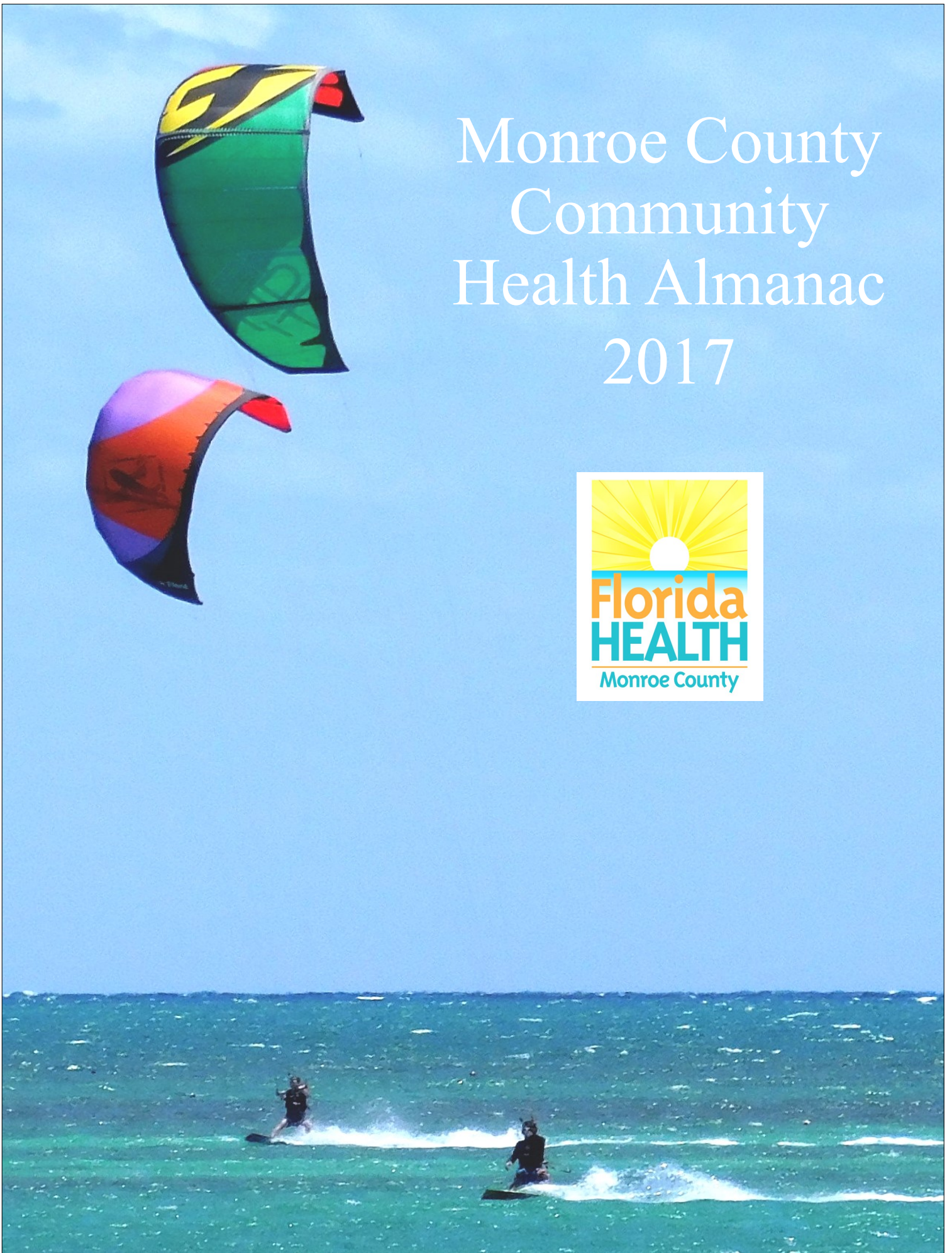
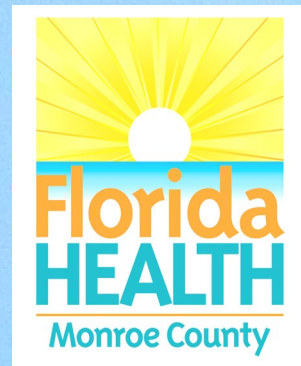


# Monroe County Community Health Almanac 2017



## **ACRONYMS USED IN THIS PUBLICATION**

<b>ACA</b>	Affordable Care Act
<b>AHEC</b>	Area Health Education Center
<b>CDC</b>	Centers for Disease Control and Prevention
<b>DHHS</b>	Department of Health and Human Services
<b>DOH</b>	Florida Department of Health
<b>DOH-Monroe</b>	Florida Department of Health in Monroe County
<b>FKHSC</b>	Florida Keys Healthy Start Coalition
<b>FKMCD</b>	Florida Keys Mosquito Control District
<b>FQHC</b>	Federally Qualified Health Center
<b>MCHS CofC</b>	Monroe County Homeless Services Continuum of Care
<b>MCSO</b>	Monroe County Sheriff's Office
<b>MCTDC</b>	Monroe County Tourist Development Council
<b>SWAT</b>	Students Working Against Tobacco

## Welcome to the 2017 edition of the Monroe County Community Health Almanac!

This edition in the Monroe County health almanac series, which was launched with publication of the first Monroe County Community Health Almanac in 2013, is packed with statistics and tables from a wide range of reliable sources at the local, county, state and federal levels.

In addition to statistical updates found in the Florida Department of Health's Community Health Assessment Resource Tool Set (CHARTS), we've tapped into the U.S. Census/American Community Survey for core data on health and socioeconomic figures on the Florida Keys as current as 2015.



We've also developed special pages and sections spotlighting Monroe County-specific issues, programs, campaigns and achievements impacting public health. We hope these pages will not only educate our readership on the various factors impacting public health across the Florida Keys, but also inspire discussion and additional partnerships in the best interest of making Monroe County and its residents as healthy as possible.

One of these special sections profiles tobacco prevention and cessation efforts countywide in the 10 years since funding was restored to the program through a statewide referendum in 2006. The multi-pronged strategy at the state level -- cessation, prevention and policy change -- can serve as a model for local movements that aim to improve our public health in other areas.

The Florida Keys Mosquito Control District provided background on the fight against species of mosquitoes that can carry diseases such as dengue, Zika virus and yellow fever and even invited us into their operation for photos of special equipment and vehicles used in the fight.

Womankind, another one of the agencies profiled in this edition of the almanac, provided insightful data from Enroll America on the numbers of county residents who have obtained health insurance through the Affordable Care Act since it was launched in 2012 and those who are still without coverage.

We've also incorporated findings from United Way's ALICE survey on our neighbors who are living on the "financial edge" (2014), a study on the workforce housing crisis presented to the Monroe Board of County Commissioners (2015) and the point-in-time survey conducted through the Monroe County Homeless Services Continuum-of-Care (2017).

Many thanks to our community partners for their hard work in researching much of the data contained in the almanac and for sharing their findings with us and you in the best interest of continuing to improve public health across the Florida Keys.

We hope you find this edition of the almanac just as informative and useful as so many others across the county and state found the first edition.

If you have any questions, please contact us.

Sincerely,

***Bob Eadie***

Administrator  
Florida Department of Health in Monroe County





***Dr. Joseph Yates Porter***

*(1847-1927)*

Key West Native and  
Director of Florida's First State Board of Health

**Editorial Board: Florida Department of Health in Monroe County**

*Bob Eadie, Administrator*

*Mark Whiteside MD MPH, Medical Director*

*Mary Vanden Brook, Administrative Services Director*

*Bill Brookman MPH, Community Health Services Director*

*Mary Turner RN, Nursing Director*

*Mike Seiler CPA, Budget Director*

*Cyna Wright, MS, CHEP Public Health/Medical Preparedness Coordinator*

*Alison Morales-Kerr MPH, Public Information Officer*

**Researchers**

*Christopher Tittel*

*Lauren Lysiak MPH*

**Designers**

*Christopher Tittel*

*Lauren Lysiak MPH*

## TABLE OF CONTENTS

6	Geography	27	Pregnancy and Birth
8	Age	27	Child Safety and Care
9	Gender	28	<i>Profiles: Women's Health, Pregnancy and Birth, Infant Care</i>
9	Race	29	School Health
10	Cost of Living	30	Communicable Disease
11	<i>Talking Point: How Do I Work Health Care Into My Budget? Go Ask ALICE</i>	31	<i>Talking Point: Florida Keys Mosquito Control: What's the buzz?</i>
12	<i>Talking Point: Affordable Housing Crunch Can Impact Public Health</i>	32	Chronic Disease
13	Special Populations	33	Injury
14	<i>Talking Point: Bridging Language Gaps To Improve Public Health</i>	34	<i>Talking Point: Helmets Key To Ensuring Health, Safety of Youngest Bicyclists</i>
15	<i>Talking Point: Housing Is Care: Serving Homeless Population's Needs</i>	35	Elder Care
16	Tobacco	35	Hospice and Palliative Care
17	<i>Talking Point: Generation Marks Decade of Successes</i>	35	Death
18	Obesity	37	DOH-Monroe: Programs and Partnerships
19	<i>Talking Point: Less Is More: Campaign Promotes Obesity Prevention</i>	38	DOH-Monroe: Environmental Health
20	Alcohol	39	DOH-Monroe: Public Health and Medical Preparedness Program
21	Substance Abuse	39	Hospitals and Clinics
22	Sexual Practices	40	<i>Talking Point: Protocol for Assessing Community Excellence in Environmental Health (PACE EH)</i>
23	Screenings		
25	Immunizations		
25	Mental Health		

*For complete lists of health care providers across the Florida Keys:*

### **Florida Department of Health in Monroe County**

[www.monroe.floridahealth.gov](http://www.monroe.floridahealth.gov)

*Click on "Monroe County Healthcare Partners Directory" under "Popular Programs & Services"*  
(305) 293-7500

### **Switchboard 2-1-1 Helpline of the Keys**

*For 2016 Florida Keys Community Resources Guide (download)*

[www.switchboardmiami.org/helplineofthekeys](http://www.switchboardmiami.org/helplineofthekeys)

*For 24/7 confidential information and referral and crisis counseling*  
(305) 296-4357 or 2-1-1

### **Agency for Health Care Administration**

[www.floridahealthfinder.gov/index.html](http://www.floridahealthfinder.gov/index.html)

Search "Monroe County"

## GEOGRAPHY

Monroe County's unique geography plays a major role in how goods and services — including health care services — are accessed.

**Population.** Population estimates for Monroe County range from 73,090 (Monroe County Growth Management Division and US Census, 2010) to 74,095 (Florida Department of Health, 2015) to as high as 77,482 (US Census/American Community Survey 1-year estimate for 2015).

The Monroe County Growth Management Division report from 2010, which set the total population at 73,090 at the time, provides the most complete breakdown of county population into incorporated and unincorporated areas (see table on page 7).

In 2016, the division updated data for the City of Key West, the City of Marathon and the Village of Islamorada to 2014 figures.

Between 2010 and 2014, the City of Key West's population dropped from 29,550 to 25,704, the City of Marathon's population increased from 8,287 to 8,708 and the Village of Islamorada's population increased from 6,119 to 6,523.

**Overseas Highway.** The Overseas Highway (U.S. Highway 1) is a critical lifeline, a 113-mile stretch of two-lane road and more than 60 bridges (including one drawbridge) linking communities of varying sizes located on more than 100 different keys.

It is the only means by which residents traveling by land vehicle from less developed keys can reach the population centers, grocery stores, gas stations, hospitals and health care providers located on more developed keys.

**On the water.** Monroe County is a popular destination for anyone who enjoys water activities: boating, fishing, personal watercraft, snorkeling, scuba diving and more.

With these activities comes the risk of injury or death due to, among other things, drowning, boating accidents or dehydration.

In addition, Monroe residents are particularly vulnerable to the eye and throat irritation that comes with algae blooms, red tides and fish kills in the Gulf of Mexico and Florida Bay from time to time.

**Tropical latitudes.** Although Key West sits right on the edge of the Tropic of Cancer, many people consider the city a tropical destination due to, among other things: year-round warm temperatures (average year-round temperature in Key West is 77 degrees Fahrenheit), an average of 259 days of sunshine every year, rainy and dry seasons (rather than summer and winter) and the presence of mangroves and other tropical vegetation.

Warm temperatures and open exposure to the sun put Monroe County residents at higher risk of overexertion and melanoma, a particularly dangerous form of skin cancer with reported incidence and death rates across the Florida Keys significantly higher than statewide rates between 2011 and 2015.

Warm temperatures and a wet environment also make the Florida Keys a prime breeding ground for 45 species of mosquito, some of which can carry dengue, Zika virus, West Nile virus, encephalitis and other diseases.

**Sea level.** The highest point in Monroe County is located on Windley Key in the Upper Keys (18 feet above sea level). With the Florida Keys so low to the water, residents are at greater risk of wind damage and flooding during tropical storms and hurricanes. (As such, many residents evacuate to the mainland when severe weather approaches. Hurricane season runs June 1-November 30.)

**Deepwater port.** Monroe County sits on one of the largest coral reefs in the world, making for relatively shallow nearshore waters. The county's only deepwater port (Key West) plays host to cruise ships, which bring about 800,000 visitors to Key West annually.

## A PRIMER ON MONROE COUNTY GEOGRAPHY

Monroe County holds the distinction of being not only the southernmost county in Florida, but also the southernmost county in all of the continental United States.

Monroe County is made up of two regions: Mainland Monroe and the Florida Keys.

Mainland Monroe is the largely uninhabited western half of Everglades National Park. The village of Flamingo (pop. 9 in 2010) is the largest population center in Mainland Monroe.

The Florida Keys is the 125-mile-long chain of islands curving south and west from mainland Florida into Florida Bay, the Florida Straits, the Gulf of Mexico and the Atlantic Ocean. The majority of Monroe County's 73,090 residents in 2010 lived in the Florida Keys.

Two roads link the Florida Keys to mainland Florida: Card Sound Road (County Road 905) and the Overseas Highway (U.S. Highway 1).

Card Sound Road runs from Miami-Dade County out to Ocean Reef, the community located farthest north and east in the Florida Keys, before turning south and west to meet up with the Overseas Highway in Key Largo.

The Overseas Highway runs from Miami-Dade County down to Key Largo before turning west to provide passage all the way down to Key West.

The Florida Keys includes four subregions: Upper Keys, Middle Keys, Lower Keys and Key West (county seat and largest population center).

Roadside Mile Markers (MM) along the Overseas Highway are used roughly to mark off each subregion.

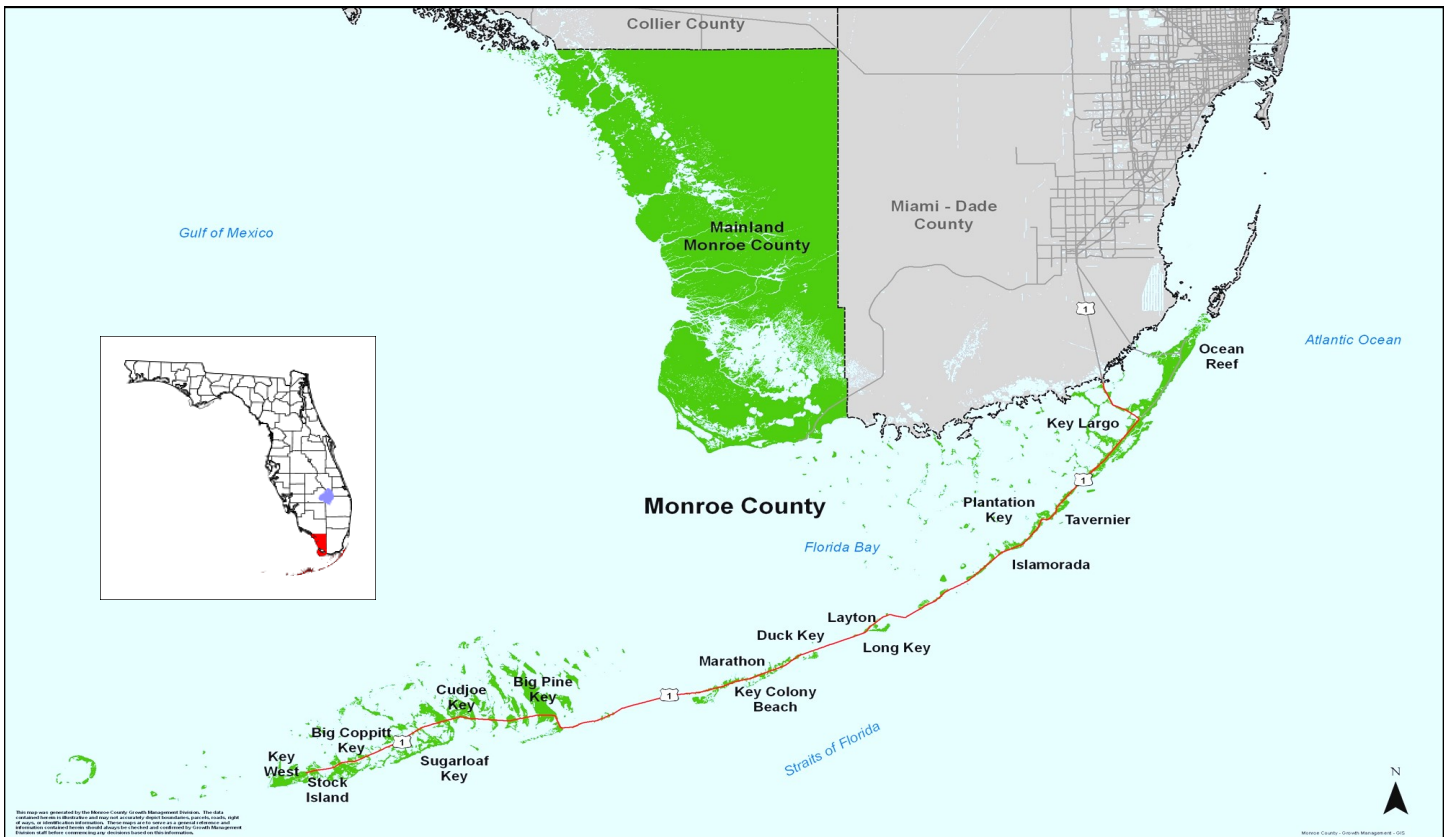
Subregions of the Florida Keys and their major population centers include:

**Upper Keys**  
MM113-MM70  
*Key Largo*  
*Tavernier*  
*Islamorada*

**Middle Keys**  
MM70-MM40  
*Layton*  
*Key Colony Beach*  
*Marathon*

**Lower Keys**  
MM40-MM4  
*Big Pine Key*  
*Cudjoe Key*  
*Sugarloaf Key*

**Key West**  
MM4-MM0  
*Key West*



<i>Incorporated areas listed in the table are shaded green. All other areas constitute unincorporated Monroe County.</i>	<b>Population 2010</b>	<b>Land Area square miles</b>	<b>Population Density population per square mile</b>
<b>Village of Islamorada</b>	6,119	7.2	850
<b>City of Layton</b>	184	.07	2,628
<b>City of Key Colony Beach</b>	810	.44	1,841
<b>City of Marathon</b>	8,287	9.1	911
<b>City of Key West</b>	29,550	7	4,221
<b>Key Largo/Tavernier/Ocean Reef</b>	13,872	35.4	392
<b>Long Key</b>	131	1.8	73
<b>Duck Key/Conch Keys</b>	621	.6	1,035
<b>Big Pine Key/No Name Key</b>	4,284	12.04	356
<b>Little Torch/Middle Torch/Big Torch Keys</b>	970	5.2	187
<b>Ramrod Key</b>	688	1.67	412
<b>Summerland Key</b>	944	1.7	555
<b>Cudjoe Key</b>	1,763	6	294
<b>Sugarloaf Key/Saddlebunch Keys</b>	1,948	16	122
<b>Big Coppitt/Rockland/Geiger/Shark Keys</b>	2,747	2.6	1,057
<b>Bahia Honda, Scout Key, Boca Chica Key, Dry Tortugas, Ballast Key, Cooks Island, Knock-Em-Down Key</b>	163	8.03	5
<b>FLORIDA KEYS TOTALS</b>	73,081	114.85	636 average
<b>MAINLAND MONROE TOTALS</b>	9	833	.01 average

Sources: Monroe County Growth Management Division, DOH

## AGE

Monroe County's population increased approximately 6 percent between 2010 and 2015. The US Census 2010 set the population at 73,090, while the 1-year estimate provided through the US Census/American Community Survey 2015 set the population at 77,482.

