FLORIDA DEPARTMENT OF HEALTH IN PINELLAS COUNTY

EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

November 2016

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) 820-4270

(excluding HIV/AIDS)

To Report HIV/AIDS by mail:

Surveillance Room 3-138
205 Dr. MLK Jr St. N
St. Petersburg, FL 33701

Animal Bite Reporting:

Phone: (727) 524-4410 x7665

GET SMART
About Antibiotics Week 2016

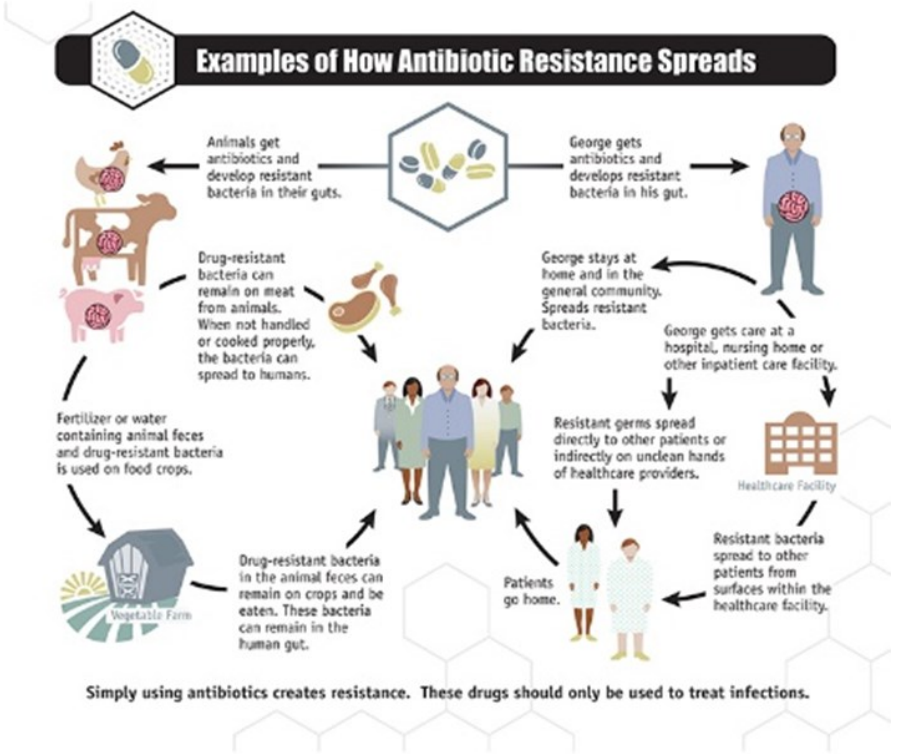
By Rachel Janssen Ilic, BSPH

Source: CDC.gov

The Centers for Disease Control and Prevention (CDC) will observe 'Get Smart About Antibiotics Week' November 14 – 20, 2016, which aims to raise awareness of antibiotic resistance and the importance of proper prescribing of antibiotics. Nationally, over 2 million people become ill with an antibiotic-resistant infection and about 23,000 people die as a result every year [1]. Antibiotics are one of the most commonly prescribed drugs, but up to 50% of prescriptions are not accurately prescribed. Bacteria can develop resistance to some antibiotics when antibiotics are inappropriately prescribed or misused. Furthermore, animals can develop resistant bacteria when antibiotics are not used appropriately. Antibiotics should only be used in food-producing animals when medically necessary and not to promote growth. Drug-resistant organisms can remain on meat and if not handled properly, the bacteria can spread to humans.

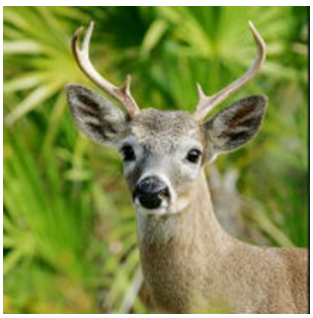
Drug-resistant bacterial infections can be transmitted in the general community and passed from person-to-person. The most important way to prevent drug-resistant infections is to avoid infection in the first place. Good hand hygiene, cooking food to the proper temperature, avoiding cross-contamination and ensuring all medication is taken as prescribed is key.

