FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology Newsletter

April 2019

Florida Department of Health in Pinellas County
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Division of Disease Control and Health Protection

Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932

Fax: (727) 484-3865 (excluding HIV/AIDS)

To report HIV/AIDS by mail: Surveillance Room 3-138

205 Dr. MLK Jr St. N

St. Petersburg, FL 33701

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@HealthyPinellas

HIV Risk Reduction Tool

This tool allows individuals to identify their risk level of exposure to HIV (and other STDs) and customizes a plan for safer habits for risk reduction. It also provides a list of HIV testing sites nearby. Click the link below
https://wwwn.cdc.gov/hivrisk/index.html

STD Awareness Month

The month of April is Sexually Transmitted Disease (STD) Awareness month. This is a great opportunity to raise awareness regarding STDs, what they are and how these diseases affect our lives. It is imperative that our community understands the importance of getting tested and treated. Nationally, the Centers for Disease and Control Prevention (CDC) reported an increase in gonorrhea by 67 percent from 2013-2017, in addition syphilis cases and chlamydia cases remain at record highs[1]. These trends are also observed in Pinellas County where these three diseases continue to show an increasing trend. To help reduce STDs and create awareness, the CDC provides a series of campaigns to help spread the information. These campaigns are summarized below:

Treat me right
This campaign provides information on how to create and strengthen patient-provider relationships and encouraging patients to stay healthy ask questions about their sexual health.

Talk. Test. Treat.
The goal of this campaign is to improve communication between patients and providers and to reinforce that STDs are preventable and treatable.

Syphilis Strikes Back
This campaign works to reduce syphilis and increase testing and treatment, together with partners such as *Gay & Bisexual Men* and *Women & Newborns*.

Get Yourself Tested
The goal of this campaign is to increase testing and treatment for STDs and HIV to protect everyone's health and their partners.

The CDC also provides additional information on clinical guidance, including testing and treatment. You can find more information on STD clinics and where to get tested in Pinellas County by visiting the Department of Health's webpage.

For more information, please visit: https://www.cdc.gov/std/sam/index.htm

Refences:
[1]Centers for Diseases and Control Prevention (CDC). STD Awareness Month. Webpage: https://www.cdc.gov/std/dstdp. Accessed on April 2019.

Stem-cell Therapy in HIV Patients

A study published in March 2019 discussed a patient who is currently in HIV remission after undergoing a stem-cell transplant (bone marrow transplant) in the United Kingdom[1]. The article was reported in *Nature* by a group of researchers from the University College London. The patient has been HIV free for 18 months; however, researchers are emphasizing that is it too soon to call this treatment a "cure". This patient is actually the second to be considered HIV-free after treatment.

The first patient, known as the Berlin Patient, was also going through leukemia treatment, which led researchers to try stem-cell transplant with a variant receptor called CCR5. This receptor is known to block one variety of HIV; however, a less common form of HIV could still infect a person despite the transplant[2]. You can read more about the Berlin Patient here. The Berlin patient is still HIV-free today.

It has been more than 10 years since researchers could eradicate HIV from a patient; it was an intensive process that involved This process is expensive and risky as it is basically reconstructing someone's immune system utilizing drugs and radiation. More research is needed to identify how to improve the process as it is still considered an aggressive procedure, and both HIV patients were going through cancer treatment, which may not be the case for all HIV-positive patients[3].

To read more about these patients, please visit: https://www.nature.com/articles/d41586-019-00798-3

References:
[1]Second patient free of HIV after stem-cell threapy. Nature International Journal of Science; doi: 10.1038/d41586-019-00798-3
[2]Hütter, G., Nowak, D., Mossner, M., Ganepola, S., Müßig, A., Allers, K., Schneider, T., Hofmann, J., Kücherer, C., Blau, O. & Blau, I.W. (2009). Long-term control of HIV by CCR5 Delta32/Delta32 stem-cell transplantation. New England Journal of Medicine, 360(7), pp.692-698.
[3]Brown, T. R. (2015). I am the Berlin patient: a personal reflection. AIDS research and human retroviruses, 31(1), 2-3.

Overcoming Barriers to STD Prevention

By: Nicole B. Houston

Between 2016-2017, the national rates of chlamydia, gonorrhea and syphilis have increased in both males and females by 6.9%, 18.6% and 10.5%, respectively[1]. STDs are a serious public health threat that can cause various health issues and lead to infertility and/or other chronic disorders. STDs also increase the likelihood of contracting HIV[1]. Federal and state health organizations aim to identify and overcome barriers to the prevention of STDs in hopes of reducing these rates.