Three age ranges showed marked drops in percentage from 2010 to 2015. The greatest drop was in the 45-54 age range, from 17.6 percent of the total population in 2010 to 14.3 percent of the population in 2015 (3.3 percent drop). The 55-59 and 20-24 age ranges also dropped, from 9.2 percent to 7.6 percent (1.6 percent drop) and 5.1 percent to 3.7 percent (1.4 percent drop), respectively.

Two age ranges showed marked increases: The 65-74 age range made up 10.5 percent of the total population in 2010 and 13.2 percent of the population in 2015 (2.7 percent increase), while the 75-84 age range made up 4.9 percent in 2010 and 6.4 percent in 2015 (1.5 percent increase).

**Young, middle-aged adults.** Of the five age ranges recorded within the 25-64 demographic, two of them showed relatively significant drops in terms of percentage of the total population in 2010 compared to that of 2015 (3.3 percent drop for 45-54 range and 1.6 percent drop for 55-59 range) while three showed only modest gains (.7 percent increase for 25-34 range, .7 percent increase for 35-44 range and .6 percent increase for 60-64 range).

The high cost of living in the Florida Keys could be one reason for a decline in the number of younger adults between 2010 and 2015, especially those with families who have little choice but to relocate from Monroe County to more affordable destinations. (Even so, a considerable number of young adults and children still call Monroe County home. In 2014, 749 babies were born to residents of the Florida Keys. Through its public schools alone, Monroe County serves close to 8,500 students grades Pre-K through 12.)

Young people leaving the Keys to go to college on the mainland could help account for the drop in the 20-24 range.

The high cost of living could explain why middle-aged populations are on the decline, as well, with many realizing as they approach retirement that they will not be able to afford to live out their golden years in Monroe County.

**Over age 64.** The marked increase in the population over age 64 may be the result of more and more locals aging in place and/or a steady rise in the number of "baby boomers" who can afford to make the Florida Keys their retirement destination of choice.

In October 2012, the American Association of Retired Persons recommended Florida as a top retirement destination (ranked 7th on its top 10 list of states).

[Topretirements.com](http://Topretirements.com), whose mission is to "help the 78 million baby boomers make more informed decisions about where they should live in retirement," listed Key West among the most popular places to retire in the U.S. in 2016 (91st out of 100). The site based its findings on the level of interest that online visitors expressed in each town on the list.

**Population by Age, Monroe County, 2000/2010/2015\***

	US Census 2000	US Census 2010	US Census/ ACS 2015*
<b>Under 5</b>	3,462	3,189	3,642
<b>5-9 years</b>	3,802	2,858	2,635
<b>10-14 years</b>	4,003	2,937	3,409
<b>15-19 years</b>	3,698	3,260	4,184
<b>20-24 years</b>	3,639	3,758	2,944
<b>25-34 years</b>	10,260	8,885	9,918
<b>35-44 years</b>	14,493	9,887	9,995
<b>45-54 years</b>	14,647	12,876	11,157
<b>55-59 years</b>	5,596	6,744	5,966
<b>60-64 years</b>	4,341	6,227	7,128
<b>65-74 years</b>	6,779	7,696	10,305
<b>75-84 years</b>	3,893	3,609	4,959
<b>85+ years</b>	976	1,164	1,240
<b>TOTALS</b>	79,589	73,090	77,482
<b>MEDIAN AGE</b>	42.6 years	46.4 years	46.7 years

\* US Census/American Community Survey 1-year estimates for 2015

## BABY BOOMERS

Americans born 1946-1964 are considered "baby boomers," the generation of Americans born immediately after World War II.

Baby boomers began retiring in 2011 at age 65 (median retirement

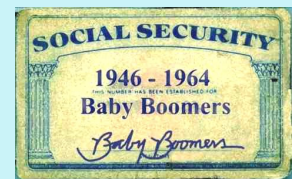
age) and will continue to retire in large numbers into 2029.

Baby boomer retirement figures will peak around 2024

and only begin to dissipate around 2030, as more and more baby boomers reach average life expectancy of age 79 (US Census projection).

With this in mind, Monroe County can expect to see a steady increase in the number of baby boomers going into retirement over the next seven years.

Baby boomer retirees will include: full-time Monroe County residents retiring in place, part-time residents relocating to the county full-time and nonresidents whose retirement destination is Monroe County.





## GENDER

The CDC reported in 2012 that 61 percent of Americans age 18 and over were in “excellent” or “very good” health.

The CDC also listed adverse health conditions that impact both men and women: 11 percent of Americans had been told by a health care professional that they have heart disease; 24 percent had been diagnosed with hypertension; 9 percent had been told they have diabetes; and 21 percent had been told that they have some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia.

**Men’s health.** Two health-related conditions that are of particular concern among men are prostate and testicular cancers. As for prostate cancer, the National Cancer Institute at the National Institutes of Health projected 180,890 new cases and 26,120 deaths nationwide due to this disease in 2016. As for testicular cancer, the NCI projected 8,720 new cases and 380 deaths nationwide due to this disease in 2016.

**Women’s health.** One health-related condition that impacts women more often than men is osteoporosis, a condition in which bones become weakened and fragile. Florida Hospital, one of the country’s largest not-for-profit health care providers, reported in 2016 that more than 10 million Americans over the age of 50 have osteoporosis. The hospital notes that women are four times more likely than men to develop osteoporosis, oftentimes following menopause. Florida Hospital adds that in the five to seven years after menopause, a woman can lose up to 20 percent of her bone mass.

**Population by Gender,  
Monroe County, 2010/2015**

Age Range	Males 2010	Males 2015	Females 2010	Females 2015
-5	1,639	1,748	1,550	1,839
5-9	1,409	1,586	1,449	1,066
10-14	1,539	1,667	1,398	1,729
15-19	1,763	1,992	1,497	2,171
20-24	2,043	1,911	1,715	1,066
25-34	4,801	5,245	4,084	4,673
35-44	5,327	5,083	4,560	4,967
45-54	6,767	5,855	6,109	5,298
55-59	3,557	3,335	3,187	2,612
60-64	3,463	3,457	2,764	3,790
65-74	4,274	5,612	3,422	4,672
75-84	1,876	2,764	1,733	2,133
85+	504	365	660	846
<b>TOTALS</b>	<b>38,962</b>	<b>40,620</b>	<b>34,128</b>	<b>36,862</b>

*Sources: US Census 2010, US Census/American Community Survey 1-year estimates for 2015*

## RACE

The CDC Office of Minority Health and Health Equity notes on its website the growing need to address minority health issues across the American landscape.

“The United States has become increasingly diverse in the last century,” the CDC writes. “According to the 2010 US Census, approximately 36 percent of the population belongs to a racial or ethnic minority. Though health indicators such as life expectancy and infant mortality have improved for most Americans, some minorities experience a disproportionate burden of preventable disease, death and disability compared with nonminorities.”

DOH reports that between 2013 and 2015, stroke, certain forms of cancer (colorectal, breast, prostate and cervical), diabetes and HIV/AIDS were claiming disproportionately more lives in the black community than the white community across the Florida Keys.

Monroe County also saw disproportionately higher rates of infant deaths and low birth weights in the black community between 2013 and 2015.

In addition, the CDC reports that rates of diabetes and infant deaths among Native Americans and Alaska Natives nationwide are twice as high as rates for whites and that Alaska Natives have disproportionately high death rates from unintentional injuries and suicide.

Although Asians and Pacific Islanders are one of the healthiest population groups in the United States, the CDC notes disparities within this greatly diverse population group (i.e., women of Vietnamese ancestry experiencing cervical cancer rates at nearly five times white rates).

**Population by Race, Monroe County, 2015**

Race	Total	Percentage
White	69,180	89.3
Black	5,711	7.4
Native American/Alaska Native	110	0.1
Asian	521	0.7
Native Hawaiian/Pacific Islander	0	0
Other Race	323	.4
Two or More Races	1,637	2.1
<b>TOTAL</b>	<b>77,482</b>	<b>100</b>
Hispanic (Any Race)	17,523	22.6

*Source: US Census/American Community Survey 1-year estimates for 2015*

## COST OF LIVING

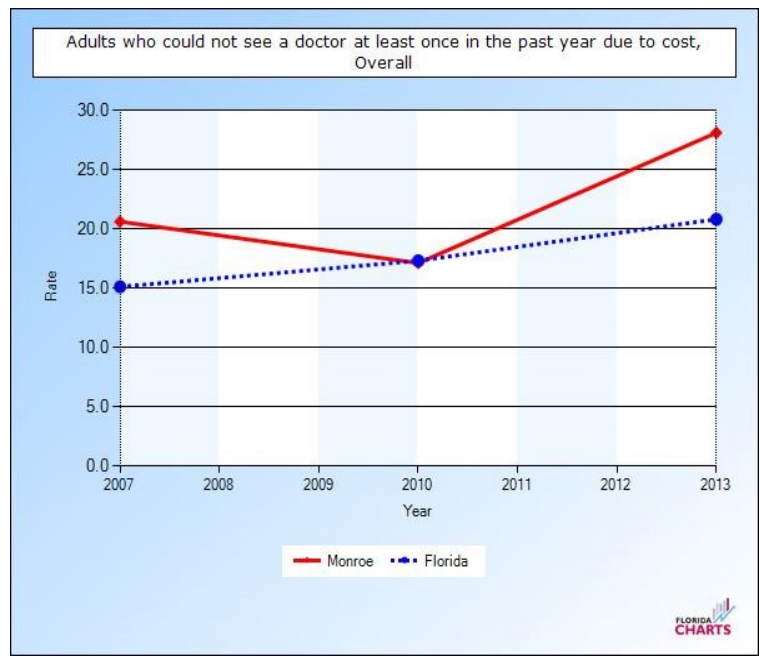
Bert Sperling, an independent researcher who mines data on communities across the United States for [www.bestplaces.net](http://www.bestplaces.net), recently posted a cost of living overview for Key West.

On a scale where 100 represents the US average, Sperling listed overall cost of living in Key West at 171. He also pegged the cost of housing in Key West at 319 — more than three times the national average.

The Monroe County Tourist Development Council (MCTDC) reported in 2006 that roughly 25 percent of workers in the tourism industry — the largest employer in the county — were making minimum wage. Four out of every five workers interviewed said they were “housing cost burdened” — that is, they were paying more than 30 percent of their income into housing costs.

According to the MCTDC, only about half of tourism industry employers offered health benefits at the time.

DOH reported in 2013 that approximately 28.1 percent of Monroe County adults could not see a doctor at least once in the previous year due to cost. The statewide rate was 20.8 percent.



**Health Insurance.** According to Enroll America, an independent, nonprofit, nonpartisan organization whose stated mission is to maximize the number of Americans who enroll in and retain health coverage under the Affordable Care Act (ACA), nearly one-third of Monroe County residents did not have health insurance before ACA was signed into law in 2010 and launched in 2012.

The figure on uninsured individuals in the Florida Keys has dropped steadily since that time, from 33 percent in 2013 to 23 percent in 2014 to 17 percent in 2015.

In 2015, it was estimated that 6,472 individuals across the Florida Keys had signed up for health insurance coverage under ACA.

**Health Fairs.** The Health Resources and Services Administration at DHHS listed Monroe County as a medically underserved area in 2015.

DOH reported 266 licensed health care providers across the Florida Keys that same year. These included physicians (172), dentists (35), internists (31), family practice physicians (13), OB/GYNs (8) and pediatricians (7) serving a population of 77,482 (US Census/American Community Survey 1-year estimates for 2015).

Keys AHEC, a 501(c)3 nonprofit corporation affiliated with the University of Miami Miller School of Medicine and the statewide AHEC network, has been cohosting health fairs with its community partners in the Upper, Middle and Lower Keys and Key West for more than 45 years.



smoking cessation, men’s exam, dental, children’s health, blood glucose and blood cholesterol.

Keys AHEC also runs a no-cost quit-smoking program that has been recognized at both the state and national levels.

**Federally Qualified Health Centers.** An FQHC is a federally-funded health partner that provides comprehensive services — preventive health, dental, mental health and substance abuse services, as well as transportation services necessary for adequate patient care and hospital and specialty care — especially to underserved areas or populations on a sliding fee scale.

The Florida Keys is home to three FQHCs: Lower Keys Community Health Center in Key West, the Community Health Center in Marathon and CHI in Tavernier.

## Affordable Care Act, Insured by Zip Code, Monroe County, 2015

33036	Upper Keys	383
33037	Upper Keys	1,208
33040	Key West/Lower Keys	2,987
33042	Lower Keys	524
33043	Lower Keys	338
33050	Middle Keys	969
33051	Middle Keys	63
	<b>TOTAL</b>	<b>6,472</b>

Source: Enroll America and Womankind

Diagnostic and preventive services provided free of charge to the public not only help those who cannot afford trips to the doctor or health insurance, but also save money in the long run. They also help ease the burden on the overworked health care system.

For every critical condition discovered at a health fair, it is estimated that \$125,000 in health care costs can be saved over a three-year period.

Services and screenings offered free of charge include: vision, skin cancer, Pap smears, breast exams, HIV testing, bone density, blood pressure, mental health,

# How Do I Work Health Care Into My Budget? Go Ask ALICE

United Way, with the help of United Way of Florida and United Way of the Florida Keys, studied financially vulnerable populations across the state and Monroe County in 2012.

Researchers determined that 3,557 of the 29,241 households across the Florida Keys (12 percent) were living at or below the poverty level.

Researchers then developed a “household survival budget” to determine the number of ALICE households. ALICE (Asset-Limited, Income-Constrained, Employed) refers to households that earn more than the U.S. poverty level, but less than the basic cost of living for the county.

In addition to the 3,557 households living at or below the poverty level, researchers identified 10,664 ALICE households across the Keys.

United Way reported its findings in fall 2014.

The report estimates that 48 percent of households across the Florida Keys — 14,221 out of 29,241 — are living at or below the poverty level or are ALICE households barely making enough to survive.

*ALICE households are working households; they hold jobs, pay taxes, and provide services that are vital to the Florida economy in a variety of positions such as retail salespeople, customer service representatives, laborers and movers, and health care aides.*

*The core issue is that these jobs do not pay enough to afford the basics of housing, child care, food, health care, and transportation.*

*Moreover, the growth of low-skilled jobs is projected to outpace that of medium- and high-skilled jobs into the next decade. At the same time, the cost of basic household necessities continues to rise.*

*There are serious consequences for both ALICE households and their communities when these households cannot afford the basic necessities. ALICE households are forced to make difficult choices such as skipping preventative health care, accredited child care, healthy food, or car insurance. These “savings” threaten their health, safety, and future — and they reduce Florida’s economic productivity and raise insurance premiums and taxes for everyone. The costs are high for both ALICE families and the wider community.*

ALICE: Study of Financial Hardship (Florida)

United Way, Fall 2014

[www.UnitedWayALICE.org/Florida](http://www.UnitedWayALICE.org/Florida)



## HOUSEHOLD SURVIVAL BUDGET, MONROE COUNTY, 2012

	Single Adult	Family (Infant and Pre-K)
Housing	\$946	\$1,419
Child care	0	\$1,250
Food	\$176	\$531
Transportation	\$350	\$699
Health care	\$107	\$426
Miscellaneous	\$182	\$469
Taxes	\$242	\$368
Monthly total	\$2,003	\$5,162
<b>ANNUAL TOTAL</b>	<b>\$24,036</b>	<b>\$61,944</b>
<b>POVERTY ANNUAL TOTAL</b>	<b>\$11,170</b>	<b>\$23,050</b>

## ALICE & POVERTY HOUSEHOLDS, MONROE COUNTY, 2012

Census-Designated Place	Total Households	ALICE & Poverty
Big Coppitt Key	833	47%
Big Pine Key	1,619	44%
Key Largo	4,517	53%
Key West	9,322	52%
Marathon	3,371	55%
North Key Largo	510	31%
Stock Island	1,111	76%
Tavernier	953	52%

Source: ALICE: Study of Financial Hardship (Florida), United Way, Fall 2014



# Affordable Housing Crunch Can Impact Public Health



What is considered “affordable housing” in the Florida Keys?

In April 2015, Robert Jones, director of the Florida Conflict Resolution Consortium Consensus Center at Florida State University, published an extensive report on the workforce housing situation in Monroe County.

Jones cited an affordable housing solutions white paper published in October 2014. Donald Craig, then planning director for the City of Key West and author of the white paper, projected a deficit of more than 6,500 affordable housing units in the city.

“The City’s Comprehensive Plan identified the City of Key West median household income as \$52,004 while the average annual wages earned by a worker in the City are approximately \$37,844, indicating that by standard guidelines for mortgage lending at the median level, a home should not cost more than \$166,012, or three times the median income,” Craig wrote. “This is clearly inconsistent with actual cost of housing in the City, when the Key West Board of Realtors reports that at the end of

July 2014 the median sales price of 162 single-family homes sold in the preceding seven months was \$630,000 and the median sales price for condos/townhouses was \$368,000.”

Craig wrote that the rental situation was no better in 2010, when the median gross monthly rent in the city was \$1,359. He wrote that in order to be “affordable” to the average wage earner in the city at the time, monthly rent should have been no more than \$946.

“Rent such as this is not available in the City at this point in time and results in workers sharing housing in increasing numbers or paying 40-50 percent of their income for housing,” he wrote.

The limited availability and high cost of workforce housing often forces workers into sacrificing health care opportunities in favor of paying their mortgage or rent.