Through the one-week observance, the CDC aims to promote antibiotic stewardship within the community, hospitals and among farm workers. Per the CDC, "stopping even some of the inappropriate and unnecessary use of antibiotics in people and animals would help greatly in slowing down the spread of resistant bacteria" [2].



References:
1 Centers for Disease Control and Health Protection (CDC). Get Smart About Antibiotics Week. http://www.cdc.gov/getsmart/week/overview.html. Accessed November 7, 2016.
2 Centers for Disease Control and Health Protection (CDC). Antibiotic/Antimicrobial Resistance. http://www.cdc.gov/drugresistance/about.html. Accessed November 7, 2016.

Reintroduction of New World Screwworm in the Florida Keys



On September 30, 2016, an infestation of New World screwworm was confirmed in Key deer at the National Key Deer Refuge on Big Pine Key, Florida. The infestation has spread to additional keys including Big Torch, Middle Torch, Little Torch, Cudjoe, Ramrod, and Summerland[1].

New World screwworms are fly larvae that infest warm-blooded animals, including livestock and sometimes even humans[2]. The larvae enter the host through an open wound and feed on its flesh. Symptoms of infestation include an enlarging wound that may have bloody discharge and a decaying odor. If left untreated, an infested animal can die within 7-14 days. The New World screwworm was largely eradicated from the United State in the 1960s, and this is the first local infestation in more than 30 years.

The Key deer are the smallest subspecies of white-tailed deer in North America[3]. Poaching and loss of habitat caused their numbers to dwindle to fewer than 100 animals in the 1950s. In 1967, Key deer were added to the endangered species list and their population has rebounded to nearly 1,000.

The U.S. Fish and Wildlife Service (USFWS), which operates the Key Deer Refuge, is issuing a daily report on the status of the infestation. As of November 8, 130 Key deer had been euthanized or died. Refuge staff and volunteers have been working to distribute treatment to the deer and 1,690 doses had been administered. The daily report can be found here: https://www.fws.gov/refuge/National_Key_Deer_Refuge/.

Residents and tourists that notice flies buzzing around the deer, irritated behavior or head shaking, or a smell of decay should report it to USFWS by calling 888-404-3922, extension 7.

References

1. Batchelor, A. (2016, October 18). New World screwworms found on additional Florida Keys. Local 10 ABC News. Retrieved from http://www.local10.com/news/new-world-screwworms-found-on-additional-florida-keys
2. United States Department of Agriculture. (May 2014). New World Screwworm. Retrieved from https://www.aphis.usda.gov/publications/animal_health/2014/fs_new_world_screwworm.pdf
3. National Key Deer Refuge. (January 20, 2016). Key Deer. Retrieved from https://www.fws.gov/refuge/National_Key_Deer_Refuge/wildlife_and_habitat/key_deer.html

Herpes B Virus

By Sheila Alaghemand, MPH

Herpes B virus, also known as monkey B virus, herpesvirus simiae, and herpesvirus B, is an enzootic virus found among macaques, including the carb-eating macaque (known as cynomolgus monkeys in laboratories). Macaques are thought to be the natural hosts for the virus and typically have mild to no symptoms when infected. Transmission of the virus occurs through viral secretions in bodily fluids. Research done on the Macaques residing in sanctuaries suggest that the primates will become infected with herpes B virus before they reach adulthood[1]. Similar to other types of herpes viruses, once infected the virus remains in the body for life with intermittent viral shedding. The host is only infectious while actively shedding the virus which may be stimulated by various environmental factors, such as stress[2].

Humans who are bitten, scratched, or exposed to the bodily fluids from a non-human primate carrying the herpes B virus are at risk for infection and disease as a result[2]. Initial symptoms for herpes B virus infection in humans can include: flu-like body aches, fever, chills, headaches, fatigue, muscular incoordination, shortness of breath, rash at the site of the exposure and if left untreated can lead to encephalomyelitis (inflammation of the brain), severe neurologic impairment or death. Incubation period can be as short as 3 days to 1 month from the exposure. Roughly 70% of untreated patients die from complications associated with the infection[1].

