

Epi Monthly

April 2023 Vol 24, Issue 4

Public Health LOOK OUT!

Florida Department of Health in Miami-Dade County

- May is designated as **Hepatitis Awareness Month**, with the goal to shed light on the impact of hepatitis and raise awareness of this disease! **May 19th** is Hepatitis Testing Day, encouraging hepatitis testing and vaccination! Of the most common types of viral hepatitis, hepatitis A and B are vaccine-preventable and hepatitis C is curable with prescribed treatment. Chronic hepatitis B and C are the leading causes of liver cancer in the United States. This month underscores barriers to reducing hepatitis such as social stigma against the disease and works to reduce these barriers and improve hepatitis testing, treatment, and prevention efforts. Visit [CDC.gov](https://www.cdc.gov) to learn more!
- **National Nurses Week** is celebrated **May 6th through May 12th**, as a time to recognize more than 4 million registered nurses across the United States for their hard work and dedication to the nursing profession and the patients they serve each day. This week is part of National Nurses Month, and this year's theme is "*You Make a Difference*" emphasizing that a nurse's role in health care and wellness impacts patients' lives and makes a difference to the health of the community as a whole! A huge **THANK YOU** to all of the wonderful nurses who serve the Miami-Dade community.
- Each year, **World Hand Hygiene Day** is recognized on **May 5th**, encouraging people globally to improve hand hygiene practices in health care facilities! Proper hand hygiene is one of the most effective methods to reduce the spread of germs and prevent infection. This year's theme is "*SAVE LIVES—Clean Your Hands*", emphasizing the importance of proper hand hygiene in reducing the transmission of infections and saving lives, especially in health care settings. The core of this campaign is "All health care workers should clean their hands at the right time and in the right way"! Visit [WHO.int](https://www.who.int) to learn more about this day.

For the most recent information on COVID-19 in Florida please visit: <https://floridahealthcovid19.gov/>

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Background

Sexually transmitted diseases (STDs) caused by bacteria are a major global health problem, impacting both Miami-Dade and Florida. The three most common causes of STDs with significant health effects are the bacterium *Neisseria gonorrhoeae*, which causes gonorrhea; the bacterium *Chlamydia trachomatis*, which causes chlamydial infections and their sequelae; and the bacterium *Treponema pallidum*, which causes syphilis. There is a broad range of clinical symptoms associated with bacterial STDs, and the clinical presentation of bacterial STDs may vary considerably from individual to individual. The risk factors for bacterial STDs include youth, an increasing number of sexual partners, and inconsistent condom usage.¹

Clinical Presentation of Bacterial STDs

Chlamydia

Chlamydia is the most widespread bacterial STD. As a result of its sluggish reproduction, chlamydia may emerge as a "silent infection" in infected individuals, as symptoms may not appear until sometime after exposure. It may eventually lead to a variety of painful conditions in women such as inflammation to cervix or cervicitis, urethral inflammation or urethritis, and rectum infection. Later complications including persistent pelvic discomfort, infertility owing to ectopic pregnancies, and pelvic inflammatory disease may manifest.²

Gonorrhea

As the second most common sexually transmitted disease, gonorrhea is a major health concern. Gonorrhea typically manifests 2-5 days after exposure. Some individuals may show no signs of illness with infection. Symptomatic males present with painful urination, urethral discharge, and inflammation to the epididymis (narrow tube attached to testicle). Symptoms of a urogenital gonococcal infection in women are generally nonexistent. If some women exhibit symptoms, the most common manifestations are inflammation of the cervix, urethral inflammation, and pelvic pain.³

