Epi Monthly

Florida Department of Health in Miami-Dade County September 2019 Vol 20, Issue 9

Public Health LOOK OUT!

- October is Domestic Violence Awareness Month. Almost 1 in 5 women and 1 in 7 men have experienced severe physical violence from an intimate partner in their lifetime. Intimate partner violence (IPV) describes physical, sexual, or psychological harm by a current or former partner. Appropriate strategies that promote healthy relationships can help prevent IPV. For more information on how to prevent intimate partner violence in your community please visit: https://www.cdc.gov/violenceprevention/index.html.

- International Infection Prevention Week (IIPW) is October 13-19th. The theme this year is **Vaccines are Everybody's Business**. This year the U.S. has seen a rise in vaccine preventable diseases such as measles. For that reason IIPW aims to raise awareness of the important role vaccines play in preventing infections. The video featured below, titled Gundersen Petri Bowl, is the APIC 2019 Film Festival winner. It showcases one of the basic yet important infection prevention strategies that can be applied in healthcare settings: hand hygiene. For tools and resources to help promote infection prevention please visit: https://professionals.site.apic.org/.

- October also marks Lead Poisoning Prevention Week, celebrated October 20-26. Lead Poisoning is a preventable environmental disease that affects an estimated half a million U.S. children. It is important to get children tested, since a simple blood test can help prevent lifelong effects. Testing is also available for older homes that may be at higher risk. For more information on how to take action against this public health issue please visit CDC's Lead Poisoning Prevention Week Page.

In this Issue

Click the image to the left to watch the video.

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What's New with the Flu? Updates for the 2019-2020 Influenza Season

By: Daniel Mauck

Flu is a contagious illness of the respiratory system that is caused by influenza viruses.[1] It can cause mild to severe illness.[1] Symptoms come on quickly and may include fever, cough, sore throat, muscle or body aches, headache, and fatigue.[1] Flu viruses spread through tiny droplets when an infected person coughs, sneezes, or talks.[1] Staying away from sick people, covering coughs and sneezes, and frequent handwashing can help someone avoid infection.[1] If antiviral drugs are started within two days of becoming sick, the severity of symptoms and the time someone is sick can be reduced.[2] The best way to prevent flu is by getting vaccinated each year.[1]

The composition of flu vaccines in the United States (US) is reviewed and updated annually to match circulating flu viruses.[2] Flu vaccines protect against three or four viruses (trivalent or quadrivalent).[3] For 2019–2020, trivalent vaccines are recommended to have A/Brisbane/02/2018 (H1N1) pdm09-like virus (updated), A/Kansas/14/2017 (H3N2)-like virus (updated), and B/Colorado/06/2017-like (Victoria lineage) virus.[3] The quadrivalent vaccine has the three viruses above plus B/Phuket/3073/2013-like (Yamagata lineage) virus.[3]

Earlier this year, the National Institutes of Health announced a phase one clinical trial to test a universal flu vaccine.[4] Influenza vaccines must be updated each year because the virus changes.[4] This vaccine, however, is based on a part of the virus that does not change much.[4] If effective, it could provide long-lasting protection from multiple types of influenza, including those that could cause a pandemic.[4]

Seasonal flu activity often begins to increase in October and November in the US, with a peak between December and February.[3] Flu season can last as late as May.[3] The Centers for Disease Control and Prevention (CDC) recommends that people get a flu vaccine by the end of October because it takes about two weeks after vaccination for antibodies to develop.[3] On average, about eight percent of the US population gets sick from flu each season.[1]

Click the image above to visit the CDC Digital Media Flu Toolkit page.

The CDC collects, compiles, and analyzes information on influenza activity throughout the year and produces a weekly influenza surveillance report.[5] This allows the CDC to see when and where influenza activity is occurring, track influenza-related illness, determine what influenza viruses are circulating, detect changes in influenza viruses, and measure the impact of influenza on hospitalizations and deaths.[5] The Florida Department of Health in Miami-Dade County also produces a weekly influenza surveillance report. This report has information on emergency department visits for influenza-like illness for all ages and children under 17 in Miami-Dade County.

An annual flu vaccine is the best way to protect against this potentially serious disease.[6] Influenza viruses mutate rapidly and the body's immune response from a vaccination declines over time, creating a need for annual vaccination.[6] Therefore, the CDC recommends that everyone over six months of age get a flu vaccine every season.[6] High rates of vaccination in the community help to protect those too young to be vaccinated.

