



# The EPI gazette

July 2018—March 2019  
Issue 191



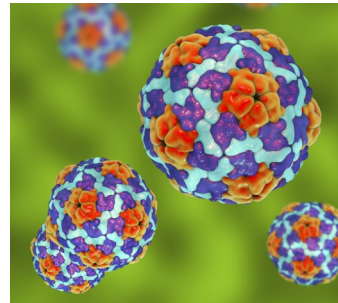
## Hepatitis A

### SPECIAL EDITION

The Florida Department of Health in Seminole County (DOH-Seminole) has seen a significant increase in hepatitis A infections since July of last year. This increase is not unique to Seminole County and is affecting 25 counties including most of central Florida. Given the recent outbreaks in other states in which increased morbidity and mortality were reported, DOH-Seminole is encouraging increased vigilance from our healthcare and community partners to mitigate the impact of hepatitis A on our community.

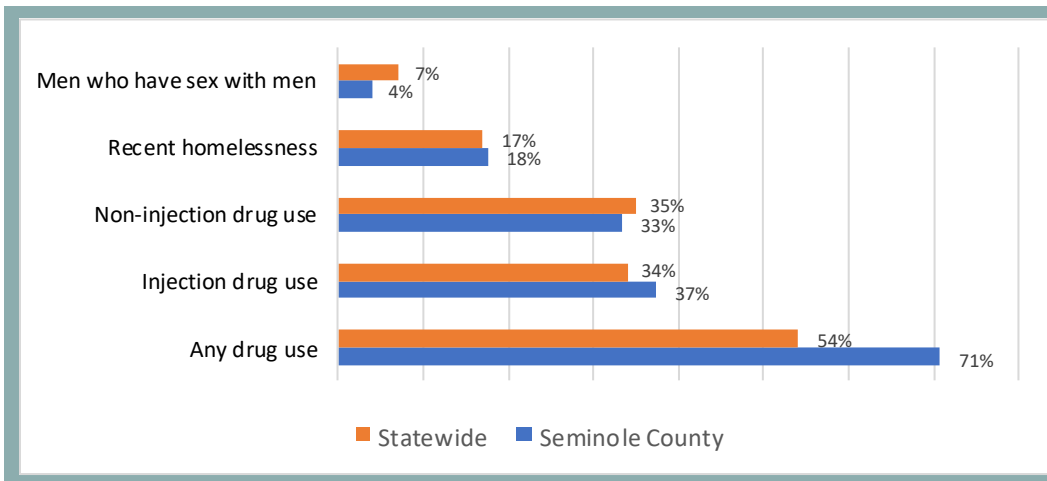
Many people with hepatitis A do not have symptoms and do not know they are infected. If symptoms do occur with an acute infection, they can appear from 15 to 50 days (28 days average) after exposure. The communicable period is 2 weeks prior to the onset of symptoms to one week after. Symptoms of hepatitis A can include: fever/chills, fatigue/malaise, anorexia/loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stools, diarrhea, and jaundice.

hepatitis A virus



### Hepatitis A in Seminole County

As of the end of March 2019, 51 cases of hepatitis A were reported since January 2018 in Seminole County with 1,239 reported statewide for the same timeframe. The previous five-year average for hepatitis A cases in Seminole County was 1.6 cases annually. Most of these cases occurred June through December 2018. The majority of these cases were acquired in Florida. The risk factors for acquiring Hepatitis A in Seminole County and Florida are shown below:



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### HEPATITIS A PATHOGENESIS

- Entry into mouth
- Viral replication in the liver
- Virus present in the blood and feces 10-12 days after infection
- Virus excretion may continue for up to 3 weeks after onset of symptoms

## CLINICAL FEATURES

The incubation period of hepatitis A is approximately 28 days (range 15–50 days). The clinical course of acute hepatitis A is indistinguishable from that of other types of acute viral hepatitis. The illness typically has an abrupt onset of fever, malaise, anorexia, nausea, abdominal discomfort, dark urine and jaundice. Clinical illness usually does not last longer than 2 months, although 10% – 15% of persons have prolonged or relapsing signs and symptoms for up to 6 months. Virus may be excreted during a relapse.

The likelihood of symptomatic illness from hepatitis A infection is directly related to age. In children younger than 6 years of age, most (70%) infections are asymptomatic. In older children and adults, infection is usually symptomatic, with jaundice occurring in more than 70% of patients.

## COINFECTION

Co-infection with more than 1 type of viral hepatitis can lead to more severe liver disease and increase the risk of developing liver cancer. In Seminole County, since January 1, 2018, 1 case (2%) was co-infected with chronic hepatitis B, 16 (31%) cases were co-infected with chronic hepatitis C, and 2 (4%) cases were co-infected with chronic hepatitis B and C while 32 (68%) cases had no co-infection.