Syphilis

Syphilis is an STD that causes skin and mucous membrane lesions in both the acute and chronic phases. The chronic phase results in bone, visceral, cardiovascular, and neurological illness.⁴ The primary stage of syphilis is marked by a single hard, round, painless chancre (ulcer), however there may be multiple sores in the genital tract or area of exposure, which last for about 3-6 weeks. The secondary stage of symptoms includes non-itchy skin rashes (reddish or brown spots) and/or sores in the mouth, vagina, or anus. Later in the secondary stage, cutaneous infectious skin lesion may appear. Secondary syphilis may also cause fever, enlarged lymph nodes, sore throat, weight loss, muscle aches, and patchy hair loss. The latent stage of syphilis is characterized by the absence of obvious symptoms of the disease. Syphilis may remain dormant for years. Tertiary syphilis is uncommon and occurs in a small percentage of untreated syphilis infections. It may show 10-30 years after a person has the virus and is potentially lethal. Tertiary syphilis may impact a variety of organ systems.⁵

Transmission of Bacterial STDs

Bacterial STDs are transmitted through sexual contact with the penis, vagina, mouth, and/or anus of an infected partner. Ejaculation does not have to occur for an STD to be transmitted or acquired. They may also spread through intimate physical contact like heavy petting, though this is not very common. Syphilis spreads from person-to-person by direct contact with a syphilitic sore, known as a chancre, located on, or around the penis, vagina, anus, rectum, and lips or mouth. Pregnant women infected with chlamydia, gonorrhea and syphilis also can transmit the infection to their unborn child.⁶

Exploring Bacterial STD Trends in Miami-Dade County

Time Series

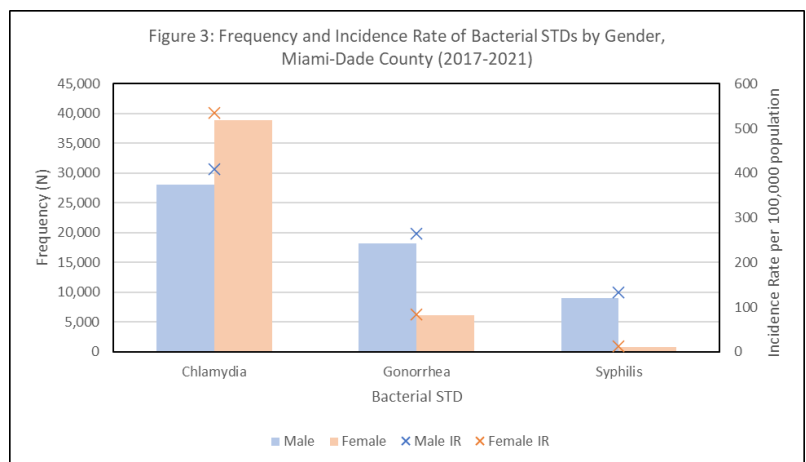
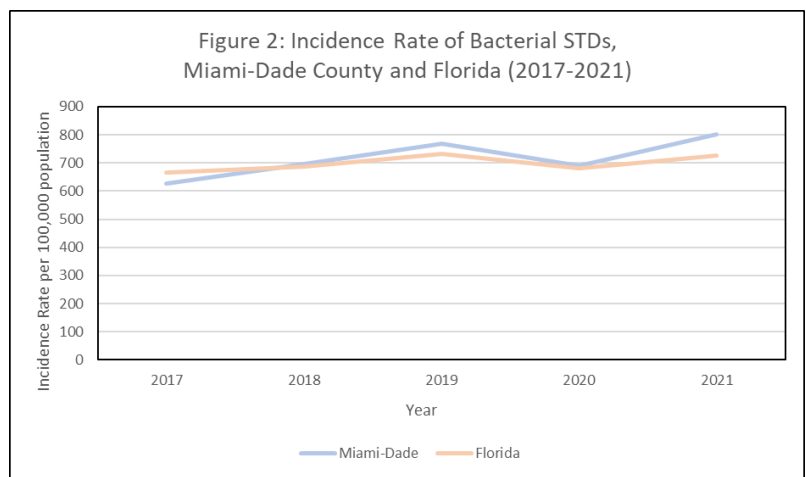
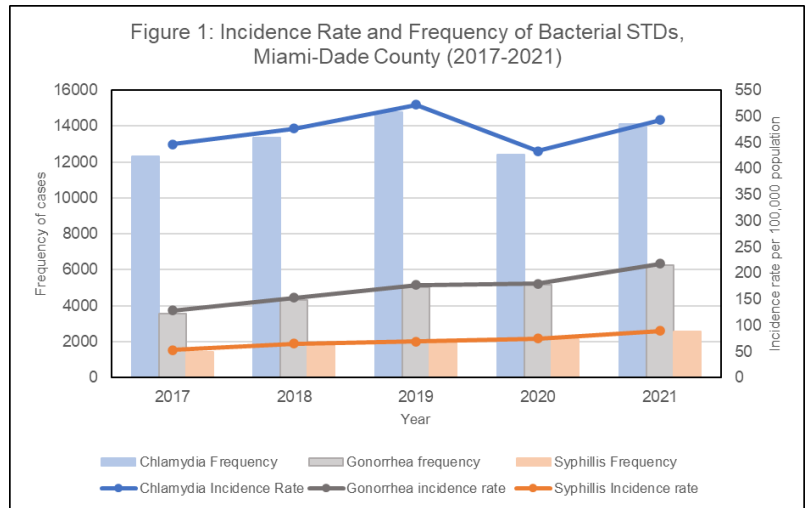
Chlamydia is the most prevalent bacterial STD and has the highest incidence rate per 100,000 population in comparison to gonorrhea and syphilis in Miami Dade, as indicated by Figure 1. In 2017, a total of 12,299 chlamydia cases were reported with an incidence of 446.5, compared to 14,096 cases in 2021 and an incidence rate of 492.8. The highest frequency and incidence rate of chlamydia occurred in 2019. Gonorrhea was observed to be the second most prevalent bacterial STD. Gonorrhea cases have steadily increased from 3,550 in 2017 to 6,248 cases in 2021. The incidence rate of gonorrhea has also increased from 154.1 in 2017 to 203.6 in 2021. As shown in Figure 1, although syphilis had the lowest frequency and incidence rate between 2017-2021, cases have gradually increased. Lastly, from 2018-2021, Miami-Dade County exceeded the incidence rate of bacterial STDs at Florida state levels (Figure 2). The biggest difference of incidence occurred in 2021 with a rate of 801.5 in Miami-Dade County compared to 725.3 at Florida state levels.