Individuals most at risk for herpes B virus infection are veterinarians, laboratory workers, and others who have close contact with the macaque monkeys. Currently, there are no vaccines available for herpes B virus. There are experimental vaccines being examined in animals, but none are prepared for human trials[1]. The Centers of Disease Control and Prevention (CDC) recommends that individuals that work with the monkeys who carry the virus should utilize humane restraint methods that reduce risk of bites and scratches. Proper personal protective gear should be worn such as a lab coat, gloves, and face shield when working the macaque monkeys. If there is an accidental exposure to the virus, the area of should be immediately cleansed and the individual should seek medical care.

References

1. National Center for Immunization and Respiratory Diseases, Division of Viral Diseases. B Virus (herpes B, monkey B virus, herpesvirus simiae, and herpesvirus B). *Centers for Disease Control and Prevention.* [Online] July 18, 2014. https://www.cdc.gov/herpesbvirus/.

2. The Florida Department of Health. Herpes B Virus, Possible Exposure (B Virus). *Surveillance and Investigation Guidance.* [Online] January 2016. http://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/cd-herpes-b-virus.pdf.

Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	October 2016	October 2015	Pinellas 2016	Florida 2016	2015	2014	2013
A. Vaccine Preventable							
Measles	0	0	0	5	0	0	0
Mumps	0	0	0	14	0	0	0
Pertussis	3	3	18	290	17	19	17
Varicella	3	1	68	623	38	35	19
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	1	14	3	0	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	1	7	97	6	4	5
Meningococcal Disease	0	0	0	12	1	0	1
C. Enteric Infections							
Campylobacteriosis	13	9	111	1670	104	103	63
Cryptosporidiosis	2	10	26	495	49	240	19
Cyclosporiasis	0	3	5	36	3	0	5
E. coli Shiga Toxin (+)	0	0	2	147	2	6	7
Giardiasis	5	2	34	943	30	42	34
Hemolytic Uremic Syndrome (HUS)	0	0	0	6	0	0	1
Listeriosis	1	0	2	33	2	0	0
Salmonellosis	17	21	145	4673	196	216	203
Shigellosis	1	21	17	616	174	21	5
D. Viral Hepatitis							
Hepatitis A	0	1	2	97	4	2	6
Hepatitis B: Pregnant Woman +HBsAg	2	1	22	344	37	21	17
Hepatitis B, Acute	4	4	53	556	57	44	39
Hepatitis C, Acute	4	3	40	238	32	19	17
E. VectorBorne/Zoonoses							
Animal Rabies	0	0	3	64	1	2	0
Rabies, possible exposure	9	9	112	2721	114	190	193
Chikungunya Fever	0	0	1	14	2	10	0
Dengue	0	0	2	67	3	1	2
Eastern Equine Encephalitis	0	0	0	1	0	0	0
Lyme Disease	0	0	11	161	6	5	8
Malaria	0	1	0	59	2	3	1
West Nile Virus	0	0	1	9	1	0	0
Zika Virus	3	0	20	921	0	0	0
F. Others							
AIDS**	5	10	101	n/a	118	129	114
HIV**	17	31	179	n/a	252	171	157
Chlamydia	293	356	3457	n/a	4147	3853	4141
Gonorrhea	98	101	1316	n/a	1438	1295	1424
Hansen's Disease	0	0	0	15	0	0	0
Lead Poisoning: Children < 6 years:	0	3	5	124	6	8	4
Legionellosis	3	1	17	245	18	13	10
Mercury Poisoning	0	0	0	16	1	2	0
Syphilis, Total	19	22	321	n/a	283	186	114
Syphilis, Infectious (Primary and Secondary)	14	9	153	n/a	151	75	52
Syphilis, Early Latent	1	9	115	n/a	83	61	37
Syphilis, Congenital	0	0	1	n/a	3	0	0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	4	4	52	n/a	52	50	25
Tuberculosis	3	3	18	n/a	14	25	30
Vibrio Infections	2	0	8	160	11	10	11

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS http://www.floridacharts.com/charts/default.aspx.

*STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

**Current HIV Infection data by year of report reflects any case meeting the CDC definition of 'HIV infection' which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the most recent calendar year (2015 or 2016) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida.