



# PACE EH

# Protocol for Assessing Community Excellence in Environmental Health

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# AGENDA

- Review PACE EH process
- Review of PACE EH Data Collection and Analysis
  - Secondary: data indicators from existing sources

# PACE EH: THE WHAT AND WHY?



# WHAT IS PACE EH?

## Protocol for Assessing Community Excellence in Environmental Health

- *Community-based* method for evaluating and characterizing local environmental health conditions; identifying at risk populations; and prioritizing local actions, programs, and policies.
- Developed by NACCHO, endorsed by CDC.



# WHY PACE EH?

- Environment health was identified as a *priority health issue* by Clay residents during the last CHA cycle.
- No previous county-wide EH assessment conducted (last was Green Cove Springs, 2012)
  - Surface water quality, vacant/abandoned buildings, and transportation safety
- Benefits of PACE EH include:
  - New professional partnerships
  - New/improved leadership roles for public health in community
  - Improved public health workforce competencies
  - Greater credibility for local public health initiatives
  - Creation of collaborative local EH improvement plans

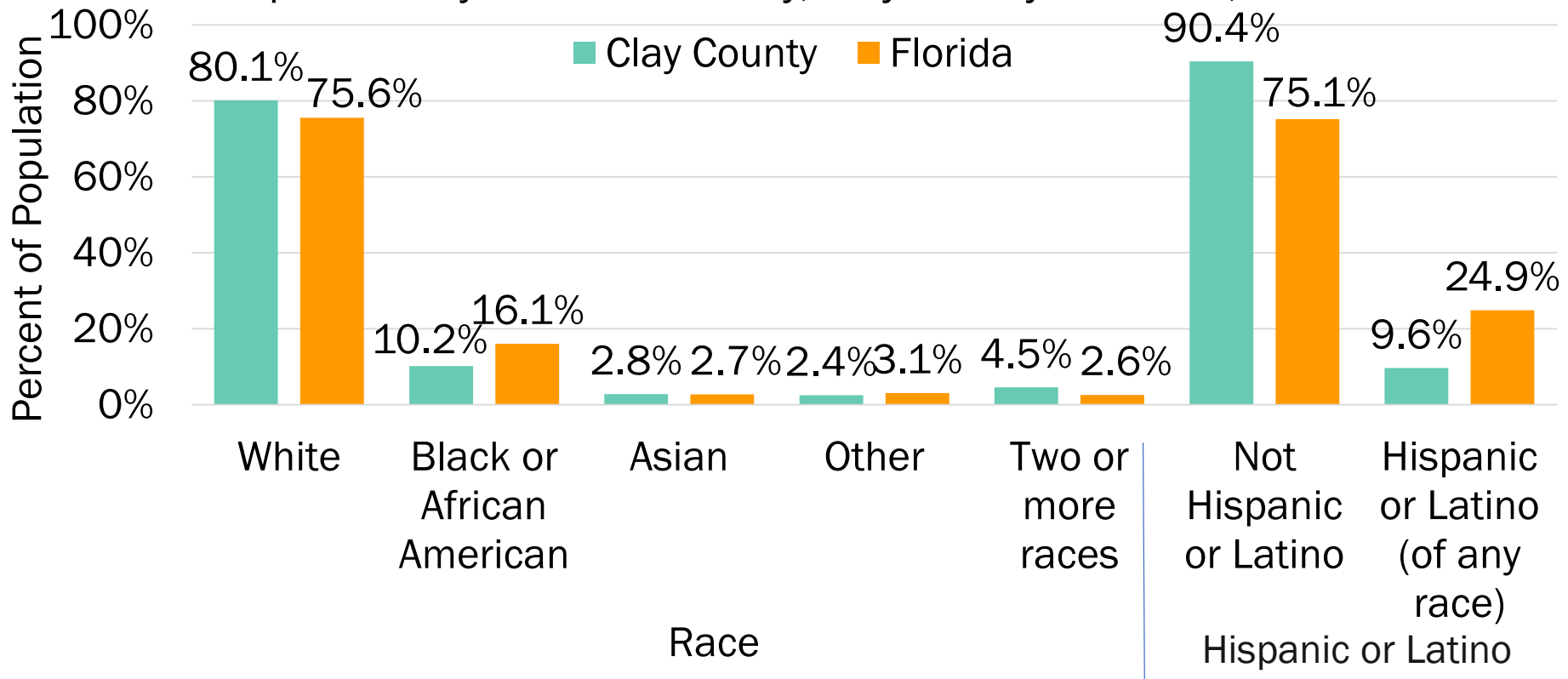
# POPULATION OVERVIEW

Demographic and  
Socioeconomic  
Characteristics

# DEMOGRAPHICS

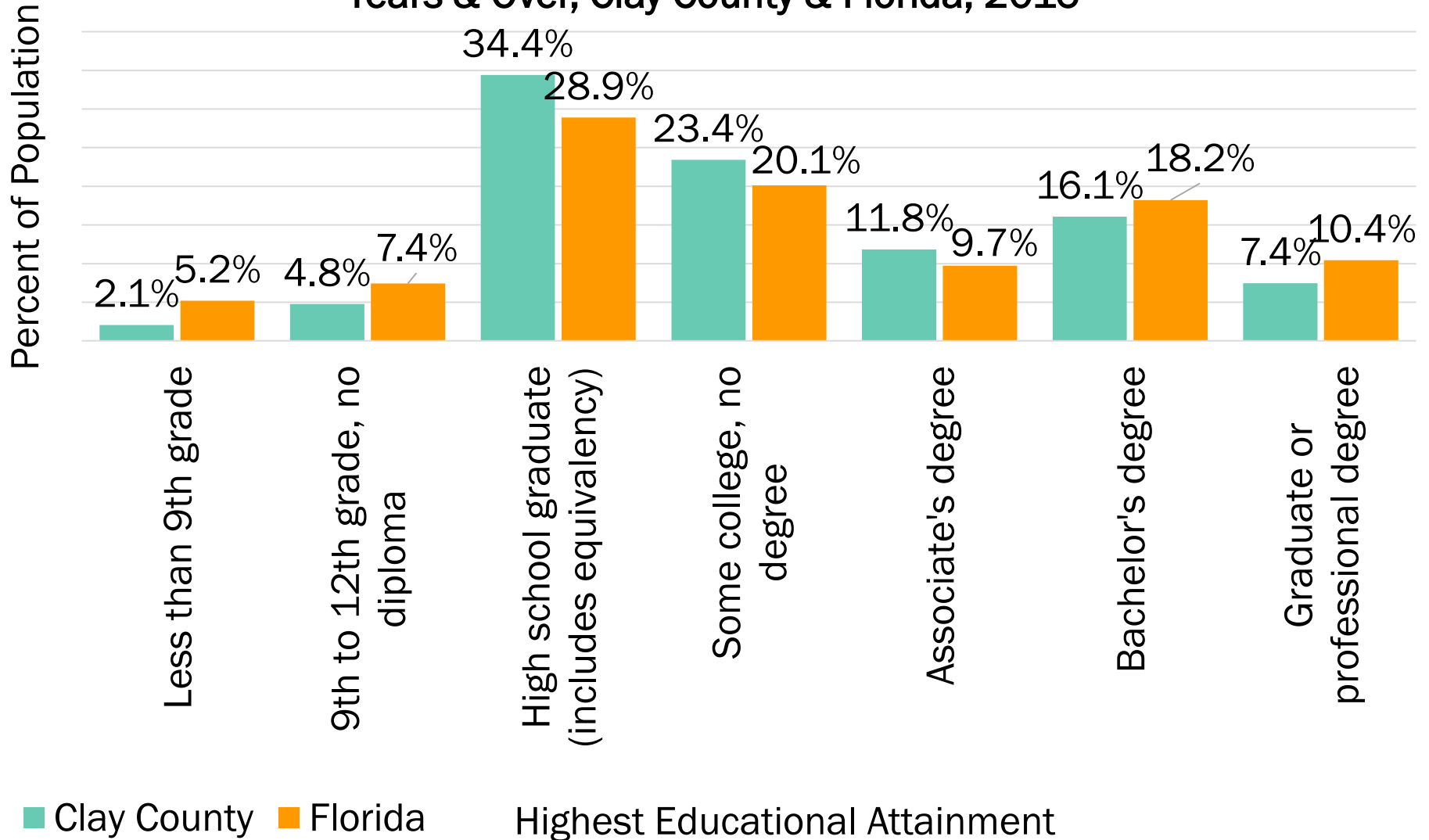
2016 Demographics	Clay County	Florida
Population	208,311	20,612,439
Gender	48.9% male, 51.1% female	48.9% male, 51.1% female
Median Age	40.4 years	42.1

