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DHS OREGON HEALTH DIVISION

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**CD SUMMARY**
August 17, 2000
Vol. 49, No. 17

PERIODICALS
POSTAGE
**PAID**
Portland, Oregon

## NOTES TO CENTERFOLD

* The asterisk denotes infections that by law must be reported in Oregon.

1. The safety during pregnancy has not been established.
2. Treatment may be extended if healing is incomplete after 10 days of therapy.
3. Appears to be less effective that other valacyclovir regimens in persons with very frequent occurrences (10 episodes/year).
4. Multnomah County STD Program recommends a second injection given 7-10 days later for secondary syphilis and for early latent syphilis.
5. Tetracyclines are contraindicated for pregnant or lactating women, and for children.
6. The safety and efficacy of azithromycin has not been determined for pregnant or lactating women, or for children <8 years of age and less than 45 kg. Preliminary data indicates that azithromycin may be safe and effective in pregnancy, but data are insufficient to recommend routine use in pregnant women.
7. Because mixed infections are so common, empiric therapy for *Chlamydia* is recommended for persons with gonorrhea; azithromycin is not effective against *N. gonorrhoeae*.
8. Quinolones are contraindicated for pregnant or lactating women, or for children.
9. Erythromycin estolate is contraindicated in pregnancy.
10. Not recommended against pharyngeal gonorrhea. Person treated with these regimens for known or suspected pharyngeal gonorrhea must have follow-up throat cultures to verify eradication of infection.
11. Patient should be advised to avoid consuming alcohol during and 24 hours following treatment with metronidazole.
12. The creams and suppositories are oil based and might weaken latex condoms and diaphragms; refer to condom labeling for additional product information.
13. The use of clindamycin vaginal cream during pregnancy is not recommended.
14. Do not use metronidazole gel in persons allergic to metronidazole.
15. High risk women are those who have previously delivered a premature infant. Some experts recommend treatment of asymptomatic BV in high risk women after the first trimester to prevent premature delivery, while others believe more information is needed before a recommendation can be made.
16. This regimen has lower efficacy for bacterial vaginosis (BV).
17. Available over the counter without a prescription.
18. Consult the full guidelines for management of pediculosis of the eyelashes.
19. Do not use lindane in pregnant or lactating women, or children < 2 years old. Do not use lindane lotions or cream after a bath or in persons with extensive dermatitis.
20. Consult the full guidelines for management of bedding and clothing.

## Reporting Abortion Complications

ABORTION is an issue that generates considerable public and policy debate. The role of the Health Division in these debates is to provide data as required by law that is as accurate and complete as possible to inform public debate on this issue. Our ability to fulfill that role is dependant upon the cooperation of health care providers in reporting to us.

This is a reminder that in addition to reporting induced terminations of pregnancy to the Health Division, the fact that a follow-up visit has occurred, and whether any complications were noted are required by statute (ORS 435.496) to be included in that report.

Each induced termination of pregnancy that occurs in Oregon, regardless of the length of gestation, must be reported after two weeks but within 30 days of the termination. Reporting must be done by the person in charge of the institution in which the termination was performed, or, if the termination was performed outside an institution, by the attending physician. In addition, the person filing the report must also include information they have about follow-up visits or complications. Health care providers who perform a follow-up visit or see a patient with a complication should therefore provide that information to the person filing the report with the Health Division.

Reports should be sent to the Center for Health Statistics on form 45-113, Report of Induced Termination of Pregnancy. Forms can be ordered by fax (503/731-4084) or phone (503/731-4027); you can also download them from the Internet: *http://healthoregon.org/chs/abortion.htm*.

