

## The Costs of Underage Drinking in Florida

*Excerpted from Department of Children & Families commissioned study*

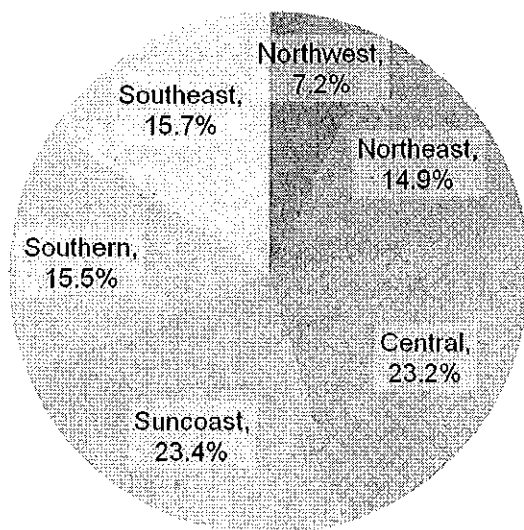
Underage drinking is a persistent public health problem that generates significant costs to society from alcohol-related consequences such as criminal activity/delinquency, antisocial behavior, academic difficulties, risky sexual behavior, health problems, unintentional injuries, and traffic crashes. Florida faces a particularly tough challenge in this regard as Florida youth have higher rates of alcohol use than the national average.

The total estimated cost of underage drinking in the state of Florida in 2007 was \$3.073 billion. This state-wide total translates into a cost of:

- \$165 per Florida resident
- \$627 per youth under the age of 21
- \$1,818 per youth 14-20 years of age

These costs were the result of approximately 180 youth deaths and 71,602 injuries and other events directly attributable to underage alcohol use.

**Economic Costs of Underage Drinking**  
 Drinking in Florida per Florida Resident, by Region



1,494 million

Violent Crime

642.7 million

Motor Vehicle Crashes

316.3 million

Property Crime

291.1 million

Risky Sexual Behavior

202.5 million

Other Injuries & Events

75.4 million

Fetal Alcohol Syndrome

48.3 million

Suicides & Suicide attempts

2.8 million

Alcohol Abuse Treatment

**\$3.1 Billion**

**Total Cost of Underage  
 Drinking in Florida**

The geographical distribution of the costs of underage drinking provides information on the areas in the state in which the consequences are most highly concentrated. Six counties accounted for more than half of the total estimated cost in the state: Miami-Dade, Broward, Orange, Palm Beach, Hillsborough, and Duval.

Counties located in the Suncoast and Central regions of the state generated the largest share of the total statewide cost. Costs per youth under the age of 21 and per youth between the ages of 14 and 20 are highest in the Suncoast region, averaging \$679 and \$2,021 per youth, respectively. The counties located in the Suncoast region are Charlotte, Collier, Desoto, Glades, Hendry, Hillsborough, Lee, Manatee, Pasco, Pinellas, and Sarasota.

### Economic Costs of Underage Drinking in Florida, by County\*

County	Total (in millions)	% of Total	County	Total (in millions)	% of Total	County	Total (in millions)	% of Total
Alachua	38.3	1.2	Hamilton	1.4	0.1	Okaloosa	23.7	0.77
Baker	5.3	0.2	Hardee	4.7	0	Okeechobee	7.5	0.24
Bay	31.4	1	Hendry	8.9	0.2	Orange	230.9	7.51
Bradford	4.3	0.1	Hernando	19.8	0.3	Osceola	40.4	1.32
Brevard	88.3	2.9	Highlands	14.3	0.6	Palm Beach	223	7.26
Broward	258.7	8.4	Hillsborough	205.1	0.5	Pasco	65.6	2.13
Calhoun	1.8	0.1	Holmes	2.5	6.7	Pinellas	161	5.24
Charlotte	20.8	0.7	Indian River	16.8	0.1	Polk	86.6	2.82
Citrus	14.9	0.5	Jackson	9.1	0.5	Putnam	20.2	0.66
Clay	22.3	0.7	Jefferson	2.9	0.3	Saint Johns	20.4	0.66
Collier	40.2	1.3	Lafayette	0.3	0.1	Saint Lucie	37.4	1.22
Columbia	12.1	0.4	Lake	33.7	0.01	Santa Rosa	19.2	0.63
Dade	460.6	15	Lee	93.9	1.1	Sarasota	54.4	1.77
Desoto	6.6	0.2	Leon	38.6	3.05	Seminole	48.2	1.57
Dixie	3.1	0.1	Levy	5.3	1.26	Sumter	7.6	0.25
Duval	207	6.7	Liberty	0.8	0.17	Suwannee	9.3	0.3
Escambia	65.8	2.1	Madison	3.2	0.03	Taylor	4.4	0.14
Flagler	10.4	0.3	Manatee	61.6	0.1	Union	1.3	0.04
Franklin	3	0.1	Marion	45	2.01	Volusia	72.7	2.37
Gadsden	7.1	0.2	Martin	17.3	1.46	Wakulla	3	0.1
Gilchrist	1.5	0	Monroe	15.4	0.56	Walton	6.8	0.22
Glades	1.3	0	Nassau	15.3	0.5	Washington	2.5	0.08
Gulf	3.3	.1						

\* Total estimates at the county level exclude alcohol dependence and abuse treatment costs.