Population by Race & Ethnicity, Clay County & Florida, 2016



# DEMOGRAPHICS

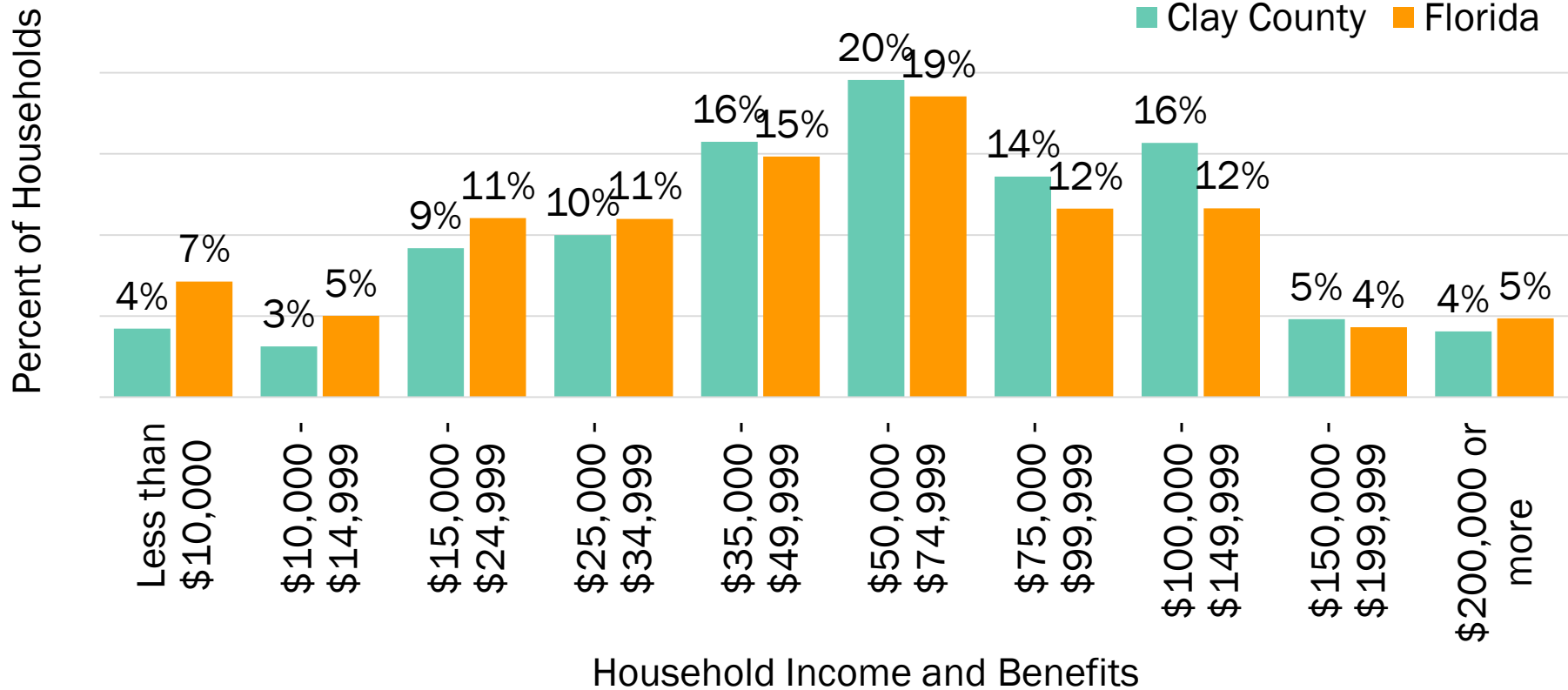
Reported Highest Level of Education Attained, Population 25 Years & Over, Clay County & Florida, 2016





# SOCIOECONOMICS

Household Income and Benefits (2016 Inflation-Adjusted Dollars), Clay County & Florida, 2016

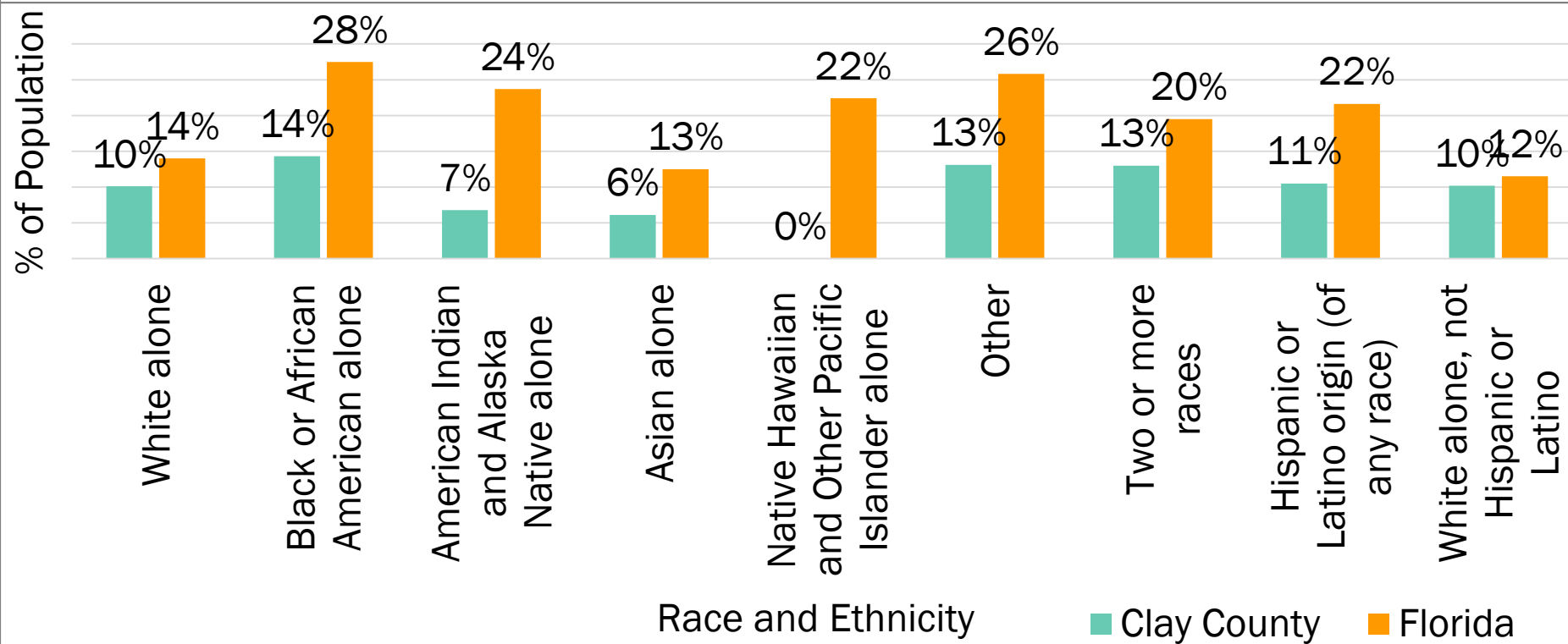
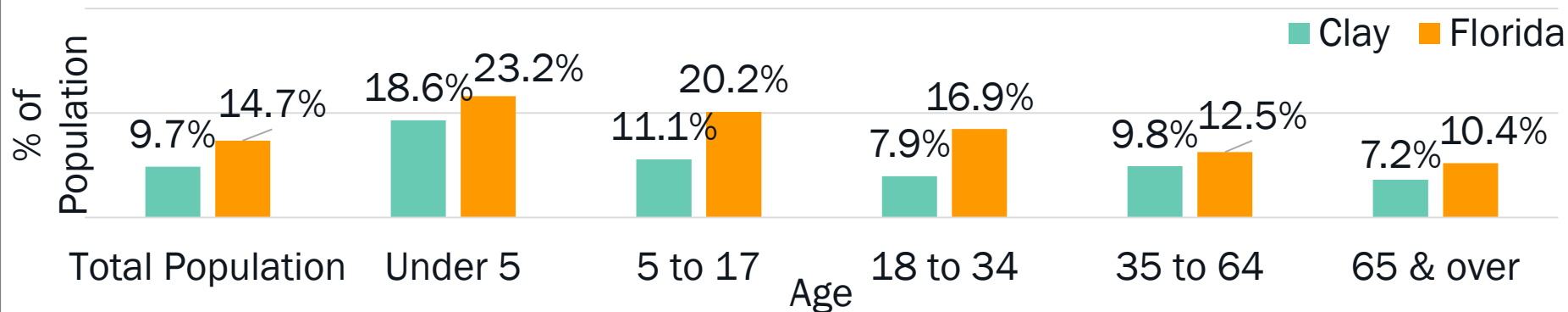


	Clay County	Florida
Median Household Income	\$56,315	\$50,860
Per Capita Income	\$27,930	\$28,621

# SOCIOECONOMICS

Family Size	Avg. Poverty Threshold
1 person	\$12,228
4 people	\$24,563

## Population Below the Poverty Level by Age and by Race/Ethnicity, 2016



# OVERALL HEALTH STATUS

# COUNTY HEALTH RANKINGS

Health Outcomes: 9th out of 67 counties  
 Health Factors: 10th out of 67 counties

HEALTH BEHAVIORS	CLINICAL CARE	SOCIO-ECONOMIC	PHYSICAL ENVIRONMENT
<p>Tobacco</p> <p>Diet and Exercise</p> <p>Alcohol Use</p> <p>High-Risk Sex</p>	<p>Access to Care</p> <p>Quality of Care</p>	<p>Education</p> <p>Employment</p> <p>Income</p> <p>Family/Social Support</p> <p>Community Safety</p>	<p>Air Quality</p> <p>Built Environment</p> <p>Access to Healthy Food</p> <p>Liquor Stores</p>
<p>Clay rank: 22nd</p>	<p>Clay rank: 22nd</p>	<p>Clay rank: 5th</p>	<p>Clay rank: <b>38th</b></p>

