



Epidemiology Monthly Surveillance Report



Florida Department of Health in Orange County

Norovirus Outbreaks in Health Care Facilities

Over the past several months, the Epidemiology office at Florida Department of Health in Orange County has seen multiple Norovirus outbreaks in skilled care facilities. This highly-contagious infection is the leading cause of gastroenteritis in the United States, and spreads through:

- Close person to person contact
- Contaminated food or water
- Contaminated surfaces, objects, or substances

Health care facilities, including nursing homes and hospitals have the most reported outbreaks of all settings- nearly two-thirds of all reported outbreaks in the United States occur in nursing homes.

Elderly and otherwise vulnerable people in our communities have higher rates of severe outcomes from Norovirus infection; and these patients make up a significant percentage of nursing home populations.

In nursing home settings, most outbreaks are caused by person to person transmission through close contact, with fecal-oral or vomitus-oral routes being the underlying mechanisms. In these settings, infection also occurs through ingestion of the virus after contact with contaminated surfaces in the facility.

Quite often the index patient is a visitor or staff member who became infected through a foodborne route, or the index case can also be a recently-admitted patient.

A person infected with Norovirus can shed billions of viruses, but an infectious dose can be as low as 18 viral particles.

The typical symptoms are: acute onset of vomiting, watery, non-bloody diarrhea with abdominal cramps, and nausea. The most common complication is dehydration, especially in older adults and young children.

Empirical antimicrobial treatment of symptomatic patients is not recommended; this process could not only be ineffective, but could also result in the initiation of a Norovirus outbreak (with the treatment of a single patient) or in prolonging an existing Norovirus outbreak. Additionally, this process can contribute to antimicrobial resistance.

Standard stool specimen tests can reveal the etiologic agent and provide direction for treatment.

Exclusion and isolation, or cohorting of confirmed patients are among the recommendations for outbreak management. Environmental disinfection with the proper EPA-registered agents, using the labeled recommended procedure and dwell time is also a component of outbreak management. Proper hand washing with soap and running water is fundamental in both preventing outbreaks and in the management of outbreaks. Hand sanitizers should not be considered a substitute for proper hand washing.

Florida law requires that outbreaks be reported. To report outbreaks and for outbreak management support, please call our office at: 407-858-1420.

April 2016

Volume 7, Issue 4

Points of Interest:

- Norovirus Outbreaks
- COPA America Soccer matches in Orlando
- Zika Virus Surveillance

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Orlando: One of the Host Cities for COPA America Soccer Matches this Summer

For the first time in its 100 year history, the world's oldest continental soccer competition, the Copa America Tournament, will be played outside of South America, and the host country this year will be the United States.

Teams from the following countries will be playing in the tournament: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, United States, and Venezuela.

Active Zika virus transmission is ongoing in all but 4 of these countries (Argentina, Peru, Uruguay, and the United States).

Orlando will host games on June 4th (Costa Rica vs Paraguay), June 6th (Panama vs Bolivia) and June 8th (Brazil vs Haiti).

As always, travel history should play an integral role in all diagnostic processes. With Zika virus infection, the most common signs and symptoms are: acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis. Other symptoms that are commonly reported are myalgia and headache.

The differential diagnosis for Zika virus involves a broad range of diseases, especially when travel history includes countries with multiple arboviral and other disease endemicities, and countries with histories of large outbreaks of tropical diseases.

Among the diseases considered in the differential diagnosis for Zika virus infection are: dengue, chikungunya, leptospirosis, malaria, rickettsia, group A streptococcus, rubella, measles, and parvovirus, enterovirus, adenovirus, and alphavirus infections.

Reporting of suspected cases of Zika virus infection is required by Florida Administrative Code.

Please contact our office at 407-858-1420 for patients meeting following criteria:

All persons, including pregnant women, with two or more of the following signs/symptoms: fever, maculopapular rash, arthralgia or conjunctivitis (GBS could follow) and a history of travel to an area reporting Zika virus activity in the two weeks prior to illness onset or is a suspect local case should be immediately reported and tested.

