

# **Epi Monthly**

January 2023 Vol 24, Issue 1

### Florida Department of Health in Miami-Dade County

- February is recognized as **American Heart Month**, a time when everyone may pay special attention to their heart health. One person dies every 34 seconds in United States from cardiovascular disease, making it the nation's leading cause of death. This month encourages us to learn about heart disease risk factors and adopt heart healthy habits as part of our daily lives. To raise awareness about heart disease and the need for prevention efforts, February 3 has been designated as National Wear Red Day. To learn more about your risk for heart disease, please visit <a href="CDC.gov!">CDC.gov!</a>!
- National Black HIV/AIDS Awareness Day is honored each year on February 7<sup>th</sup> to raise awareness on the importance of HIV education and testing services among the Black community! This day, organizations come together to highlight efforts and quality of HIV treatment and care among Black communities. In 2019, an estimated 41% of all new HIV infections in the United States were among Black/African Americans. This staggering estimate sheds light on the existing burden of HIV/AIDS among the Black population. Visit <a href="CDC.gov">CDC.gov</a> to learn more about the 'Ending the HIV Epidemic' initiative!
- On February 4<sup>th</sup>, communities come together globally to combat the cancer epidemic under the banner of World Cancer Day. The annual goal of World Cancer Day is to reduce the number of deaths caused by cancer by urging governments and people throughout the world to act against the illness via increased awareness and education. This year's theme is Close the Care Gap, emphasizing the importance of quality and accessible cancer care. Visit WorldCancerDay.org to learn about various cancers and associated risk factors, including modifiable risk factors!

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

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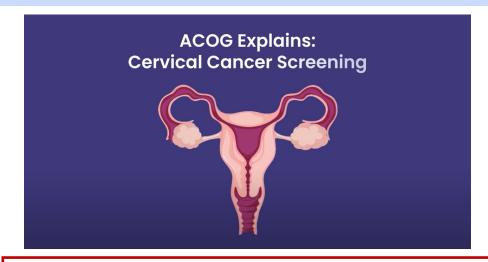
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Click the image to the left to watch the video.

# Acute Hepatitis B in Miami-Dade County, 2012-2022.

# By: Katerina Lopez

#### **Background**

Hepatitis B is a vaccine-preventable liver infection that is caused by the hepatitis B virus (HBV). The infection can either be short-term (acute), or long-term (chronic). Acute hepatitis B is an illness that occurs within the first six months after exposure to the virus. Some individuals with this illness may experience little to no symptoms, while others may require hospitalization. Common symptoms include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored bowel movements, joint pain, and jaundice. Symptoms typically appear after 90 days from the initial exposure but may appear as early as 8 weeks after the exposure. Over the last ten years, in Miami-Dade County, cases have increased from 14 in 2012, to 101 reported in 2022.

#### **Transmission**

Hepatitis B virus is spread through the transmission of bodily fluids from an infected person entering the body of someone who is not infected or has not been vaccinated. Hepatitis B is commonly transmitted through sexual contact, sharing needles and syringes, and from mother to baby at birth. Other methods of transmission include sharing items with someone who has hepatitis B such as medical equipment (glucometer), razors, or toothbrushes. Because it is not uncommon for some people to be asymptomatic, they may be unaware of their infection and easily infect others. The hepatitis B virus can survive outside of the body for a minimum of seven days and has an incubation period of 30 to 180 days.<sup>2</sup>

#### **Treatment**

Though there are several medications approved to treat individuals with chronic hepatitis B, according to the Centers for Disease Control and Prevention (CDC), there is no medication available to treat acute hepatitis B. The treatment health care providers often recommend for those with mild symptoms is rest, adequate nutrition, and fluids while monitoring liver function; those whose symptoms are more severe may need to be hospitalized. <sup>1</sup>