# HCI DATA SCORING TOOL

Topic	Indicators	Score
<b>Transportation</b>	7	2.20
Other Chronic Diseases	3	1.93
Diabetes	3	1.80
<b>Prevention &amp; Safety</b>	8	1.80
<b>Environmental &amp; Occupational Health</b>	4	1.78
<b>Respiratory Diseases</b>	10	1.69
Substance Abuse	13	1.59
<b>Public Safety</b>	11	1.57
Exercise, Nutrition, & Weight	17	1.49
Access to Health Services	7	1.41
County Health Rankings	6	1.39
<b>Environment</b>	12	1.37
<b>Immunizations &amp; Infectious Diseases</b>	11	1.26
Social Environment	7	1.07
Economy	17	0.91

# HCI DATA SCORING TOOL

Transportation in Clay County Indicator	County Distribution			
	State	US	Trend	Score
Mean Travel Time to Work	3	3	3	2.83
Workers who Drive Alone to Work	3	3	3	2.67
Workers Commuting by Public Transport.	2	2	2	2.44
Workers who Walk to Work	2	3	1	2.39
Solo Drivers with a Long Commute	3	3	2	2.36
Households w/ No Car and Low Access to a Grocery Store	1	1	N/A	1.33

Prevention & Safety in Clay County Indicator	County Distribution			
	State	US	Trend	Score
Death Rate due to Drug Poisoning	3	2	3	2.42
Age-Adjusted Death Rate due to Unintentional Injuries	2	N/A	2	2.36
Age-Adjusted Death Rate due to Motor Vehicle (MV) Collisions	2	N/A	3	2.17
MV Crashes by Teen Drivers Rate	N/A	N/A	3	1.83
Severe Housing Problems	0	2	2	1.19
Pedestrian Death Rate	1	2	2	0.94

Public Safety in Clay County Indicator	County Distribution			
	State	US	Trend	Score
Alcohol-Impaired Driving Deaths	3	3	1	2.14

# HCI DATA SCORING TOOL

Enviro. & Occupational Health	County Distribution			
Indicator	State	US	Trend	Score
Asthma: Medicare Population	2	3	2	2.44
Teens with Asthma	2	N/A	3	2
Physical Environment Ranking	2	N/A	N/A	1.58
Adults with Current Asthma	1	N/A	N/A	1.08

Environment	County Distribution			
Indicator	State	US	Trend	Score
Children w/ Low Access to a Grocery Store	2	2	N/A	1.67
PBT Released	N/A	N/A	2	1.61
Recognized Carcinogens Released into Air	N/A	N/A	2	1.61
Physical Environment Ranking	2	N/A	N/A	1.58
People with Low Access to a Grocery Store	1	2	N/A	1.5
Households w/ No Car & Low Access to a Grocery Store	1	1	N/A	1.33
People 65+ w/ Low Access to Grocery Store	1	1	N/A	1.33
Food Environment Index	0	1	2	1.19
Severe Housing Problems	0	2	2	1.19
Access to Exercise Opportunities	1	0	N/A	1.17
Low-Income & Low Access to Grocery Store	0	1	N/A	1.17
Drinking Water Violations	1	1	N/A	1.08

**BUILT ENVIRONMENT**



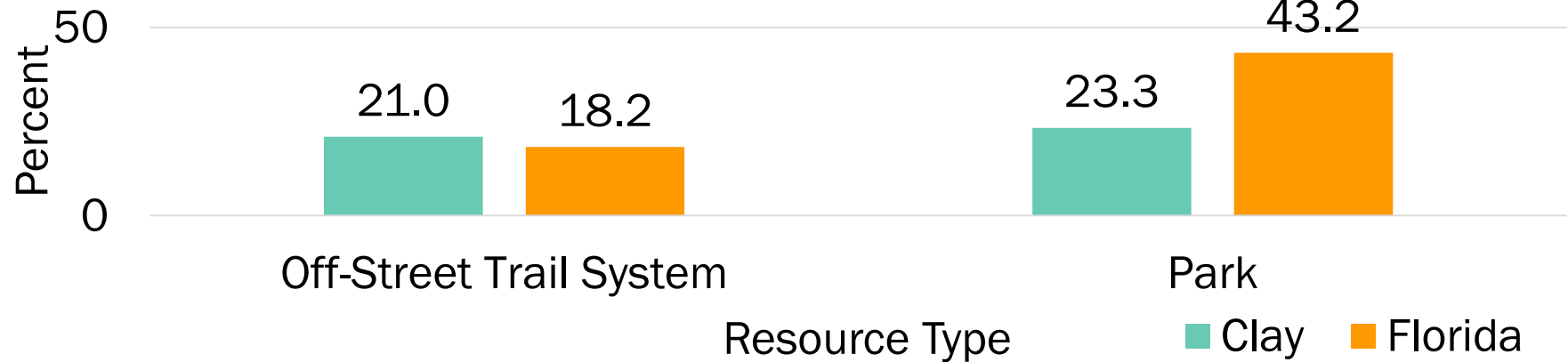


# BUILT ENVIRONMENT: WALKABILITY

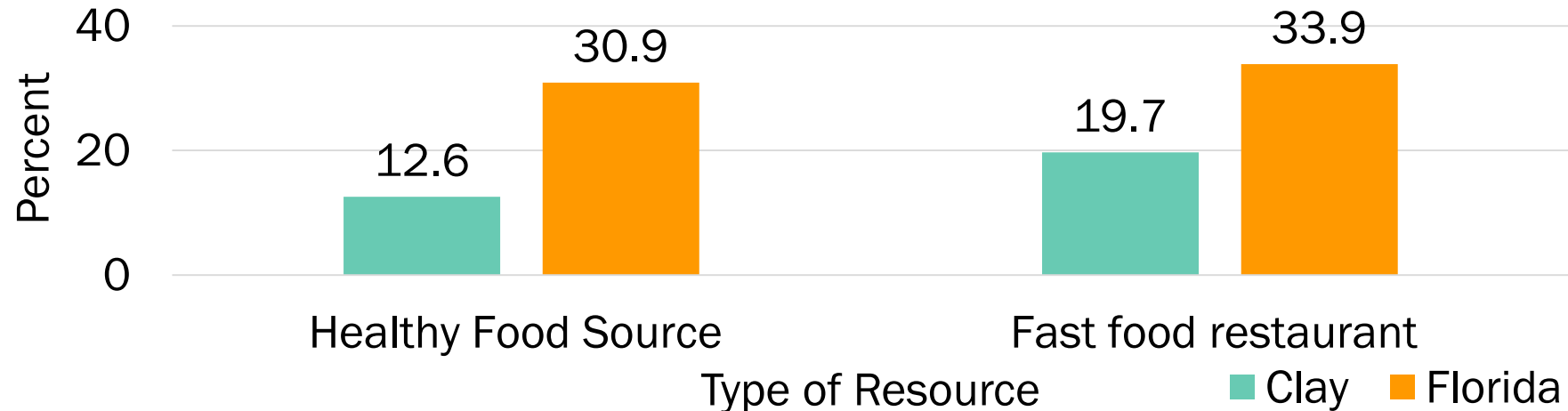
<b>Clay County Walk Score</b>		
<b>Walk Score</b>	<b>Description</b>	<b>Location (Walk Score)</b>
90–100	Walker's Paradise Daily errands do not require a car.	None
70–89	Very Walkable Most errands can be accomplished on foot.	None
50–69	Somewhat Walkable Some errands can be accomplished on foot.	Orange Park (61) Green Cove Springs (55) Keystone Heights (50)
25–49	Car-Dependent Most errands require a car.	Middleburg (40)
0–24	Car-Dependent Almost all errands require a car.	Fleming Island (12)

# BUILT ENVIRONMENT: PROXIMITY TO RESOURCES

Percent of Population Living within a Ten Minute Walk (1/2 Mile) of an Off-Street Trail System or Park, 2016