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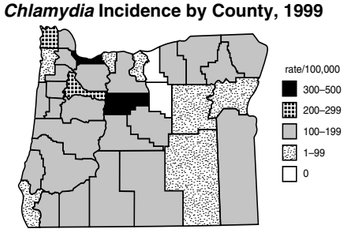
CENTER FOR DISEASE PREVENTION & EPIDEMIOLOGY • OREGON HEALTH DIVISION

# STD TREATMENT GUIDELINES

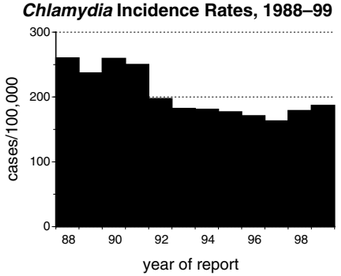
AN ESTIMATED 12-15 million persons in the United States acquire a new sexually transmitted disease each year.[1] In Oregon, we track a number of STDs, including syphilis, gonorrhea, chlamydia, chancroid, lymphogranuloma venereum, and pelvic inflammatory disease. Although all are reportable by law, the majority of chlamydial infections and cases of PID are not reported. Several common STDs, including genital herpes simplex (HSV) and human papillomavirus (HPV) infections, are not reportable in Oregon.

The most commonly diagnosed STDs in Oregon (by far) are *Chlamydia trachomatis* genital infection, with 6,131 cases in 1999 (a rate of 187 per 100,000 population). Among reported cases, there is a 2.8:1 female to male ratio, in part due to active CT screening programs for young women. Rates are high across most of the state (see map)—particularly so in Jefferson and Multnomah Counties. Routine screening of sexually active females between the ages of 15 and 24 is critical, since three-fourths of infected women are asymptomatic. Twenty to 40% of untreated women with chlamydial infection will develop PID, which can lead to scarring of the fallopian tubes with attendant infertility, increased risk of tubal pregnancy, and chronic pelvic pain. Because of the complications of untreated CT infection, every $1 spent in screening and treatment saves an estimated $12 in medical costs.

***Chlamydia* Incidence by County, 1999**




***Chlamydia* Incidence Rates, 1988–99**



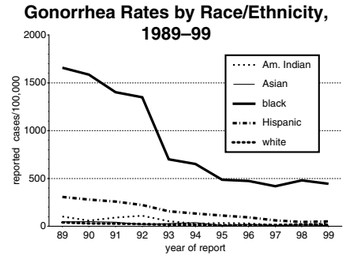

From 1980 through 1995, gonorrhea rates dropped precipitously (from 11,162 cases in 1980 to 854 cases in 1995). In the past few years, this trend has ended; with tallies steady or slightly increased (880 cases in 1998; 906 in 1999). Relative to the rest of the state, rates are high among black Oregonians (>400 cases per 100,000), persons between the ages of 20 and 39, and residents of Multnomah, Lane and Jackson counties.

Penicillin and tetracycline resistance is not uncommon in *Neisseria gonorrheae* isolates here, and there has been a gradual decrease in sensitivity to ciprofloxacin. To achieve clinical cures, and to reduce the spread of disease, it is important to follow current treatment guidelines. Penicillin and erythromycin should no longer be used for the treatment of gonorrhea in the United States.

The incidence of early syphilis (primary, secondary and early latent) continues to be low in Oregon; only 14 cases were reported in 1999. No congenital syphilis infections were reported in 1999.

Abstinence from sex, or an increase in the age at which young people become sexually active, can have a dramatic impact on STD rates among young adults. Those who choose an active sexual lifestyle must have access to condoms and be taught to use them properly. Recent sex partners of individuals diagnosed with STDs should be referred to a health care provider or the local health department for evaluation. Health department staff are trained to counsel clients about the importance of sex partner evaluation, and can help patients of private clinicians notify their partners.

**Gonorrhea Rates by Race/Ethnicity, 1989–99**

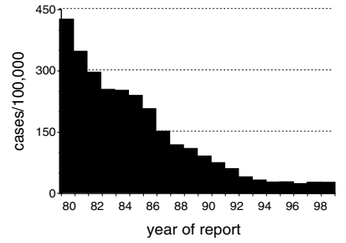



Several factors contribute to the ongoing epidemic of STDs, including the lack of appropriate screening and treatment, not to mention a surfeit of licentiousness. Even when STDs are considered and properly diagnosed, patients may not receive appropriate treatment. The highlights of the 1998 STD Treatment Guidelines[2] have been distilled into a Quick Summary table, which appears as the centerfold in this special double edition of the *CD Summary*—sure to become a collector's item.

## REFERENCES

1. Institute of Medicine: *The Hidden Epidemic: Confronting Sexually Transmitted Diseases.* Washington,DC: National Academy of Sciences, National Academy Press; 1997:1-432.
2. Centers for Disease Control and Prevention. 1998 guidelines for treatment of sexually transmitted diseases. MMWR 1998;47(RR-1):1-127.