Studies have identified several barriers that reduce the efficiency of STD prevention and have provided recommendations to rectify them. First, it was found that it is not beneficial to discuss prevention of HIV and STD simultaneously as many people at risk of HIV and STDs perceive all prevention methods work equally for HIV and STDs[1,2]. Though any people living with HIV (PLWH) are co-infected with other STDs; 66% with syphilis, 28% with gonorrhea and 15% with chlamydia, research recommends that the discussion about preventative measures should be separate[2]. While education about Pre-Exposure Prophylaxis, Post Exposure Prophylaxis and Treatment as Prevention (TasP) have been effective in preventing infections of HIV, there has been less emphasis on condom use, which may point to the increase of other STDs[2]. Studies also suggest that virus suppression because of TasP is associated with greater prevalence of condomless sex among PLWH, which is also linked to higher STD rates[2,3].

Health disparities in relation to race and sexual orientation are identified as another obstacle to STD prevention. African-Americans, Latino-Americans and minorities who identify as men who have sex with men (MSM) are disproportionately affected by HIV and STD infections[2-4]. To overcome these health gaps, research suggests that programs and health staff trainings are needed to support the populations at greatest risk[3]. State and local health departments are advised to develop culturally appropriate and tailored services for these high risk groups. Health departments should also revise reporting procedures to include sexual orientation and gender identity items to develop more adequate surveillance data for these populations[3,4].

Lastly, research has found that STD rates may have increased as condom use has decreased in heterosexual couples. Reasons for non-use in this population include: reduced physical sensation, lower perceived risks, desiring spontaneity, desire to be intimate and/or substance abuse[3]. To overcome these barriers preventing safe sex practices, health educators should discuss negotiated safety in sexual behaviors and acknowledge the importance of love in relationships while promoting healthy behaviors which minimize STD transmission[3].

Reference:
[1]Centers for Disease Control and Prevention (CDC). National Profile. Webpage: https://www.cdc.gov/std/stats17/natoverview.htm. Accessed on April 2019.
[2]Bertand, T., Montgomery, M., & Chan, P. (2018).The Changing Paradigm of Sexually Transmitted Disease Prevention, *Sexually Transmitted Diseases (45)*8, 573-575 https://journals.lww.com/stdjournal/pages/articleviewer.aspx?year=2018&issue=08000&article=00013&type=FullText.
[3]Corbett, A. M., Dickson-Gómez, J., Hilario, H., & Weeks, M. R. (2009). A little thing called love: condom use in high-risk primary heterosexual relationships. *Perspectives on sexual and reproductive health*, *41*(4), 218–224. doi:10.1363/4121809.
[4]Hess, K. L., Hu, X., Lansky, A., Mermin, J., & Hall, H. I. (2017). Lifetime risk of a diagnosis of HIV infection in the United States. Annals of epidemiology, 27(4), 238-243.

Availability of IV Artesunate for Treatment of Severe Malaria in the U.S.

Malaria is a serious mosquito-borne disease that can be fatal to some people. The U.S. reports over 300 imported severe malaria cases each year, and Florida typically sees 40 to 90 imported malaria cases annually[1]. Most infections have been *Plasmodium falciparum*, which causes the most severe form of malaria. Any delays in treatment of severe malaria can result in death. Beginning this April, the CDC will provide IV artesunate for the treatment of severe malaria, which is the first-line, World Health Organization recommended treatment for severe malaria. Although IV artesunate is neither approved by the Food and Drug Administration (FDA) nor commercially available in the U.S., clinicians treating patients with severe malaria can call the CDC to obtain the medication. This change in treatment protocol is necessary because the FDA-approved IV quinidine has been discontinued and will no longer be available.

The CDC is ensuring that IV artesunate is available through an expanded use investigational new drug protocol, a FDA regulatory mechanism. Clinical studies have shown that IV artesunate is safe and can be administered to infants, children, and pregnant women in their second and third trimesters and during lactation. Starting April 2019, clinicians must call CDC's Malaria Hotline (770-488-7788; M-F, 9 a.m. to 5 p.m.) to obtain the IV artesunate. When consultation with a CDC expert confirms that IV artesunate is needed, the drug will be released free of charge to the CDC quarantine station nearest to the requesting hospital. The CDC is stocking IV artesunate at 10 quarantine stations and anticipates that there will be sufficient supply of IV artesunate for treatment of all U.S. cases of severe malaria.

For detailed information on the criteria for IV artesunate treatment and other frequently asked questions, you can visit: https://www.cdc.gov/malaria/new_info/2019/artesunate_2019.html. For after hours, providers can call 770-488-7100 and ask to speak with a CDC malaria expert.