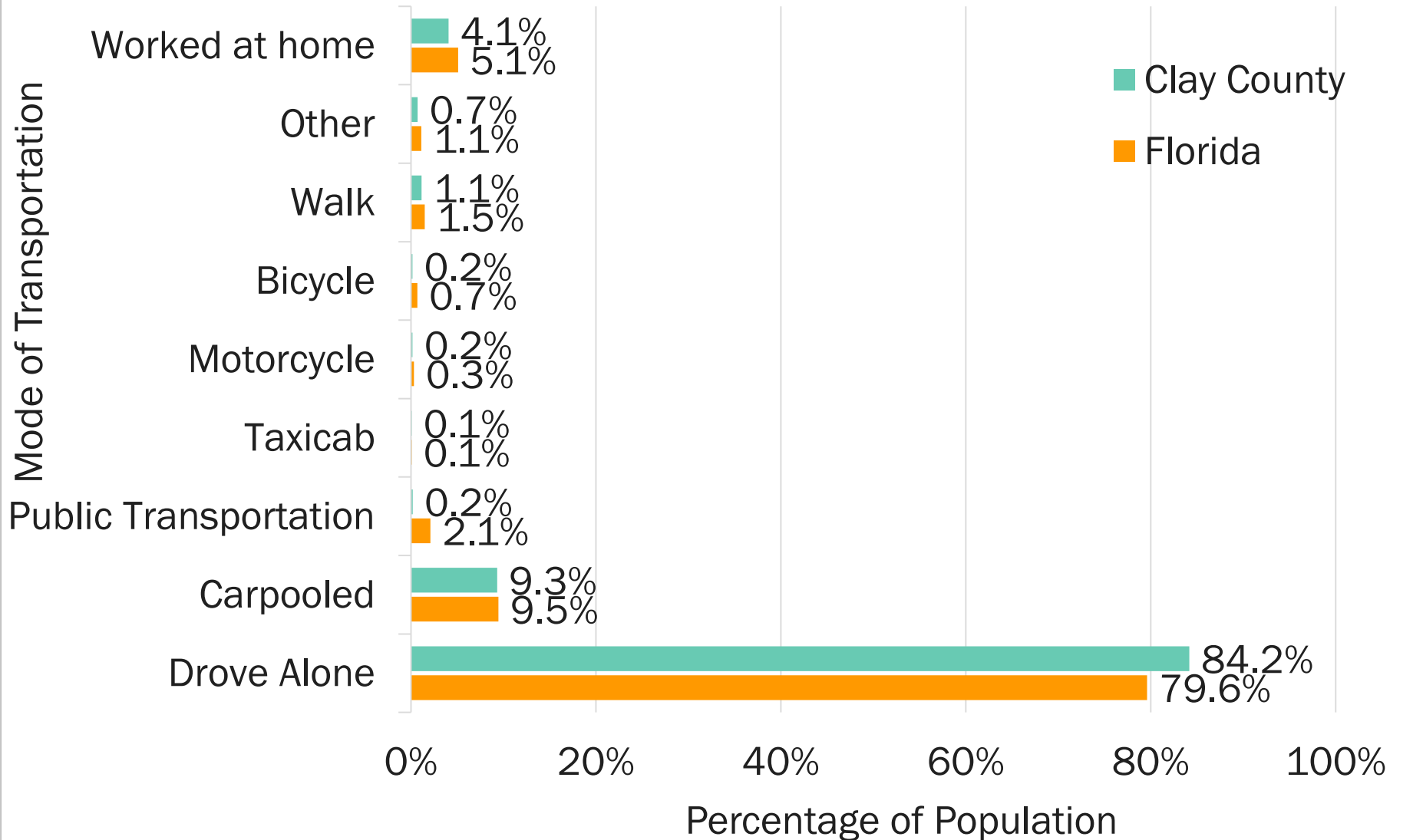


Percent of Residents Living within a Ten Minute Walk (1/2 Mile) of Healthy Food /Fast Food Restaurant, 2016