Or

Mother of an infant or fetus with microcephaly or intracranial calcifications or poor fetal outcome diagnosed after the first trimester and with history of travel to an area with Zika virus activity during pregnancy should be immediately reported. Testing of both mother and infant is recommended.

Or

Pregnant women who, while pregnant, traveled to an area reporting Zika virus activity regardless of the length of time since the travel/illness occurred, but ideally within 2-12 weeks of travel can also be tested.

Please note that many of the diseases involved in the differential diagnosis of Zika virus infection are also reportable. [Please see the Reportable Diseases List here.](#)

[Florida Health Zika](#)

[CDC Zika](#)

[Disease Reporting– Florida Health](#)

[COPA AMERICA CENTENARIO USA 2016](#)

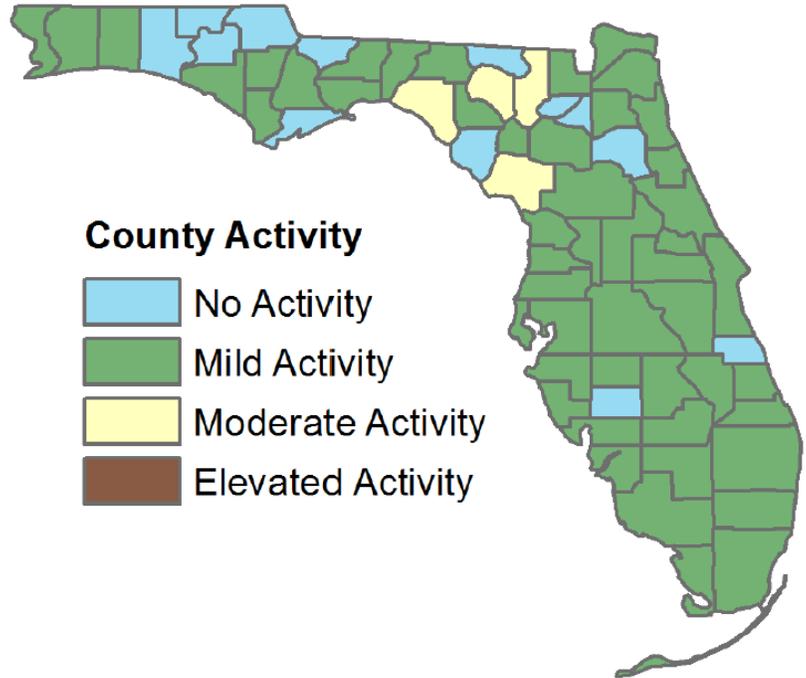


CDC

Influenza Surveillance (data from Florida Flu Review)

Florida

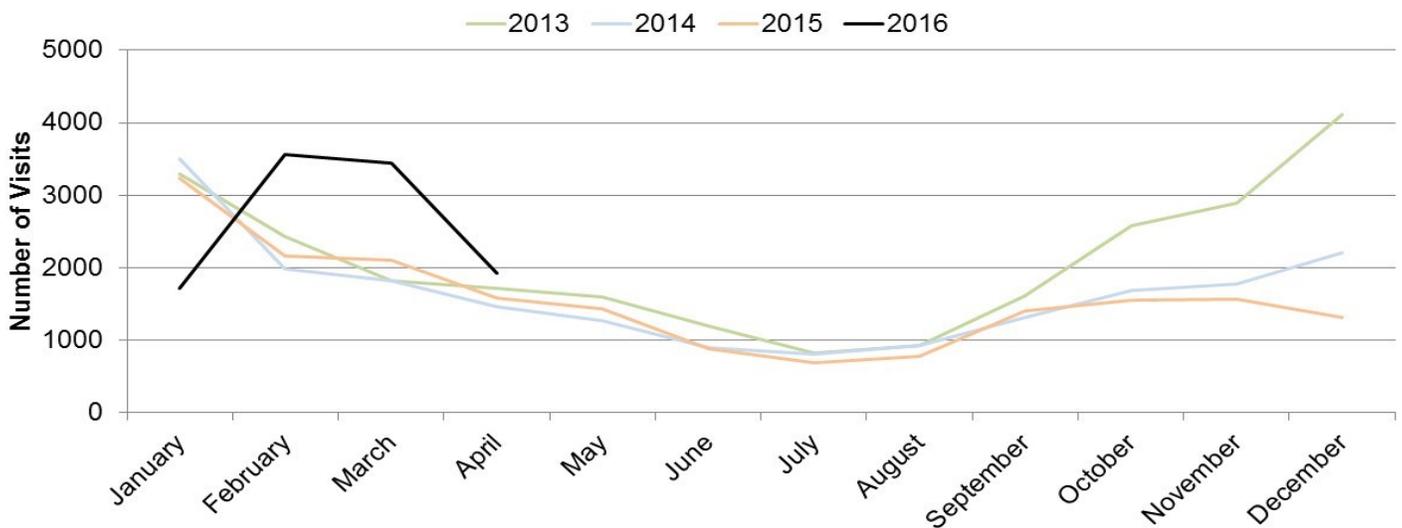
- ⇒ Influenza activity this season peaked between weeks 7-11. This peak in activity has occurred later than in the past six seasons.
- ⇒ In recent weeks, the preliminary estimated number of deaths due to pneumonia and influenza remained elevated. The most notable increase in deaths due to pneumonia and influenza were observed in the 55-74 age group.
- ⇒ Influenza A 2009 (H1N1) has been the most common influenza subtype identified by the Bureau of Public Health Laboratories (BPHL) this season.