Statewide cases demonstrated a similar pattern as that of Seminole County with most cases having no co-infection 904 (73%), 20 (2%) cases co-infected with chronic hepatitis B, 284 (23%) cases co-infected with chronic hepatitis C and 31 (3%) cases co-infected with both hepatitis B and C.

## COINFECTION AND INCIDENCE RATE ASSOCIATED WITH AGE GROUP

Statewide, from January 2018 to March 2019, 239 (19%) of the 1,239 total cases of hepatitis A were epidemiologically linked to other cases. In March 2019, 15% of cases were linked to other cases. County level data is not available for this measurement.

The pie charts below show the incidence rate of hepatitis A with the associated age groups for Seminole County and Florida, respectively:

### 97% NEVER VACCINATED

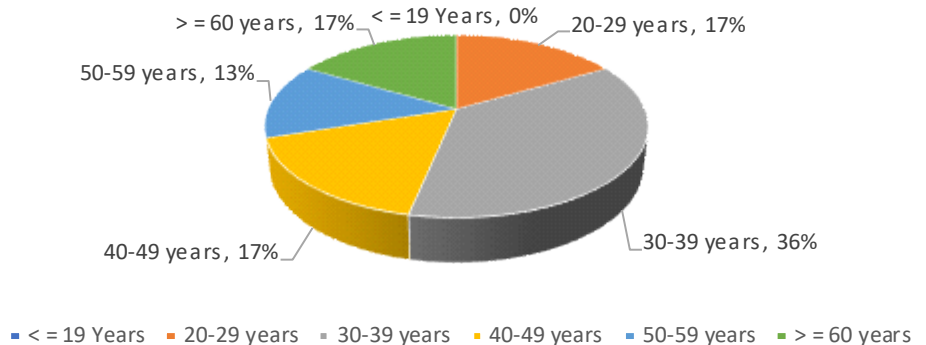
The best way to prevent hepatitis A infection is through vaccination.

Since January 1, 2018, 97% of people with hepatitis A had never received a documented dose of hepatitis A vaccine. In March 2019, 96% of infected people had not received the vaccine. Since 2006, hepatitis A vaccine has been recommended for all children at age 1 year. Hepatitis A vaccine is also recommended for certain high-risk groups of adults including illegal drug users, persons experiencing homelessness, and men who have sex with men.

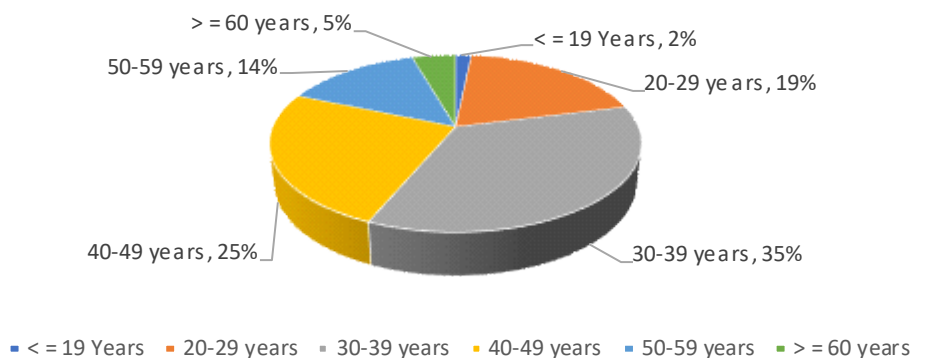
To learn more about the hepatitis A vaccine, visit:

[www.CDC.gov/Vaccines/HCP/](http://www.CDC.gov/Vaccines/HCP/)

