSES ONLY

The individual clinician is in the best position to determine which tests are most appropriate for a particular patient.

Clinical Prevention Guidelines

The prevention and control of STDs is based on the following five major concepts: a) education and counseling of persons at risk on ways to adopt safer sexual behavior; b) identification of asymptomatically infected persons and of symptomatic persons unlikely to seek diagnostic and treatment services; c) effective diagnosis and treatment of infected persons; d) evaluation, treatment and counseling of sex partners of persons who are infected with an STD; and e) pre-exposure vaccination of persons at risk for vaccine-preventable STDs[1].

Clinical Considerations : All patients at risk for STD should undergo a standardized examination that includes:

1. specific, relevant history,
2. physical examination, and
3. laboratory tests

The examination should be followed with a written clinical assessment based on 1) the history, 2) physical examination with a discussion of any abnormalities and 3) a management plan that includes all laboratory tests requested and therapies initiated and when the patient should return for follow-up.[2]

Recommended sequence of specimen collection

Females

- Vaginal swab specimen for *Chlamydia trachomatis* (CT) and/or *Neisseria gonorrhoeae*(GC) (if vaginal swab is selected specimen type)
- First void urine (FVU) specimen for *Chlamydia trachomatis* (CT) and/or *Neisseria gonorrhoeae*(GC) (if urine tests are being used)
- Vaginal secretions: pH, saline/KOH microscopy, test for amines with KOH (whiff test)
- Endocervical swab for culture or other test for gonorrhea (Urine specimen tested by nucleic acid amplification test (NAAT - see reverse for examples) recommended if cervix absent. Urethral swab also acceptable.)
- Endocervical swab for nucleic acid amplification or other test for chlamydial infection
- Pap smear (defer if menstruating)

Males

- Urethral swab for Gram stain and gonorrhea or GC/Chlamydia combined test
- Swab or urine for Chlamydia (if not using combined test)
- If a NAAT for both GC and CT is being used on a urine specimen, no swab is necessary. Otherwise the order should be GC swab; then swab or urine specimen for CT.

Special Populations: Pregnant Women

The following tests should be performed at the first prenatal visit, with additional testing as indicated.

- Voluntary HIV testing. Retesting in the third trimester (preferably before 36 weeks' gestation) is recommended for women at high risk for acquiring HIV infection.
- A serologic test for syphilis at the time of first examination
- A serologic test for hepatitis B surface antigen (HBsAg) should be performed on all women at the first prenatal visit and repeated late in pregnancy for women at high risk of hepatitis B infection.
- *Chlamydia trachomatis*. Repeat during the third trimester for women aged<25 years and women with a new, or more than one sex partner.
- *Neisseria gonorrhoeae* for women at risk. Repeat during third trimester if risk continues.
- A test for hepatitis C antibodies (anti-HCV) for women with a history of injection drug use, repeated exposure to blood products, prior blood transfusion or organ transplants.
- A Papanicolaou (Pap) smear
- Evaluation for bacterial vaginosis (BV) might be conducted at the first prenatal visit for asymptomatic woman at high risk for preterrm labor (e.g., those with history of previous pretem delivery).

Possible Sexual Assault or Child Abuse Patients: see "Sexual Assault and STDs," Sexually Transmitted Diseases Treatment Guidelines, 2006, pages 80-83..

1 Sexually Transmitted Diseases Treatment Guidelines, MMWR August 4, 2006; 55 (No. RR-11)
2 The Practitioner's Handbook for the Management of Sexually Transmitted Disease, 3rd ed., 2004 CL Celum et al.