Orange County

- ⇒ Orange County reported mild influenza activity in week 16 of 2016.
- ⇒ One influenza B outbreak was reported in an assisted living facility in Orange County during April 2016.
- ⇒ Influenza-like illness remains elevated in Orange County, but has decreased since peaking during the February/March timeframe.

Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2016



Influenza Resources:

- [Florida Department of Health Weekly Influenza Activity Report](#)
- [Center for Disease Control and Prevention Weekly Influenza Activity Report](#)

As of April 27, 2016:

Top 10 States	Travel-associated Cases
Florida	90
New York	77
Texas	30
California	29
Pennsylvania	16
Minnesota	14
Georgia	13
Illinois	12
Ohio	12
Virginia	12

As of May 3, 2016:

FL County	Travel-associated Cases
Alachua	4
Brevard	2
Broward	15
Clay	1
Collier	1
Hillsborough	3
Lee	4
Martin	1
Miami-Dade	40
Orange	6
Osceola	4
Palm Beach	7
Pasco	1
Polk	3
Santa Rosa	1
Seminole	1
St Johns	1

Zika Virus Surveillance

National

- ⇒ The CDC has issued travel recommendations concerning the Zika virus. The latest travel recommendations can be viewed [here](#).
- ⇒ No locally-acquired Zika cases have been reported within the continental United States.

Florida

- ⇒ **No locally-acquired cases of Zika virus have been reported in Florida.**
- ⇒ 17 counties are currently under a declared state of emergency due to identification of travel-associated Zika infections (see table for counties).
- ⇒ As of May 3, 2016:
 - ⇒ A total of 102 confirmed imported cases have been identified in Florida.
 - ⇒ 7 imported confirmed cases of Zika have been among pregnant women in Florida.

Clinician Guidance

Clinicians that suspect a patient has a Zika virus infection should:

- 1) Test for dengue and chikungunya viruses due to similar geographic spread of diseases and clinical presentation;
- 2) Contact their local county health department for consultation and specimen collection and shipment information to the Florida Department of Health Bureau of Public Health Laboratories. **Authorization must be given from the local health department prior to specimen shipment and testing.** Local health department contact information is available [here](#).

Zika Virus Resources:

[Florida Department of Health](#)

[Orange County Mosquito Control](#)

[Centers for Disease Control and Prevention](#)