### Seminole County



### Statewide



# WHAT ARE WE DOING TO PREVENT THE SPREAD OF HEPATITIS A?

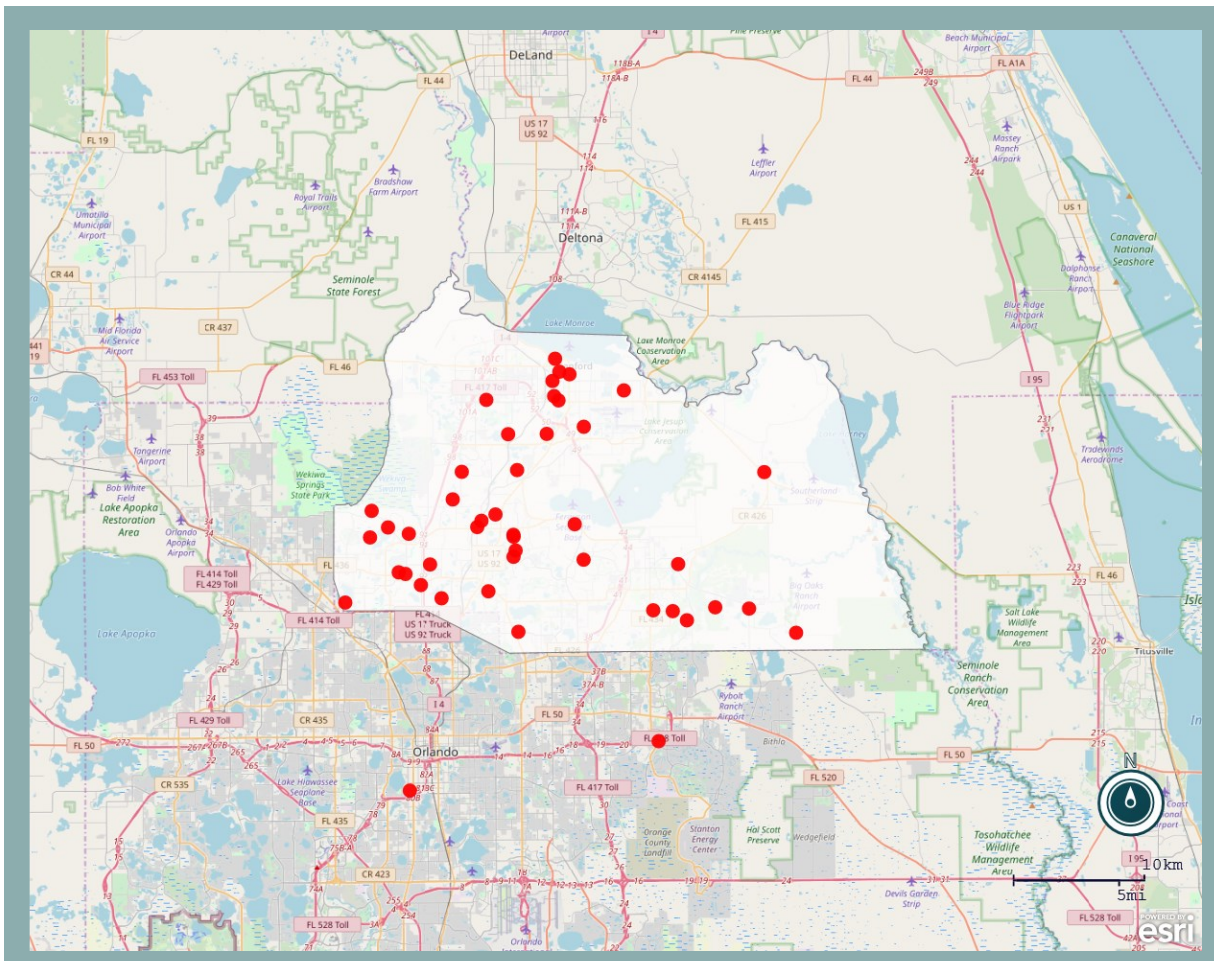
From January 1, 2018 through April 7, 2019, a total of 654 hepatitis A vaccinations have been administered in Seminole County. Of the total 208 possible close contacts of probable, suspected and confirmed hepatitis A cases identified, 89 persons have been vaccinated.

DOH-Seminole has been engaged in implementing the following action items as well:

- Outreach to local hospitals and urgent cares.
- Present on hepatitis A to the Healthy Seminole Coalition.
- Provide hepatitis A information to the John E. Polk Jail.
- Present on hepatitis A at the Seminole County Emergency Management Team Meeting.
- Provide hepatitis A information to the Rescue Mission homeless shelter.
- Provide hepatitis A information to Aspire Health Partners (a drug rehabilitation and mental health agency).
- Outreach to local hospitals to encourage hepatitis A vaccinations in emergency rooms.
- Outreach to blood banks and plasma centers.
- Provide hepatitis A information to Seminole State College and the University of Central Florida.
- Coordinate training for food handlers in conjunction with the Department of Business and Professional Regulation.

These and other ongoing actions ensure that the spread of hepatitis A continues to be reduced in Seminole County.

The Epidemiology team for the Florida Department of Health in Seminole County developed the map below which indicates where the hepatitis A cases were reported in Seminole County.



## STATEWIDE RESPONSE

The Florida Department of Health is actively working to vaccinate those most at risk for hepatitis A infection. In recent months, the number of first doses of hepatitis A vaccine administered by both private providers and county health departments to adults age 18 years and older, as recorded in Florida SHOTS, remained well above the previous 5-year-average. Since October 2018, an additional 24,255 doses were administered compared to previous years.