References

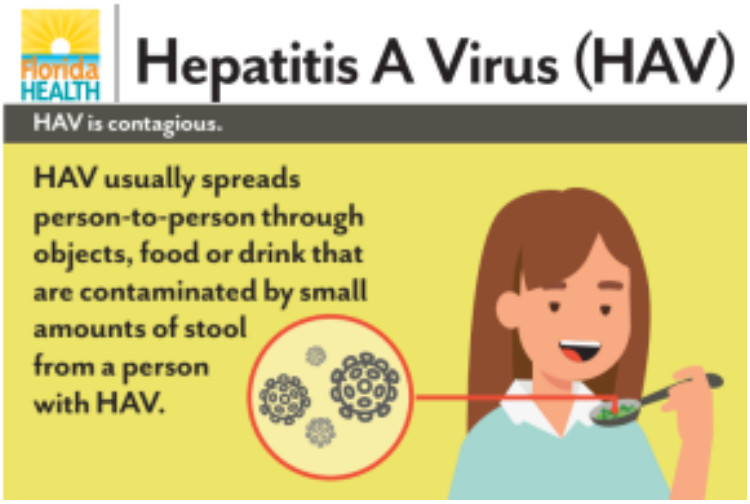
1. https://www.cdc.gov/flu/about/keyfacts.htm
2. https://www.cdc.gov/flu/treatment/whatyoushould.htm
3. https://www.cdc.gov/flu/season/flu-season-2019-2020.htm
4. https://www.nih.gov/news-events/news-releases/nih-begins-first-human-trial-universal-influenza-vaccine-candidate
5. https://www.cdc.gov/flu/weekly/fluactivitysurv.htm
6. https://www.cdc.gov/flu/prevent/keyfacts.htm

Hepatitis A Trends in Miami-Dade County and Florida, 2015-2019

By: Jenna Webb

Background

Hepatitis A is an acute liver infection caused by Hepatitis A virus (HAV). HAV is a common communicable disease seen worldwide and is typically transmitted via the fecal-oral route from person-to-person or by encountering contaminated food or water.[1,2] The average incubation period for HAV is 28 days, but disease onset can happen anytime between 15 to 50 days after exposure.[1,3,4] HAV symptoms may occur suddenly and include abdominal pain, diarrhea, fatigue, fever, jaundice, nausea, and vomiting. Jaundice is the most common symptom.[1-5] Children under the age of six usually do not develop symptoms after becoming infected, making them a good source for silent transmission of the virus. Risk factors for HAV include traveling to areas where HAV infections are common, direct contact with a person who has HAV, men who have sex with men, using drugs (injectable and non-injectable), being homeless, having a chronic liver disease, and having a clotting disorder.[1-5]



Source: Florida Department of Health website.

There has been a nationwide HAV outbreak for several years now, involving 30 states. As of September 2019, 28 states have current HAV outbreaks. Kentucky, Ohio, West Virginia, Tennessee, Indiana, and Florida have a considerably higher amount of cases than the other states with outbreaks.[6] The HAV outbreak in Florida started on January 1, 2018, according to the Center for Disease Control and Prevention (CDC).[6] The following November, the Florida Department of Health (FL DOH) issued a public health advisory regarding HAV. On August 1, 2019, the Florida State General Surgeon declared a public health emergency in Florida for HAV, mentioning several counties that have been severely affected by the outbreak.[7] This report summarizes HAV data in Florida and Miami-Dade County from January 1, 2015 to August 31, 2019 in order to educate the public on how the HAV outbreak is affecting Florida and Miami-Dade County as well as to provide prevention strategies against HAV infections.

Methods

Data for HAV case investigations of Miami-Dade County residents were extracted from Merlin, the FL DOH Epidemiology Surveillance System. Data gathered includes confirmed cases with symptom onset dates, clinical diagnosis dates, or lab report dates between January 1, 2015 and August 31, 2019. The data were analyzed using SAS Studio 3.6.

The FL DOH defines a *confirmed* HAV case as a person[4]:

> Whose laboratory findings are positive for hepatitis A.
>
> or
>
> Exhibiting hepatitis A symptoms and having had contact with a person (within 15-50 days before onset of symptoms) with a positive lab test.