In addition to higher purchase and rental rates, environmental factors can impact the number of properties available to the workforce. The US Census/American Community Survey 5-year estimates for 2011-2015 showed that 75 percent of the housing units across the county — 39,674 out of 52,913 — were built before 1990. Aging properties can pose numerous health risks that can make them difficult to live in and even uninhabitable, including dampness and mold, termites and other pests and leaking roofs and other structural deficiencies.

## Gross Rent (Estimates), Occupied Housing Units Paying Rent, Monroe County, 2014

Median: \$1,400 per month

\$1,500 or more	4,671
\$1,000-1,499	3,449
\$750-999	1,149
\$500-749	877
\$300-499	321
\$200-299	138
Less than \$200	87
No Rent Paid	521
<b>TOTAL OCCUPIED HOUSING UNITS PAYING RENT</b>	<b>11,213</b>

Source: US Census/American Community Survey 2014

*Monroe County faces the quadruple impact of high land values, land limited by geographic and environmental features, housing supply limited by controlled growth (the Rate of Growth Ordinance) and a tourism economy with a prevalence of lower paying service-sector employment.*

Robert Jones, Director,  
FCRC Consensus Center,  
Florida State University

*Monroe County Workforce  
Housing Stakeholder  
Assessment Report,  
April 2015*

## Gross Rent as Percentage of Household Income (Estimates), Occupied Housing Units Paying Rent, Monroe County, 2014

35.0 percent or more	5,674
30.0-34.9 percent	1,146
25.0-29.9 percent	1,134
20.0-24.9 percent	1,070
15.0-19.9 percent	818
Less than 15.0 percent	701
Not Computed	670
<b>TOTAL OCCUPIED HOUSING UNITS PAYING RENT</b>	<b>11,213</b>

Source: US Census/American Community Survey 2014



## SPECIAL POPULATIONS

**Visitors.** Tourism is the largest industry in the Keys and the largest employer in Monroe County.

Close to 3 million people pass through Monroe County on day trips and extended holidays every year.

Key West is the destination of choice for most travelers, drawing more than 90 percent of all visitors to the Keys. In addition to countless travelers by air and by road, Key West plays host each year to more than 800,000 cruise ship passengers at the county's only deepwater port.

According to the MCTDC, visitors contributed approximately \$2.7 billion to the local economy (about 60 percent of total local economy) during the 2014 visitor year. In addition, the tourism industry accounted for approximately 54 percent of the total work force in the county that same year.

The high volume of visitors can impact the health of Florida Keys residents. Among other things, visitors can introduce diseases from outside the community (such as dengue and Zika virus) and vacationers who rent cars, scooters and bikes can increase the chance of road injury not only as they learn to operate the vehicles they've rented, but also as they become familiar with local traffic laws and streetscapes.

**Seasonal residents.** The Florida Keys attract many seasonal residents, especially those who want to own their own piece of "paradise" and escape the cold winter months up north.

The US Census Bureau/American Community Survey 1-year estimates for 2015 registered a total of 52,913 housing units across the Florida Keys.

Approximately 54 percent of those units (28,910) were occupied. Approximately 46 percent (24,003) were vacant for a variety of reasons (for rent, rented but not occupied, for sale, sold but not occupied, etc.).

The 2010 US Census indicated about 75 percent of all vacant housing units at that time — or approximately 28 percent of all housing units across the Florida Keys (vacant or otherwise) — were listed as "for seasonal, recreational or occasional use."

In addition, an untold number of seasonal residents who do not own homes in the Florida Keys arrive in recreational vehicles and stay the season at local campgrounds and mobile home parks.

**Military.** More than 3,500 active duty personnel and their dependents representing all branches of the armed

services call Key West home. Naval Air Station Key West includes four annexes, three of which offer permanent housing (Truman, Trumbo and Sigsbee) and one that offers temporary lodging (Boca Chica Field). The Naval Branch Health Clinic is the primary health care provider for both active duty personnel and their dependents. Government insurance covers active duty personnel and their dependents.

**Veterans.** According to the Monroe County Department of Veterans Affairs, approximately 9,640 full-time residents of the Florida Keys are enrolled in Veterans Administration (VA) programs.

The department estimates that 1,500 part-time residents of the county and approximately 3,000 visitors annually are also veterans.

Most veterans reside in Key West, according to the department, with average age in their mid-50s. Leading health-related issues among the veteran population include cancer, diabetes and mental illnesses such as post-traumatic stress disorder.

Veterans receive basic care at VA clinics in Key West and Key Largo, with all referrals to the VA hospital in Miami. (Dependents of veterans are not eligible to use the same health care resources.)

Tricare Prime covers health care costs for retired military personnel.

The department works with the Florida Department of Veterans Affairs, the VA health care system and Volunteers of

America to serve the veteran population.

**LGBT.** The Institute of Medicine issued a research report in March 2011 that identifies the following health-related issues impacting lesbians, gays, bisexuals and transgender individuals: stress, exposure to violence, stigma and discrimination; access and barriers to health care; resilience, including familial and society factors; depression and suicide; substance use and abuse (alcohol, drugs, tobacco); HIV/AIDS and other sexually transmitted diseases; certain cancers; obesity; and long-term hormone use (transgender individuals). (The institute also found that data and research on LGBT health is "quite limited" and identified a number of opportunities to expand scientific knowledge in this area.)

The number of men and women in Monroe County who identify as LGBT could be as high as 8,500 (11.6 percent of the county's population in 2010), based on data from the US Census and Gallup. Key West, in particular, has been a draw for LGBT travelers for decades and home to the largest LGBT community in the Keys.



# Bridging Language Gaps To Improve Public Health

The US Census/American Community Survey 5-year estimates for 2011-2015 indicate that about 9.3 percent of residents of the Florida Keys over the age of 5 (6,775 out of 72,445) speak English “less than very well.”

People with limited English skills can find navigating everyday life a challenge, no less so when it comes to health care.

Everything from reporting a medical emergency to making an appointment with a physician to understanding when and how to take routine medications can prove frustrating — and even dangerous — to those who know little or no English and have no one who can translate for them.

The Monroe County chapter of Literacy Volunteers of America Inc. has helped more than 4,800 men, women and children from Key Largo to Key West bridge the language gap through free, confidential, one-on-one and small group literacy training.

DOH-Monroe and other local agencies also use Language Line, a telephone translation service.

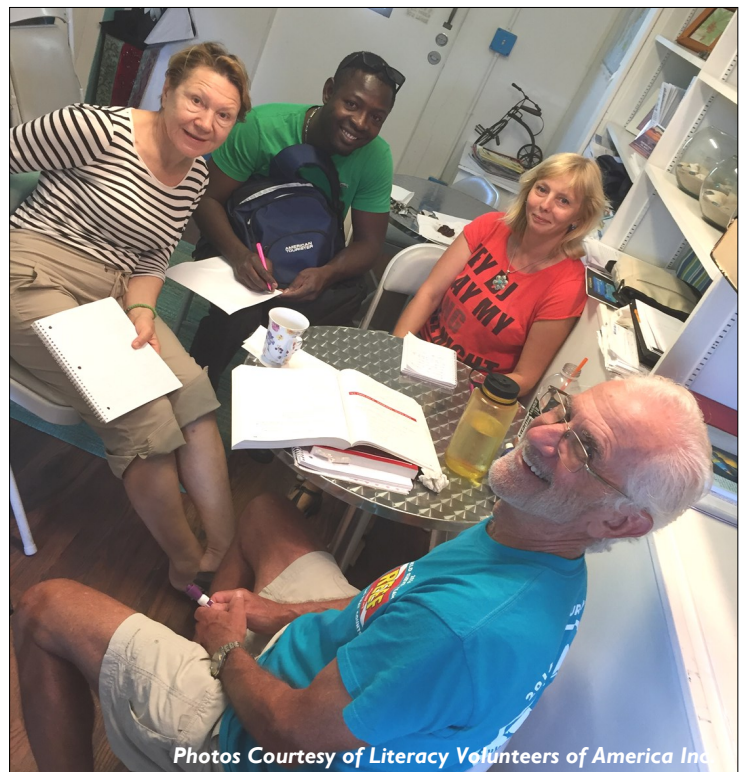


*Our students hail from Cuba, Mexico, Puerto Rico, Colombia, Poland, Russia, the Czech Republic, China, Japan, the Ukraine, Haiti and beyond. It's a regular melting pot.*

— Judge Peary S. Fowler  
President, Literacy Volunteers of America

<b>Language Spoken at Home, Population 5 Years and Older, Monroe County, 2011-2015</b>		
<i>Total Population 5 Years and Older: 72,445</i>		
	<i>Population</i>	<i>Percentage</i>
English Only	55,009	75.9
Language Other Than English	17,436	24.1
Speak English Less Than “Very Well”	6,775	9.3

<b>Language Spoken at Home, Population 5 Years and Older, Speak English “Less Than Very Well,” Monroe County, 2011-2015</b>			
<i>Language Spoken at Home</i>	<i>Pop.</i>	<i>Speak English Less Than “Very Well”</i>	<i>Percentage Speak English Less Than “Very Well”</i>
Spanish	13,066	5,690	43.5
Other Indo-European Languages	3,534	892	25.2
Asian and Pacific Islander Languages	499	161	32.2
Other Languages	337	32	9.4



Photos Courtesy of Literacy Volunteers of America Inc.

Source: US Census/American Community Survey 5-year estimates for 2011-2015



# Housing Is Care: Serving Homeless Population's Needs

The Florida Keys attract a significant number of homeless individuals, a good many of whom live in vehicles, on city streets and public beaches, under bridges and in the mangroves of an island chain with a year-round average temperature of 77 degrees.

Many others struggle to find help and shelter for themselves and, in some cases, their families.

Monroe County has adapted to the changing needs of this population, with community partners now offering a range of services associated with health care, housing and more.

The Monroe County Homeless Services Continuum-of-Care (MCHS CoC) is the lead agency for coordination and planning of homeless services in the Florida Keys. Its overarching mission is to promote communitywide commitment to the goal of ending homelessness by facilitating coordination of services in the continuum-of-care

process. This coalition dedicates itself to providing every possible means of support and care necessary to the homeless population.

Through their support, Monroe County has continued to see positive changes in many aspects of the homeless situation.

In early 2016, the MCHS CoC submitted to the Department of Housing and Urban Development the results of its most recent Point-in-Time (PIT) report. The annual report includes the results of the survey of homeless individuals conducted across the county each January.

On January 25, 2017, 631 people across the Florida Keys were identified as homeless.

Homeless individuals are at risk of multiple health issues, everything from dehydration to verbal and physical assault.

Organizations like DOH-Monroe, the Southernmost Homeless Assistance League and Rural Health Network of Monroe County work with MCHS CoC to provide the homeless with everything from weekly wound care and triage at the Keys Overnight Temporary Shelter to vaccinations to free diagnostic testing and prescriptions.

The MCHS CoC works extensively with its Homeless Management Information System, which collects and monitors client-level data on housing and services to homeless individuals, families and persons at risk of becoming homeless, as well as with applying for, monitoring and managing multiple state and federal grants that have been awarded to them and their member providers.

According to the 2016 PIT report, 575 people across the Florida Keys were identified as homeless. Of those, 186 individuals were sheltered in emergency housing (20 under the age of 16, six between the ages of 18 and 24 and 160 ages 24 and older). A total of 119 individuals were reportedly living in transitional housing (16 under the age of 16, four ages 18-24 and 99 over the age of 24). The 2016 PIT report also noted that 201 permanent housing beds had been made available to homeless individuals in the Florida Keys, many of them occupied at the time the survey was conducted.



## Point-in-Time Survey Results, Monroe County, 2009/2011-2017

PIT Date	Sheltered	Unsheltered	Total
1/25/17	339	292	631
1/27/16	305	270	575
1/27/15	301	314	615
1/28/14	383	295	678
1/29/13	347	305	652
1/23/12	364	0	364
1/24/11	346	558	904
1/27/09	324	716	1,040

## Point-in-Time Survey Results, Unsheltered Individuals, Monroe County, 2017

Total Number of Individuals Surveyed: 631

AGE	
Under 18	31
18-24	23
24-60	397
Over 60	162
No Response	18
GENDER	
Male	485
Female	120
Transgender	2
No Response	24
ETHNICITY	
Non-Hispanic/Non-Latino	496
Hispanic/Latino	78
No Response	57
RACE	
White	546
Black	45
Asian	1
Native American or Alaska Native	1
Native Hawaiian/Pacific Islander	1
Multiple Races	6
No Response	31

Source: Monroe County Homeless Services Continuum of-Care Inc.

## TOBACCO

Tobacco use is the leading cause of preventable disease and death in the United States. According to the CDC, cigarette smoking causes more than 480,000 deaths (1 in 5 of all deaths) in the United States annually. Smoking is said to increase the risk of, among other things, coronary heart disease and stroke. In addition, smokeless tobacco is said to increase the risk of oral and throat cancers.

The CDC reports that cigarette smoking was responsible for approximately \$300 billion in health-related economic losses in the United States in 2015 alone, including nearly \$170 billion in direct medical costs and an additional \$156 billion in lost productivity.

Additionally, the CDC notes that secondhand smoke — the combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers — contains more than 7,000 chemicals (including 70 that can cause cancer). The CDC reports that approximately 42,000 people die annually in the United States from the effects of secondhand smoke alone. The agency makes clear that there is no risk-free level of exposure to secondhand smoke.

**Access.** Florida Keys residents live in communities where tobacco is more readily available through a greater number of convenience marts, grocery stores and bars than other communities in Florida.

Monroe has the highest tobacco retailer density in the state and registers about three times more active tobacco dealer licenses than any one of three select

Florida counties with similar population size (Columbia, Nassau and Putnam). Cigar stores and stands can also be found throughout Monroe County, a nostalgic reminder that cigar making helped build the Keys in their early days.

The number of electronic nicotine dispensing system (ENDS) retailers has increased locally as marketing of these items entice new young users and adults who seek what they are led to believe are safer alternatives to tobacco. Campaign for Tobacco Free Kids reports that ENDS use by youth nationwide increased 967 percent between 2011 and 2015.

**Adults.** Tobacco-Free Florida Keys reports that 20.6 percent of adults in the Florida Keys were smokers in 2013. Health policy assists adults with success in cessation, while modeling a positive behavior for children and youth. These are seen in tobacco-free events and tobacco-free worksite, smoke-free housing and point-of-sale policies.

**Youth.** DOH notes that approximately 9 out of 10 adult smokers begin using tobacco before age 18.

Youth are exploring cheaper alternatives to cigarettes, such as small cigars and loose tobacco, as the cost of cigarettes and the taxation on tobacco products continue to rise.

Furthermore, the Monroe County Growth Management Division reported in 2013 that there was at least one tobacco retailer within a 1/2-mile radius of each of 11 out of 17 elementary, middle and high schools across the county. In some cases, a tobacco retailer was located within only one or two blocks of campus. Tobacco retailer density is particularly noticeable on Key West, an island measuring a mere 8 square miles.

CounterTools, a marketing research firm based in North Carolina, reports that marketing tobacco at the point of sale, in particular, is an effective way of drawing in young consumers. With this in mind, the tobacco industry reportedly spends \$1 million per hour to market its products at the point of sale.

**LGBT.** The CDC reported in 2014 that the prevalence of cigarette smoking among individuals who identify as lesbian, gay, bisexual or transgender was 23.9 percent, compared to 16.6 percent of individuals who identify as heterosexual.

Potential factors for higher rates of smoking among individuals who identify as LGBT include: higher levels of social stress, frequent patronage of bars and clubs, higher rates of alcohol and drug use and industry marketing that targets the LGBT community.

**Cessation and prevention.** Cessation services are available via the Bureau of Tobacco Free Florida's Quit Your Way Program and Keys AHEC, a nonprofit 501(c)3 corporation serving Monroe and south Dade counties. Keys AHEC reported that 1,360 people enrolled in its face-to-face counseling program in 2012, with 1,209 eventually completing the program.

Students Working Against Tobacco (SWAT) clubs can be found in four Monroe County schools. SWAT youth advocates, among other things, educate classmates and friends on the dangers of tobacco use and the industry's efforts to manipulate youth into

buying its products and help ensure campuses remain tobacco-free. According to the Florida Youth Tobacco Survey 2016, Monroe County youth ages 11-17 were registering in 2016 four-year lows on use of cigarettes (3.0 percent), cigars (4.0 percent) and smokeless tobacco (1.8 percent). The survey also noted, however, that e-cigarette use among Keys youth was five times higher in 2016 than 2012 (12.0 percent versus 2.4 percent).

In addition, Monroe County adheres to the Florida Clean Indoor Air Act, which the Florida legislature enacted in 1985 to protect people from the health hazards of secondhand smoke.

**Number of Active Tobacco Dealer Licenses (2012, 2015)**

<i>Counties</i>	<b>2012</b>	<b>2015</b>
<b>Monroe</b>	395	423
<b>Columbia</b>	104	121
<b>Nassau</b>	109	121
<b>Putnam</b>	125	146

— Florida Department of Business & Professional Regulation, US Census/2014 American Community Survey



Mitzy Cordova of Wendover Properties partnered with Tobacco Free Florida Keys to get Wendover to go smoke-free. AHI Properties, which manages the 50-unit Poinciana Royale apartment complex in Key West, also partnered with TFFK to go smoke-free.



# Generation Marks Decade of Successes

Gov. Lawton Chiles hailed it as “the straw that broke Joe Camel’s back” and “a victory for the children and their future.”

In August 1997, the state of Florida reached an out-of-court settlement with Big Tobacco. The \$11.3 billion coming to Florida, to be paid in installments over a 25-year period, would do more than just compensate the state for public health costs incurred through smoking-related illnesses.

With the first shots of funding, Students Working Against Tobacco was born. SWAT “armed” youth with counter-marketing skills, empowering them to spread the word on the dangers of tobacco use, expose tobacco industry tactics to lure youth into buying these deadly products and enlist more young men and women in the war on Big Tobacco.

Some campaign tactics were splashy: One early SWAT campaign featured teens dressed in fatigues and dog tags on a whistle-stop train tour of the state.

The heady days of SWAT soon faded, however, as lawmakers debated with each passing year whether the settlement money could be used more productively elsewhere.

In November 2006, voters approved a measure ensuring that at least 15 percent of all tobacco settlement money be put toward

tobacco prevention programs like SWAT.

In January 2007, DOH-Monroe rolled out the Tobacco Free Florida campaign and revived SWAT at the local level.

SWAT chapters began springing up across the Florida Keys: According to the Florida Youth Tobacco Survey, SWAT membership

in 2014 had grown to include 8.3 percent of all Monroe County high school students.

In addition to encouraging elected officials in Key West, Marathon, Key Colony Beach, Layton and Islamorada to approve resolutions against the sale of candy-flavored tobacco products in their municipalities, SWAT activists continue to post displays, stage contests, mount petitions and partner in community events to educate policymakers and the general public on the need for tobacco-free policies.