Gender

As shown in Figure 3, from 2017-2021 females had a higher frequency and incidence rate of chlamydia compared to males. A total of 38,870 reported chlamydia cases were female with an incidence rate of 535.5 compared to 28,086 male cases with an incidence of 409.6. Next, males had a higher frequency and incidence rate of gonorrhea and syphilis. There were a total of 24,268 gonorrhea cases and males accounted for 75% of them with an incidence of 265.2 compared to an incidence of 83.8 for females. Of the 9,913 syphilis cases, 91% were male with an incidence of 132.1 compared to females who had an incidence of 11.7 per 100,000 population.

Age

From 2017-2021 youths 13-19 years old and adults 20-24 years old had the highest incidence rate of chlamydia infections. The incidence rate of chlamydia infections was 2521.9 in adults 20-24 years old and 1327.0 in youths 13-19 years old. Among cases of gonorrhea, ages 20-24 years old are most affected, with an incidence rate of 649.2 per 100,000 population. Lastly, syphilis incidence was highest among adults ages 30-34 years old with a rate of 173.7.



Race and Ethnicity

Of the total population in Miami-Dade County, 13% is Non-Hispanic White, which account for 7% of all bacterial STDs; 17% of the total population is Non-Hispanic Black, accounting for 24% of all STD cases; 69% are Hispanic and account for 40% of STD cases. The incidence of chlamydia was 617.4 for Non-Hispanic Blacks, 243.3 for Hispanics, and 198.0 for Non-Hispanic Whites. Next, the Non-Hispanic Black population had an incidence rate of 264.2 for gonorrhea compared to 126.6 for Non-Hispanic Whites and 105.0 for Hispanics. While the incidence rate of syphilis was not substantially different between populations, the incidence was 74.4 for Non-Hispanic Blacks, 63.6 for Hispanics, and 61.2 for Non-Hispanic Whites.