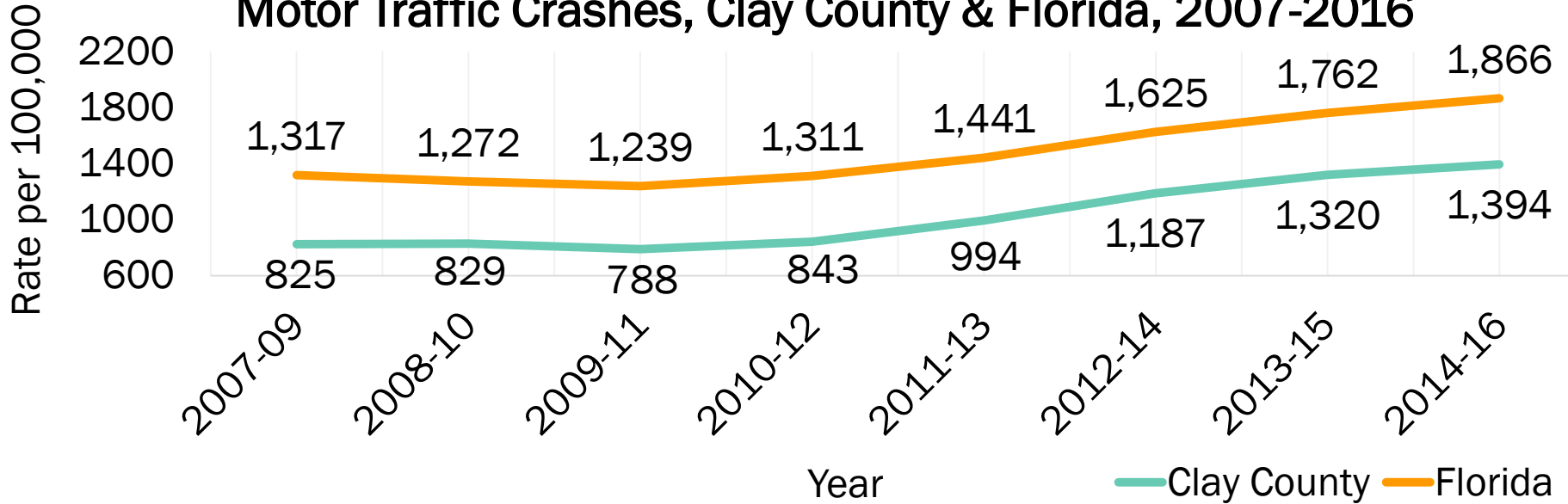
# TRANSPORTATION

Means of Transportation, Workers 16 & Older, 2015

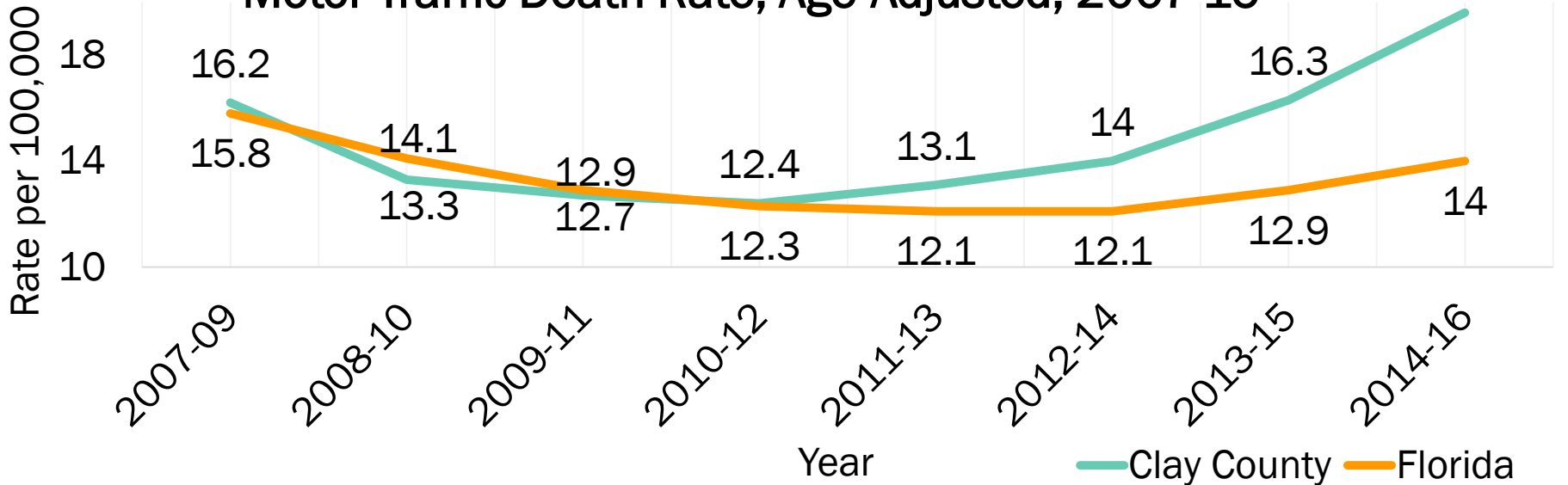


# TRANSPORTATION

## Motor Traffic Crashes, Clay County & Florida, 2007-2016



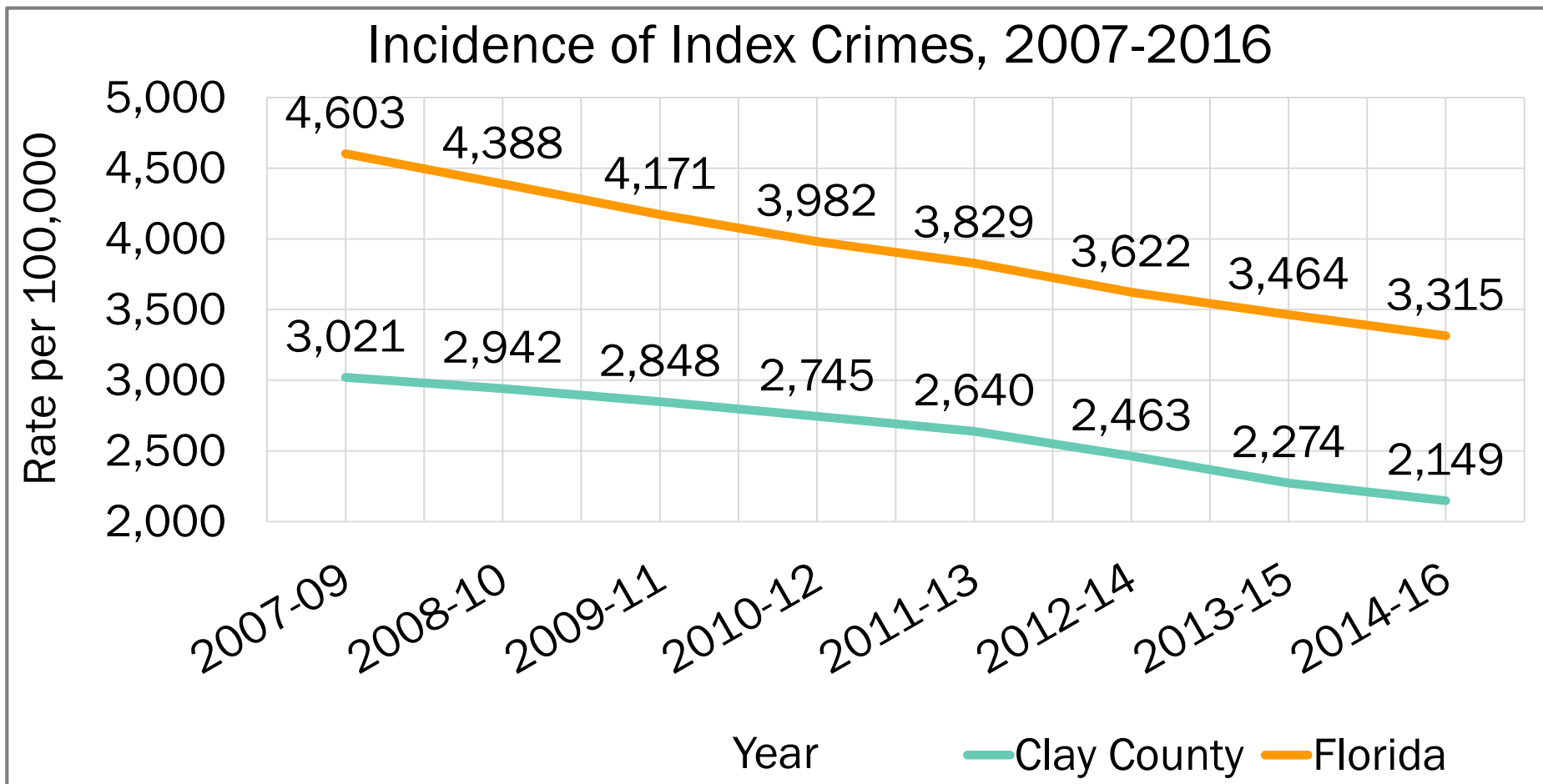
## Motor Traffic Death Rate, Age-Adjusted, 2007-16



**CRIME**

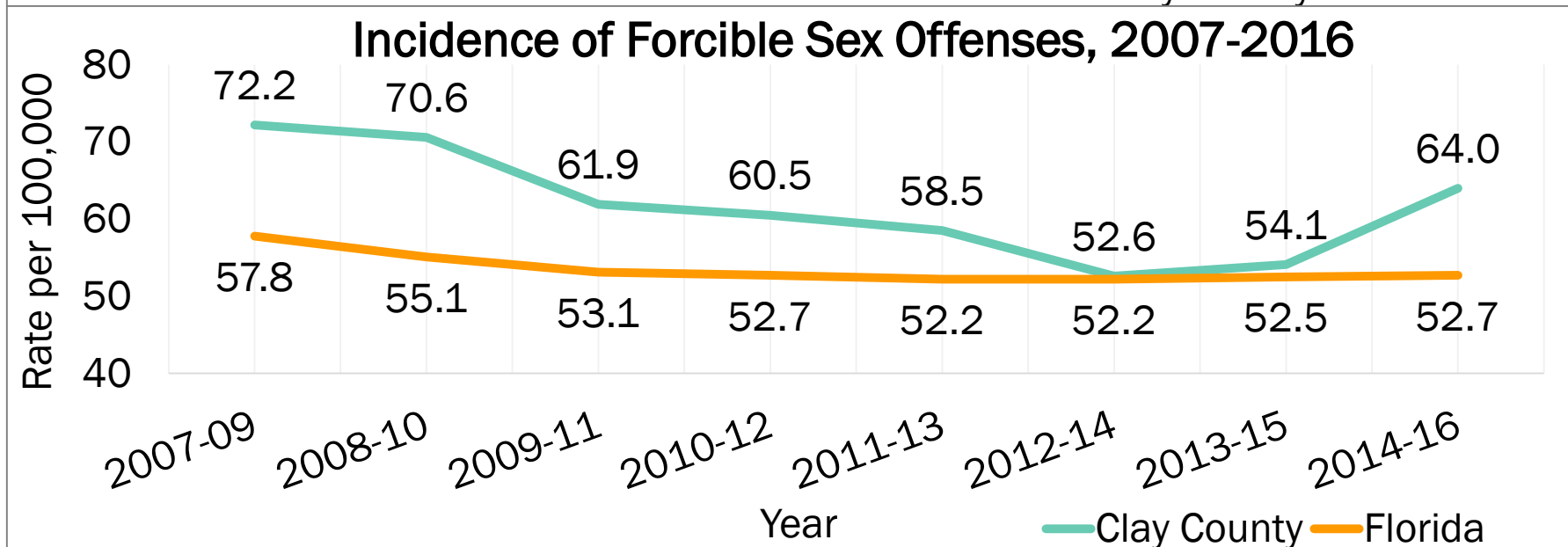
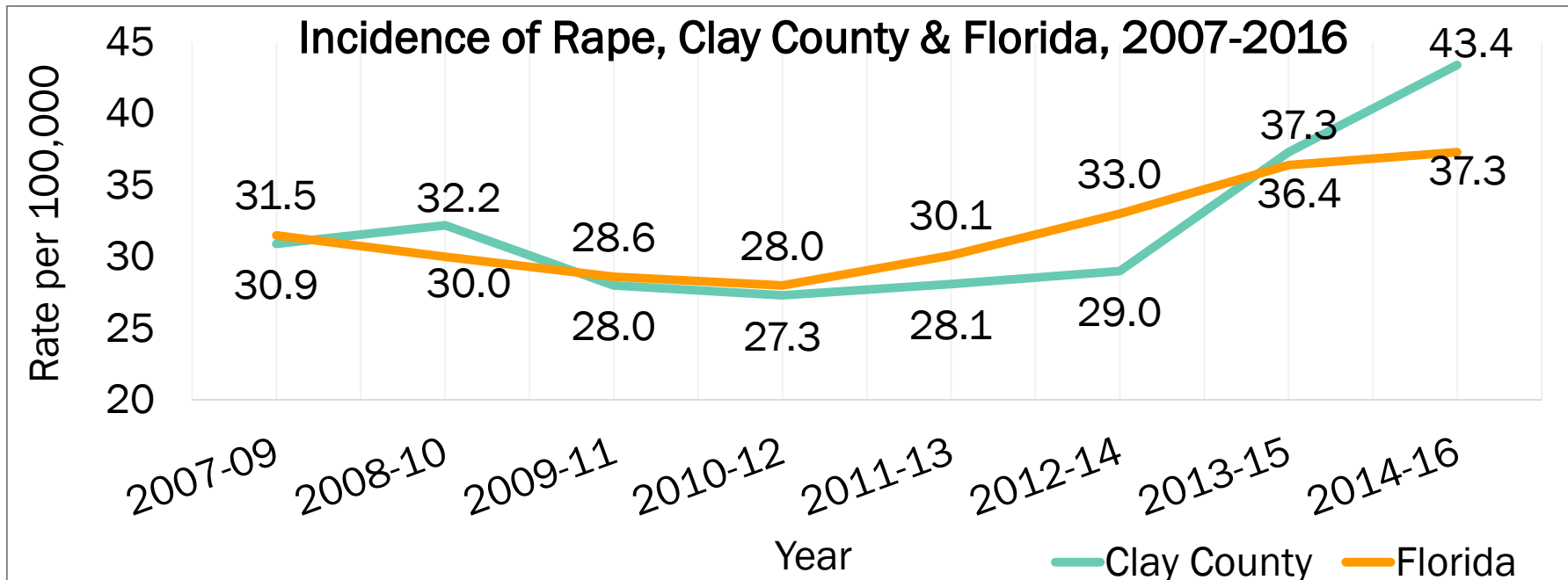


# CRIME



- Index crimes: aggravated assault, burglary, larceny, motor vehicle theft, murder, robbery, and sexual offenses
- Track number of offenses reported to law enforcement, not arrests