#### Prevention

The most efficient way to prevent Hepatitis B is by getting vaccinated. The vaccine is recommended for infants, children, and adolescents younger than 19 who are not vaccinated. Individuals aged 19-60 and any adults over 60 are considered at a high risk for contracting hepatitis B.<sup>3</sup> The World Health Organization (WHO) recommends that infants receive the vaccine within 24 hours of birth, or as soon as possible. Following the initial vaccine, it is recommended that the next 2 or 3 doses of the vaccine are given at least 4 weeks apart to complete the vaccination series. The vaccine offers a minimum of 20 years of protection and can potentially be lifelong. Once the 3-dose vaccination series is completed, WHO does not recommend a booster. In addition to vaccination, there are prevention methods that can be done such as implementation of blood safety and needle stick strategies and sex practices which include minimizing the number of partners and the use of condoms.<sup>2</sup>

#### Methods

Confirmed cases of acute hepatitis B in Miami-Dade County between 01/01/2012 and 12/31/2022 were obtained from the Florida Department of Health, Epidemiology Diseases Surveillance System, Merlin, by event date. Incidence rates were calculated per 100,000 population using population estimates from Florida Health Charts. Incidence was calculated for county and state levels by age, gender, and race/ethnicity. Statistical analysis was conducted using SAS 9.4, and ArcGIS Pro was for geocoding and identifying high-density areas.

#### Results

A total of 482 confirmed cases of acute hepatitis B cases were reported in Miami-Dade County between 2012 and 2022. Cases gradually increased with minor fluctuations from 2012 up until 2020 when there was a significant spike in Miami-Dade in 2021. Cases nearly doubled from 66 in 2020 to 116 in 2021. Figure 1 shows incidence rates of acute hepatitis B in Miami-Dade were trending below the state's rates from 2012-2020. Between 2020-2022 Miami-Dade County's rates exceeded those of the state with a peak incidence rate of 4.06 cases per 100,000 population in 2021.

#### Age and Gender

The average incidence rate of acute hepatitis B confirmed cases in Miami-Dade County over 10 years was calculated per age group. The age group with the highest average is 65-74 years old Figure 2. Average Incidence Rate of Acute Hepatitis B Cases by Age with an average incidence rate of 2.73 confirmed cases per 100,000 as depicted in Figure 2. There is a gradual increase in the trend from age group 35-44 years old until age group 65-74 years old when the trend then begins to decrease. No confirmed cases were observed for ages 0-4 between 2012-2022.

During 2012-2022, 49% of all confirmed acute hepatitis B cases reported in Miami-Dade County were male, while females accounted for 51% of these cases. As shown in Figure 2, during 2019-2021, there was a spike of cases among females, whereas males experienced a steady increase. Similarly, however, both genders underwent a decrease between 2021-2022.

#### Race and Ethnicity

Compared to non-Hispanic white and Hispanic, non-Hispanic Black has a higher incident rate of acute Hepatitis B. After 2017, non-Hispanic other becomes a high-risk group (Figure-4).

Figure 4. Acute Hepatitis B Incidence Rate by Race/Ethnicity, Miami-Dade County (2012-2022).

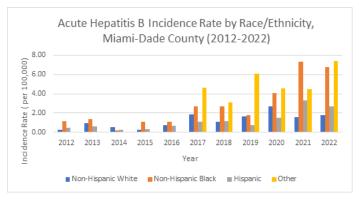
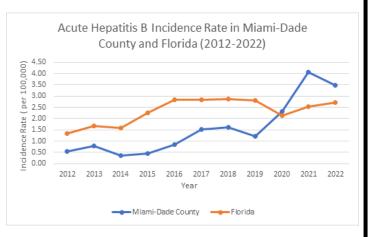


Figure 1. Acute Hepatitis B Incidence Rate in Miami-Dade County and Florida (2012-2022)



Group in Miami-Dade County (2012-2022)

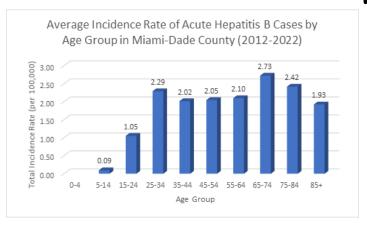
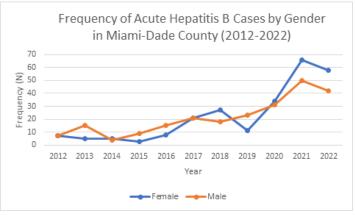


