

The  **EPI**
gazette

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Misperceptions Keep Kids from Getting Lifesaving Treatment for Tickborne Diseases

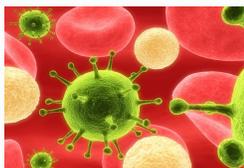
Kids are five times more likely than adults to die from tickborne diseases like Rocky Mountain spotted fever (RMSF). Doctors often avoid prescribing doxycycline, the most effective RMSF treatment, for young children because the drug's warning label cautions that tooth staining may be a side effect in children younger than 8 years. A new study published in *The Journal of Pediatrics* suggests that for patients with RMSF, this warning may be doing more harm than good.

doxycycline for suspected RMSF before their 8th birthday and those who had not, without knowing which children had received the drug. The dentists evaluated tooth color and looked for tooth staining and evidence of weakness in the tooth enamel of all children in the study. They found no differences between the two groups in tooth color, staining, or enamel.



Since 1970, all tetracycline-class antibiotics, including doxycycline, have included a warning label from the U.S. Food and Drug Administration advising against their use in children younger than 8 because of the risk of tooth staining. Previous studies of children who received older tetracyclines identified staining or tooth problems in 23 to 92 percent of recipients. The current study is the largest conducted to date that examines whether doxycycline negatively affects dental health and the first to use instruments to measure tooth color.

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The study led by experts at the Centers for Disease Control and Prevention (CDC) and Indian Health Service (IHS) found that short courses of the antibiotic doxycycline can be used in children under 8 years old without staining teeth or weakening tooth enamel.

CDC and IHS researchers reviewed medical records for more than 250 children who lived on an American Indian reservation with high rates of RMSF. Dentists inspected the permanent teeth of children who had received

Treating RMSF is a race against time, and doctors must prescribe the drug early, before they have lab results confirming infection. “Many doctors readily use doxycycline to treat suspected RMSF in adults but won’t use the drug in children, because they’re worried about tooth staining and hesitate to prescribe it for only a suspected case,” said Dr. Jennifer McQuiston, CDC epidemiologist and one of the study’s authors. “Our study shows definitively that this shouldn’t be a reason to avoid this life-saving drug. Changing the drug’s label may encourage physicians to use doxycycline earlier to treat suspected RMSF in children, which will help save lives.”



CDC recommends starting doxycycline treatment as soon as a doctor suspects RMSF or other rickettsial infection. Delaying treatment after the start of the infection increases the patient’s risk of hospitalization and death.

More than 13,500 cases of RMSF and related infections were reported in the United States between 2008 and 2012. Children younger than 10 years represented only 6 percent of the reported cases but accounted for nearly a quarter of the RMSF deaths during that period, highlighting the importance of early pediatric treatment.

RMSF is a severe tickborne disease caused by the bacterium *Rickettsia rickettsii*. RMSF begins with non-specific symptoms such as fever and headache, vomiting, diarrhea and sometimes rash. More than 20 percent of untreated cases are fatal; the average time from the beginning of symptoms to death is 8 days.

In addition to improving survival from RMSF, the news that short courses of doxycycline are not linked to dental concerns in kids might also improve treatment of other infections. Doxycycline is also effective against some bacteria that commonly cause community-acquired pneumonia.

Take Away Points:

- ***Short-term doxycycline use does not stain kids’ teeth, CDC/IHS study finds.***
- ***Doxycycline is the most effective antibiotic for the treatment of suspected rickettsial infections, including Rocky Mountain spotted fever (RMSF).***
- ***Delay in treatment of rickettsial diseases may lead to severe illness or death.***

To read the article, visit: [http://www.jpeds.com/article/S0022-3476\(15\)00135-3/fulltext](http://www.jpeds.com/article/S0022-3476(15)00135-3/fulltext)

For more information about RMSF and other rickettsia, visit: www.cdc.gov/rmsf

May is Hepatitis Awareness Month -

May 19th is Hepatitis Testing Day -



Viral Hepatitis is a leading cause of liver cancer and liver transplants. An estimated 4.4 million Americans are living with chronic Hepatitis; most do not know they are infected.

Persons at risk for viral Hepatitis can receive FREE testing and vaccination through the DOH-Seminole Hepatitis Prevention Program. For additional information contact Enid Santiago-Cruz at (407) 665-3019.