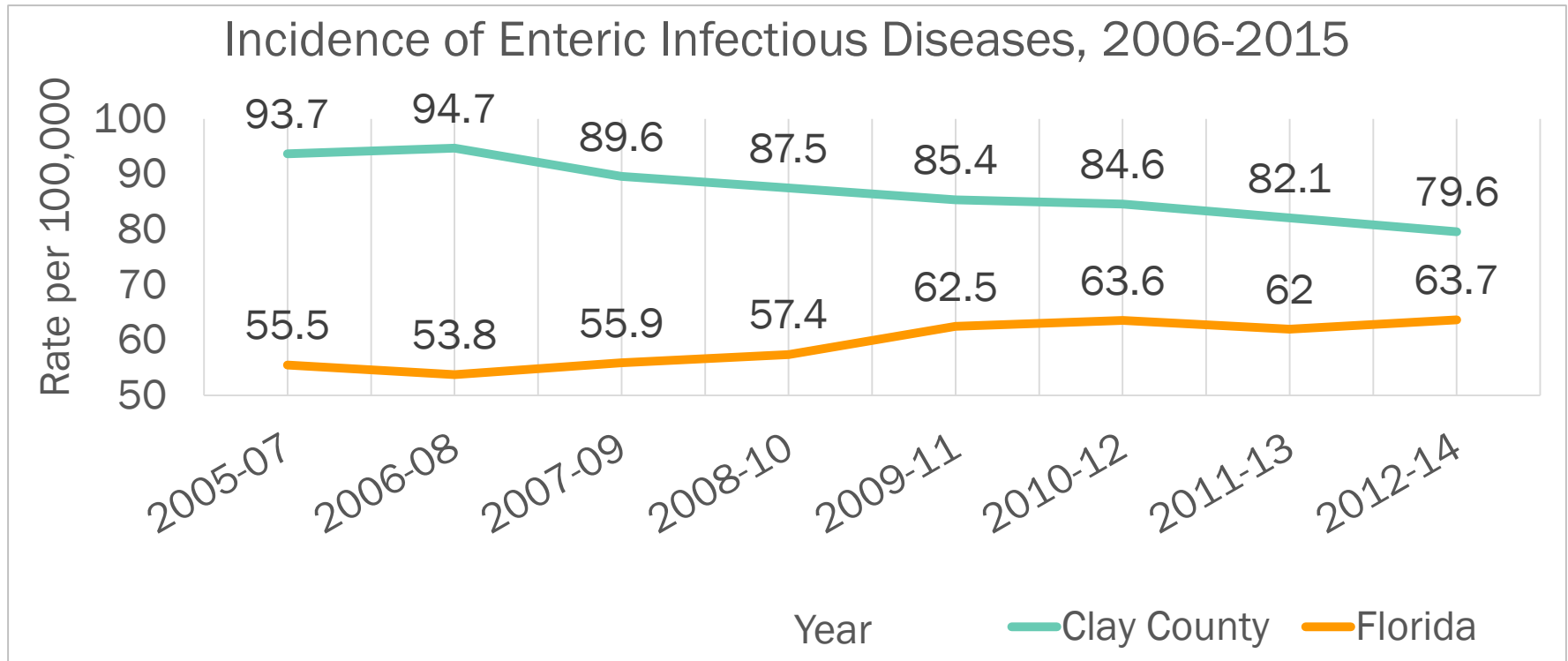
# CRIME



# COMMUNICABLE DISEASES

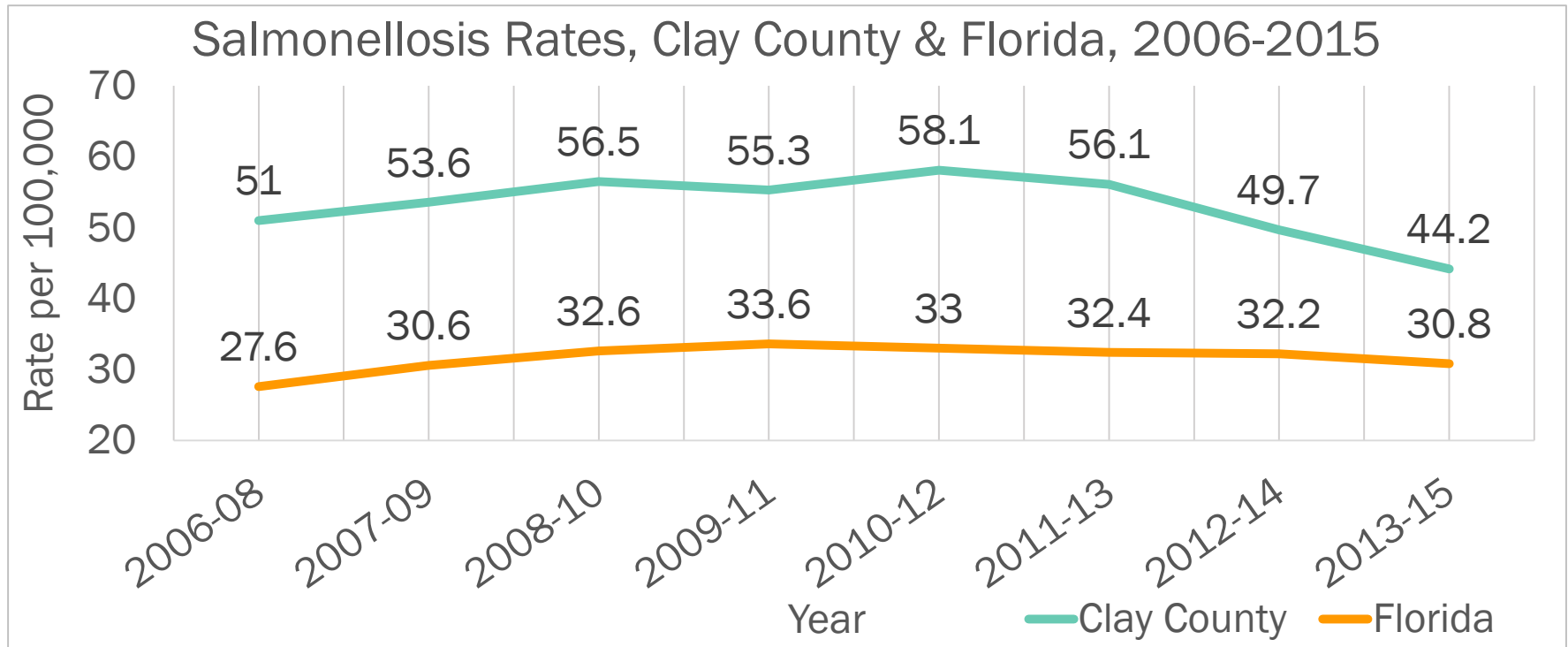


# COMMUNICABLE DISEASES: ENTERIC



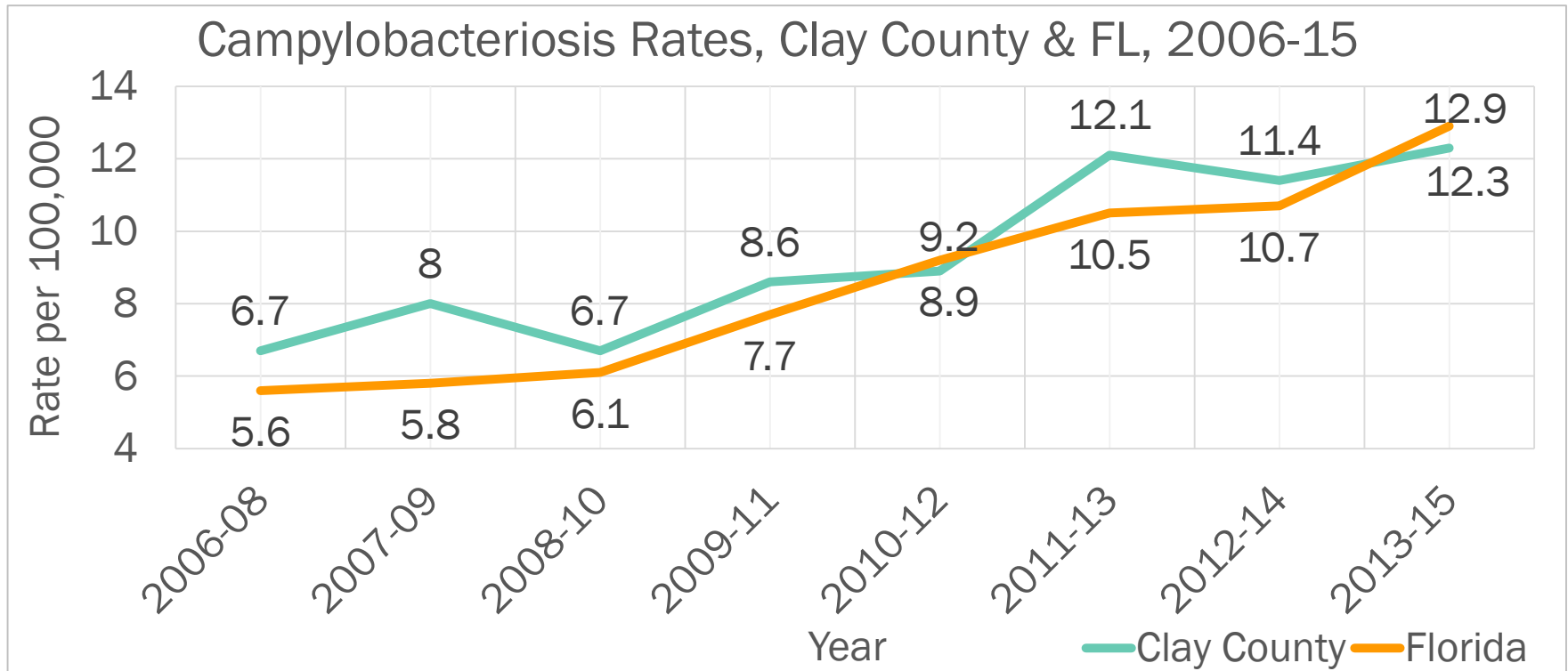
- Data for Clay County shows negligible rates for the following diseases: Cholera (*Vibrio cholerae* Type O1), Cyclosporiasis, Hemolytic Uremic Syndrome, Staphylococcal Enterotoxin B Poisoning, Typhoid Fever (*Salmonella* Serotype Typhi), and Vibriosis (excluding Cholera).