Figure 3. Frequency of Acute Hepatitis B Cases by Gender in Miami-Dade County (2012-2022)



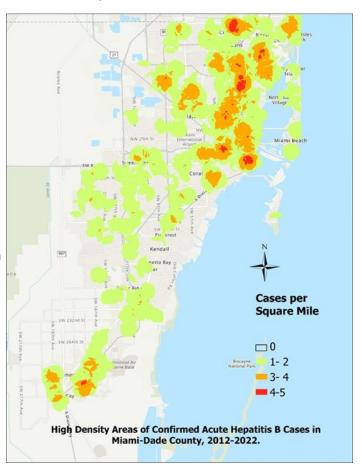
#### **Distribution of Cases in Miami-Dade County**

Figure 5 illustrates high-density areas of confirmed acute hepatitis B cases in Miami-Dade County from 2012-2022. Though cases are distributed throughout the county, areas of high density (4-5 cases per square mile) include North Miami Beach, Brickell, and in Homestead. Areas with 3-4 cases per square mile extend west to Hialeah and Hialeah Gardens.

#### Discussion

A potentially life-threatening liver infection, hepatitis B is a global health problem. 2,157 cases of acute hepatitis B were reported among 44 states during 2020 which correspond to an estimated 14,000 infections. 4 The cases in Miami-Dade have gradually increased from 2012-2022 with slight fluctuations but experienced a sharp peak between the year 2020-2021 where cases nearly doubled from 66 to 116. Hepatitis B is commonly transmitted through sexual contact or through needles/injections. The bacterial sexually transmitted disease (STDs) has been significantly increasing to 853.1 per 100,000 population in 2021 from 524.0 in 2012 in Miami-Dade County, particularly in gonorrhea, and syphilis infections 5. According to the CDC, since the beginning of the pandemic, large numbers of STD program staff have been deployed in response to the COVID-19 pandemic, which can lead to delays in services. <sup>6</sup> Furthermore, between 2020-2021 reported drug use also experienced an increase. These findings are

**Figure 5.** High Density Areas of Confirmed Acute Hepatitis B Cases in Miami-Dade County, 2012-2022.



consistent with the increase in acute hepatitis B in Miami-Dade County. The Miami-Dade County Health Department offers the hepatitis B vaccine to all school-aged children in the immunization clinics. The Hepatitis Clinic also offers viral hepatitis services which include hepatitis b vaccines for adults who are at high risk.

#### References

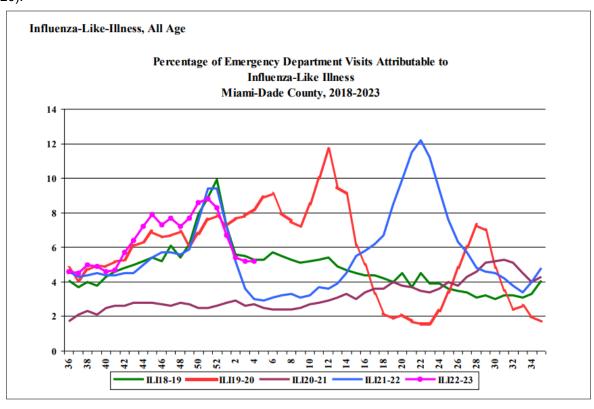
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- 5. Bacterial Sexually Transmitted Diseases (STDs). (n.d.). fihealthcharts.gov. https://www.fihealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=STD.DataViewer&cid=9767
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# Influenza Like Illness Surveillance Report

#### **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 37,971 ED visits; among them 1,962 (5.2%) were ILI. During the same week last year, 3.0% 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 December 2022