In 2013, Monroe County SWAT activists inspired the “Not a Replacement” campaign, featuring imagery of youth walking

through graveyards in a warning to Big Tobacco that they were not going to be “replacement” customers for those who had died from using its products. After the campaign went statewide in 2014, Campaign for Tobacco Free Kids used it to promote events nationwide in recognition of Kick Butts Day 2015.

**Tobacco Use, High School / Middle School Students, Monroe County (Percentages)**

	2008	2012	2014
Cigarettes	19.9 / 5.9	10.4 / 4.0	8.7 / 4.1
Cigars	21.9 / 6.5	14.8 / 4.0	11.7 / 4.6
Smokeless	7.7 / 3.7	6.7 / 1.9	6.9 / 2.9

Source: Florida Youth Tobacco Survey 2014



SWAT activists at Coral Shores High School took top honors with this photo in a statewide competition to educate the public and market the youth tobacco prevention program.

*This is a time to recognize our state’s progress in reducing tobacco use, still the leading cause of preventable disease and death in Florida. Tobacco Free Florida is truly a public health success story having had a positive — life-saving — impact on so many Floridians.*

— Celeste Philip, MD  
Florida Surgeon General

Source: Tallahassee Democrat, 11/25/16

## NEXT CHAPTER

Youth across Monroe County continue to face new challenges in the fight against tobacco with the introduction of new and innovative products meant to intrigue and appeal to a younger audience.

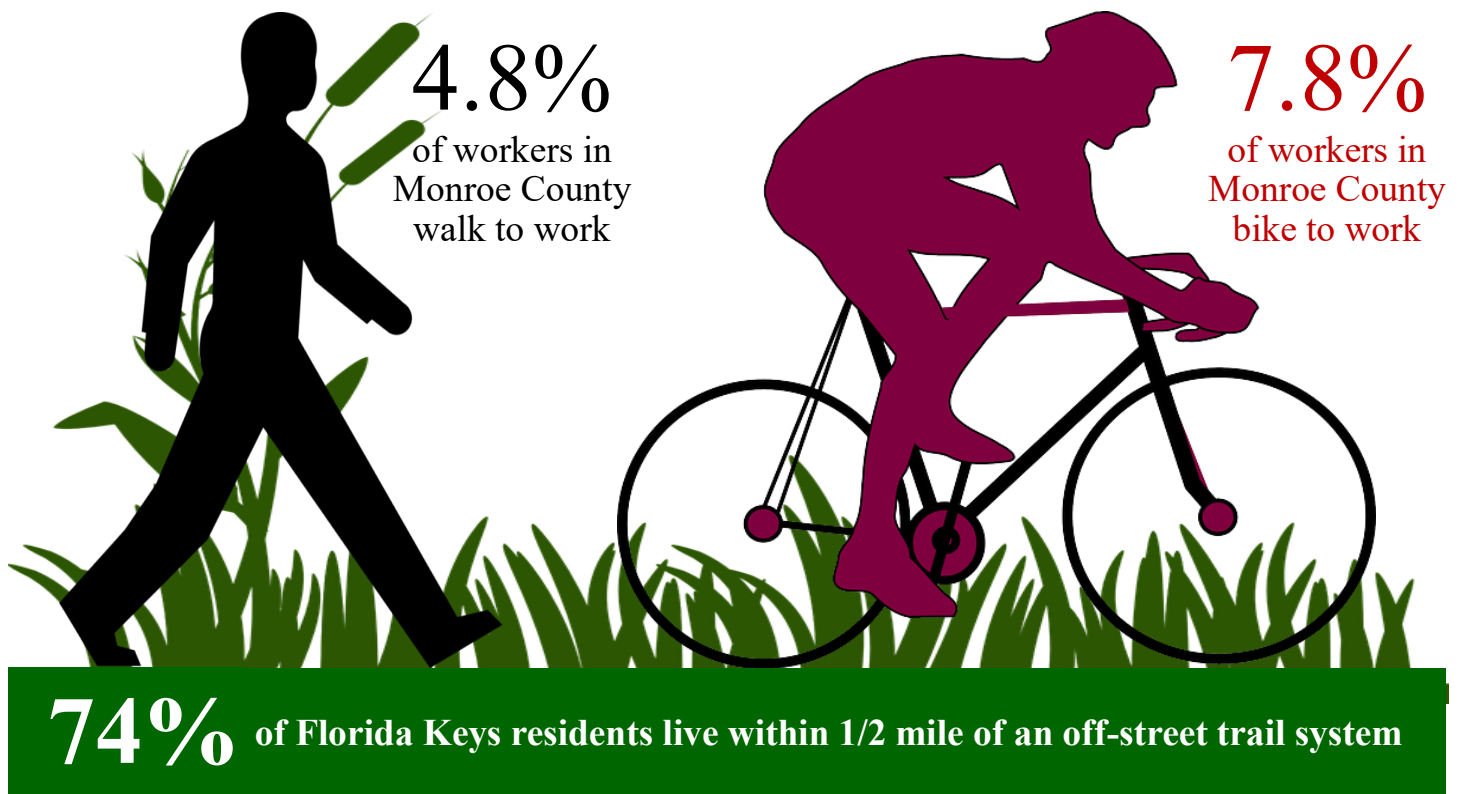
**ENDS (Electronic Nicotine Dispensing Systems).** In late 2016, the Office of the US Surgeon General reported that ENDS are now the most commonly used tobacco products among youth. The report described this as a newly emerging public health concern, with stark reminders that ENDS aerosol is not harmless and that “use of products containing nicotine in any form among youth, including [ENDS], is unsafe.”

**Flavors.** Companies flavor tobacco products to taste like chocolate, candy or fruit. Although the Food and Drug Administration banned the sale of flavored cigarettes in 2009, tobacco companies continue to appeal to the tastes of the younger crowd through their other products.

**Hookah.** This is a single-stemmed or multi-stemmed water pipe most often used to smoke flavored tobacco.

**Snus.** This small pouch contains a smoke-free and spit-free form of tobacco.

**Specialty products.** *Bidis* are small brown cigarettes from India that are known to have higher levels of nicotine, carbon monoxide and tar than traditional cigarettes. *Kreteks* are cigarettes that contain clove and clove extracts.



Source: DOH

## OBESITY

“Overweight” and “obesity” are key factors in the development of a variety of chronic illnesses.

Monroe County’s rates for both conditions in adults were relatively low in 2013 compared to statewide rates. According to DOH, about 33.6 percent of Monroe County residents were overweight (36.4 percent statewide) and 24 percent were obese (26.4 percent statewide).

The same was true of Monroe middle and high school students in 2014, with 12.1 percent overweight (15.8 percent statewide) and 10.7 percent obese (12.4 percent statewide).

Good nutrition and routine physical exercise are important to maintaining a healthy weight

**Nutrition.** An individual has a better chance of maintaining a healthy weight if he/she has access to supermarkets and grocers that offer affordable fresh fruits, vegetables, meats, dairy products and whole-grain goods and restaurants that serve healthier dishes made from fresh ingredients.

In 2013, Monroe County registered 138 convenience stores and supermarkets/grocers, affording Keys residents 50-60 percent greater access to food than residents in Florida counties with similar population totals (Columbia and Putnam).

In 2013, DOH reported that 19.8 percent of the adult population in Monroe County was consuming the recommended five servings of fruits and vegetables a day (18.3 percent statewide rate).

While convenience stores offer quick and easy access to processed snacks and a limited amount of fresh fruit, supermarkets and grocery stores offer the widest possible range of affordable fresh foods.

In 2013, of the 503 restaurants in Monroe County, 458 were locally owned and 45 were owned by popular national chains (McDonald’s, Wendy’s, Burger King, Pizza Hut, Papa John’s, Subway, Arby’s, Denny’s, etc.).

Locally owned restaurants oftentimes offer the diner a better chance of incorporating healthier choices into his/her diet, either through selection of entrees and side dishes prepared with fresh ingredients or through a cook-to-order service. Popular national chains, especially those identified as “fast food” restaurants, typically offer a set menu using prepared foods. Many “fast food” restaurants have taken the nationwide concern with obesity rates to heart, however, and have introduced healthier choices to the public.

**Physical activity.** Monroe County offers more than 65 public parks and beaches and more than 120 fitness centers, where residents can engage in moderate to vigorous physical activity.

In general, Florida Keys residents tend to be some of the more active residents in the state.

In 2013, DOH reported 58.1 percent of adults in Monroe County were getting 150 minutes or more of aerobic physical activity per week (50.2 percent statewide rate), 30.9 percent were participating in muscle-strengthening exercises at least twice a week (29.6 percent statewide rate) and 22.5 percent were participating in enough aerobic and muscle strengthening exercises to meet prescribed guidelines (19.9 percent statewide rate).

The same held true for Monroe County middle and high school students in 2014, 28.3 percent of whom were physically active for at least 60 minutes per day on all seven of the previous day (22.9 percent statewide rate).

# Less Is More: Campaign Promotes Obesity Prevention

DOH reports that 40.5 percent of adults across Monroe County are at a “healthy weight” (more than 5 percentage points higher than statewide averages), yet more than half (57 percent) are still either “overweight” or “obese.”

DOH-Monroe has made progress in recent years through various programs and challenges to educate the community on staying healthy and active.

In 2013, DOH launched the Healthiest Weight Florida campaign with the goal of getting Florida residents to the healthiest weights in the nation.

Healthiest Weight Florida is a public-private collaboration bringing together state agencies, not-for-profit organizations, businesses and entire communities to help Florida’s children and adults make consistent, informed choices about healthy eating and active living.

If the current trend continues, experts say, about 60 percent of the nation will be obese before the year 2030.

In addition to contributing to the development of perhaps millions of cases of preventable chronic diseases, this incidence of obesity will likely cost tens-of-billions of dollars in health care costs.

Healthiest Weight Florida’s goal at this time is to bend the current weight curve by 17 percent.

Healthiest Weight Florida strategies include: increasing opportunities for physical activity, making healthy food available everywhere, promoting health in the workplace, strengthening schools as the heart of health and marketing what matters for a healthy life.

At the county level, DOH-Monroe and its community partners have made major strides in promoting healthy lifestyles among residents and visitors.

A complete parks directory of the Florida Keys was written, photographed and designed with fitness in mind and advertised throughout the county as a fun and healthy way to explore the Keys.

“Motion on the Ocean: A Public Health Guide to Physical Activity in Parks Across the Florida Keys” profiles the many beautiful and well-kept parks and beaches Monroe County has to offer, while encouraging walkers, bikers, kayakers and other fitness enthusiasts to engage in healthy activities on both land and sea.

DOH-Monroe also hosts “Biggest Loser” weight-loss challenges in Key West and the Upper Keys. These challenges run 10 and 8 weeks, respectively, and encourage all community members to participate. Each challenge offers incentives to encourage top weight-loss champions in each region.



Top finishers in the “Biggest Loser” competition in the Upper Keys for spring 2017 gather outside DOH-Monroe’s site in Tavernier.

## Weight/Activity/Eating Habits Among Adults, Monroe County and Florida, 2013

	Monroe %	Florida %
Healthy weight	40.5	35.0
Overweight or obese	57.7	62.8
Participated in enough aerobic and muscle strengthening exercise to meet guidelines	22.5	19.9
Sedentary	22.5	27.7
Consume at least five servings of fruits and vegetables daily	19.8	18.3

## MOTION ON THE OCEAN

A PUBLIC HEALTH GUIDE TO PHYSICAL ACTIVITY IN PARKS ACROSS THE FLORIDA KEYS



#healthiestweightfl

Download this booklet on your smartphone at [monroe.floridahealth.gov](http://monroe.floridahealth.gov)

Charts Source: DOH

## Weight/Activity Among Middle and High Schoolers, Monroe County and Florida, 2014

	Monroe %	Florida %
Healthy weight	72.3	67.6
Overweight or obese	22.9	28.2
Physically active for at least 60 minutes per day on all 7 of the past days	28.3	22.9



## ALCOHOL

Alcohol consumption is the third leading lifestyle-related cause of death in the United States, attributed to approximately 88,000 deaths nationwide each year. In 2006, there were more than 1.2 million emergency room visits and 2.7 million physician office visits nationwide due to excessive drinking. The economic costs of excessive alcohol consumption for that same year were estimated at \$223.5 billion.

Excessive alcohol use can pose both immediate health risks — traffic injuries, falls, drownings, burns, unintentional firearm injuries and alcohol poisoning — and long-term health risks — liver disease, certain types of cancer and neurological, cardiovascular and psychiatric problems. Excessive alcohol use has also been linked to battery, domestic violence, child abuse, risky sexual behaviors and miscarriage and stillbirth among pregnant women.

**Access.** Monroe County residents live in a community where alcohol is more readily available than many other communities in Florida, due to a greater number of bars, restaurants, convenience marts and liquor stores.

In 2015, Monroe County registered upward of three times more active alcoholic beverage licenses than any one of three select Florida counties with similar size population. It is estimated that the ratio of active alcoholic beverage licenses to residents in Monroe County is one license per 108 people (Columbia is one per 442 people, Nassau is one per 369 people and Putnam is one per 402 people).

**Youth.** Monroe County youth are using alcohol at rates higher than statewide averages. The 2014 Florida Youth Substance Abuse Survey found that:

- 23.7 percent of Monroe middle schoolers and 59.7 percent of Monroe high schoolers had used alcohol in their lifetimes (statewide averages were 25 percent for middle schoolers and 56 percent for high schoolers);
- 11.8 percent of Monroe middle schoolers and 36.8 percent of Monroe high schoolers had used alcohol in the past 30 days (statewide averages were 10.1 percent for middle schoolers and 28.4 percent for high schoolers); and
- 3.6 percent of Monroe middle schoolers and 19.4 percent of Monroe high schoolers had engaged in binge drinking in the past 30 days (statewide averages were 3.9 percent for middle schoolers and 13.7 percent for high schoolers).

**Injuries.** According to DOH, approximately 4.1 percent of Monroe County residents surveyed in the 2010 behavioral risk factor project reported having climbed behind the wheel of a vehicle after consuming too many alcoholic beverages. The statewide rate was 1.9 percent.

The MCSO reported 169 charges of driving under the influence (DUI) countywide during 2015. Such charges totaled 161 and 148 in 2013 and 2014, respectively.

In 2014, the number of alcohol-related vehicle crashes in Monroe County per 100,000 population was almost three times more than the number of alcohol-related vehicle crashes per 100,000 population statewide. DOH-Monroe also reported almost three times more deaths due to alcohol-related vehicle crashes than statewide averages.

**Treatment and support groups.** There are three alcohol treatment programs operating in Monroe County. In addition, first-time felons are treated through Monroe County Drug Court at facilities located in the Upper and Middle Keys and Key West. Alcoholics Anonymous offers support through daily meetings at locations countywide.

### Active Alcoholic Beverage Licenses (2015)

Monroe (pop. 75,208)	695
Columbia (67,662)	153
Nassau (74,918)	203
Putnam (73,191)	182

— Florida Department of Business &  
Professional Regulation and  
US Census/2014 American Community Survey

### Adult Alcohol Consumption: Heavy or Binge Drinking (2013)

	Monroe	State
<b>Overall</b>	25.7 %	17.6 %
<b>Men</b>	29.3 %	23.4 %
<b>Women</b>	22.1 %	12.2 %
<b>Ages 18-44</b>	35.5 %	24.2 %
<b>Ages 45-64</b>	23.6 %	16.9 %
<b>Ages 65+</b>	15.7 %	7.2 %

*“Binge drinking” is defined as four or more drinks for a woman or five or more drinks for a man in one sitting.*

Source: DOH

### Source of Alcohol, High School Students, Monroe County and Florida, 2014

	Monroe	State
Someone gave it to me	44.5	43.0
Someone bought it for me	21.6	17.5
Some other way	17.4	17.5
Took it from a family member	9.3	11.0
Bought in a store	5.4	8.1
Bought at public event	0.9	0.8
Bought in restaurant/bar/club	0.5	1.7
Took it from a store	0.4	0.5

Source: Florida Department of Children and Families



## SUBSTANCE ABUSE

Use of both illegal and controlled substances is believed to be widespread in the Florida Keys, based on the number of arrests made on substance-related charges and data gathered from youth surveys.

The MCSO reported 155 substance-related charges made in 2015, counting only possessions for marijuana, cocaine, and other controlled substances. The number of narcotics investigations reported in Monroe has seen a significant decline each year since 2013: 422 in 2013, 381 in 2014 and 222 in 2015.

**Marijuana.** In 2015, the National Institutes of Health reported the results of a survey that showed daily use of marijuana among 10th and 12th graders nationwide at 3.5 percent and 6.0 percent respectively. These figures are both a decline from previous years. NIH also established a correlation between the rise in daily marijuana use and survey figures that showed fewer teens believing marijuana to pose any kind of serious health risk. Media reports in recent years have linked higher rates of marijuana use among youth to the higher cost of tobacco products, suggesting that more and more youth turn to marijuana because it is more affordable than cigarettes.

The MCSO reports that more than 100 charges of marijuana possession were made in 2015. In addition, the 2014 Florida Youth Substance Abuse Survey indicates that Monroe middle schoolers and Monroe high schoolers are exposed to and using marijuana at rates higher than statewide averages.

**Cocaine/crack cocaine.** Cocaine is a powerfully addictive central nervous system stimulant that is snorted, injected or smoked. Crack is cocaine hydrochloride powder that has been processed to form a rock crystal that is then usually smoked. According to the National Institute on Drug Abuse (NIDA), cocaine increases body temperature, blood pressure and heart rate and can bring on heart attack, respiratory failure, strokes, seizures, abdominal pain, nausea and even death (on first use or unexpectedly afterward). The MCSO reports that more than 29 charges of cocaine possession were made in 2015, down from 61 charges in 2014.

**Club drugs.** Drugs such as ecstasy, methamphetamine, LSD, GHB and ketamine are known as “club drugs” because they are typically used at nightclubs, bars, concerts and parties. NIDA reports that while club drugs can induce feelings of detachment and sedation, they can also cause delirium, amnesia, seizures and coma and can be lethal if mixed with alcohol. Ecstasy can interfere with the body’s ability to regulate temperature. Methamphetamine can produce irregular heartbeat and induce violent behavior, anxiety and confusion. LSD can increase body temperature, heart rate and blood pressure and interfere with sleep and appetite.