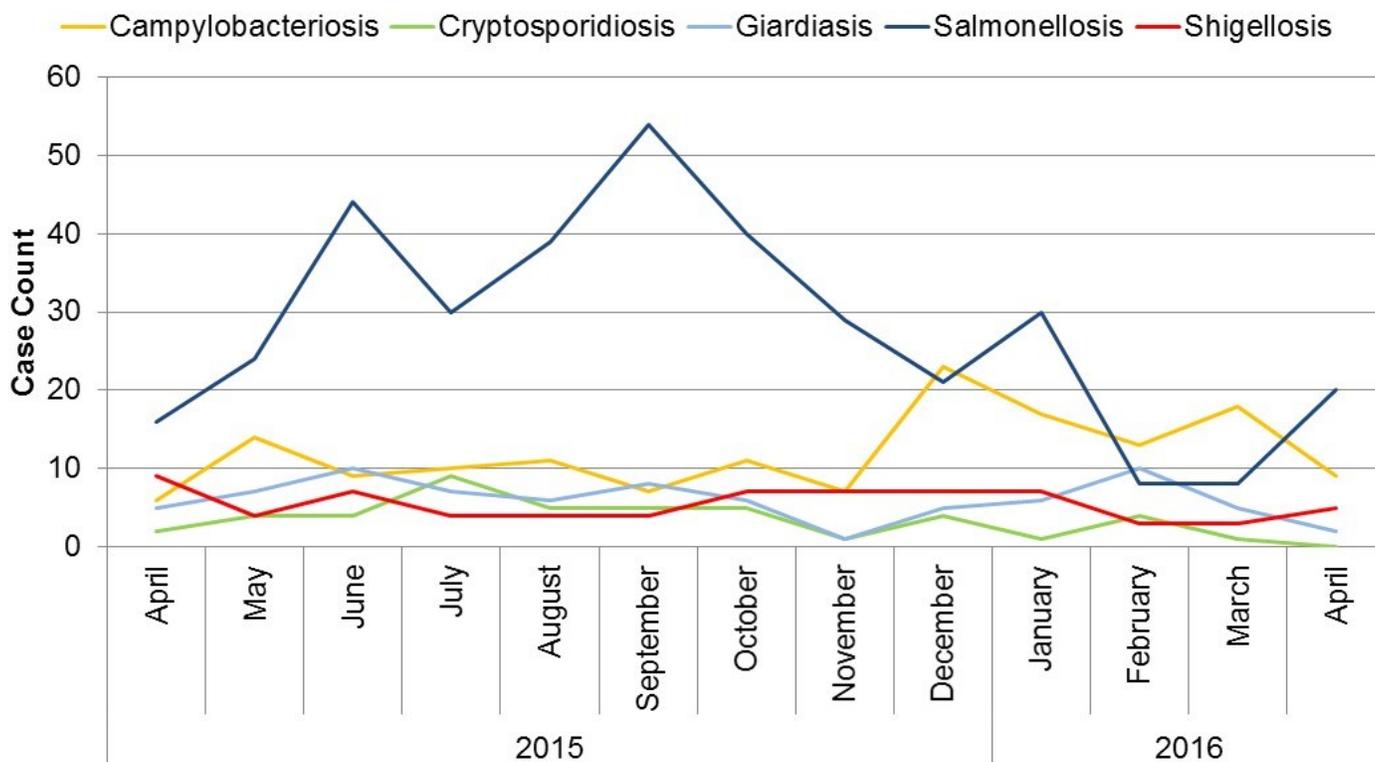
[Latest Travel Notices](#)

[CDC Healthcare Guidance](#)

[Local Health Department Contact Information](#)

Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, April 2015 to April 2016



Gastrointestinal Illness Points of Interest:

- ⇒ Enteric reportable diseases cases remain at seasonally expected low levels. An increase in Salmonella cases may signal the beginning of the expected summertime increase in enteric cases.
- ⇒ No waterborne disease outbreaks were identified in April 2016.
- ⇒ 6 gastrointestinal illness outbreaks were reported in April 2016. Two of these outbreaks have been confirmed to have been caused by Norovirus GII. Four of the outbreaks are associated with assisted living facilities/nursing homes.