Below are Viral Hepatitis Facts and Statistics:

Hepatitis B

- An estimated 1.2 million people are living with chronic Hepatitis B in the US.
- 1 in 12 Asian Americans has Hepatitis B.
- Nearly 2 in 3 Asian Americans with Hepatitis B do not know they are infected.
- Asian and Pacific Islanders make up 5 percent of the U.S. population but account for over 50 percent of Americans living with Hepatitis B.
- People with Hepatitis B often have no symptoms.
- Up to 25 percent of people with Hepatitis B develop serious liver problems.
- Hepatitis B –related liver cancer is a leading cause of cancer deaths among Asian Americans.
- CDC recommends all people born in Asia and the Pacific Islands get tested for Hepatitis B.
- Perinatal HBV transmission can be prevented by identifying HBV-infected (i.e., Hepatitis B surface antigen [HBsAg]-positive) pregnant women and providing Hepatitis B immune globulin and Hepatitis B vaccine to their infants within 12 hours of birth.

Hepatitis C

- People born from 1945 through 1965 are five times more likely to be infected with Hepatitis C than other adults.
- Nearly 3 in 4 people with Hepatitis C were born from 1945 through 1965.
- Most people living with Hepatitis C do not know they are infected.
- Many people can live with Hepatitis C for decades without having symptoms or feeling sick.
- Left untreated, Hepatitis C can cause serious liver damage and liver failure.
- Hepatitis C is a leading cause of liver cancer and liver transplants.
- CDC recommends all people born from 1945-1965 get tested for Hepatitis C.

For additional information on Hepatitis visit <http://www.cdc.gov/hepatitis/>

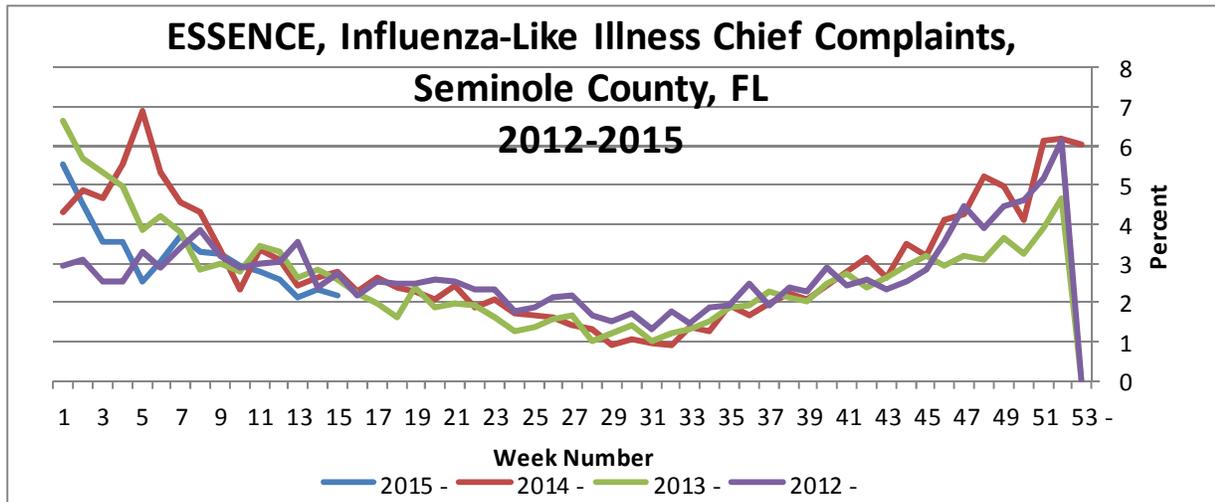


Influenza Surveillance

Local: Seminole County has reported **MILD** flu activity since January. **Three(3) influenza outbreaks** have been reported in Seminole for the 2014-2015 Influenza season in nursing homes. The ESSENCE Syndromic Surveillance system is showing **DECREASING** influenza-like illness (ILI) chief complaints.

State: Florida is currently reporting **LOCAL** flu activity. Influenza activity has **DECREASED** since week 52. **One hundred and two (102) influenza or ILI outbreaks** have been reported this flu season. **Three (3) pediatric influenza-associated deaths** have been reported this season. The most common influenza subtype detected at the state laboratory is **Influenza B**.