**Florida Youth Substance Abuse Survey, 2014**

	Percentage of youth who reported having used various drugs <u>in their lifetimes</u>				Percentage of youth who reported having used various drugs <u>in the past 30 days</u>			
	<i>Middle School (Monroe)</i>	<i>Middle School (Florida)</i>	<i>High School (Monroe)</i>	<i>High School (Florida)</i>	<i>Middle School (Monroe)</i>	<i>Middle School (Florida)</i>	<i>High School (Monroe)</i>	<i>High School (Florida)</i>
<b>Marijuana/Hashish</b>	10	8.4	39.7	33.4	4.9	4.2	23.6	18.6
<b>Synthetic Marijuana</b>	—	—	11.3	8.8	—	—	1.2	1.4
<b>Inhalants</b>	4.4	8.6	5.6	4.9	1.1	3.1	0.4	1.3
<b>Club Drugs</b>	0.6	1.1	8.8	4.5	0.4	0.3	2.1	1
<b>LSD/PCP/Mushrooms</b>	1.2	1.3	7.6	5.3	—	0.6	1.7	1.4
<b>Methamphetamine</b>	0.7	0.9	0.9	1.1	0.4	0.4	—	0.5
<b>Cocaine/Crack</b>	0.7	0.9	4.9	2.5	0.4	0.4	2.4	0.7
<b>Heroin</b>	0.5	0.6	1.5	0.7	0.4	0.3	0.6	0.3
<b>Depressants</b>	1.5	1.9	11.5	6.2	0.5	0.8	3.5	2.1
<b>Prescription Pain Relievers</b>	2	3	10.7	7.3	0.3	1.4	3.3	2.6
<b>Prescription Amphetamines</b>	0.3	1	8.7	5.1	—	0.5	2.7	1.7
<b>Steroids (w/o doctor’s orders)</b>	0.4	0.5	0.9	0.8	—	0.2	0.6	0.3
<b>Over-the-Counter Drugs</b>	2.3	3.4	11.1	6.1	1.1	1.6	3	2.4

Source: Florida Department of Children and Families

**Prescription drugs.** In December 2015, DOH reported that more than 26.2 million prescriptions for controlled substances — everything from opioids like Vicodin, Percocet and OxyContin to sedatives like Ambien and benzodiazepines like Xanax — had been written in Florida during that year alone.

DOH also reported in 2015 that there were 86 pharmacists in Monroe County, all of them licensed to fill prescriptions for controlled substances written by a physician.

In May 2017, Gov. Rick Scott signed an executive order declaring a statewide public health emergency that allows the state to draw more than \$27 million in federal funding for prevention, treatment and recovery support services.

DOH also tracked law enforcement activity related to prescribed controlled substances statewide during 2015, including 3,174 active investigations of potential criminal activity, 285 active investigations of potential fraud and 65 active investigations of theft.

The MCSO reports that 23 charges of possessing a controlled substance without a prescription were made in 2015. In most cases, it was not known how the substances were obtained.



In an effort to ensure prescription and over-the-counter medications that are expired or no longer needed do not make it into the wrong hands, the MCSO will dispose of them in a safe and environmentally friendly manner.

Medications can be dropped at any MCSO location across the Florida Keys. The MCSO also takes calls to pick up medications: (305) 289-2351.

## SEXUAL PRACTICES

DOH-Monroe tracks cases of sexually transmitted diseases (STDs), including HIV, chlamydia, gonorrhea and syphilis. Health care partners in the Keys must report to DOH-Monroe any encounters with any of these four diseases.

In addition to tracking STD cases, DOH-Monroe and its partners offer testing and education across the Florida Keys. In 2015, registered testing sites reported giving more than 1,500 rapid HIV tests countywide. To help promote safer sex practices, DOH-Monroe also distributes more than 500,000 condoms free to the public every year at more than 175 sites.

**HIV/AIDS.** HIV (human immunodeficiency virus), a virus that can progress to AIDS (Acquired Immune Deficiency Syndrome), destroys blood cells that fight diseases.

In 2014, DOH reported 4,613 people newly diagnosed with HIV and 2,370 people newly diagnosed with AIDS statewide. Approximately 71 percent of the 109,969 people living with HIV or AIDS through 2014 (78,124 people) were in care, while the rest (31,845 people) were not in care.

In Monroe County, 17 people were newly diagnosed with HIV and 5 people were newly diagnosed with AIDS in 2015. Approximately 64 percent of the 658 people living with HIV or AIDS through 2014 (421 people) were in care, while the rest (237 people) were not in care. Monroe County saw 15 new cases of HIV on average each year between 2012 and 2014. The greatest number in one year was 21 cases (2012); the least number in one year was 9 cases (2013).

The CDC reports that about 30 percent of those receiving HIV treatment nationwide have complete viral suppression.

DOH-Monroe, which oversees federal funding (Ryan White) for health programs targeting the HIV/AIDS population, runs a clinic in Key West in line with the “treatment is prevention” philosophy. Clinic nurses and physicians see more than 300 HIV/AIDS clients on a routine basis. Dr. Mark Whiteside, DOH-Monroe medical director and leading specialist in the field of HIV/AIDS, has noted that the majority of clinic clients have the disease under control. Whiteside reports that 85 percent of DOH-Monroe clients are on HAART; of these, 95 percent are HIV undetectable.

DOH-Monroe and its partners have initiated an aggressive “Test and Treat” program. Pre-exposure Prophylaxis (e.g., Truvada), aka PrEP, is now considered for people at very high risk for HIV infection.

While DOH-Monroe tends to the clinical needs of HIV/AIDS clients, A.H. Monroe helps clients in need of housing, food, transportation, dental care and alcohol and substance abuse treatment.

### POSITIVE SPINS ON HIV

- HIV has been controllable since the 1990s due to highly active antiretroviral therapy (HAART).
- Disease and death can be reduced by 80 percent in persons living with HIV/AIDS (far better than any other field of medicine).
- The majority of HIV patients whose disease is under control can expect to reach nearly full life expectancy.
- Patients on HAART with an undetectable viral load are extremely unlikely to transmit HIV. The philosophy is “treatment as prevention”: If patients with HIV are identified and treated, there should be little transmission within the community.
- Florida tests all pregnant women for HIV and treats them. This has reduced mother-to-infant transmission to 1 per 100 cases....a prevention success story!
- About 85 percent of Keys clients are on HAART; 95 percent of them are undetectable for the virus.



*Dr. Mark Whiteside  
Medical Director  
DOH-Monroe*

**Chlamydia.** DOH reports that chlamydia infections are widespread across the state and continue to rise annually. Almost 78,000 cases were reported statewide in 2012, the largest number reported in any year since reporting became law in 1993. Chlamydia accounted for 76 percent of all reportable STDs that same year.

In Monroe County, an average of 137 new cases of chlamydia were reported each year between 2008 and 2014. The greatest number in one year was 168 cases (2014); the least number in one year was 107 cases (2008).

Most people who have chlamydia do not know they have it since the disease often has no symptoms. Sexually active females under age 25 should be tested for chlamydia every year. Although chlamydia is easy to cure, it can affect a woman's ability to have children if left untreated.

**Gonorrhea.** Despite recent decreases in the number of gonorrhea cases overall, DOH notes that the emerging threat of antimicrobial resistance and increases among subpopulations across the state are still a concern.

In 2014, 20,600 cases of gonorrhea were reported statewide.

In Monroe County, an average of 22 new cases of gonorrhea were reported each year between 2008 and 2014. The greatest number in one year was 40 cases (2013); the least number in one year was 15 cases (2008).

Anyone who is sexually active can get gonorrhea, a disease that can affect the anus, eyes, mouth, genitals or throat. Symptoms in men and women can vary, depending on what part of the body is infected. Gonorrhea can affect a woman's ability to have children if left untreated.

**Syphilis.** According to DOH, 4,142 cases of "early syphilis" – that is, cases in which the signs or symptoms of the disease occur within a year of diagnosis – were reported statewide in 2011.

In Monroe County, an average of 4 new cases of "early syphilis" were reported each year between 2008 and 2011. The greatest number in one year was 5 cases (2011); the least number in one year was 3 cases (2008 and 2010).

DOH reported an average of 15 new cases of syphilis – early syphilis, late syphilis and infectious syphilis – each year in Monroe County between 2008 and 2011. The greatest number in one year was 18 cases (2008); the least number in one year was 12 cases (2011).

## SCREENINGS

Health screenings are invaluable tools for detecting and treating disease at any stage and even saving lives.

Not receiving recommended screenings can put an individual and/or the community at large at risk.

Statistics indicate that Monroe County percentages lag behind statewide averages in several screening areas.

**Physical exams.** Physical exams can stop problems before they start, according to the CDC, and improve chances for treatment and cure should problems be found. Annual physicals can improve a person's chances for a longer and healthier life. The CDC adds that age, family history, lifestyle choices and overall health can impact how often you should have a physical. For example, annual lung cancer screenings (chest X-ray) are recommended, especially for anyone who smokes.

**Dental exams.** Routine dental checkups are important in the fight against tooth decay, gum disease and oral cancers.

According to the CDC, more than 17 percent of children and young adults ages 5-19 nationwide in 2011-2012 had untreated cavities.

In addition, the CDC notes, only 83.0 percent of children and young adults ages 2-17 nationwide in 2014 had visited the dentist within the previous year.

The CDC recommends that a child's preventive dental program include fluoride, twice-daily brushing, wise food choices and regular dental care. Since 2009, the Rural

Health Network of Monroe County has successfully run a dental sealant program which helps ensure that chewing surfaces on the back teeth of children are protected with plastic coatings. The CDC reports that approximately 27.4 percent of adults nationwide in 2011-2012 had untreated cavities. In addition, only 62.0 percent of adults ages 18-64 and 62.4 percent of adults ages 65 and over nationwide in 2011-2012 had visited the dentist within the previous year. In a study conducted in 2010, DOH reported that approximately 16.9 percent of adults in Monroe County said that they could not visit the dentist within the previous year due to cost.

## Health Screenings for Adults

	Year(s)	Monroe	State
		<i>percentages</i>	
<b>Dental exam within past year</b>	2010	71.5	64.7
<b>Cholesterol: Adults checked within past five years</b>	2013	76.9	79.5
<b>Colorectal Cancer: Adults 50+ who received a sigmoidoscopy or colonoscopy within past five years</b>	2013	55.2	55.3
<b>Colorectal Cancer: Adults 50+ who received a blood stool test within past year</b>	2013	12.1	13.9
<b>Mammogram: Women 40+ who received a mammogram within past year</b>	2013	49.9	57.5
<b>Cervical Cancer: Women 18+ who received a Pap test within past year</b>	2013	50.9	51.4

Source: DOH

**Cancer.** In November 2015, the Jay Weiss Institute for Health Equity at the University of Miami’s Miller School of Medicine published a report profiling cancer’s impact on Monroe County. The report includes data from the Florida Cancer Data System that shows that Keys residents are being diagnosed at late stages for certain forms of cancer. In the cases of breast, cervical, lung, skin (melanoma), oral and prostate cancers, data shows that Keys residents are being diagnosed at late stages at higher averages than statewide averages.

**Colorectal cancer.** According to the CDC, colorectal cancer is the second leading cancer killer in the United States. In 2012, 51,516 of the 134,787 people in the United States who were diagnosed with colorectal cancer (roughly 38 percent) died from the disease. Colorectal cancer almost always develops from precancerous abnormal growths in the colon or rectum. The CDC highly recommends screening for colorectal cancer, as detecting the disease early can lead to more effective treatment. If everyone age 50 and over had regular screenings, the CDC notes, at least 60 percent of deaths from this cancer could be avoided. Screening types include blood stool testing (annually), sigmoidoscopy (every 5 years) or colonoscopy (every 10 years).

More than 40,000 residents in Monroe County (about 52 percent of the county’s total population) are age 50 and over.

**Breast cancer.** Breast cancer is the second most common cancer (behind skin cancer) among women. The CDC reports that 41,150 of the 224,147 women diagnosed with breast cancer in the United States in 2012 (roughly 18 percent) died from the disease. There are three types of screening for breast cancer: mammogram or X-ray of the breast; clinical breast exam, where a doctor or nurse feels for lumps or other changes in the breast; and breast self-exam, where the woman checks her own breast for lumps, changes in size or shape or any other changes in the breast or underarm. Although the CDC recommends that women as early as age 40 talk to their doctors about when and how often they should have a mammogram, the CDC suggests that women ages 50-74 schedule a routine mammogram every two years. (Any woman of any age who is at higher risk of breast cancer due to genetic or lifestyle factors should talk to her doctor about routine breast exams and mammograms.)

According to DOH, Monroe County is approximately 10 percentage points behind statewide averages on the number of women over age 40 who have had a mammogram within the past year. Due to these rates falling behind the state level, the DOH has labeled Monroe with a health status of “least favorable” regarding breast cancer screenings.

**Cervical cancer.** Each year, about 12,000 women in the United States are diagnosed with cervical cancer. The CDC notes that cervical cancer is highly preventable through screenings and vaccination against the *human papillomavirus* (HPV), a relatively common sexually transmitted disease that can develop into cervical cancer. Screenings include the Pap test (recommended for all women ages 21-65) and the HPV test.

In addition to the cervical cancer screening rates in the Florida Keys falling behind statewide averages, DOH lists the county’s cervical cancer incidence and death rates as being among some of the “least favorable” in the state, with the screening rates being listed “average” and nearing “least favorable.”

**Melanoma.** Skin cancer is the most common form of cancer in the United States. While basal cell and squamous cell skin cancers are curable, the CDC notes, melanoma is more dangerous.

Up to 90 percent of melanomas are caused by ultraviolet light — that is, light from the sun, tanning beds and sunlamps.

According to DOH, Monroe County experienced almost twice as many deaths due to melanoma on average than statewide averages between 2009 and 2011 (5.7 per 100,000 people versus 2.9 per 100,000 people). However, the death rate due to melanoma in the Keys has reportedly been on the decline in recent years: Between 2012 and 2014, the average number of deaths was 2.5 per 100,000 people in Monroe versus 2.9 per 100,000 people in Florida overall.

However, the incidence of melanoma in Monroe County was still vastly higher than statewide rates (36.7 per 100,000 versus 17.5 per 100,000) between 2010 and 2012.

**Heart disease.** Heart disease was the second leading cause of death (behind cancer) in Monroe County in 2014. Although men are typically at higher risk than women of developing heart disease, the risks increase for women after menopause. The CDC reports that the most common type of heart disease in the United States is coronary artery disease, which can cause heart attacks. Preventive measures include, but are not limited to: eating a healthy diet, maintaining a healthy weight, exercising regularly, quitting smoking and limiting alcohol use.

Screening for cholesterol, a fat-like substance that can build up in the body and cause heart disease and stroke, is another way to help minimize risk. DOH reported in 2013 that 76.9 percent of adults in Monroe County had received a cholesterol screening within the previous five years. The statewide rate was 79.3 percent.

Hypertension (high blood pressure) can also lead to heart disease and stroke, especially if untreated. DOH noted in 2013 that 30.2 percent of adults in the Florida Keys had been diagnosed with hypertension.

Percentage of Cancers Diagnosed at Late Stage, Monroe County and Florida, Annual Averages (2011-13)		
	Monroe	Florida
Bladder	21	25
Breast	43	35
Cervical	64	58
Colorectal	55	60
Lung	87	78
Melanoma	16	15
Non-Hodgkin’s Lymphoma	55	71
Oral	75	70
Prostate	22	16

Source: Florida Cancer Data System



## IMMUNIZATIONS

Immunizations are the best tools for preventing the introduction and spread of communicable diseases in populations. Not receiving recommended immunizations can pose health risks not only to an individual, but also to the community.

DOH-Monroe received more than \$573,000 in vaccines through the federally funded Vaccines For Children program between July 2011 and June 2012, which helped staff, among other things, meet the 2012 goal for immunizing 24-month-olds.

Throughout 2012, the department administered 15,133 childhood, adult and travel vaccinations at its clinics in Key West (9,219), the Middle Keys (2,898) and the Upper Keys (3,016).

The department has also launched several immunization campaigns, targeting diseases of particular concern at the national, state and local levels.

**Influenza.** DOH-Monroe typically runs flu shot clinics in Key West and the Middle and Upper Keys during flu season, which typically starts late September or early October, and publicizes flu shot services (both walk-in and by appointment). According to DOH, in 2013 the percentage of Keys adults who received a flu shot in the past year was higher than the statewide average (36.3 percent versus 30.7 percent). The 2014-2015 flu season was particularly active nationwide, with “mild” to “moderate” influenza-like illness activity reported in Monroe County from November 2014 through May 2015.

**Pneumonia.** Pneumococcal disease, including strep pneumonia, is a leading cause of death worldwide. In the United States alone, more people die of pneumococcal disease than all the other vaccine-preventable diseases combined. Safe and effective pneumonia vaccines are available for both children and adults and are particularly important for individuals with underlying disease.

According to DOH, six people in Monroe County succumbed to the disease in 2014.

**Pertussis.** In response to six confirmed cases of pertussis (aka, “whooping cough”) reported in the Florida Keys in 2011 and 2012, DOH-Monroe launched a campaign to ensure that adults who come in contact with infants receive a Tdap vaccination.

In addition to protecting against tetanus and diphtheria, a Tdap shot will prevent an adult from contracting pertussis and passing the disease to an infant. In response to these initiatives, Monroe County has seen a decline in cases of pertussis, recording only 1 case in 2014.

The department encourages a “cocooning” approach – that is, parents of newborns ensuring that any adult who comes in contact with the newborn be vaccinated so as to create a protective “cocoon” of pertussis-resistant individuals around the newborn. Infants can die from the violent coughing spasms that come with pertussis.

**HPV.** *Human papillomavirus* (HPV) is a relatively common sexually transmitted disease that can develop into certain anal, genital and head and neck cancers in both men and women. The department recommends that young men and women receive the three-shot series against HPV before they become sexually active to prevent the disease and the types of cancer that it can develop into later in life.

**Meningitis.** Meningococcal meningitis can develop when certain bacteria enter membranes covering the brain and spinal cord. Symptoms typically include fever, headache, stiff neck, nausea, increased sensitivity to light and confusion. It’s recommended that children receive the vaccine around age 12 and again at age 16 and that young adults bound for college receive the vaccine.

## MENTAL HEALTH

Mental health is directly linked to physical health: A person’s mental state can impact him/her physiologically or alter behavior that could put that person’s health and safety at risk.

For example, stress alone can increase blood pressure about 15 percent.

According to the CDC, certain levels of stress can help people develop the skills they need to adapt to new and potentially threatening situations throughout life. The benefits of stress diminish, however, when it is severe enough to overwhelm a person’s ability to cope effectively.

Mental health professionals encourage people who suffer from mental illness to build “resilience” to relieve stress.

Following is information on some of the more common mental illnesses that health care professionals in the Florida Keys diagnose and treat in adults, as well as statistics on mental health conditions observed in children and young adults.

**Depression.** More than 26 percent of the adult population in the United States is affected by depression. Americans are diagnosed with clinical depression every year. Depression takes different forms and can be mild or severe.

Causes range from genetics to hormones to serious adverse life events (job changes, divorce, death of a loved one, etc.). Some studies suggest that depression occurs twice as often in women as in men, due to hormonal changes linked to puberty, pregnancy and menopause.

Treatment of depression typically includes psychotherapy; antidepressant medications; and/or personal, marital and family therapies.

According to DOH data from 2013, approximately 16.1 percent of adults in Monroe County were told that they have had a depressive disorder sometime in their life. The Florida state average was 16.8 percent.