Gastrointestinal Illness Resources:

[Florida Online Foodborne Illness Complaint Form - Public Use](#)

[Florida Food and Waterborne Disease Program](#)

[Florida Food Recall Searchable Database](#)

[Florida Department of Health - Norovirus Resources](#)

[CDC: A-Z Index for Foodborne Illness](#)

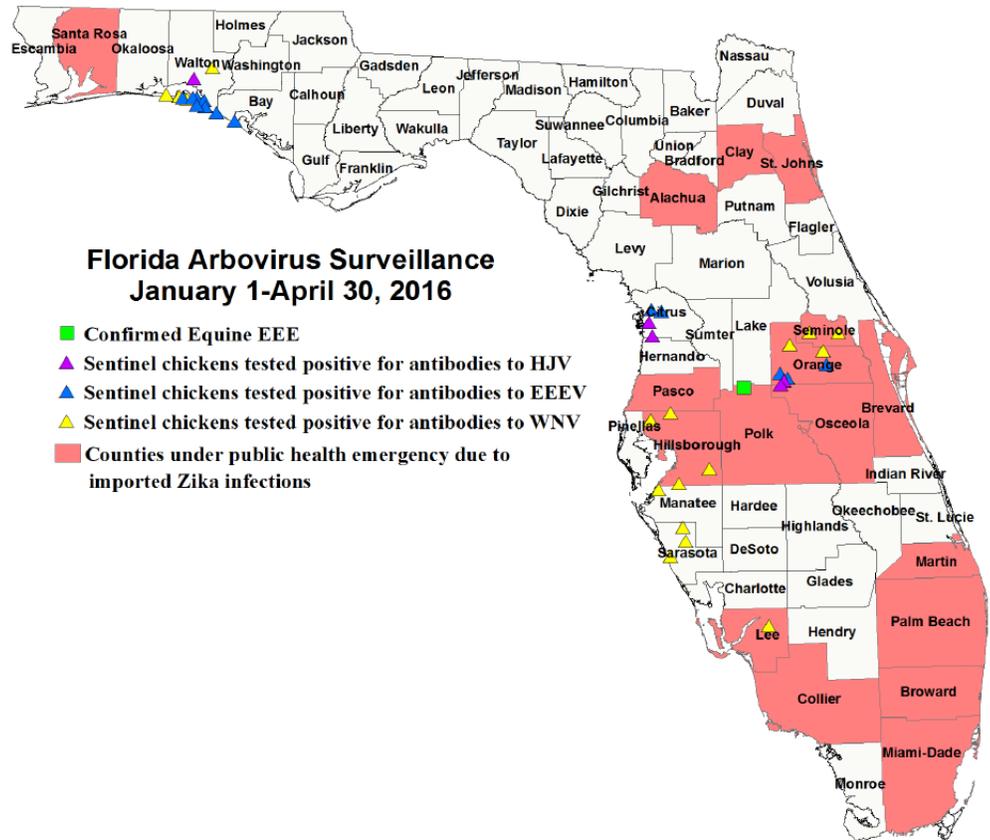
[CDC: Healthy Water](#)

**REPORT
FOODBORNE
ILLNESS
ONLINE**

Arboviral Surveillance

Florida

- ⇒ Seventeen counties are currently under a declared public health emergency due to the identification of travel-associated Zika infections.
- ⇒ No locally-acquired cases of Zika, Dengue, Chikungunya, West Nile, St. Louis Encephalitis, or Eastern Equine Encephalitis viruses have been reported in Florida during 2016.
- ⇒ Imported cases of Zika, Dengue, and Chikungunya virus have been reported in Florida during 2016.



Orange County

- ⇒ No human cases of West Nile Virus, Chikungunya Virus, St. Louis Encephalitis Virus, or Eastern Equine Encephalitis Virus have been reported among Orange County residents in 2016.
- ⇒ Six imported confirmed cases of Zika virus have been reported among Orange County residents in 2016.
- ⇒ In 2016, sentinel chickens tested positive for West Nile Virus (WNV) Highlands J Virus, and Eastern Equine Encephalitis (EEE) in Orange County.

Arboviral Resources:

[Weekly Florida Arboviral Activity Report \(Released on Mondays\)](#)

[Orange County Mosquito Control](#)

Chikungunya Resources

[Florida Department of Health Chikungunya Information](#)

[CDC Chikungunya Information](#)

[CDC Chikungunya MMWR](#)

Florida Healthy Babies Initiative: “Save the Date” for Florida Department of Health in Orange County’s Meeting

The Florida Department of Health recently invested 1.4 million dollars in the Florida Healthy Babies initiative, which is a collaborative statewide initiative to positively influence social determinants and reduce racial disparity in infant mortality.