National: Seventeen (17) states are reporting **LOCAL** flu activity. Since October 1, 2014 the CDC has identified an antigenically **drifted influenza A (H3N2) strain** circulating that is different from the influenza A (H3N2) strain contained in the current 2014-2015 influenza vaccine formulation. Additional information can be found at the following link: <http://emergency.cdc.gov/han/han00374.asp>



Arbovirus Surveillance

Seminole County Mosquito-borne Illness Statistics 2015 Year to Date:

West Nile Virus: N/A

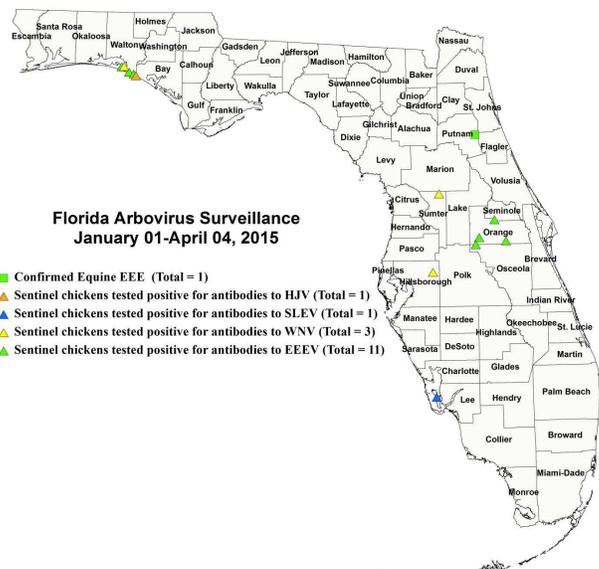
Eastern Equine Encephalitis: N/A

St. Louis Encephalitis: N/A

Dengue: One imported case

Chikungunya: One imported case

Malaria: N/A

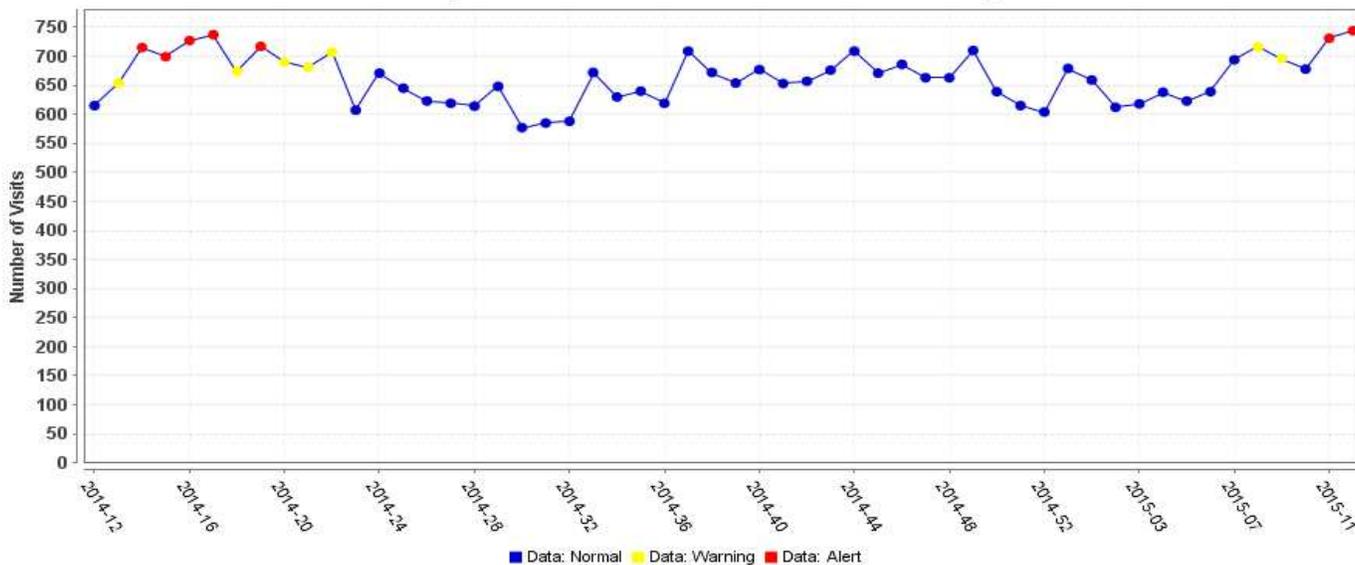


Gastrointestinal Illness Surveillance

Gastrointestinal Illness typically follows a trend similar to influenza season, peaking in the winter months. Two gastrointestinal illness outbreaks were reported in March, one in a nursing home and one foodborne associated with a restaurant.