**Gonorrhea Incidence Rates, 1980–99**



# Quick Summary of Treatment Guidelines for Sexually Transmitted Diseases — August 2000

| STD SYNDROME | AGENT / DIAGNOSIS | RECOMMENDED TREATMENT | ALTERNATIVES |
|---|---|---|---|
| **GENITAL WARTS** | **GENITAL WARTS** | **GENITAL WARTS** | **GENITAL WARTS** |
| Genital warts, cervical dysplasia | Human papillomavirus (HPV, serotypes 16,18 associated with cervical carcinoma)<br>Dx: Visual inspection, Pap smear | ***Patient Self Application***<br>podofilox[1] 0.5% solution or gel<br>imiquimod[1] 5% cream | ***Provider Application***<br>cryotherapy (liquid $N_2$ or probe)<br>TCA or BCA 80–90%<br>podophyllin[1] resin 10%-25%<br>intralesional interferon<br>surgical or laser removal |
| **ULCERS** | **ULCERS** | **ULCERS** | **ULCERS** |
| Herpes, primary (genital, rectal) | Herpes simplex virus (HSV), type 1 or 2<br>Dx: culture of ulcer, antigen detection, PCR | acyclovir[1,2] 400 mg oral (po) 3x/day for 7-10 d ***or*** 200 mg po 5x/day for 7-10 d<br>famciclovir[1,2] 250 mg oral (po) 3x/day for 7-10 d<br>valacyclovir[1,2] 500 mg oral (po) 2x/day for 7–10 d | |
| Herpes, recurrent | HSV, usually type 2<br>Dx: culture of early ulcer, antigen detection, PCR, plus HSV-2 specific antibody (by Western blot) | ***Episodic therapy (start within 24 hours of onset)***<br>acyclovir[1] 400 mg po 2x/day for 5 d ***or*** 200 mg po 5x/day for 5 d<br>famciclovir[1] 125 mg po 2x/day for 5 d<br>valacyclovir[1] 500 mg po 2x/day for 5 d<br>***Suppressive therapy***<br>acyclovir 400 mg po 2x/d<br>famciclovir 250 mg po 2x/d<br>valacyclovir[1] 250 mg po twice daily ***or*** 1 g po once daily (500 mg less effective[3]) | |
| Syphilis*<br>primary, secondary, latent < 1 year | *Treponema pallidum*<br>Dx: dark field microscopy of ulcers, serology | benzathine penicillin G 2.4 million units IM once[4] | doxycycline[5] 100 mg po 2x/day for 14 d<br>tetracycline[5] 500 mg po 4x/day for 14 d |
| latent >1 year duration | serology | benzathine penicillin G 2.4 million units IM weekly x 3 doses (7.2 million U total) | doxycycline[5] 100 mg po 2x/day for 28 d<br>tetracycline[5] 500 mg po 4x/day for 28 d |
| neurosyphilis | serology, lumbar puncture | aqueous crystalline penicillin G 3–4 million U IV q 4 h for 10–14 d (18–24 million U/day) | procaine penicillin G 2.4 million U daily for 10-14 days with probenecid 500 mg orally 4x/day concurrently |
| Chancroid* | *Haemophilus ducreyi*<br>Dx: culture of lesion | azithromycin[6] 1 g po, single dose<br>ceftriaxone 250 mg IM, single dose<br>erythromycin base 500 mg po 4x/day for 7 d | amoxicillin/clavulanate (500/125) 3x a day for 7 d<br>ciprofloxacin 500 mg po 2x/d. for 3 d |
| Lymphogranuloma venereum (LGV)* | *Chlamydia trachomatis** (serovars L1, L2, L3)<br>Dx: serology, culture of urethra, node | doxycycline[5] 100 mg po twice daily for 21 d | erythromycin base[9] 500 mg po 4x/day for 21 d<br>sulfasoxazole 500 mg po 4x/d for 21 d |
| **URETHRITIS & CERVICITIS** | **URETHRITIS & CERVICITIS** | **URETHRITIS & CERVICITIS** | **URETHRITIS & CERVICITIS** |
| Uncomplicated urethritis and cervicitis in adults/adolescents (also rectal infection) | *Chlamydia trachomatis**<br>Dx: culture, antigen detection, nucleic acid detection in urine or exudates | azithromycin[6,7] 1 g po single dose<br>doxycycline[5] 100 mg po, 2x/d. for 7 d | ofloxacin[8] 300 mg po twice daily for 7 d<br>erythromycin ethylsuccinate[9] 800 mg po 4x/day for 7 d<br>erythromycin base[9] 500 mg po 4x/day for 7 d |