Prevention of Bacterial STDs

All bacterial STDs have the same route of transmission and have similar prevention methods. To lower the likelihood of contracting a sexually transmitted disease, several preventative measures may be taken. Recommendations for preventing the spread of an STD include male circumcision, which has been demonstrated to minimize the chance of getting an STD, reducing the number of sex partners, maintaining a monogamous relationship, and periodic testing for recurrence.⁷

Discussion

Cases of bacterial STDs in Miami-Dade County have followed trends seen nationwide. According to the CDC, a decrease in rates of chlamydia infections in 2020 were not due to a reduction in new infections but influenced by the lack of screening coverage throughout the COVID-19 pandemic. Although the rate of chlamydia increased from 2020-2021, the rate was still lower than 2019, suggesting that challenges related to screening persisted during 2021. Next, the increase in gonorrhea cases from 2020-2021 is suspected to be from increased transmission, increased service utilization, and antibiotic resistance. Lastly, cases of syphilis have increased within all demographics nationwide. It is reported that MSM communities are disproportionately impacted by syphilis, which reflects differential access to quality sexual health care and sexual network characteristics.⁸

Figure 4: Incidence Rate of Bacterial STDs by Age Group, Miami-Dade County (2017-2021)

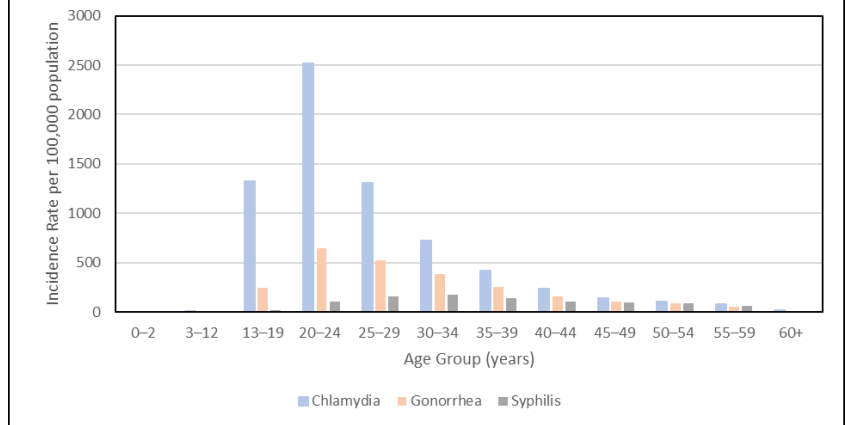
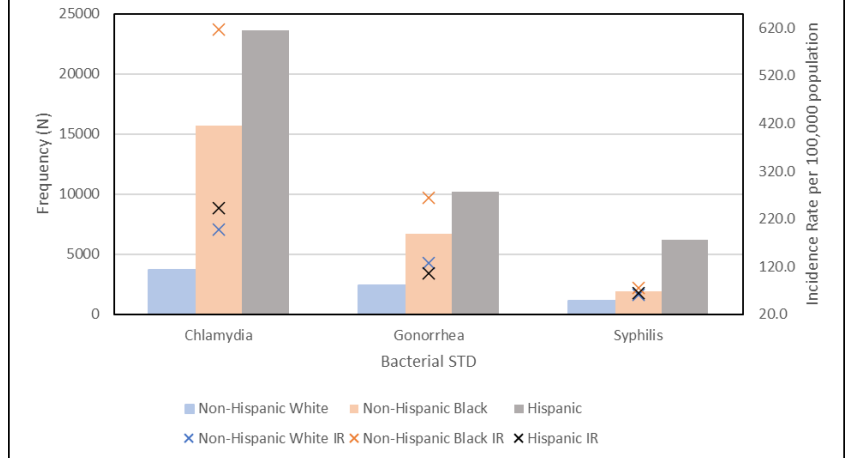


Figure 5: Frequency and Incidence Rate of Bacterial STDs by Race/Ethnicity, Miami-Dade County (2017-2021)