Food and Waterborne Illness Complaints can be submitted at the following link, a health department employee will follow-up with the complainant by phone: <http://www.floridahealth.gov/diseases-and-conditions/food-and-waterborne-disease/online-food-complaint-form.html>

ESSENCE, Chief Complaints of Gastrointestinal Illness, Seminole County, FL 2014-2015



Ebola Virus Disease Update

Current Statistics:

Guinea—	3,515 cases	2365 deaths
Liberia—	9,862 cases	4573 deaths
Sierra Leone—	12,139 cases	3886 deaths

Total Cases—25,516 Total Deaths 10,824 (stats as of April 5, 2015)

The U.S., Nigeria, Senegal, Spain, Mali, and U.K. have all previously reported cases but have since been declared Ebola-free.

The Florida Department of Health continues to encourage healthcare providers and hospitals to prepare for an Ebola case in Florida.

The latest FDOH guidance on Ebola Virus Disease can be found at the following link:

<http://www.floridahealth.gov/diseases-and-conditions/ebola/index.html>

Disease Incidence Table-Seminole County

Selected Diseases/Conditions Reported to DOH-Seminole	2015 through Week 12	2014 through Week 12	2013 through Week 12	2012–2014 Average through Week 12
AIDS*	7	4	5	5.0
Animal Bite to Humans**	3	5	4	4.0
Animal Rabies	3	0	3	1.7
Campylobacteriosis	17	5	5	9.0
Chlamydia	135	109	109	114
Cryptosporidiosis	5	1	0	1.0
Cyclosporiasis	0	0	0	0
Dengue	1	0	0	0
E. coli Shiga toxin-producing	2	2	2	2.0
Giardiasis	4	1	2	2.7
Gonorrhea	34	21	27	25.7
Haemophilus influenzae (invasive)	0	1	4	1.7
Hepatitis A	0	0	0	0.7
Hepatitis B (acute and chronic)	19	9	11	11.7
Hepatitis C (acute and chronic)	123	93	58	72.3
Hepatitis B in Pregnant Women	0	0	0	0
HIV*	6	2	3	2.3
Lead poisoning	1	1	0	2.3
Legionellosis	3	1	2	1.0
Lyme Disease	1	0	0	0.7
Meningococcal Disease	0	1	0	1.7
Pertussis	2	3	3	2.3
Salmonellosis	12	10	7	8.7
Shigellosis	5	0	1	6.0
S. pneumoniae – drug resistant	1	2	3	3.0
Syphilis	8	7	5	5.3
Tuberculosis	1	1	0	0.7
Varicella	5	4	7	5.3

• * HIV data includes those cases that have converted to AIDS. These HIV cases cannot be added with AIDS cases to get combined totals since the categories are not mutually exclusive.

• ** Animal bite to humans by a potentially rabid animal resulting in a county health department or state health office recommendation for post-exposure prophylaxis (PEP), or a bite by a non-human primate.

Reported cases of diseases/conditions in **Bold** are >10% higher than the previous three year average for the same time period.

All Data is Provisional



Disease Reporting

The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions reported from physician’s offices, hospitals and laboratories.

Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381, Florida Statutes.

To report a reportable disease or outbreak during business hours please use the [Report of Communicable Disease Form](#) for diseases other than HIV/AIDS, STD, or TB, or contact the Epidemiology Department at (407) 665-3266.

To report an urgent reportable disease or outbreak after hours, please contact (407) 665-3266 and follow the instructions to reach the Epidemiologist on-call 24/7.

[Reportable Diseases/Conditions in Florida - Practitioner List](#)

[Reportable Diseases/Conditions in Florida - Laboratory List](#)

[Disease Reporting Information for Health Care Providers and Laboratories](#)

Foodborne Illnesses Reporting Links:

[Report illnesses due to food online 24/7](#)

[Report unsafe or unsanitary conditions](#)

MISSION

To protect, promote and improve the health of all people in Florida through integrated state, county and community efforts

VISION

To be the Healthiest State in the Nation

VALUES

Innovation
Collaboration
Accountability
Responsiveness
Excellence

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