Figure 1. HAV incidence rates in Miami-Dade County and Florida, 2015-2019

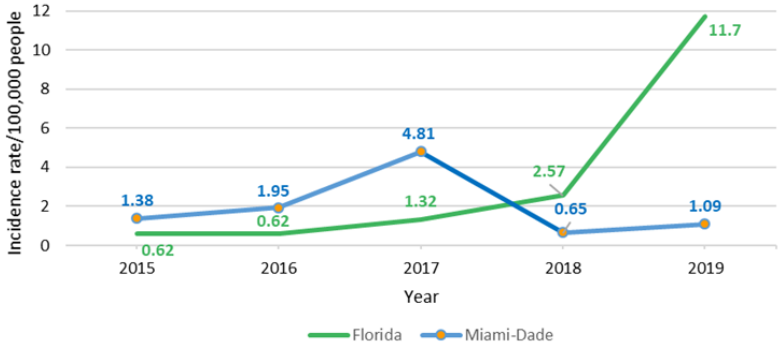


Figure 2. HAV cases by sex in Miami-Dade County, 2015-2019

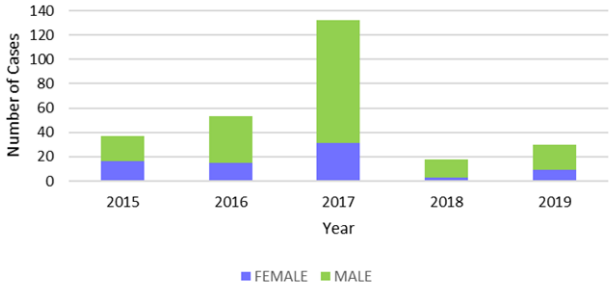


Figure 3. HAV cases by age in Miami-Dade County, 2015-2019

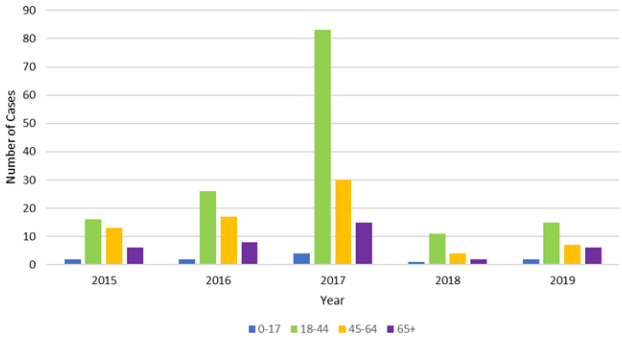


Table 1. Characteristics of HAV in Florida and Miami-Dade County during 2019

	Florida n(%)	Florida Rate	Miami-Dade n(%)	Miami-Dade Rate
Summary				
Number of cases	2,443	11.5	30	1.09
Age				
0-17 years	23(0.9)		2(6.7)	
18-44 years	1,537(62.9)		15(50)	
45-64 years	730(29.9)		7(23.3)	
65+ years	153(6.3)		6(20)	
Unknown	0		0	
Gender				
Female	876(35.9)	8.05	9(30)	0.63*
Male	1,567(64.1)	15.05	21(70)	1.57
Race and Ethnicity				
Non-Hispanic White	2,029(83.1)	17.8	6(20)	1.67*
Non-Hispanic Black	141(5.8)	4.26	3(10)	0.7*
Hispanic	169(6.9)	3.15	21(70)	1.11
Other	58(2.3)		0	
Unknown	46(1.9)		0	
Imported Status				
Acquired in Florida	2,272(93.11)		17(56.7)	
Acquired outside the U.S.	30(1.23)		9(30)	
Acquired in the U.S.	8(0.33)		0	
Unknown	130(5.33)		4(13.3)	

*Be cautious when interpreting results with small numbers

Results

In Florida, the number of HAV infections has increased every year since 2015. The yearly case counts starting with the year 2015 and ending with the current year, 2019, are as follows: 126, 128, 276, 548, and 2,492 cases. In Miami-Dade County, the number of HAV infections peaked in 2017 (132 cases) and decreased in both 2018 (18 cases) and 2019 (30 cases). Miami-Dade County's HAV incidence rate (per 100,000 people) decreased in 2018 and 2019 and is, currently, lower than the HAV incidence rate in Florida (1.09 per 100,000 people vs. 11.5 per 100,000 people; Figure 1). In the past five years, Miami-Dade County cases have predominately been male (Figure 2) and the age group with the highest amount of cases was between 18 to 44 years (Figure 3). Roughly 93% of Florida cases acquired their infection in Florida, while in Miami-Dade County roughly 57% of cases acquired their infection in-state. In Florida, the majority of cases are Non-Hispanic White, while in Miami-Dade County, the majority of cases are Hispanic (Table 1).