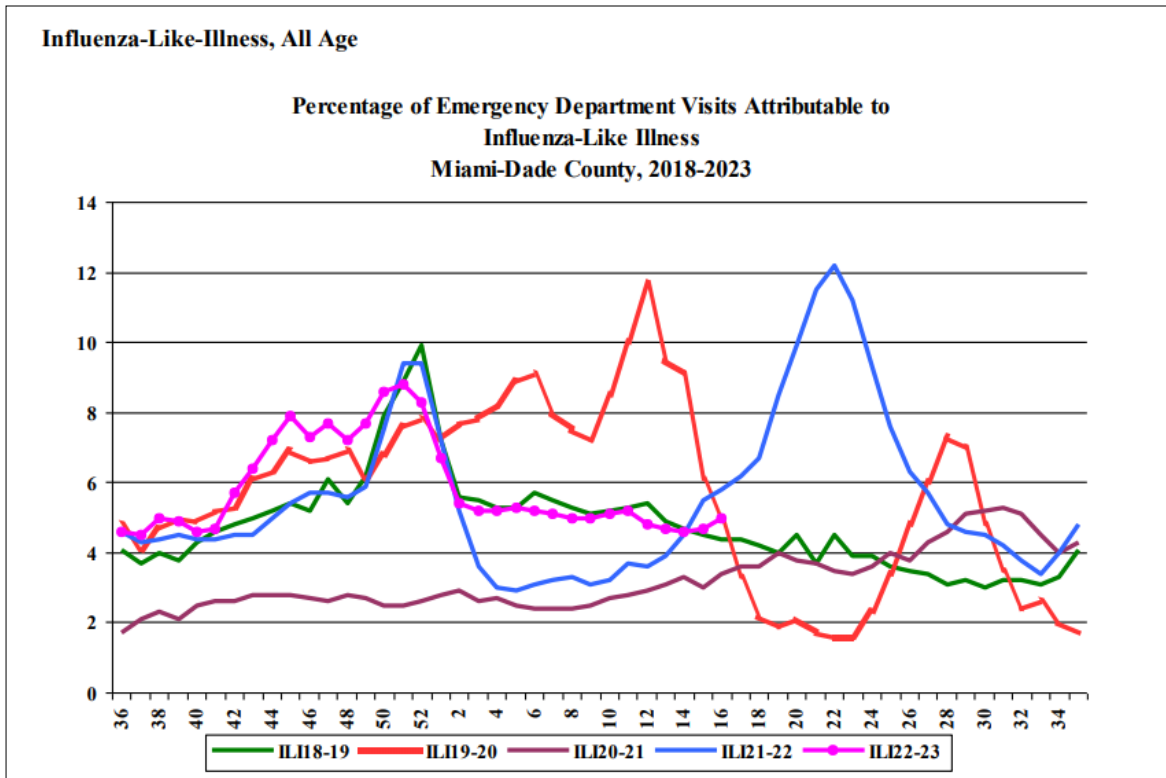
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Epidemiology, Disease Control and Immunization Services

Florida Department of Health in Miami-Dade County

On a daily basis, all of Miami-Dade County's emergency department (ED) hospitals electronically transmit ED data to the Florida Department of Health. This data is then categorized into 11 distinct syndromes. The influenza-like illness (ILI) syndrome consists of fever with either cough or sore throat. It can also include a chief complaint of "flu" or "ILI". This season's 2020-2021 data is compared to the previous 4 influenza seasons (2016-2017, 2017-2018, 2018-2019, 2019-2020).



Across all ages, there were 38,167 ED visits; among them 1,894 (5.0%) were ILI. During the same week last year, 5.8% of ED visits were ILI.

PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

Florida Department of Health in Miami-Dade County NEEDS Influenza Sentinel Providers!

Sentinel providers are key to the success of the Florida Department of Health's Influenza Surveillance System. Data reported by sentinel providers gives a picture of the influenza virus and ILI activity in the U.S. and Florida which can be used to guide prevention and control activities, vaccine strain selection, and patient care.