# COMMUNICABLE DISEASES: ENTERIC



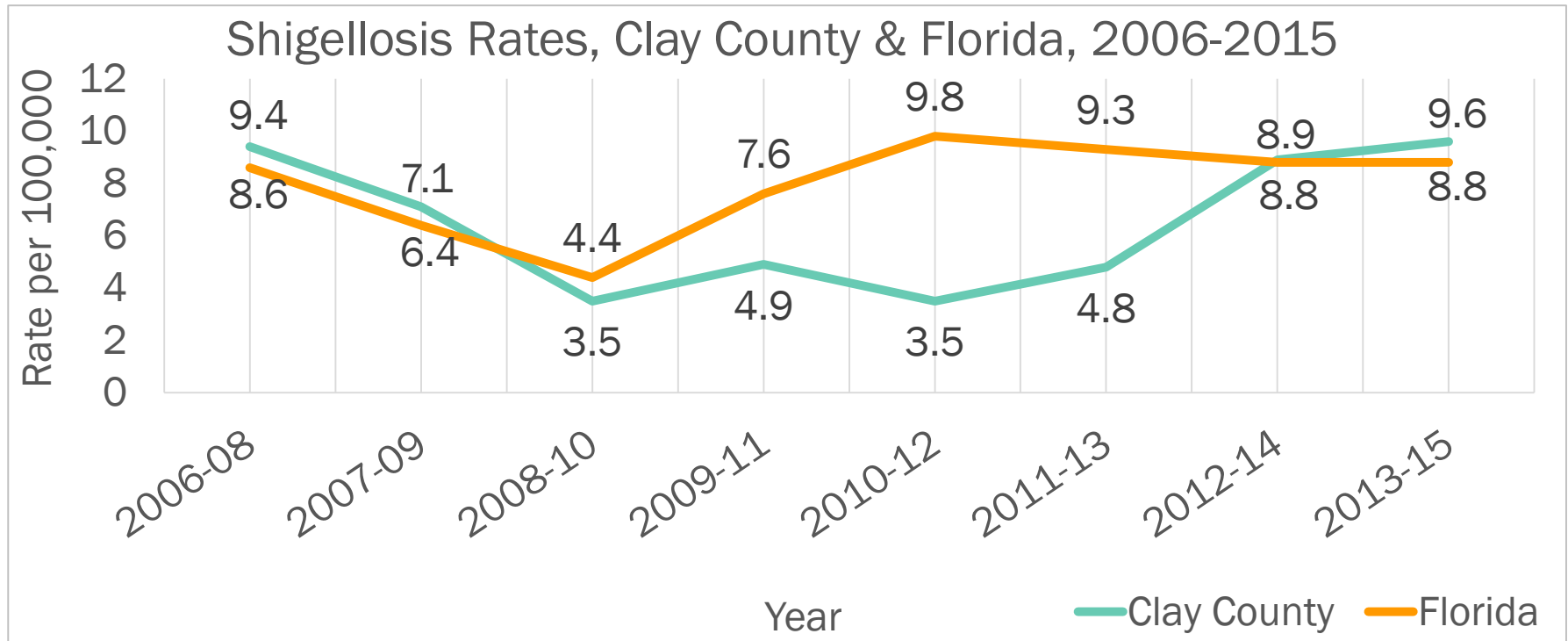
- Caused by *Salmonella* serotype Typhimurium and Enteritidis.
- Symptoms are usually mild without need for specific treatment, BUT children and the elderly can become life-threateningly dehydrated.
- Spread by consumption of contaminated foods of animal origin (e.g., eggs, meat, poultry, and milk) or vegetables contaminated by manure.

# COMMUNICABLE DISEASES: ENTERIC



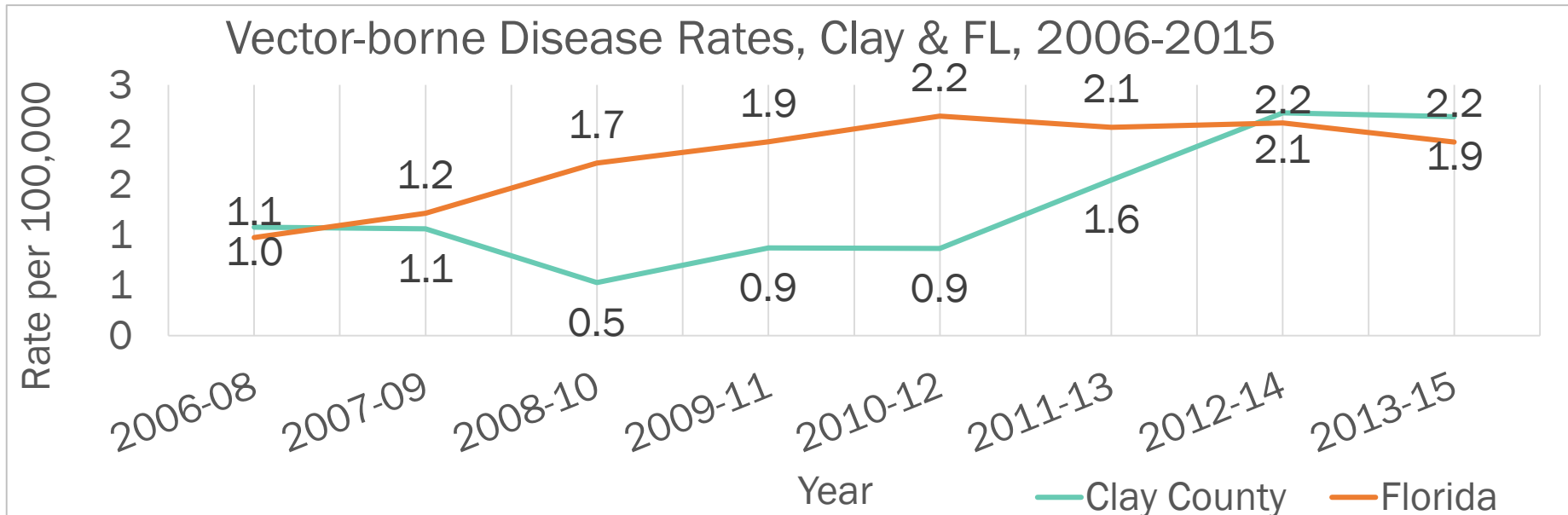
- The bacteria *Campylobacter jejuni* causes most human illness.
- *Campylobacter* can spread to the bloodstream in individuals with compromised immune systems causing serious complications.
- Associated with eating raw/undercooked poultry or foods cross-contaminated by these items. Also associated with unpasteurized dairy products, contaminated water, and produce.

# COMMUNICABLE DISEASES: ENTERIC



- Diarrheal disease. Causes: consuming contaminated food or not washing hands after contacting contaminated surfaces.
- *Shigella* is very contagious; only takes a few bacteria to infect a person.
- Genetically predisposed or immunocompromised may have complications.
  - Children occasionally experience generalized seizures.
  - Shiga-toxin producing *Shigella* can cause hemolytic-uremic syndrome.

# COMMUNICABLE DISEASES: VECTOR-BORNE



- Negligible rates of: Anaplasmosis, Eastern Equine Encephalitis, Ehrlichiosis, Plague, Rocky Mt. Spotted Fever and Spotted Fever Rickettsiosis, St. Louis Encephalitis, Typhus Fever, Venezuelan Equine Encephalitis, and Yellow Fever.
- **Zika Virus:**
  - 2016: Florida had 1,467 cases (1,112 were due to travel and 296 were due to local mosquito or pregnant mother-to-baby transfer). Clay County accounted for 6 travel cases.
  - 2017 (Jan.-Oct.): Florida had 203 cases; Clay County had 0 cases.