Prevention

The best way to prevent HAV is to receive the Hepatitis A vaccine. There are two different vaccines available today. The first option is a series of two injections, six months apart called Havrix.[1-4] The second option is a vaccine that prevents against both HAV and Hepatitis B virus (HBV) and is a series of 3 injections over a six-month period called Twinrix.[1-4] Both vaccines contain inactivated HAV, meaning the vaccines cannot cause infection. Beginning in 2006, The CDC recommends that all children over the age of one be vaccinated during their routine immunizations.[1-4] In addition, it is recommended that people who fall into the high-risk category be vaccinated as well. That being said, any healthy individual can be vaccinated against HAV.[1-4]

Receiving an immune globulin injection is another way to prevent HAV, but it is recommended only for certain populations.[1,8] For instance, travelers going to countries with high rates of HAV or who have medical conditions that prevent them from receiving a vaccine, should receive an immune globulin injection two weeks before they travel. Typically, these injections can protect against HAV for up to three months, depending on the dose.[1,8] For postexposure use, it is still recommended that individuals over the age of one year receive a single dose of the Havrix vaccine.[1]

Other preventative measures for HAV include practicing proper hand hygiene, heating foods to 185 degrees Fahrenheit for one minute, avoiding handling uncooked foods, and avoiding sharing towels, eating utensils, and toothbrushes with others.[1-3,9] It is important to note that alcohol-based hand sanitizer does not kill HAV, so proper hand washing should occur.[9] Proper hand hygiene includes washing your hands with warm water and soap for at least 20 seconds. Hand washing should occur before preparing food, after touching people or public surfaces, and after using the restroom or changing a diaper.[9]

Conclusion

Even though the incidence of HAV infections is lower in Miami-Dade County than in Florida, in regard to this outbreak, it is still important that Miami-Dade County residents and visitors get vaccinated to help reduce the transmission of HAV. The Florida Department of Health in Miami-Dade County (DOH Miami-Dade) is home to the Hepatitis Program. The goals of this program are to educate residents and visitors about all viral hepatitis, investigate reported viral hepatitis cases, provide screening and vaccines to vulnerable and at-risk populations, and provide case management to chronic hepatitis C clients.[10] As of September 20, 2019, the DOH Miami-Dade Hepatitis Program has vaccinated 2,556 at-risk persons in Miami-Dade County.

For more information on where hepatitis services are offered, or to receive more information on hepatitis A or other viral hepatitis, please call the Epidemiology, Disease Control and Immunization Services, Hepatitis Prevention Program at (305) 470-5660 or visit the department's website at: http://miamidade.floridahealth.gov/index.html.

References

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10. Florida Department of Health Miami-Dade County. (2019). Hepatitis Program. Retrieved from http://miamidade.floridahealth.gov/programs-and-services/infectious-disease-services/disease-control/hepatitis-program.html