| | *Neisseria gonorrheae** (“GC”)<br>Dx: culture, antigen detection, nucleic acid detection in urine or exudates | cefixime[10] 400 mg po, single dose<br>ceftriaxone 125 mg IM, single dose<br>ciprofloxacin[8] 500 mg po, single dose<br>ofloxacin[8] 400 mg po, single dose ***plus*** azithromycin ***or*** doxycyline ***for CT*** | spectinomycin[10] 2 g IM, single dose ***plus*** azithromycin ***or*** doxycyline for *Chlamydia* |
| Pregnant women[6]<br>uncomplicated | *Chlamydia trachomatis**<br>Dx: culture, antigen detection, nucleic acid detection in urine or exudates | amoxicillin 500 mg po 3x/day for 7 d<br>erythromycin base[4] 500 mg po 4x/day for 7 d | erythromycin base[9] 250 mg po 4x/day, 14 d<br>erythromycin ethylsuccinate[9] 800 mg po 4x/d. for 7 d ***or*** 400 mg po 4x/day for 14 d<br>azithromycin[6,7] 1 g po single dose |
| | *Neisseria gonorrheae**<br>Dx: same as above | cefixime[10] 400 mg po, single dose<br>ceftriaxone 125 mg IM, single dose ***plus*** erythromycin base ***or*** amoxicillin for CT | spectinomycin[8] 2 g IM, single dose ***plus*** erythromycin base ***or*** amoxicillin for *Chlamydia* |
| Recurrent male urethritis | *Trichomonas*, *Ureaplasma urealyticum* | metronidazole[11] 2 g po single dose ***plus*** erythromycin base 500 mg po 4x/day for 7 d ***or*** erythromycin ethylsuccinate 800 mg po 4x/day for 7 d | |
| **PID** | **PID** | **PID** | **PID** |
| PID* (suitable for outpatient management) | *C. trachomatis**<br>*N. gonorrheae** polymicrobial infection including anaerobes | ceftriaxone 250 mg IM once ***plus*** doxycycline[5] 100 mg po 2x/day for 14 d ***or***<br>ofloxacin[8] 400 mg po 2x/day for 14 d plus metronidazole[11] 500 mg oral 2x/day for 14 d | cefoxitin 2 g IM once ***with*** probenecid 1 g po single dose concurrently ***or*** Other parenteral cephalosporin (see guidelines)<br>***plus*** doxycycline[5]100 mg po 2x/day for 14 d<br>***Consider*** metronidazole[11] 500 mg po 2x/d for 14 d for anaerobic activity |
| **EPIDIDYMITIS** | **EPIDIDYMITIS** | **EPIDIDYMITIS** | **EPIDIDYMITIS** |
| Epididymitis | *C. trachomatis*,<br>*N. gonorrheae*, other Gram-negative bacilli | ceftriaxone 250 mg IM once doxycycline[5] 100 mg po 2x/day for 10 d | ofloxacin[8] 300 mg po 2x/day for 10 d |
| **VAGINAL INFECTION** | **VAGINAL INFECTION** | **VAGINAL INFECTION** | **VAGINAL INFECTION** |
| Bacterial vaginosis | Polymicrobial change in vaginal flora: *Gardnerella vaginalis*, *Mobiluncus* sp., *Bacteroides* (non-*fragilis* sp.), *Peptococcus*, *Mycoplasma hominis*<br>Dx: wet prep with clue cells; “Are you a Pisces?” | ***Non-pregnant***<br>metronidazole[11] 500 mg po 2x/day for 7 d<br>clindamycin cream [12,13] 2% 5 g intravaginally nightly for 7 d<br>metronidazole gel[11,14] 0.75% 5 g intravaginally 2x/day for 5 d<br>***Pregnant, high risk,[15] asymptomatic***<br>metronidazole[11] 250 mg po 3x/day for 7 d, after first trimester<br>***Pregnant, with symptoms***<br>metronidazole[11] 250 mg po 3x/day for 7 d | ***Non-pregnant***<br>metronidazole[11,16] 2 g po, single dose<br>clindamycin 300 mg po 2x/day for 7 d<br>***Pregnant, with symptoms***<br>metronidazole[11,16] 2 g po in a single dose<br>clindamycin 300 mg po 2x/day for 7 d<br>metronidazole[11,14] gel 0.75% 5 g intravaginally 2x/day for 5 d<br>***Pregnant, high risk,[15] asymptomatic***<br>metronidazole[11,16] 2 g po, single dose<br>clindamycin 300 mg po 2x/day for 7 d |