**Vaccination is the best way to prevent hepatitis A infection.**



## NATIONAL ACTIVITY

Hepatitis A rates have decreased by more than 95% since the first vaccine became available in 1995. However, since March of 2017, the Centers for Disease Control and Prevention has been monitoring outbreaks in 15 states among persons who use drugs and persons who are homeless. Kentucky and West Virginia have been the most heavily impacted, and response efforts are ongoing. More information about these outbreaks can be found here:

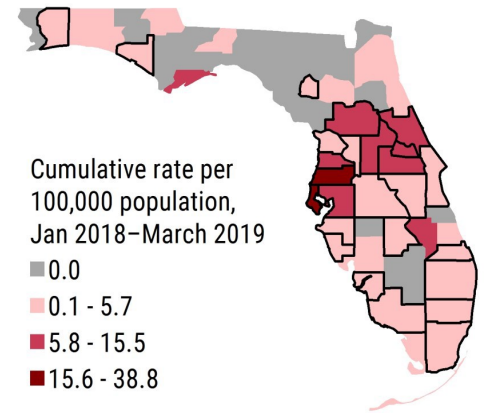
[www.cdc.hepatitis/outbreaks/](http://www.cdc.hepatitis/outbreaks/)

## HEPATITIS IN FLORIDA

**From January 1, 2018 through March 31, 2019, 1,239 hepatitis A cases were reported among 31 counties.**

The number of reported hepatitis A cases more than doubled from 2016 to 2017 after remaining relatively stable in previous years. Case counts in 2018 exceeded those seen in previous years and are more than double the case counts in the last 5 years.

**The 265 hepatitis A cases in March were reported among the 25 counties outlined in black on the adjoining map of Florida. The central Florida region has had the highest hepatitis A activity levels so far this year. Since January 1, 2018, 97% of cases have likely been acquired locally in Florida.**



## RECOMMENDATIONS FOR HEALTHCARE PROVIDERS

Consider hepatitis A as a diagnosis in anyone with jaundice and clinically compatible symptoms (abdominal pain, nausea/vomiting, anorexia, dark urine, malaise, fever, and diarrhea). Laboratory testing should include hepatitis A IgM antibody testing and liver function testing.

Intravenous drug users and the homeless are known to be at increased risk of hepatitis A infection. The Advisory Committee on Immunization Practices has recommended that all persons with intravenous drug use and all homeless individuals receive two doses of hepatitis A vaccine; the second dose should be administered 6-12 months after the first dose.

Additional persons at increased risk for hepatitis A infection who should be offered vaccine include:

- Men who have sex with men
- Persons with direct contact with persons who have hepatitis A
- Persons who have chronic liver disease
- Persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A
- Persons who have clotting-factor disorders
- Household members and other close personal contacts of adopted children newly arriving from countries with high or intermediate hepatitis A endemicity

## DISEASE INCIDENCE TABLE — SEMINOLE COUNTY

Selected Diseases/Conditions Reported to DOH-Seminole	2018 Jan-Dec	2017 Jan-Dec	2016 Jan-Dec	2016 - 2018 Average
AIDS	32	36	36	34.6
Campylobacteriosis	59	61	50	56.7
Chlamydia	1,982	1,814	1,708	1,834.7
Cyclosporiasis	1	3	3	2.3
Dengue	—	1	4	1.7
E. coli Shiga toxin-producing	10	6	4	6.7
Giardiasis	18	14	15	15.7
Gonorrhea	646	521	438	535.0
Haemophilus influenzae (invasive)	7	6	3	5.3
Hepatitis A	30	4	1	11.7
Hepatitis B (acute and chronic)	87	86	87	86.7
Hepatitis B in Pregnant Women	5	2	4	3.7
Hepatitis C (acute and chronic)	309	314	400	341.0
HIV	55	55	61	57.0
Lead poisoning	48	45	12	35.0
Legionellosis	16	10	8	11.3
Pertussis	4	6	6	5.3
Rabies, Possible Exposure	134	71	43	82.7
Salmonellosis	122	77	79	92.7
Shigellosis	17	35	3	18.3
S. pneumoniae - drug resistant	5	7	7	6.3
Syphilis	99	97	98	98.0
Tuberculosis	12	8	8	9.3
Varicella	17	24	11	17.3
Zika Virus, Non-Congenital	4	7	25	12.0

## 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



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## 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](#) or Contact the Division of Epidemiology at 407-665-3266.

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To report an urgent reportable disease or outbreak after hours, call 407-665-3266 and follow the instructions to reach the on-call epidemiologist.

### Reportable Disease Lists:

[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](#)

### Disaster Preparedness Link:

<https://www.floridadisaster.org/>

Direct links for all of the above may also be found on our website at [seminole.floridahealth.gov](http://seminole.floridahealth.gov).

## WHY WE DO

### DISEASE SURVEILLANCE



Detect Disease  
When and  
Where It Happens



Stop Disease  
Before It Spreads



Study Disease  
to Strengthen  
the Science



Improve How  
We Prevent  
and Control Disease



Keep People  
Healthy