16

Approximate number per 100,000 population of Monroe County youth ages 12-18 who were hospitalized for self-inflicted injuries between 2012 and 2014

10

Approximate number per 100,000 population of Monroe County youth ages 12-18 who were hospitalized for eating disorders between 2012 and 2014

2

Approximate number per 100,000 population of Monroe County youth ages 12-18 who committed suicide between 2013 and 2015

78.2

Percentage of Monroe County middle schoolers who feel safe at school

84.8

Percentage of Monroe County high schoolers who feel safe at school

**Anxiety.** Although anxiety is a relatively common feeling, it becomes a problem when it interferes with everyday life. One form of anxiety is general anxiety disorder (GAD), which is thought to affect approximately 2 percent of the US population at any given time. GAD is characterized by excessive worry and anxiety occurring more days than not for at least six months. Symptoms of GAD include (but are not limited to): restlessness, fatigue, difficulty concentrating, muscle tension and sleep disturbance. Panic disorder, which can cause panic attacks, is another form of anxiety. It is also thought to affect approximately 2 percent of the US population at any given time.

**Children and young adults.** The Childhood & Adolescent Health Measurement Initiative reported in 2007 that approximately 11.2 percent of children and young adults ages 2-17 in Florida had been diagnosed with one or more of the following emotional, behavioral or developmental conditions:

- Attention deficit disorder/attention deficit hyperactivity disorder (ADD/ADHD)
- Anxiety
- Depression
- Oppositional defiant disorder (ODD)/conduct disorder
- Autism spectrum disorders
- Developmental delay
- Tourette's Syndrome

Of those children and young adults in Florida, 57.7 percent had received mental health treatment or counseling within the previous year (nationwide figure was 61.0 percent) and only 54.6 percent had health care coverage adequate to meet their needs (nationwide figure was 70.6 percent).

In addition to a school health services plan and school wellness policy that commit Monroe County schools to serving the mental health needs of all students, the school system has adopted an anti-bullying policy in the wake of nationwide reports on bullying as the cause of some children and young adults taking their own lives.

**Substance use.** Alcohol and drugs impact a person's mental health and could lead to behaviors that put that person's physical health and/or the health of others at risk. DOH "social and mental health" data shows how a person's state of mind can translate into serious and sometimes violent crime.

#### Social and Mental Health, Number of Cases (Monroe)/3-Year Rates per 100,000 Pop., (Monroe and Florida), 2013-15

	Cases	Monroe	Florida
Larceny	6,241	2,830.2	2,175.7
Burglary	1,483	672.5	627.7
Motor Vehicle Theft	479	217.2	190.0
Robbery	143	64.8	112.1

	Cases	Monroe	Florida
Domestic Violence	1,224	555.1	549.3
Aggravated Assault	887	402.2	306.0
Forcible Sex Offenses	123	55.8	52.5
Homicides	6	2.7	5.9

Color Boxes and Charts Source: DOH

## PREGNANCY AND BIRTH



### Resident Births (Location and Attendant), Monroe County, 2014

Hospital			Birth Center	Home Birth	
Physician MD/DO	Midwife CNM/LM	Other	Midwife LM	Midwife LM	Other
658	73	11	1	5	1

Source: DOH

The DOH Bureau of Vital Statistics reported 749 live births to Monroe County women in 2014.

Healthy Start, a free program for all pregnant women and women with infants under age 3, is run through DOH-Monroe in partnership with the FKHSC, which includes more than 20 partners in the community.

Healthy Start care coordinators help ensure that healthy babies are born into the community, especially through home visits and educational outreach focusing on childbirth, parenting, breastfeeding, smoking cessation and staying healthy between pregnancies.

The FKHSC also runs the Healthy Babies, Keys to Kids Safety and Education, Outreach and Advocacy programs.

Lower Keys Medical Center (Key West) is the only facility in the Florida Keys that has a labor and delivery unit. Many women in Key West and the Lower Keys deliver at LKMC.

Women in the Middle Keys either transport to LKMC to deliver or deliver at a hospital in Miami.

Most Upper Keys women transport to mainland Florida to deliver.

In 2014, 742 resident women of Monroe County delivered at hospitals in the Florida Keys or on mainland Florida. One resident woman delivered at a birthing center. The remainder delivered at other locations.

A total of 32 of the babies born in 2014 were born to teenage mothers. DOH-Monroe reports that Monroe County's rate of births to teenage mothers has always been recorded as low on average compared to the statewide rates, with the exception of 2013. Percentage of repeat births to teenage mothers ages 15-19 in Monroe County was also lower than the statewide average between 2012 and 2014 (11.9 percent versus 16.6 percent).

A total of 704 of the babies born in 2014 were born at a "healthy weight" (more than 2,500 grams or 5 pounds/8 ounces); 43 of these babies were born at an "unhealthy weight" (less than 2,500 grams).

As of 2015, the county has 9 obstetrician/gynecologists and two gynecologists.

## CHILD SAFETY AND CARE

As of February 2015, there are only seven pediatricians in Monroe County (four in Key West, one in Marathon and two in the Upper Keys).

WIC, a federally funded program that helps ensure that low-income women, infants and children have access to food, operates through DOH-Monroe in Key West and the Middle and Upper Keys. According to DOH, 26.6 percent of WIC children age 2 and above in Monroe County in 2014 were either overweight or at risk of becoming overweight (statewide rate was 26.7 percent).

Monroe County registered high rates of injuries and injury-related deaths in children ages 1-5 between 2012 and 2014, including accidental falls and poisonings, traumatic brain injuries, near drownings and injuries/deaths due to motor vehicle accidents.

### Injuries/Injury-Related Deaths, Ages 1-5, 2012-2014

Cause	Monroe	State
	per 100,000 ages 1-5 per year	
Deaths: unintentional injury	33.5	10.1
Hospitalizations: non-fatal unintentional injuries	154.2	151.3
Hospitalizations: near drownings	11.0	13.2
Traumatic brain injuries	44.1	37.9
Hospital/ER: non-fatal unintentional poisonings	363.5	401.7
Hospital/ER: non-fatal unintentional falls	6,422.1	5,049.0
Hospital/ER: non-fatal motor vehicle injuries	330.5	507.1
Children injured/killed in motor vehicle crashes	330.5	284.8

Source: DOH





1511 Truman Avenue, Key West, FL 33040  
Phone: (305) 294-4004  
Fax: (305) 294-6043  
Email: [croberts@womankindkeywest.org](mailto:croberts@womankindkeywest.org)  
Executive Director: Cali Roberts

**Agency:** Womankind

**Mission:** To provide high-quality family planning and primary health care to people of all income levels.

**Target Population:** Male and female residents ages 13 and up from Key West to Marathon who are medically underserved, low-income and uninsured.

**Clients Receiving Benefits (2016):** 1,968

**Cost of Services Provided for Reduced Fee or Free of Charge (2016):** \$310,036

**Services (portion):** annual gynecological exams and Pap smears, clinical breast exams, testing and treatment for sexually transmitted infections, screening for diabetes and heart disease, pregnancy testing, HIV testing and pre-/post-test counseling, teen services, menopausal counseling

**Highlight:** DOH has reported that the age-adjusted death rate due to breast cancer in Monroe County between 2012 and 2014 was 29.8 per 100,000 population. The statewide rate was 20.2 per 100,000. Womankind is the first and only place in Key West that offers free cervical and breast cancer treatment to women ages 50-64. This includes: cancer screening, surgery, chemotherapy and breast reconstruction. Services are made possible in collaboration with the state health office in Miami, Lower Keys Medical Center and 21st Century Oncology in Key West.

**Agency:** Healthy Start/DOH

**Mission:** To assist pregnant women, interconception women, infants and children up to age 3 to obtain the health care and social support needed to reduce the risks for poor maternal and child health outcomes.

**Target Population:** pregnant women, infants, children up to age 3

**Services (portion):** information, referral and ongoing care coordination and support to assure access to needed services; psychosocial, nutritional and smoking cessation counseling; childbirth, breastfeeding and substance abuse education; home visiting; interconception education and counseling

**Highlights:** The percentage of women statewide who are beginning prenatal care during the first trimester rose from 74.9 percent in 1991 to 79.4 percent in 2014. The infant mortality rate statewide has declined from 8.9 per 1,000 live births to 6.0 in 2014, with a decline in the black population from 16.3 in 1991 to 11.0 in 2014. Fewer teenagers statewide are having babies, with the rate of births to teens (ages 15-17) dropping from 45.3 per 1,000 in 1991 to 9.1 in 2014. The percentage of 2-year-olds statewide completing their immunizations rose from 63.2 percent in 1991 to 85.7 percent in 2014. The percentage of women statewide reporting tobacco use during pregnancy declined from 17 percent in 1991 to 6.4 percent in 2014.



1100 Simonton Street  
Key West, FL 33040  
Phone: (305) 809-5654  
Fax: (305) 809-5629



1100 Simonton Street  
Key West, FL 33040  
Phone: (305) 293-8424  
Fax: (305) 293-8542  
[www.keyshealthystart.org](http://www.keyshealthystart.org)

**Agency:** Florida Keys Healthy Start Coalition

**Mission:** To unite people and resources to improve the health and well-being of pregnant women, children and their families in Monroe County.

**Vision:** A community working together to provide access to quality care and resources for all pregnant women, infants and their families in the Florida Keys.

**Highlights:** The FKHSC, a 501(c)3 community-based organization, serves more than three-fourths of the approximately 750 babies born in Monroe County each year before, during and after pregnancy. The FKHSC is a prenatal and infant care coalition of private and public agencies, community-centered providers, local businesses and passionate individuals in Monroe County. The FKHSC runs four main programs: Healthy Start provides care coordination and educational opportunities to pregnant women and families with newborns and children up to 3 years old. Healthy Babies provides necessary prenatal care to families who are uninsured or underinsured. Keys to Kids Safety helps families keep their children safe while traveling in a car or on a bike and while sleeping, as well as in their home and in and around the water. The Education, Outreach and Advocacy program offers support for all families in the Keys, including transportation assistance, playgroups for children ages 0-5 and Perinatal Mood Anxiety Disorder support.

## SCHOOL HEALTH

Monroe County is home to more than 8,400 students grades Pre-K to 12 who attend classes on more than 20 public, charter and private school campuses across the Florida Keys.

**School Health Services Plan.** Monroe County Schools and DOH-Monroe work together to set and implement program standards that meet or exceed the requirements laid out in Florida law regarding school health.

**School Wellness Policy.** A school wellness policy is in effect, based on the eight components of coordinated school health that the CDC recommends. The policy lists goals specific to each component, including (but not limited to):

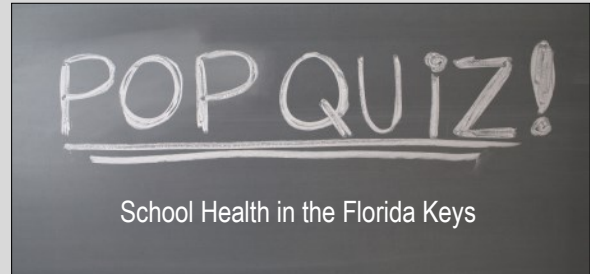
- School meals, to include breakfast, lunch and snacks/ refreshments, will offer varied and nutritious food choices that are consistent with current dietary guidelines, portion size and caloric content. Schools will serve food that is high in fiber and low in added fats, sugar and sodium. There will be no more than 35 percent of total calories from fat and 10 percent of total calories from saturated fat, including trans fat, and no more than 35 percent added sugar by weight.
- Items sold during fundraisers, used as rewards, provided during celebration or sold through vending machines on school property must be in compliance with school, district and state procedures and policies. Candy and high-sugar soda are strictly prohibited.
- High schools shall require 1 credit of physical education for graduation to include 1 year of Health Opportunities through Physical Education (HOPE), which shall be taken at the school.
- Middle school students (grades 6-8) will be required to take the equivalent of 1 class period per day of physical education for 1 semester of each year.
- Recess shall not serve as a replacement for physical education class.
- The district shall provide, as available, programs and services that support and value the mental health and social and emotional well-being of students, families and staff to build a healthy school environment.

**Anti-Bullying Policy.** The school district has adopted an anti-bullying policy that expresses a commitment to providing an educational setting that is safe, secure and free from harassment and bullying for all students and school employees.

**Tobacco-Free Campuses.** Monroe County Schools have adopted a comprehensive tobacco use policy, banning not just tobacco products but electronic nicotine dispensing systems (ENDS) on all school properties at all times.

**School Health Advisory Committee.** The SHAC includes members representing each of the eight components of coordinated school health that the CDC recommends, as well as the school health coordinator at DOH-Monroe.

The SHAC meets several times a year to, among other things, review the school health services plan, prepare and submit required documentation to the Monroe County School Board, hear schools-related concerns and discuss trends and projects regarding school health.



1. How many students (K-12) attend school in Monroe County?
2. On average, how many times does a student (K-12) visit his/her school clinic in a year?
3. Of the students who visit their school clinics, what percentage return to the classroom after his/her visit?
4. DOH specifies 13 conditions reported out of all student visits to Keys school clinics between 2013 and 2014. The following are the top five conditions reported. Draw a line between each condition and the number of times it was reported during that year.

Allergies (non-life-threatening)	522
Asthma	90
Attention Deficit/Hyperactivity Disorder	472
Seizure Disorder	834
Psychiatric	58

5. What is the nurse-to-student ratio in Monroe County?
6. What is the nurse-to-student ratio that the Department of Health and Human Services recommends?
7. Which two organizations provide the biggest pieces of funding to Monroe County school health services?
8. What is the average amount spent on school health per student each year in the Keys?

Answers:

- 1) 8,490;
- 2) 7.43;
- 3) 90.73%;
- 4) Allergies (non-life-threatening) 834, Attention-Deficit/Hyperactivity Disorder 522, Asthma 472, Psychiatric 90, Seizure Disorder 58;
- 5) 1 nurse to every 865 students;
- 6) 1 nurse to every 750 students;
- 7) Monroe County Schools and DOH-Monroe;
- 8) \$77.02.

Source: Monroe 2013-14 Summary of School Health Services, DOH

## COMMUNICABLE DISEASE

Communicable diseases are diseases that can be caught from another human being, an animal or the environment. Following is information on several groups of communicable diseases that public health officials in Monroe County monitor especially closely.

**Hepatitis.** Hepatitis attacks the liver. Although heavy alcohol use, toxins, some medications and certain medical conditions can cause hepatitis, it is more often caused by a virus. Hepatitis A, Hepatitis B and Hepatitis C are the most common types.

Hepatitis A is spread by exposure to contaminated fecal matter from close person-to-person contact or contaminated food or drinks. People usually completely recover from Hepatitis A within a few months. There is a vaccine available to protect against this disease.

Hepatitis B is spread through contact with infectious blood, semen or other bodily fluids most often during sexual contact, by sharing contaminated needles or drug injection equipment or from an infected mother to newborn. Hepatitis B illness can last a few weeks or become chronic, leading to liver damage or liver cancer. There is a vaccine available to protect against this disease.

Hepatitis C is spread from contact with blood of an infected person, primarily through sharing contaminated needles or equipment used to inject drugs. It can also be passed through sexual contact. Hepatitis C usually is a long-term illness that can remain dormant for years before symptoms appear. It can lead to liver damage and liver cancer. There is no vaccine for Hepatitis C, but there are medications for treatment. Hepatitis C is on the rise nationwide among “baby boomers” (Americans born 1946-1964), especially those who have experimented with or used intravenous drugs.

Health officials recommend all infants receive Hepatitis A and B immunizations. In 2014, DOH-Monroe gave 987 Hepatitis A and B immunizations to adults. That same year, there were 11 reported cases of Chronic Hepatitis B, 106 cases of Chronic Hepatitis C and no cases of Hepatitis A in Monroe County.

**Tuberculosis.** TB is a bacterial disease that can attack any part of the body, most typically the lungs, and can be fatal if not treated properly. The disease is spread through the air, most often when a person with TB of the lungs or throat coughs or sneezes. There are two types of TB-related conditions: Latent TB infection means a person has TB in his/her body without being sick, while TB disease means TB is actively growing in a person’s body.

Many people who have latent TB infection never develop TB disease. For people whose immune systems are weak, the risk of developing TB disease is much higher. Three cases of TB were reported in Monroe County in 2015, two in 2014 and three in 2012.

### REPORTABLE DISEASES/CONDITIONS IN FLORIDA

DOH, 2014

*(partial list of diseases and health conditions that health care providers are required to report to public health authorities if/when encountered)*

- |  |  |  |
|--|--|--|
| • Any disease outbreak                       | • Hepatitis B, C, D, E and G                 | • Salmonellosis                                |
| • Acquired Immune Deficiency Syndrome (AIDS) | • Hepatitis B surface antigen*               | • Smallpox                                     |
| • Amebic encephalitis                        | • Herpes simplex virus in infants            | • Staphylococcus aureus                        |
| • Anthrax                                    | • Human Immunodeficiency Virus (HIV)         | • Staphylococcal enterotoxin B                 |
| • Arsenic Poisoning                          | • Human papillomavirus (HPV)                 | • Streptococcal disease                        |
| • Botulism                                   | • Influenza due to novel or pandemic strains | • Streptococcus pneumoniae                     |
| • Cancer*                                    | • Lead poisoning                             | • Syphilis                                     |
| • Carbon monoxide poisoning                  | • Lyme disease                               | • Tetanus                                      |
| • Chlamydia                                  | • Malaria                                    | • Toxoplasmosis (acute)                        |
| • Cholera                                    | • Measles                                    | • Trichinellosis (trichinosis)                 |
| • Ciguatera                                  | • Meningitis                                 | • Tuberculosis (TB)                            |
| • Conjunctivitis*                            | • Meningococcal disease                      | • Typhoid fever                                |
| • Creutzfeldt-Jakob disease                  | • Mercury poisoning                          | • Typhus fever                                 |
| • Dengue                                     | • Mumps                                      | • Varicella (chickenpox)                       |
| • Diphtheria                                 | • Neurotoxic shellfish poisoning             | • Venezuelan equine encephalitis virus disease |
| • Eastern equine encephalitis virus disease  | • Pertussis                                  | • Viral hemorrhagic fevers                     |
| • Encephalitis                               | • Pesticide-related illness and injury       | • West Nile virus disease                      |
| • Enteric disease due to e. coli             | • Plague                                     | • Western equine encephalitis virus disease    |
| • Gonorrhea                                  | • Q Fever                                    | • Yellow fever                                 |
| • Haemophilus influenzae*                    | • Rabies                                     |  |
| • Hansen's disease (leprosy)                 | • Rocky Mountain spotted fever               |  |
| • Hepatitis A                                | • Rubella                                    |  |
|  | • St. Louis encephalitis virus disease       |  |

\* designated certain types



# Florida Keys Mosquito Control: What's the buzz?



With a year-round tropical climate, hundreds of miles of coastline and plenty of vegetation, the Florida Keys is a natural for attracting mosquitoes. In fact, about 45 species of mosquitoes call Monroe County home.

The Florida Keys Mosquito Control District (FKMCD) is a world-class operation, with more than 100 employees operating on a \$10 million annual budget to fight mosquitoes living everywhere from backcountry marshes in the Upper, Middle and Lower Keys to the most densely populated neighborhoods of Old Town Key West.