Diseases/Conditions	2022	2022	2021	2020
	Current Month	Year to Date	Year to Date	Year to Date
HIV/AIDS				
AIDS*	38	413	404	333
HIV	147	1371	1285	967
STD			***	
Infectious Syphilis*	47	654	631	504
Chlamydia*	1232	14361	14269	11763
Gonorrhea*	549	6290	6213	4884
TB Tuberculosis**	6	128	102	72
Epidemiology, Disease Control &				
Immunization Services				
Epidemiology				
Campylobacteriosis	87	705	667	571
Chikungunya Fever	1	1	0	0
	0	11	21	12
Ciguatera Poisoning Cryptosporidiosis	22	95	62	32
	0	95 71	19	9
Cyclos poriasis Dengue Fever	80	659	11	25
Escherichia coli, Shiga Toxin-Producing	26	216	119	56
	0	0	0	0
Encephalitis, West Nile Virus Giardiasis, Acute	46	318	131	115
Influenza, Pediatric Death	0	0	0	0
•	6	48	60	35
Legionellosis	0	40 1	2	35 2
Leptospirosis Listeriosis			11	9
	1	9		
Lyme disease	3 0	14 6	6 6	3 2
Malaria	0	9	12	10
Meningitis (except aseptic)	0			4
Meningococcal Disease	-	8	6 1	-
Salmonella serotype Typhy (Typhoid Fever) Salmonellosis	0	0	-	0
	143	1483	1148	1130
Shigellosis	21	198	87	104
S. Pneumoniae, invasive disease Vibriosis	6 3	89 40	70 29	46 18
West Nile Fever	0	0	29	28
Zika Virus (non-congenital)	_	•	•	•
	0	U	O	O
Immunization Preventable Diseases				
Measles	0	0	0	0
Mumps	0	5	5	2
Pertussis	1	6	2	9
Rubella	0	0	0	0
Tetanus	0	0	0	0
Varicella	20	49	22	29
Hepatitis				
Hepatitis A	3	33	9	13
Hepatitis B (Acute)	16	102	102	42
Healthy Homes				
Lead Poisoning	36	399	124	75

<sup>\*</sup>Data is provisional at the county level and is subject to edit checks by state and federal agencies.

Data on EDC-IS includes Confirmed and Probable cases.

<sup>\*\*</sup> Data on tuberculosis are provisional at the county level.

### What's New at DOH-Miami-Dade!

- DOH-Miami-Dade wishes a happy and prosperous New Year to all!
- Tobacco-free Florida in Miami-Dade offers 'Quit Season' tips and support for 2023 New Years Resolutions. Visit <u>miamidade.floridahealth.gov</u> to learn more!
- Miami-Dade County was selected to participate in in the <u>National Health and Nutrition Examination</u> <u>Survey</u> (NHANES), a comprehensive survey which monitors the nation's health and nutritional status.
- DOH Miami-Dade offers COVID-19 vaccines, vaccine boosters, pediatric vaccines, and flu shots. Visit <u>miamidade.floridahealth.gov</u> for clinic locations and appointments!

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

**Childhood Lead Poisoning** 305-470-6877 **Prevention Program Epidemiology and Disease** 305-470-5660 Surveillance **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

# MAKING HEALTHY CHOICES TO HELP PREVENT BIRTH DEFECTS

Make a PACT for Prevention

#### PLAN AHEAD



Get as healthy as you can before you get pregnant



Get 400 micrograms (mcg) of folic acid every day



#### Avoid Harmful Substances



Avoid smoking



Avoid drinking alcohol



Be careful with harmful exposures at work and home



#### CHOOSE A HEALTHY LIFESTYLE



Eat a healthy diet that includes fruits, vegetables, whole grains, low fat dairy, and lean proteins



Be physically active



Work to get medical conditions like diabetes under control



#### TALK TO YOUR HEALTHCARE PROVIDER



Get a medical checkup



Discuss all medications, both prescription and over-the-counter



Talk about your family history



Making a PACT to get healthy before and during pregnancy can help you have a healthy baby.



For more information, please visit www.odc.gov/ncbddd/birthdefects/prevention.htm and www.odc.gov/preconception/showyourlove

# **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.