| Vulvovaginal yeast | *Candida albicans*, occasional non-*albicans* species<br>Dx: wet prep showing yeast with pseudo-hyphae, culture | ***Topical*** butoconazole 2% cream[17] 5g intravaginally for 3 d<br>clotrimazole 1% cream[17] 5g intravaginally for 7 -14 d ***or*** 100 mg vaginal tablet, one for 7 days or two for 3 d ***or*** 500 mg vaginal tablet once<br>miconazole 2% cream[17] 5g intravaginally for 7 d ***or*** 100 mg vaginal suppository one for 7 d ***or*** 200 mg vaginal suppository one for 3 d<br>nystatin 100,000-unit vaginal tablet one daily for 14 d<br>tioconazole 6.5% ointment[17] 5g intravaginally once<br>terconazole 0.4% cream 5g intravaginally for 7 d ***or*** 0.8% cream 5g intravaginally for 3 d ***or*** 80 mg vaginal suppository one for 3 d<br>***Oral*** fluconazole[1,2] 150 mg po, single dose | |
| Trichomoniasis | *Trichomonas vaginalis*<br>Dx: wet prep with mobile flagellated organisms | ***Non-pregnant***<br>metronidazole[11] 2 g po, single dose<br>***Treatment failure, Non-pregnant***<br>metronidazole[11] 500 mg po 2x/day for 7 d<br>***Pregnant***<br>metronidazole[11] 2 g po, single dose | ***Non-pregnant***<br>metronidazole[11] 500 mg 2x/day for 7 d<br>***Treatment failure, Non-pregnant***<br>metronidazole[11] 2 g po in a single dose once a day for 3-5 d<br>***Pregnant***<br>None |
| **ECTOPARASITES** | **ECTOPARASITES** | **ECTOPARASITES** | **ECTOPARASITES** |
| Pediculosis pubis[18] | *Phthiris pubis*, a lousy louse<br>Dx: direct observation | Permethrin 1% cream rinse, apply to affected area, wash off after 10 minutes | Lindane[19] 1% shampoo apply, wash off after 4 minutes<br>Pyrethrin with piperonyl butoxide[17]: apply, wash off after 10 minutes |
| Scabies[20] | *Sarcoptes scabiae*, a mighty mite<br>Dx: skin scraping, microscopy | Permethrin cream 5%: Apply to all areas of body from neck down, wash off after 8–14 hours | Lindane[19] 1%, 1 oz lotion or 30 g cream, apply thinly to all areas of the body from neck down, wash off after 8 hours ***or*** Sulfur 6% in ointment, apply thinly to all areas nightly for 3 nights. Wash off previous applications before applying new application. Thoroughly wash off last application after 24 hours. |

* A reportable disease in Oregon

## Disclaimer

The **Quick Summary** is not a comprehensive list of all effective treatments, and should not be used as therapy standards. Please consult the complete CDC guidelines for regimens for children and lactating women, and for disease situations not covered, including persons with concomitant HIV/AIDS.

## Sources

The information in this table is based on the CDC’s *1998 Guidelines for Treatment of Sexually Transmitted Diseases*. MMWR 1998;47(RR-1):1-127. The big enchilada can be downloaded from the CDC’s web site (*ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4701.pdf*).

This particular layout is derived from a summary chart developed by Mary Ann Ware MD, Medical Director of the Multnomah County STD Program. We thank her for allowing us to share this with you.

OREGON HEALTH DIVISION