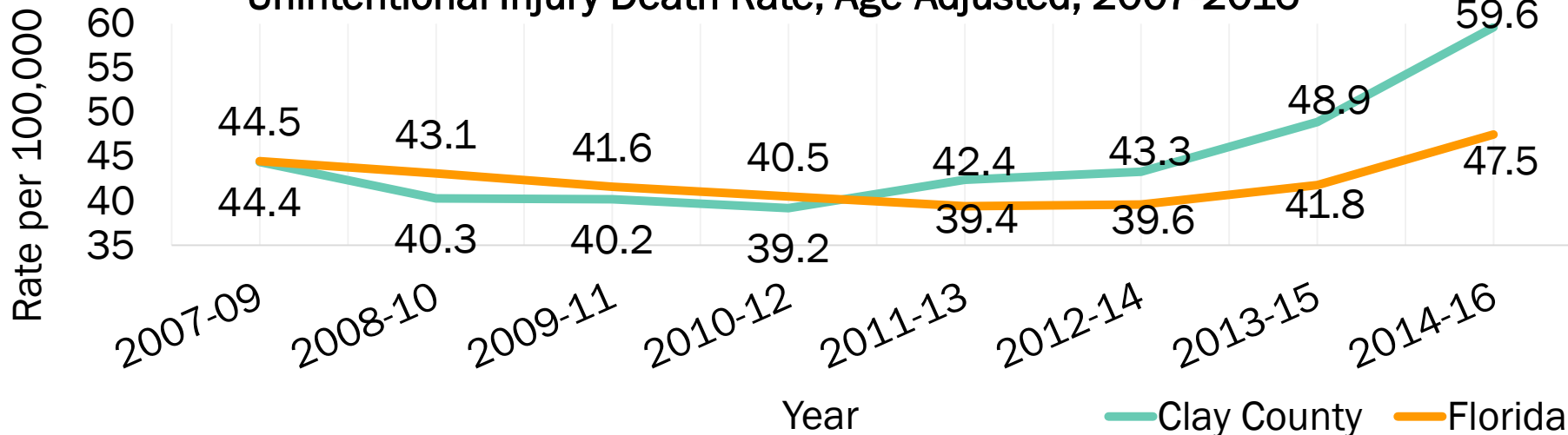
**OTHER HEALTH OUTCOMES**

# POISONING, POLLUTANTS, & CONTAMINANTS

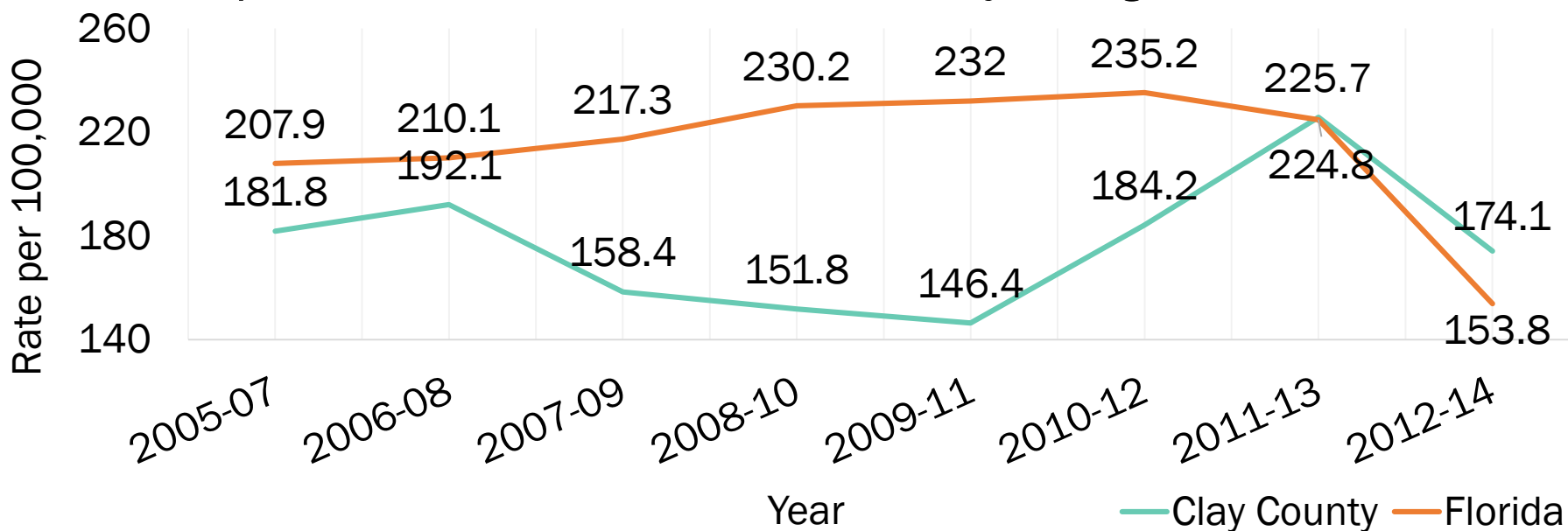
- **Air Quality** – Maintained in healthy range for CO, NO<sub>2</sub>, PM<sub>2.5</sub> and PM<sub>10</sub>, and SO<sub>2</sub>
  - Asthma – 2007-2016
    - 22% increase in rate of hospitalizations, compared to 23.9% decrease for Florida
    - 22% increase in number of ER visits compared to 13.3% increase for Florida
- **Drinking Water Quality** – All given contaminants fell well within maximum contaminant levels
- **Lead** – Rate of poisoning around 0.8 cases per 100,000
- **Pesticide Exposure** – Rate fell to zero in 2012-2015

# UNINTENTIONAL INJURIES

## Unintentional Injury Death Rate, Age-Adjusted, 2007-2016



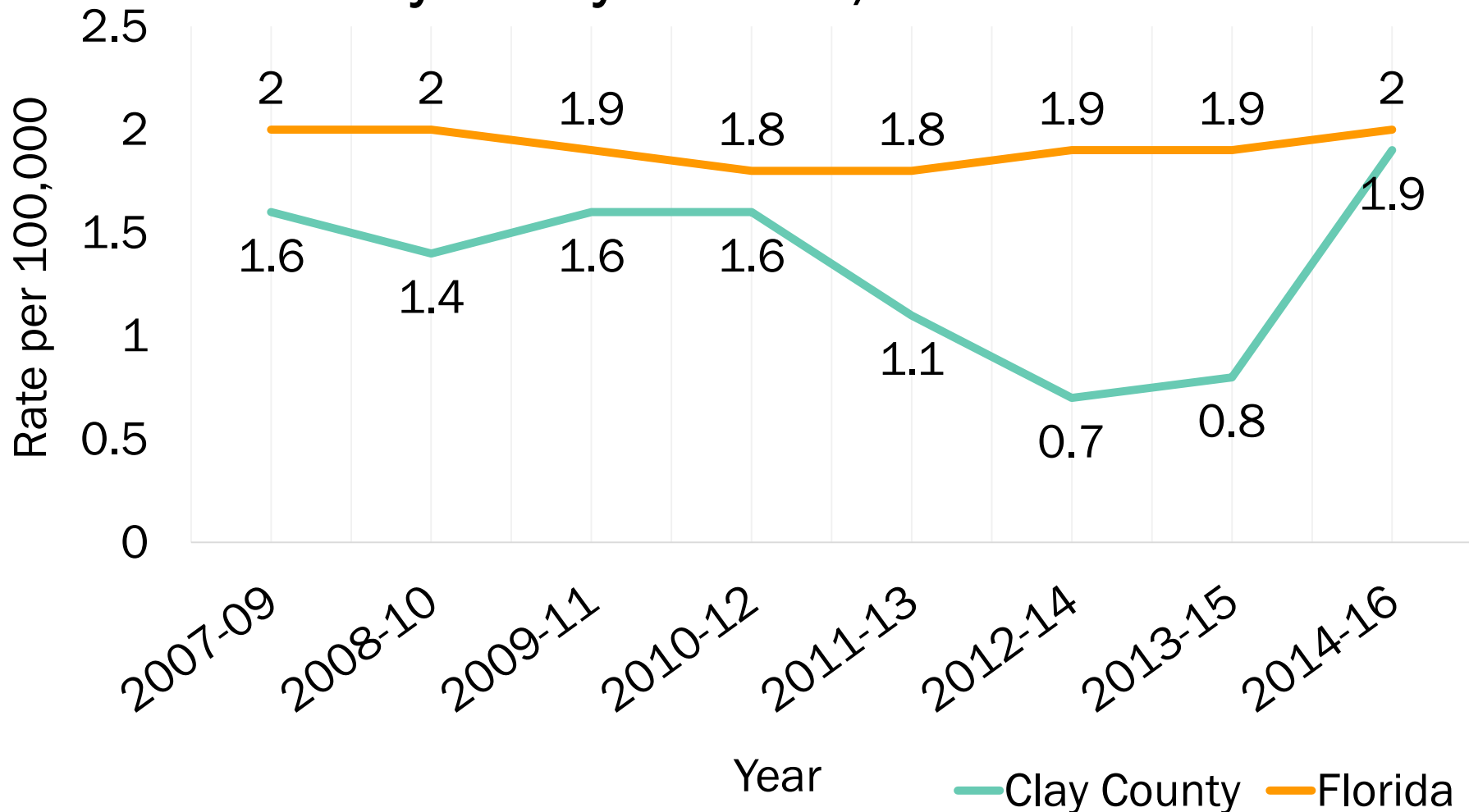
## Hospitalizations for All Non-Fatal Unintentional Injuries, Ages 1-5, 2005-14





# UNINTENTIONAL INJURIES

## Drowning Death Rate, Ages 0-4, Age-Adjusted, Clay County & Florida, 2007-2016



# THANK YOU