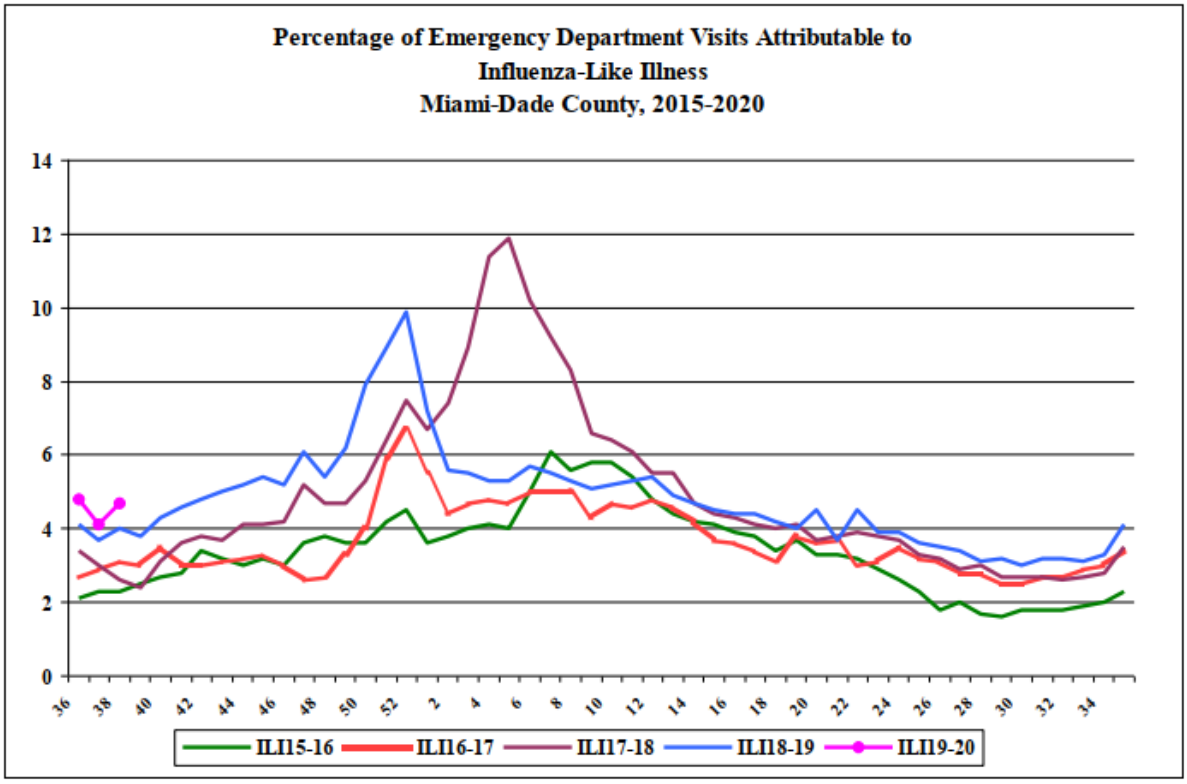
For more information on hepatitis A, call the information line, Monday–Friday, 8 a.m.–5 p.m., toll free: 1-844-CALL-DOH (844-225-5364). Or email: HepA@flhealth.gov

Florida Department of Health in Miami-Dade County
Epidemiology, Disease Control and Immunization Services

Influenza Like Illness Surveillance Report

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 2019-2020 data is compared to the previous 4 influenza seasons (2015-2016, 2016-2017, 2017-2018, 2018-2019).

Influenza-Like-Illness, All Age



Across all ages, there were 33,146 ED visits; among them 1,545 (4.7%) were ILI. During the same week last year, 4.0% 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 Calle at 305-470-5660.

Miami-Dade County Monthly Report
Select Reportable Disease/Conditions
August 2019

Diseases/Conditions	2019 Current Month	2019 Year to Date	2018 Year to Date	2017 Year to Date
HIV/AIDS				
AIDS*	44	290	310	285
HIV	124	967	938	883
STD				
Infectious Syphilis*	37	257	294	257
Chlamydia*	1259	10127	8927	8568
Gonorrhea*	412	3138	2825	2289
TB				
Tuberculosis**	N/A	N/A	77	60
Epidemiology, Disease Control & Immunization Services				
Epidemiology				
Campylobacteriosis	79	602	569	444
Chikungunya Fever	0	0	1	0
Ciguatera Poisoning	6	32	23	7
Cryptosporidiosis	8	39	27	28
Cyclosporiasis	8	25	0	4
Dengue Fever	40	83	6	13
Escherichia coli, Shiga Toxin-Producing	18	99	114	24
Encephalitis, West Nile Virus	0	0	0	0
Giardiasis, Acute	22	128	121	93
Influenza Novel Strain	0	0	0	0
Influenza, Pediatric Death	1	1	1	1
Legionellosis	4	35	35	23
Leptospirosis	0	0	1	0
Listeriosis	0	1	4	6
Lyme disease	1	2	2	3
Malaria	0	3	8	5
Meningitis (except aseptic)	0	9	7	4
Meningococcal Disease	0	2	0	6
Salmonella serotype Typhy (Typhoid Fever)	0	3	3	1
Salmonellosis	156	654	523	470
Shigellosis	35	197	219	77
Streptococcus pneumoniae, Drug Resistant	2	12	13	20
Vibriosis	2	12	5	3
West Nile Fever	0	0	0	0
Zika Virus (non-congenital)	4	21	19	85
Immunization Preventable Diseases				
Measles	0	0	3	0
Mumps	10	54	6	4
Pertussis	6	25	14	26
Rubella	0	0	0	0
Tetanus	0	0	0	0
Varicella	30	104	54	25
Hepatitis				
Hepatitis A	2	29	12	84
Hepatitis B (Acute)	8	52	33	30
Healthy Homes				
Lead Poisoning	5	91	116	182