- Providers of any specialty, in any type of practice, are eligible to be sentinel providers.
- Most providers report that it takes **less than 30 minutes a week** to compile and report data on the total number of patients seen and the number of patients seen with influenza-like illness.
- Sentinel providers can submit specimens from a subset of patients to the state laboratory for virus isolation **free of charge**.

For more information, please contact
Stephanie Ramirez at 305-470-5660.



Miami-Dade County Monthly Report Select Reportable Disease/Conditions March 2023

Diseases/Conditions	2023 Current Month	2023 Year to Date	2022 Year to Date	2021 Year to Date
HIV/AIDS				
AIDS*	33	95	96	101
HIV	185	476	510	305
STD				
Infectious Syphilis*	85	197	147	124
Chlamydia*	1410	3628	3441	3418
Gonorrhea*	618	1646	1373	1564
TB				
Tuberculosis**	8	27	42	27
Epidemiology, Disease Control & Immunization Services				
Epidemiology				
Campylobacteriosis	60	143	120	111
Chikungunya Fever	0	0	0	0
Ciguatera Poisoning	0	1	0	0
Cryptosporidiosis	14	28	7	10
Cyclosporiasis	0	2	0	1
Dengue Fever	13	37	8	1
Escherichia coli, Shiga Toxin-Producing	22	49	36	12
Encephalitis, West Nile Virus	0	0	0	0
Giardiasis, Acute	24	57	54	24
Influenza, Pediatric Death	0	0	0	0
Legionellosis	4	10	8	7
Leptospirosis	0	0	0	0
Listeriosis	0	0	1	0
Lyme disease	0	0	0	0
Malaria	0	0	0	0
Meningitis (except aseptic)	0	0	1	3
Meningococcal Disease	0	0	2	1
Salmonella serotype Typhi (Typhoid Fever)	0	0	0	0
Salmonellosis	77	196	190	119
Shigellosis	26	59	24	16
S. Pneumoniae, invasive disease	7	35	15	5
Vibriosis	2	3	2	0
West Nile Fever	0	0	0	0
Zika Virus (non-congenital)	0	0	0	0
Immunization Preventable Diseases				
Measles	0	0	0	0
Mumps	0	0	2	1
Pertussis	2	2	3	0
Rubella	0	0	0	0
Tetanus	0	0	0	0
Varicella	4	10	5	1
Hepatitis				
Hepatitis A	3	6	3	3
Hepatitis B (Acute)	5	24	18	7
Healthy Homes				
Lead Poisoning	53	120	63	22

*Data is provisional at the county level and is subject to edit checks by state and federal agencies.

** Data on tuberculosis are provisional at the county level.

Data on EDC-IS includes Confirmed and Probable cases.

Centering and Celebrating Cultures in Health



What's New at DOH-Miami-Dade!

- Miami-Dade remains under a mosquito-borne illness alert! Currently, there are two local cases of dengue infection. Continue to follow protection efforts by remembering to **DRAIN and COVER**. [Visit](#) to learn more.
- Perrigo has initiated a recall of certain lots of Gerber Good Start SoothePro™ Powdered Infant Formula in the U.S. due to the potential presence of the bacteria, **Cronobacter sakazakii**. [Visit](#) to view what batch numbers are included in this recall.
- DOH Miami-Dade offers COVID-19 vaccines, vaccine boosters, pediatric vaccines, and flu shots. Visit mi-amicidade.floridahealth.gov for clinic locations and appointments!

To report disease and for information, call EDC-IS at:

Childhood Lead Poisoning Prevention Program	305-470-6877
Epidemiology and Disease Surveillance	305-470-5660
Hepatitis Program	305-470-5536
HIV/AIDS Program	305-470-6999
Immunization Services	305-470-5660
STD Program	305-575-5430
Tuberculosis Program	305-575-5415
Appointment Line	786-845-0550



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About the Epi Monthly

The Epi Monthly Report is a publication of the Florida Department of Health in Miami-Dade County: Epidemiology, Disease Control & Immunization Services. The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, please contact Yoselin Garcia at (786) 582-2266 or Yoselin.Garcia@flhealth.gov.