An effort of the department’s Health Equity Program Council, the project engages all of the 67 local health offices across the state, and involves numerous partners within each county with the goal of addressing disparities with evidence-based interventions.

The funds will be utilized by each county health office to conduct enhanced data analysis on infant mortality and to host a community action-planning meeting to examine disparities in infant deaths, the role of social determinants of health, and propose local action.

The Florida Department of Health in Orange County (DOH-Orange) is planning its meeting for Wednesday, June 15th, from 9:00 am to 3:00 pm at Second Harvest Food Bank of Central Florida, 411 Mercy Drive, Orlando, 32806. For information on registration, please contact Ms. Penny Smith, Healthy Start Program Coordinator, at 407-254-6861.

A report produced by the Epidemiology program at DOH-Orange relating to maternal health and risk factors in Orange County can be found [here](#).

[Florida Health Healthy Babies Press Release](#)

Other Disease Resources

In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided links for surveillance information on these diseases in [Florida](#) and [Area 7 HIV & AIDS Program](#) (Brevard, Orange, Osceola, and Seminole Counties).



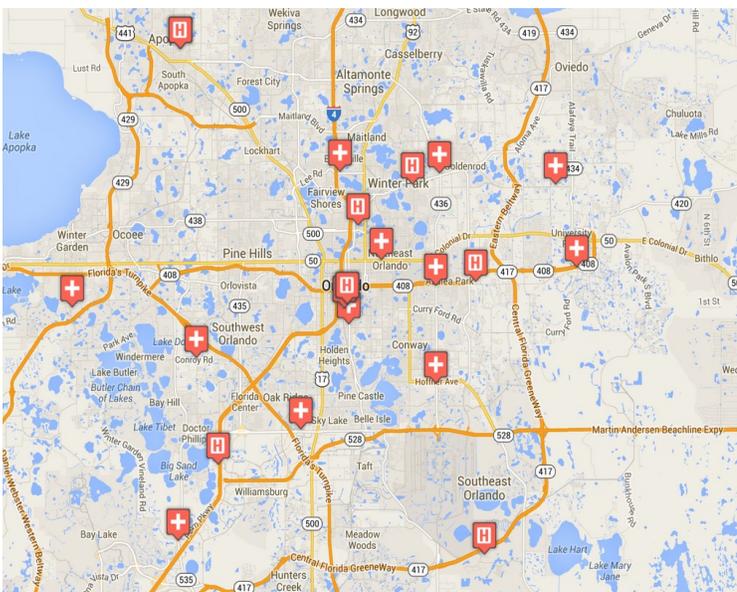
Florida



Hospital linked to ESSENCE



Florida Hospital Centra Care Clinic linked to ESSENCE



Since 2007, the Florida Department of Health has operated the Early Notification of Community-based Epidemics (ESSENCE), a state-wide electronic bio-surveillance system. The initial scope of ESSENCE was to aid in rapidly detecting adverse health events in the community based on Emergency Department (ED) chief complaints. In the past seven years, ESSENCE capabilities have continually evolved to currently allow for rapid data analysis, mapping, and visualization across several data sources, including ED record data, Merlin reportable disease data, Florida Poison Information Network consultations, and Florida Office of Vital Statistics death records. The majority of the information presented in this report comes from ESSENCE. Florida currently has 228 emergency departments and 35 urgent care centers reporting to ESSENCE-FL for a total of 263 facilities.

Florida Department of Health in Orange County

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The Epidemiology Program conducts disease surveillance and investigates suspected occurrences of infectious diseases and conditions that are 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.

Data is collected and examined to determine the existence of trends. In cooperation with the Office of Emergency Operations, the Epidemiology Program conducts syndromic and influenza-like-illness surveillance activities.

Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bioterrorism.

Our staff ensures that action is taken to prevent infectious disease outbreaks from occurring in Orange County communities and area attractions. Along with many public and private health groups, we work for the prevention of chronic and long-term diseases in Central Florida.

ALL DATA IS PROVISIONAL