In recent years, FKMCD has targeted two particular species of mosquito that can spread diseases introduced into a community.

*Aedes aegypti* (primary vector) and *Aedes albopictus* (secondary

vector) can transfer dengue, Zika virus, yellow fever and other diseases from infected individuals to those nearby who are uninfected.

The key to preventing this from occurring is to keep mosquito populations, in general, from growing out of control.

FKMCD's team works on the ground and the water and from the air to identify and treat potential mosquito breeding sites, primarily with nontoxic pellets dropped into water reservoirs to kill larvae and even special *gambusia* fish that feed on mosquito larvae.

FKMCD has partnered with DOH-Monroe on an educational campaign, as well, designed to encourage residents and business owners to drain standing water on property where mosquitoes like to breed.



[www.keysmosquito.org](http://www.keysmosquito.org)



**DRAIN**  
Drain standing water from garbage cans, house gutters, pool covers, coolers, toys, flower pots, trivets or any other containers where sprinkler or rain water has collected.

**DISCARD**  
Old tires, drums, bottles, cans, pots and pans, broken appliances and other items that aren't being used.

**EMPTY AND CLEAN**  
Birdbaths and pets' water bowls at least once or twice a week.

**PROTECT**  
Boats and vehicles from rain with tarps that don't accumulate water.

**MAINTAIN**  
The water balance (pool chemistry) of swimming pools. Empty plastic swimming pools when not in use.



**COVER YOUR SKIN WITH CLOTHING**  
If you must be outside when mosquitoes are active, cover up. Wear shoes, socks, long pants and long sleeves.

**REPELLENT**  
Apply mosquito repellent to bare skin and clothing. Always use repellents according to the label. Repellents with DEET, picaridin, oil of lemon eucalyptus and IR3535 are effective.

**COVER DOORS AND WINDOWS WITH SCREENS**  
Keep mosquitoes out of your house. Repair broken screens on windows, doors, porches and patios.

**Stop mosquitoes from living and multiplying around your home or business.**



293-7500



292-7190



**Mosquito-borne illnesses.** Dengue is one of many diseases that can be caught from the bite of an infected mosquito. Symptoms include: high fever, severe bone and head pain and rash.

In September 2009, Key West witnessed the first case of confirmed dengue acquired within the continental United States in many decades. To rally the community to play its part in preventing further spread of dengue, the Keys Action to Break the Cycle of Dengue (ABCD) partnership was formed. While Florida Keys Mosquito Control stepped up surveillance and control efforts, Keys ABCD encouraged the public to, among other things, wear mosquito repellents and eliminate standing water in and around properties where mosquitoes like to breed.

More than 90 people fell ill during the 15-month outbreak, all of them recovering fully.

In 2016, Zika virus took center stage across the state. DOH mounted a statewide monitoring and prevention campaign, tracking both travel-related and locally acquired cases of the disease.

## CHRONIC DISEASE

Chronic diseases are long-lasting and, in general, cannot be prevented by vaccines or cured by medications. Four common causes of chronic disease include: lack of physical activity, poor nutrition, tobacco use and excessive alcohol consumption. Following is information on two chronic diseases that public health officials in Monroe County monitor closely.

**Diabetes.** Diabetes, a chronic disease in which blood sugar levels are above normal, can cause serious health complications, including heart disease, blindness, kidney failure and amputation of lower limbs. Symptoms include: frequent urination, excessive thirst, unexplained weight loss, extreme hunger, sudden changes in vision, tingling or numbness in the hands or feet, fatigue and dry skin. There are three types of diabetes:

- Type 1 diabetes is most often diagnosed in children and accounts for about 5 percent of all diabetes diagnoses. Autoimmune, genetic and environmental factors can lead to this type of diabetes.
- Type 2 diabetes, also known as “adult onset diabetes,” may account for as much as 95 percent of all diabetes diagnoses. Risk factors include (but are not limited to): older age, obesity, family history of diabetes, physical inactivity and race.
- Gestational diabetes is diagnosed in pregnant women and most often linked to obesity or a family history of diabetes.

In 2013, approximately 6.6 percent of adults in Monroe County reported having been diagnosed with diabetes (statewide rate was 11.2 percent).

**Asthma.** Asthma, a chronic disease that affects the lungs, can cause repeated episodes of wheezing, breathlessness, tightness in the chest or early morning cough. The causes of and cures for asthma are unknown. Anyone diagnosed with asthma can control asthma attacks with prescribed medicines and inhalers and avoid common triggers of asthma attacks, including (but not limited to) tobacco smoke, dust mites, pets and mold.

Approximately 3.8 percent of the adult population in Monroe County had been diagnosed with asthma in 2013 (statewide rate was 8.3 percent). DOH also reported in 2010 that approximately 16.8 percent of middle schoolers and 18.5 percent of high schoolers in Monroe County reported that they had asthma.

## Chronic Disease Profile

	Year(s)	Monroe	State
		per 100,000 population	
Coronary Heart Disease			
Deaths	2012-14	90.3	100.9
Hospitalizations	2012-14	271.0	265.0
Stroke			
Deaths	2012-14	24.2	32.1
Hospitalizations	2012-14	174.7	215.5
Heart Failure			
Deaths	2012-14	7.1	10.6
Hospitalizations	2012-14	34.3	65.4
Lung Cancer			
Deaths	2012-14	40.2	43.4
Incidence	2012-14	68.9	58.0
Colorectal Cancer			
Deaths	2012-14	16.0	13.8
Incidence	2012-14	48.0	33.7
Breast Cancer			
Deaths	2012-14	29.8	20.2
Incidence	2010-12	111.0	90.4
Prostate Cancer			
Deaths	2012-14	19.1	17.5
Incidence	2010-12	102.6	114.6
Cervical Cancer			
Deaths	2012-14	3.7	2.9
Incidence	2010-12	10.3	6.1
Skin Cancer			
Deaths	2012-14	2.5	2.9
Incidence	2010-12	36.7	17.5
Chronic Lower Respiratory Diseases			
Deaths	2012-14	27.9	39.8
Hospitalizations	2012-14	199.2	300.1
Diabetes			
Deaths	2012-14	9.0	19.6
Hospitalizations	2012-14	1,243.6	1,909.1

Source: DOH

## INJURY

DOH injury prevention program staff define “injury” as “damage or harm caused to the structure or function of the body caused by an outside agent or force.” The program categorizes injuries as “unintentional” (accidental) or “intentional” and refers to agents or forces causing these injuries as the “external causes” of injuries.

Unintentional injuries are the leading cause of death of people ages 1-44 statewide and the fourth leading cause of death overall statewide (behind cancer, heart disease and chronic lower respiratory disease).

In 2014, 48 people in the Keys died from injuries (35 unintentional injuries and 13 suicides). The top five fatalities were due to: poisoning (11 total, including 9 unintentional and 2 suicides); firearms (7 total, all suicides); suffocation (7 total, including 3 unintentional and 4 suicides); drowning/submersion (5 total, all unintentional); and falls (4 total, all unintentional).

There is no major trauma center in the Florida Keys; therefore, severely injured patients must be airlifted to trauma centers on mainland Florida.

The CDC reports that injuries cost an estimated \$406 billion per year in medical expenses and lost productivity nationwide every year.

“Nearly 50 million injuries occur each year,” the CDC notes, “placing a staggering burden on the US health care system. State budgets share this burden through Medicaid, state employee health benefits, health care for the uninsured, child welfare services and lost tax revenue for the injured and their caregivers.”

**Poisoning.** In addition to 11 deaths, poisoning was the injury that sent 130 people to emergency rooms (including 84 unintentional and 31 self-inflicted) and landed 95 people in the hospital (including 45 unintentional and 43 self-inflicted).

**Violence.** The MCSO reported 261 charges of battery countywide during 2015, with 42 incidents of aggravated battery.

The agency also reported 5 charges of battery using a deadly weapon during 2015, including 1 charge involving use of a firearm.

With no state or local laws requiring that firearms be registered or licensed, it’s difficult to determine for public health purposes how many firearms there are in Monroe County. However, the Florida Department of Agriculture and Consumer Services reports that 5,445 licenses to carry concealed weapons (in vehicles or on person) were issued across the Florida Keys in 2013.

DOH reports that between 2012 and 2014 there were 253 reported counts of youth ages 5-11 who experienced child abuse in Monroe County (statewide count was 52,683).

The department also noted that the rate of violent acts in school grades K-12 in Monroe County in 2012 was 4 per 1,000 students (the Florida rate was 10.9).

**Falls.** In 2014, falls sent approximately 2,220 people to hospital emergency rooms across the Florida Keys. Many falls-prevention programs target the elderly, a growing segment of the population. Falls can also be attributed to, among other things, alcohol and substance use and mental illness.

**Drowning.** Monroe County is a popular destination for anyone who enjoys being in or on the water. In addition to thousands of miles of coastline, there are thousands of commercial and private pools across the Florida Keys. Drowning-related incidents killed 5 people in Monroe County in 2014.

**Traffic-related accidents.** Traffic-related accidents are a leading cause of injury in the county. In 2014, traffic-related accidents sent 653 vehicle drivers and passengers, motorcyclists, bicyclists and pedestrians to emergency rooms countywide. The figure accounts for roughly 8 percent of all injuries sustained in Monroe County that year.

The high number of traffic-related accidents can be linked to, among other things: higher rates of driving while intoxicated; large numbers of visitors navigating unfamiliar surroundings in and on rental cars, scooters and bikes; and accidents between population centers along the busy Overseas Highway.

In addition, a 2015 report citing data from the Florida Department of Highway Safety and Motor Vehicles and the University of Florida Bureau of Economic and Business Research listed Monroe County among the top 10 “urban priority counties” in the state when it comes to traffic accidents involving drivers over the age of 65.

### UNINTENTIONAL VS. INTENTIONAL

Injuries typically fall into one of two categories: unintentional (accidental) or intentional.

Examples include:

#### Unintentional

Motor vehicle accidents

Falls

Fires

Poisonings

Drowning

Suffocation

Choking

Animal bites

Recreational or sports-related activities

#### Intentional

Homicide

Assaults

Suicide and suicide attempts

Child abuse and neglect

Intimate partner violence

Elder abuse

Sexual assault

— DOH

*Injury due to falls sent more people to the emergency room in Monroe County during 2014 than any other injury. Other leading injuries that warranted emergency room visits that year:*

Falls	2,220
Struck By, Against	942
Overexertion	649
Motor Vehicle Accident	653
Cut, Pierce	601
Bite, Sting	359
Bicycle Accident	190
Poisoning	130
Motorcycle Accident	106

— DOH



# Helmets Key To Ensuring Health, Safety of Youngest Bicyclists

Traffic-related accidents are relatively common across the Florida Keys, many of them landing people in the hospital and some resulting in deaths.

In 2014, traffic-related accidents sent 653 vehicle drivers and passengers, motorcyclists, bicyclists, and pedestrians to emergency rooms countywide.

DOH reports that the number of fatalities due to traffic-related accidents was up from 14 in 2014 to 24 in 2015.

Many residents of Monroe County prefer bicycles as a primary means of transportation. In fact, DOH reports that about 7.8 percent of workers across the county even bike to work.

Biking in the Keys can be particularly risky, however, for a variety of reasons.

Riding bikes on or along the Overseas Highway between population centers can prove quite dangerous. Much of the highway is two-lane road with narrow shoulders and speed limits that vary up to 55 mph from one Mile Marker to the next.

Streets in urban areas, particularly Old Town Key West, can be very narrow and filled with larger SUVs and trucks that can squeeze moving bicyclists up against curbs.

In addition, the Keys is host to millions of tourists annually, many of whom rent cars, scooters and bikes without knowing local traffic laws or directions to popular tourist sites. A good number of traffic-related injuries — and even fatalities — involving bicyclists include tourists, either as drivers of vehicles or riders of bikes.

Florida Uniform Traffic Citation statistics indicate that more than 55 road violations in the Keys during 2015 involved bicyclists.

In an effort to help bicyclists across the Keys protect themselves, DOH-Monroe partnered with the Florida Pedestrian and Bicycle Safety Resource Center (FPBSRC) to launch an ongoing program in 2007 to educate children on the importance of bicycle safety and fit them with bicycle helmets at no cost.

The department has also partnered with the Florida Keys Health Start Coalition to expand the program to include toddlers.

DOH-Monroe identifies events where bicycle helmets can be distributed to youth ages 16 and under (Florida law requires anyone ages 16 and under to wear a helmet while riding a bike). Events include everything from health fairs to special children's festivals to bike rodeos.

The department contacts the FPBSRC to request the number of helmets needed to ensure every child at an event gets a helmet.

DOH-Monroe staff who have been trained and certified as bicycle helmet fitters will arrive at the event with the helmets, share safety tips with the children and their parents and then fit each child with a new helmet. According to DOH-Monroe, staff fit 322 helmets at 29 events between February 2015 and June 2016.

Each year, DOH-Monroe certifies new individuals to be helmet fitter trainers. Between 2016 and 2017, 62 new trainers were certified to be helmet fitters and represent DOH-Monroe's helmet and bicycle safety program.

## ON BICYCLE SAFETY IN THE KEYS



*As an orthopedic surgeon, I often recommend that my patients use a bicycle to exercise. The ability to get outdoors and enjoy the natural environment on a bicycle is a huge selling point for this vacation paradise we call home.*

*When I came to the Keys I was already aware that Key West was a great place to ride a bicycle. According to the U.S. Census, Key West has the second highest percentage of people who ride their bikes to work in the whole U.S.A. The sight of tourists and locals on bikes contributes to the special feel we all enjoy in the Keys.*

*However, I soon learned that this little slice of paradise can be one of the most dangerous places to ride. Key West and Monroe*

*County have the dubious honor of having the highest rate of bicycle fatalities in the state of Florida. Monroe County records an average of one bicycle fatality every year, and a recent study put Key West at the top of a list of 79 similar-sized cities in terms of bike fatalities.*

*There is no question that good bike safety infrastructure, such as dedicated bike lanes and controlling bike-car interactions can have a very positive impact on injury rates. I have no doubt that more dedicated bike lanes and car-free zones in Key West would have a positive impact on bike safety and bike usage.*

*Pedestrianized areas where only bikes and pedestrians are allowed would also be a huge attraction in Key West and encourage people to bike and walk instead of using cars. Just look at the enormous popularity of pedestrian-only areas in other touristic cities, such as Boston, New York, and all over Europe.*

**Dr. Henry DeGroot**  
Fellow of the American Academy of  
Orthopaedic Surgery

## ELDER CARE

As “baby boomers” (the generation of Americans born between 1946 and 1964) continue to enter their retirement years over the next decade, health care agencies and providers must address the increased demands for elder care services that will likely come with this population shift.

The Florida Department of Elder Affairs has designated the Alliance for Aging as the resource center for the aging population in Monroe County. Serving Health Insurance Needs of Elders (SHINE) is just one of many programs run through the alliance. SHINE volunteers provide free, confidential, unbiased one-on-one counseling on issues related to Medicare, Medicaid and health insurance matters.

**Assisted living.** Assisted living facilities typically offer assistance with everyday living, coordinate the services of outside health care providers and monitor resident activities to ensure health and safety.

Bayshore Manor, run through the Monroe County Community Services Division in Key West, is the only assisted living facility for elders in the Florida Keys. Services are available to county residents who are at least 60 years old, unable to live independently and do not require 24-hour nursing care. Bayshore Manor has 16 beds.

**Nursing homes.** Nursing homes are places of residence for people who experience difficulty with everyday living and require constant skilled nursing care.

Key West Health and Rehabilitation Center and Plantation Key Nursing Center (Tavernier) are the only two nursing homes in Monroe County. Key West Health and Rehabilitation Center and Plantation Key Nursing Center each has 120 beds.

## HOSPICE AND PALLIATIVE CARE

Hospice care (focusing on the physical, spiritual and emotional needs of those with life-limiting illnesses) and palliative care (focusing on the relief from pain and suffering that life-limiting illnesses can bring) are vital to helping those suffering life-limiting illnesses, as well as their loved ones, cope with end-of-life issues.

The Florida Hospice & Palliative Care Association lists 7 hospice care agencies serving the residents of Monroe County. Of the 7, only 3 have administrative offices in the Florida Keys (Visiting Nurse Association & Hospice of the Florida Keys in Key West, VITAS Innovative Hospice Care in Tavernier and Gentiva Health Services in Key Largo).

Visiting Nurse Association & Hospice of the Florida Keys offers home health, private duty and residence services in its commitment to helping clients maintain their sense of independence and remain in their residence of choice, with friends, family and pets at their side.

The agency provides skilled nursing care, counseling and support for those with life-limiting illnesses and their loved ones.

The agency also offers flu shots to the general public.

## DEATH

According to the DOH Bureau of Vital Statistics, a total of 780 Keys residents died in 2015.

The figure was up from 2014, a year when 691 Keys residents died.

The top five causes of death in Monroe County spanning all age groups in 2014 included:

- cancer (187 deaths)
- heart disease (154)
- “all other natural causes” (139)
- stroke (35)
- unintentional injury (35)

(Note: “All other natural causes” refers to deaths from diseases that did not make the top 25 list of causes of death.)

Other leading causes of death in Monroe for that year included chronic lower respiratory disease (28), Alzheimer’s disease (21) and chronic liver disease/cirrhosis (17).

**Under age 65.** Approximately 33 percent of all deaths in Monroe County in 2014 were among individuals under age 65.

When compared to averages in three other Florida counties with similar death rates (Jackson, Nassau and Columbia), Monroe was higher in percentage of deaths under age 65.

Cancer was the leading cause of death in people under age 65 in each of the four counties. Heart disease, unintentional injury and “all other natural causes” were listed as the second, third and fourth leading causes of death in people under age 65 in each of the four counties.

In Columbia, diabetes mellitus was the fifth leading cause of death in people under age 65.

In Jackson and Monroe, Chronic Liver Disease/Cirrhosis placed fifth.

In Nassau, the fifth leading cause of death in people under age 65 was suicide (15 suicides total, 14 under age 65).

