

A Publication of the Genesee County Health Department

Gonorrhea in Genesee County

Gonorrhea is a common sexually transmitted disease (STD) that is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in mucous membranes of the body. Each year approximately 650,000 people in the United States are infected with gonorrhea. It is most commonly transmitted during sexual activity. Gonorrhea can also be transmitted from mother to child during birth. The incubation period is usually 2-8 days. In the U.S, approximately 75% of all reported gonorrhea is found in younger persons aged 15-29 years. The highest rates of infection are usually found in 15-19 year old women and 20-24 year old men. In 1998, approximately 1 of every 30 African American youths aged 15 to 24 had gonorrhea.¹

Gonorrhea bacteria can grow in the reproductive tract, including the cervix, uterus and fallopian tubes in women, and in the urethra in women and men. This disease differs in males and females in course, severity and ease of recognition. In males, a purulent discharge from the anterior urethra with dysuria appears 2-7 days after exposure. Gonorrhea in men is more symptomatic, so men usually seek treatment as soon as they develop symptoms but may spread the infection to their partners prior to proper treatment. In females, a few days after exposure, an initial urethritis or cervicitis occurs, frequently so mild as to pass unnoticed. In about 20% of the cases, there is uterine invasion, with symptoms of endometritis, salpingitis, and pregnancy.²

¹ CDC. Division of Sexually Transmitted Diseases. Gonorrhea Fact Sheets. September 2000.

² Control of Communicable Diseases Manual. James Chin, MD, MPH. 17th Edition.

Nongonococcal urethritis (NGU) and nongonococcal mucopurulent cervicitis are caused by other sexually transmitted agents and seriously complicate the clinical diagnosis of gonorrhea; frequently the organisms that cause these diseases coexist with gonococcal infections. About 30-40% of NGU in the U.S is caused by *Chlamydia trachomatis*.²

Genesee County has a high prevalence of gonorrhea infections. The gonorrhea rate in Genesee county for the 2000 reporting year was 329.2 per 100,000, compared to Michigan's rate of 195.6. The number of gonorrhea cases in Genesee County in 2000 was 1417, accounting for 7.8% of all cases reported to the Michigan Department of Community Health. Because this infection can frequently be asymptomatic, the reported number of cases may not reflect the true incidence of the disease. Genesee County has the unfortunate distinction of having the second highest rate of gonorrhea in the State of Michigan in 1999. Wayne County has the highest rate of gonorrhea in Michigan. Analysis of Genesee County STD data in 2000 shows a disproportionately higher rate of gonorrhea infections among African Americans compared to whites. Females aged 15-19 and

The purpose of this quarterly newsletter is to inform the community and health care providers in Genesee County about disease trends in the county. We welcome any comments or questions. Contact: Priya Nair, MPH, MSc, Epidemiologist, at (810) 768-7971, or email Pnair@co.genesee.mi.us.

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males aged 20-24 (of all races) have a higher prevalence of gonorrhea in Genesee County. STD reporting is often incomplete, with demographic data missing in about 60% of all reported cases in the county. Even though a majority of gonorrhea cases that are reported are missing race information, the rates among African Americans will remain high even if all cases of unknown race are among whites.

Number of Reported Cases of Gonorrhea in Genesee County					
Year	1996	1997	1998	1999	2000
Total Cases	1630	1837	1767	1618	1417

Complete and timely reporting of gonorrhea by Genesee County health care providers has enabled the Genesee County Health Department (GCHD) to analyze trends in disease transmission and to focus interventions where needed most. Electronic data collection methods that were implemented within the GCHD in 2001 have improved data capture on positive cases, and on partners of positives. This has helped in the identification, testing and treatment of those individuals who may be asymptomatic. The GCHD has utilized

data gathered from V-76 reports to create intervention programs for individuals most at risk, specifically African American residents of North Flint. Increased outreach activities are also planned for Genesee County jail inmates and substance abuse clients. Services available to the community from the GCHD include testing and treatment for STDs, partner notification and referrals for clients testing positive for STDs.

One of the GCHD's 1997-2002 Strategic Plan goals is to reduce the rate of gonorrhea in Genesee County to 288 per 100,000 by the year 2002. In order to achieve this goal, the number of cases of gonorrhea will have to be approximately 1200 cases or less by 2002. The number of cases of gonorrhea in the county was highest in 1997 and has continued to decline steadily over the past 4 years, with a 22.9% reduction from 1997 to 2000. If this rate of decrease continues over the next two years, the goal rate of 288 per 100,000 by the year 2002 will be achieved. Continued surveillance and complete and prompt reporting of gonorrhea cases by health care providers in the county will help guide public health efforts to prevent this disease.

Selected Reportable Communicable Diseases in Genesee County

Disease	Week ending 04/20/01	Reported cases to date FY* 2000-01	Reported cases to date FY 1999-00	Total reported cases FY 1999-00
Chicken Pox	1	249	352	443
Pertussis	0	5	3	7
Flu-like illness	23	31,027	35,953	42,750
TB-Active	8	12	13	22
Chlamydia	28	1180	1126	1822
Gonorrhea	20	936	945	1748
Hepatitis B	1	34	24	65
Campylobacter	0	12	4	21
Giardiasis	0	14	23	38
Hepatitis A	0	16	7	17
Salmonellosis	0	13	15	28
Shigellosis	0	22	16	32
Meningitis-Viral	3	24	18	44
Meningitis-Bacterial	2	14	12	17

*FY – Fiscal Year, October 1-September 30

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