References:
[1]Centers for Disease Control and Prevention (CDC). Malaria. Webpage: https://www.cdc.gov/parasites/malaria/index.html. Accessed on April 2019.
[2]Centers for Disease Control and Prevention (CDC). Availability of IV-artesunate. Webpage: https://www.cdc.gov/malaria/new_info/2019/artesunate_2019.html. Accessed on April 2019.

Health Advisories and Travel Notices

CDC Current Outbreak List Cyclone in Southern African Countries Updates on Yellow Fever Vaccine

Select Reportable Diseases in Pinellas County

	Pinellas		YTD Total		Pinellas County Annual Totals		
Disease	**March 2019**	**March 2018**	**Pinellas 2019**	**Florida 2019**	**2018**	**2017**	**2016**
A. Vaccine Preventable							
Measles	**0**	**0**	**0**	**1**	7	0	0
Mumps	**1**	**0**	**1**	**10**	2	2	0
Pertussis	**0**	**0**	**4**	**79**	32	35	18
Varicella	**4**	**3**	**12**	**243**	67	24	74
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	**0**	**0**	**0**	**3**	1	2	2
Meningitis (Bacterial, Cryptococcal, Mycotic)	**0**	**0**	**2**	**16**	9	7	7
Meningococcal Disease	**0**	**0**	**0**	**7**	1	0	0
C. Enteric Infections							
Campylobacteriosis	**19**	**15**	**74**	**1070**	264	207	137
Cryptosporidiosis	**3**	**4**	**10**	**140**	34	40	27
Cyclosporiasis	**0**	**0**	**0**	**2**	4	6	5
E. coli Shiga Toxin (+)	**7**	**4**	**8**	**147**	14	9	3
Giardiasis	**5**	**5**	**14**	**250**	41	45	41
Hemolytic Uremic Syndrome (HUS)	**0**	**0**	**0**	**1**	0	0	0
Listeriosis	**0**	**0**	**0**	**3**	1	0	2
Salmonellosis	**10**	**19**	**21**	**993**	225	278	188
Shigellosis	**0**	**5**	**4**	**378**	40	26	19
D. Viral Hepatitis							
Hepatitis A	**66**	**1**	**157**	**694**	113	0	2
Hepatitis B: Pregnant Woman +HBsAg	**1**	**2**	**3**	**98**	14	25	28
Hepatitis B, Acute	**7**	**0**	**20**	**171**	51	51	68
Hepatitis C, Acute	**3**	**3**	**7**	**91**	37	30	49
E. VectorBorne/Zoonoses							
Animal Rabies	**0**	**0**	**0**	**37**	4	2	4
Rabies, possible exposure	**9**	**9**	**30**	**970**	130	140	131
Chikungunya Fever	**0**	**0**	**0**	**1**	0	0	1
Dengue	**0**	**0**	**0**	**25**	0	0	2
Eastern Equine Encephalitis	**0**	**0**	**0**	**0**	0	0	0
Lyme Disease	**2**	**0**	**3**	**23**	12	17	11
Malaria	**0**	**0**	**1**	**6**	3	0	0
West Nile Virus	**0**	**0**	**0**	**2**	0	0	1
Zika Virus Disease	**0**	**0**	**3**	**17**	1	5	
F. Others							
Chlamydia	**344**	**363**	**1010**	**n/a**	4422	4188	4133
Gonorrhea	**78**	**117**	**273**	**n/a**	1439	1574	1566
Hansen's Disease	**0**	**0**	**0**	**3**	0	0	0
Legionellosis	**3**	**0**	**5**	**86**	26	23	19
Mercury Poisoning	**0**	**0**	**0**	**8**	1	1	0
Syphilis, Total	**24**	**27**	**81**	**n/a**	438	382	400
Syphilis, Infectious (Primary and Secondary)	**8**	**15**	**36**	**n/a**	190	160	188
Syphilis, Early Latent	**15**	**12**	**44**	**n/a**	158	128	146
Syphilis, Congenital	**1**	**0**	**1**	**n/a**	2	5	2
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	**0**	**0**	**0**	**n/a**	88	89	64
Tuberculosis	**2**	**3**	**5**	**n/a**		28	31
Vibrio Infections	**0**	**0**	**1**	**42**	6	11	8

*YTD up to March 31, 2019. n/a = not available at this time

Reportable diseases include confirmed and probable cases only. All case counts are current and provisional as of April 9, 2019. Data is collected from the Merlin Reportable Disease database, surveillance systems aintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx. STD data in STARS is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.