The breakdown of suicides in Monroe County for all age categories that were reported in 2014 follows:

- 0 suicides ages <1-19
- 2 suicides ages 25-34
- 1 suicide ages 35-44
- 4 suicides ages 45-54
- 2 suicides ages 55-64
- 3 suicides ages 65-74
- 0 suicides ages 75-84
- 1 suicide ages 85+

#### Percentage of Total Deaths Under Age 65, 2014

	# Deaths Under Age 65	# Total Deaths (All Ages)	Percentage of Total Deaths Under Age 65
<b>Monroe</b>	228	691	33.0
<b>Jackson</b>	136	592	23.0
<b>Nassau</b>	214	756	28.3
<b>Columbia</b>	231	778	29.7

#### Top Five Causes of Death Under Age 65, 2014

<b>Monroe</b>	<b>Jackson</b>	<b>Nassau</b>	<b>Columbia</b>
Cancer	Cancer	Cancer	Cancer
Heart Disease	Heart Disease	Heart Disease	Heart Disease
All Other Natural Causes	All Other Natural Causes	Unintentional Injury	All Other Natural Causes
Unintentional Injury	Unintentional Injury	All Other Natural Causes	Unintentional Injury
Chronic Liver Disease/Cirrhosis	Chronic Liver Disease/Cirrhosis	Suicide	Diabetes Mellitus

#### Select Causes of Death Under Age 65, 2014

	<b>Monroe</b>	<b>Jackson</b>	<b>Nassau</b>	<b>Columbia</b>
<b>Cancer</b>	83	32	67	70
<b>Heart Diseases</b>	47	28	45	36
<b>Chronic Lower Respiratory Diseases</b>	2	7	13	10
<b>Unintentional Injury</b>	26	16	22	24
<b>Stroke</b>	8	0	3	12
<b>Diabetes Mellitus</b>	3	6	2	13
<b>Suicide</b>	9	3	14	11
<b>Chronic Liver Disease/Cirrhosis</b>	13	8	10	7
<b>Influenza and Pneumonia</b>	4	1	3	3
<b>Septicemia</b>	0	0	2	2
<b>Hypertension</b>	0	2	0	3
<b>Homicide</b>	0	1	6	3
<b>Human Immunodeficiency Virus</b>	1	0	0	1
<b>Perinatal Period Conditions</b>	1	1	2	4
<b>Viral Hepatitis</b>	2	1	4	3
<b>Congenital Malformations</b>	0	2	1	2
<b>All Other Natural Causes</b>	28	28	20	27
<b>All Other External Causes</b>	1	0	0	0
<b>TOTALS</b>	228	136	214	231

Charts Source: DOH



## FLORIDA DEPARTMENT OF HEALTH IN MONROE COUNTY

*DOH-Monroe is the branch of DOH that serves residents and visitors in the Florida Keys.*

### DOH-Monroe Mission

To protect, promote and improve the health of residents and visitors in Monroe County through integrated community, county and state efforts.

### DOH Mission

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

### DOH Vision

Healthiest state in the nation

### DOH Values

**Innovation:** We search for creative solutions and manage resources wisely.

**Collaboration:** We use teamwork to achieve common goals and solve problems.

**Accountability:** We perform with integrity and respect.

**Responsiveness:** We achieve our mission by serving our customers and engaging our partners.

**Excellence:** We promote quality outcomes through learning and continuous performance improvement.

## DOH-MONROE: PROGRAMS AND PARTNERSHIPS

DOH-Monroe has 70 full-time employees (including an administrative director and a medical director) and 25 part-time employees working at five sites from Key Largo to Key West. Revenues in FY2015-16 (July 2015-June 2016) were close to \$7.9 million.

**Clinical services.** The department runs three clinics, each with a nurse manager:

- Gato/HealthCareCenter (Key West)
- Ruth Ivins Center (Marathon)
- Roth Building (Tavernier)

**Prevention.** The department is active in the following prevention areas, offering testing, vaccinations and educational outreach:

- Immunizations (childhood, adult and travel)
- HIV/AIDS
- Tuberculosis
- Hepatitis
- Sexually transmitted diseases
- Tobacco health policies
- Wellness
- Injury

### DOH-Monroe Revenues, FY2015-16

Source	\$	Percent
Board of County Commissioners (health care tax)	1,165,070.00	14.82
Healthy Start Coalition Contract	271,392.25	3.45
Vital Statistics (fee for services)	77,470.17	0.99
Clinical Fees (fee for services)	507,672.22	6.46
Environmental Fees (fee for services)	802,817.62	10.22
Federal & State Grants, Misc. Fees, etc.	5,034,437.74	64.06
<b>TOTALS</b>	<b>7,858,860.00</b>	<b>100</b>

*Source: DOH-Monroe*

**Additional programs.** In addition to clinical services and prevention programs, the department runs the following: Healthy Start (pregnant women and newborns); Women, Infants and Children (nutrition); school health; vital statistics; and emergency management.

**Partnerships.** The department also oversees or participates in partnerships at the state and local levels, including (but not limited to) Tobacco-Free Florida Keys and the Florida Keys HIV Community Planning Partnership Prevention Committee.

## DOH-MONROE: ENVIRONMENTAL HEALTH

Environmental health is the study of health-related implications when human beings interact with the environment and the environment interacts with human beings.

DOH-Monroe's Community Health Services Division works with DOH and other state and local agencies to help ensure that the health of both human beings and the environment is protected. The division oversees more than a dozen established programs, covering everything from septic tanks to food hygiene to rabies surveillance. In addition to overseeing established programs, environmental health staff investigate nuisance complaints as they are taken from the public. There are environmental health offices in Key West, Marathon and Key Largo.

### Environmental Health Services, DOH-Monroe, 2016

Program	#Inspections	Facilities Inspected	#Facilities with Violations	Types of Violations Noted
<b>Septic System Abandonments</b>	3,269	properties connecting to the central sewer system	fewer than 10%	hole not completely filled, incomplete paperwork
<b>Biomedical Waste</b>	151	hospitals, clinics, physicians offices, dentists, etc.	60 (39.74%)	expired permit, incomplete training records, improper storage or labeling
<b>Food Hygiene</b>	215	bars/lounges, school cafeterias, fraternal and civic organizations, detention facilities	132 (61.40%)	improper holding or storage temperatures, mislabeled food containers, employee handwashing
<b>Public Pools and Spas</b>	906	public swimming pools and public spa pools	731 (80.68%)	handrail/ladder violation, tile and finish hazards, pool chemistry incorrect, no maintenance log
<b>Body Piercing Establishments</b>	7	body piercing businesses	4 (57.14%)	surface disinfection, customer records, sterilization equipment malfunctioning or improperly maintained
<b>Mobile Home and RV Parks</b>	167	mobile home and recreational vehicle parks	140 (83.83%)	backflow protection, plumbing violations, improper storage, vermin, lack of maintenance
<b>Tanning Salons</b>	4	tanning salons	1 (25%)	booth design and safety
<b>Beach Water Quality Testing</b>	286	11 public beaches across the Florida Keys	6 <2%	high bacterial counts
<b>Tattoo Parlors</b>	16 tattoo parlors 42 artists	tattoo parlors and tattoo artists	3 (23.08%)	expired licenses or operating permits, sterile requirements
<b>Group Care</b>	25	residential facilities within DOH jurisdiction	16 (64.0%)	improper chemical storage, noncompliant appliances

Source: DOH-Monroe

**Onsite sewage disposal.** Many Keys homes and businesses are not connected to central sewer systems; instead, they use septic tanks or onsite sewage treatment and disposal systems (OSTDS) regulated through DOH-Monroe.

As of December 2015, Florida statute protects the unique and fragile ecosystem of the Florida Keys by requiring that all new systems achieve high standards for treating wastewater using performance-based systems that are designed by a professional engineer licensed in the state of Florida. DOH-Monroe issues permits for the construction, installation, modification, abandonment or repair of OSTDS; conducts annual inspections; and requires annual operating permits for certain types of OSTDS.

**Pools and spas.** Florida statute defines a public pool as operated by or serving camps; churches; cities; counties; day care centers; group home facilities for eight or more clients; health spas; institutions; parks; state agencies; schools; subdivisions; or the cooperative living-type projects of five or more living units including apartments, boarding houses, hotels, mobile home parks, motels, RV parks and townhouses. Staff issue operating permits and conduct inspections of all public pools. Public pools are inspected twice a year for water quality and pool operations.

Inspectors look for the presence of required safety equipment, documentation of daily pool water quality tests and the proper operation of other equipment such as filters, pumps and disinfection feeders.

**Beach water testing.** Water samples from 11 beaches across the Keys are collected every other week, as part of the Florida Healthy Beaches program. Samples are transported to local laboratories, where they are analyzed for concentrations of bacteria and the presence of any microorganisms that could cause disease, infections or rashes. If high concentrations of bacteria are found in any of the samples, a health advisory for each affected beach is issued.

**Food hygiene.** The food hygiene program aims to reduce the occurrences of foodborne illness (often referred to as food poisoning). The division regulates only certain types of food service operations, including those located in institutional settings such as schools and jails; civic and fraternal organizations; theaters; bars and lounges that don't prepare food; and churches that serve the public. Each operator of a food service facility regulated through the division must maintain an annual operating permit. Division staff members conduct routine inspections of each facility. (The Florida Department of Business & Professional Regulation oversees commercial restaurants.)

**Biomedical waste.** Personnel inspect and permit facilities that generate, transport, store or treat biomedical waste through processes other than incineration. The objective of the biomedical waste program is to protect health care workers, environmental service staff, waste haulers and the general public from risks associated with potentially infectious biomedical waste.

**Body art and piercing.** Environmental health staff members inspect body art and piercing facilities to ensure that state laws regarding minimum sanitary and safety requirements are met.

**Mobile home parks.** The mobile home parks program aims to minimize the risk of injury and illness due to environmental factors in mobile home parks, lodging and recreational vehicle parks and recreational camps. Environmental health staff inspect these parks and camps twice a year, focusing on proper sewage disposal, safe drinking water, safe solid waste collection and disposal and effective insect and rodent control. Annual licenses are required for each park operating in the county.

**Rabies surveillance.** Officers investigate animal bites to prevent the spread of rabies. This disease is usually transmitted to humans when the virus is introduced into an open wound or abrasion of the skin or mucous membranes following exposure to the saliva of a rabid animal. Rabies is very rare in Monroe County.

## DOH-MONROE: PUBLIC HEALTH AND MEDICAL PREPAREDNESS PROGRAM

The Community Health Services Division also covers Public Health and Medical Preparedness. This program coordinates resources, develops plans and responds to emergencies. The program's mission is to ensure that Monroe County is prepared for, can respond to and recover from health-related needs during weather-related events, bioterrorism incidents, medical surge, mass fatalities and outbreaks of infectious disease as well as other public health emergencies.

Hurricane readiness and related sheltering activities is high on the list of priorities, with powerful storms typically appearing in and around Keys waters during hurricane season (June 1-November 30). DOH-Monroe collaborates with local emergency management to provide in-county and out-of-county special needs sheltering services. Those with special medical needs can preregister and get more information at: [www.tinyurl.com/monroesn](http://www.tinyurl.com/monroesn).

## HOSPITALS AND CLINICS

There are four hospitals in the Florida Keys:

- Lower Keys Medical Center (Key West)
- dePoo Medical Building (Key West)
- Fishermen's Community Hospital (Marathon)
- Mariners Hospital (Tavernier)

There are more than 40 public and private clinics throughout the Florida Keys offering a wide range of services and referrals to specialists and private health care providers in the community. Hospitals and other health care facilities in Monroe County licensed through the Agency for Health Care Administration can be found at:

[www.floridahealthfinder.gov/index.html](http://www.floridahealthfinder.gov/index.html)

## Health Resource Availability, Monroe County, 2014

*County Population: 75,208*

Providers	
Licensed Physicians	193
Licensed Family Practice Physicians	15
Licensed Internists	32
Licensed OB/GYN	7
Licensed Pediatricians	7
Licensed Dentists	42
Facilities	
Hospital Beds	267
Acute Care Beds	207
Specialty Beds	60
Nursing Home Beds	240

Source: U.S. Census/American Community Survey 2014, DOH





In 2013, DOH-Monroe published the Monroe County Community Health Improvement Plan (CHIP). The 95-page manual tracks select health statistics in each of the 25 census tracts from Ocean Reef to Key West.

Each tract — aka, microcommunity — is profiled in a double-page spread, with demographic and health statistics on the left and photos, maps, territorial descriptions and community partners on the right.

DOH-Monroe's Community Health Services Division has committed to educating and surveying residents of each microcommunity with the goal of getting a complete picture of the microcommunity's health care needs through collected data and resident input.

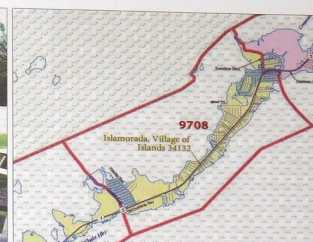
Staff started with Tract 9724, the microcommunity of Bahama Village. Research and community input eventually helped persuade the Key West City Commission to dedicate funding to refurbish two Bahama Village parks in the interest of promoting outdoor physical activity among youth and families.

Details of the Bahama Village effort are contained in the Monroe County CHIP.

In 2015, staff updated the microcommunity health profiles in a publication with details on specific findings in Tracts 9713 and 9712 — the microcommunities of West and Central Marathon.

In 2017, DOH-Monroe collected resident input for the remaining portion of the City of Marathon, Key Colony Beach and Stock Island. The results appear in the department's 2017 CHIP.

Staff plan to continue targeting specific microcommunities for research and community outreach in the coming months and years.



MILE  
8  
7

East Islamorada (Tract 9708) includes approximately 5.5 percent of the county population. On an annual basis, it is expected that there will be 5.9 asthma-related emergency room visits in the 0-17 year old group from this community.

**Photo:** Founders Park offers East Islamorada residents and visitors a wide variety of recreational activities on both land and sea, everything from basketball, tennis and volleyball to kayaking and sailing. Parks and recreation departments across the Florida Keys will play a role in CHIP's campaign to promote routine physical exercise as a means of preventing heart disease.

#### Health

- American Cancer Society/Florida Keys Unit
- Florida Department of Health in Monroe County
- Good Health Clinic
- Guidance Care Center
- Hospice/VNA
- Key Largo Health Center
- Mariners Hospital
- Plantation Key Nursing Center
- Tobacco-Free Florida Keys

#### Civic

- AARP
- Upper Keys Rotary
- Commerce
- Islamorada Chamber of Commerce
- Key Largo Chamber of Commerce

#### Education

- Florida Keys Community College
- Monroe County Schools

#### Law Enforcement

- Monroe County Sheriff's Office
- Local Government
- City of Laysan
- Laysan City Council
- Village of Islamorada
- Islamorada Village Council
- Monroe Board of County Commissioners
- Monroe County Government

#### Social Services

- AIDS/Help
- Alcoholics Anonymous
- Center for Independent Living
- Helpline
- MARC House
- Monroe County Coalition

- Monroe County Public Library
- Monroe County Social Services
- Monroe County Special Needs Services







**Florida Department of Health in Monroe County**  
1100 Simonton Street  
Key West, FL 33040  
(305) 293-7500  
[monroe.floridahealth.gov](http://monroe.floridahealth.gov)



# Florida Department of Health in Monroe County Locations and Services Summary

Main Line: (305) 293-7500  
Fax: (305) 809-5629

**Mailing Address:**  
Florida Department of Health in Monroe County  
P.O. Box 6193, Key West, FL 33041

Website: [Monroe.floridahealth.gov](http://Monroe.floridahealth.gov)  
Email: [DOHMonroe@flhealth.gov](mailto:DOHMonroe@flhealth.gov)

## **Healthiest Weight Florida Programs and Multigenerational Parks**

Gato Building  
(305) 809-5606

## **Community Health and Media Requests**

Gato Building  
(305) 809-5607

## **Administration**

Gato Building  
(305) 809-5611

## **HIV Patient Care**

Gato Building  
(305) 809-5280  
Ruth Ivins Center  
(305) 289-2708

## **AIDS Drug Assistance Program (ADAP)**

Gato Building  
(305) 809-5636 ; (305) 809-5693 (fax)

## **Emergency Preparedness**

Ruth Ivins Center  
(305) 289-2729

## **School Health and School Nurses**

(305) 809-5621

<b>Locations</b>	
<b>Lower Keys</b>	<b>Gato Building</b> 1100 Simonton Street Key West, FL 33040 Main: (305) 293-7500 Clinic: (305) 809-5280 Immunizations: (305) 809-5680  <b>Department of Juvenile Justice</b> Environmental Health 5503 College Rd. #208R Key West, FL 33040 (305) 809-5670
<b>Middle Keys</b>	<b>Ruth Ivins Center</b> 3333 Overseas Hwy. Marathon, FL 33050 (Mile Marker 48, Oceanside, next to Fishermen's Hospital) (305) 289-2708
<b>Upper Keys</b>	<b>Roth Building</b> 50 High Point Road Tavernier, FL 33070 (Mile Marker 88, Gulfside, next to Sheriff's Office substation) (305) 853-7400  <b>Murray Nelson Center</b> Environmental Health 102050 Overseas Hwy., Suite 202 Key Largo, FL 33037 (Mile Marker 102.5, Gulfside) (305) 453-8750



## Florida Department of Health in Monroe County Services Summary

Program	Services	Lower Keys	Middle Keys	Upper Keys
<b>Environmental Health</b>	beach water testing, food hygiene, indoor air quality, lead surveillance, sanitary nuisances, rabies, onsite sewage treatment (septic tanks) maintenance, tattoo and piercing parlor inspections, hazardous waste disposal, group care facilities inspections, public swimming pools, tanning facilities, mobile home parks and campgrounds, day care and foster care inspections	DJJ, Stock Island (305) 809-5670 (305) 809-5679 (fax)	Ruth Ivins Center (305) 289-2721 (305) 289-2479 (fax)	Murray Nelson Center (305) 453-8750 (305) 453-8759 (fax)
<b>Healthy Start</b>	education, and referral for pregnant women and their babies – up to age 3	Gato Building (305) 809-5654	Ruth Ivins Center (305) 289-2730	Roth Building (305) 809-5654
<b>Hepatitis</b>	screening, prevention, education	Gato Building (305) 809-5620	Ruth Ivins Center (305) 809-5620	Roth Building (305) 809-5620
<b>HIV/AIDS</b>	confidential screening, prevention, education, linkage to care	Gato Building (305) 809-5664 (305) 809-5665	Ruth Ivins Center (305) 289-2729	Roth Building (305) 853-7406
<b>Immunizations</b>	childhood, adult, travel	Gato Building (305) 809-5680	Ruth Ivins Center (305) 289-2708	Roth Building (305) 853-7400
<b>Family Planning</b>	Education, linkage to care	Gato Building (305) 809-5680	Ruth Ivins Center (305) 289-2708	Roth Building (305) 853-7400
<b>Sexually Transmitted Disease (STD)</b>	screening, prevention, education	Gato Building (305) 809-5618	Ruth Ivins Center (305) 809-5618	Roth Building (305) 809-5618
<b>Tobacco Prevention</b>	Students Working Against Tobacco (SWAT), Tobacco Free FL Keys, tobacco-free properties and worksites, and youth prevention	Gato Building (305) 809-5638	Ruth Ivins Center (305) 809-5638	Roth Building (305) 809-5638
<b>Tuberculosis (TB)</b>	screening, prevention, education	Gato Building (305) 809-5622	Ruth Ivins Center (305) 809-5622	Roth Building (305) 809-5622
<b>Vital Statistics</b>	birth certificates, death certificates	Gato Building (305) 809-5650	Ruth Ivins Center (305) 809-5650	Roth Building (305) 809-5650
<b>Women, Infants and Children (WIC)</b>	nutrition for women, infants and children	Gato Building (305) 809-5684	Ruth Ivins Center (305) 289-2718	Roth Building (305) 853-7402