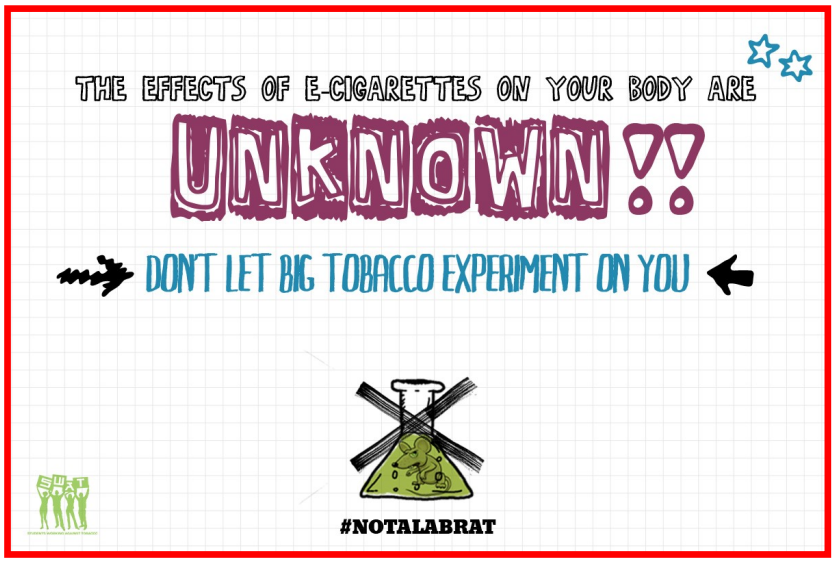
*Data is provisional at the county level and is subject to edit checks by state and federal agencies.

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

Data on EDC-IS includes Confirmed and Probable cases.

What's New at DOH Miami-Dade

- After Hurricane Dorian, our Health Administrator, Dr. Yesenia Villalta, and her team met with Frank Rollason, Miami-Dade Director of Emergency Operation, and his team to review the response to the potential passage of the storm.
- DOH-Miami-Dade team members from the Preventive Services Program, WIC & Nutrition and the Lead Program participated in the Children's Trust Family Expo to showcase local services provided. Brochures and pamphlets were distributed to approximately 500 people.
- Team member Erika Coello from DOH-Miami-Dade's HIV/AIDS Program and Grisel Marino from Miami-Dade County's Office of Community Advocacy participated in an interview with La Meca Radio to promote Getting 2 Zero and upcoming events.
- The Florida Department of Health in Miami-Dade County (DOH Miami-Dade) has issued another mosquito-borne illness alert for Miami-Dade County. This comes after a fourth case of local transmission of Dengue was confirmed in a Miami-Dade resident. The four cases do not appear to be related. The DOH Miami-Dade encourages the community to Drain and Cover to protect against mosquitos.



Not A Lab Rat Day is observed on October 16th and promoted by the organization Students Working Against Tobacco (SWAT). Click the picture above to visit the SWAT website.

Did You Know?

October is National Breast Cancer Awareness Month. Breast cancer is one of the most common cancer in women, no matter your race or ethnicity. Breast cancer screening can help find breast cancer early, when it is easier to treat. The United States Preventive Services Task Force recommends that women who are 50 to 74 years old and are at average risk for breast cancer get a mammogram every two years. Women who are 40 to 49 years old should talk to their doctor or other health care professional about when to start and how often to get a mammogram. For more information on breast cancer, please visit: The Center for Disease Control and Prevention's breast cancer webpage.

To report diseases 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

About the Epi Monthly Report

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 Vanessa Villamil at 305-470-5643 or vanessa.villamil@flhealth.gov.

Florida HEALTH Miami-Dade County