All information excerpted from the 2009 "Economic Costs of Underage Drinking in Florida", Ioana Popovici, María E. Dávalos, Kathryn E. McCollister, Michael T. French.

For more information visit: <http://www.dcf.state.fl.us/mentalhealth/sa/prevention.shtml>

#### About Florida's State Epidemiology Workgroup (SEW)

Florida's SEW was established in June 2005 under funding from a federal Strategic Prevention Framework – State Incentive Grant (SPF-SIG). The SEW, which meets face-to-face on a semi-annual basis, is composed of members with expertise in epidemiologic data and/or drug policy drawn from a wide variety of state agencies, universities, and community-based organizations.



## Prescription Drug Abuse Trends in Florida

The illicit use of prescription pain medications is an issue that is emerging rapidly nationally and in Florida as a serious threat to health and wellbeing. SAMHSA reported in July 2008 that (intentional) misuse of prescription drugs is now second only to marijuana as the nation's most prevalent drug problem. The 2008 Florida Youth Substance Abuse Survey (FYSAS) reported that, among Florida adolescents, both lifetime and past-30-day prevalence rates for prescription pain relievers (8% and 3.2%, respectively) and depressants (6% and 2.1%, respectively) were higher than for all other illicit drugs, except marijuana and inhalants. This form of drug abuse is increasing at a faster rate than marijuana use.

- The non-medical use of prescription drugs has become an increasingly widespread and serious problem in this country; one that calls for immediate action.<sup>1</sup>
- Prescription drug abuse is skyrocketing, partly due to the growing number of "pill mills" where doctors write prescriptions for non-medical reasons.
- The intentional misuse of pain medications appears to be more prevalent in the northern part of Florida than in the southern regions. DCF Circuit 1 reported the highest rate of such use in the entire nation with 7.92 percent reporting such use.

Prescription pain killers—non-illicit opioids such as fentanyl, hydrocodone, and oxycodone are prominent among causes of drug deaths in Florida. These legal substances cause far more deaths annually in Florida than the single illicit opiate (heroin).

- The Medical Examiner district which is contiguous with DCF Circuit 14 has one of the highest death rates in the state; yet District 1, with a high rate of use, has a lower death rate.
- High death rates were also caused by these drugs in Palm Beach County, Duval and adjacent counties (Medical Examiner District 4), Pinellas County, Brevard County and a number of other more rural multi-county Medical Examiner districts. These drugs are often used in conjunction with illicit drugs and this polydrug use complicates attribution of cause of death to a specific substance.

### **Facts from the Field**

*Florida's Drug Epidemiology Networks*

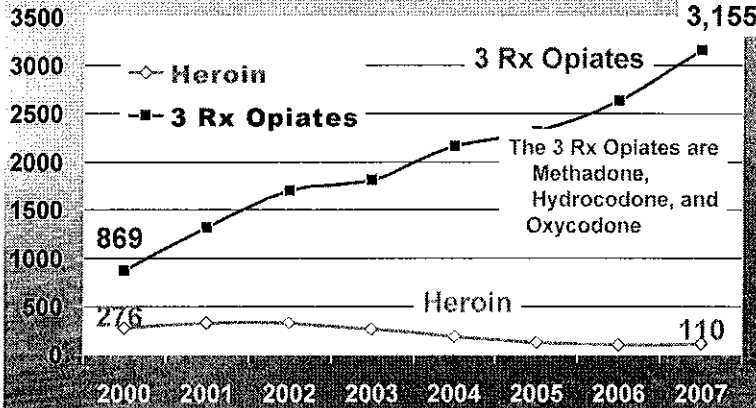
#### **Northeast Florida:**

- In Jacksonville, prescription narcotic analgesics specifically methadone, hydrocodone, and oxycodone, are the most commonly abused medications and are resulting in the most consequences such as deaths and emergency department visits.
- Jacksonville has a particularly acute problem with hydrocodone and have led the state in hydrocodone related and caused deaths in 2005, 2006, and in 2007.

#### **Southeast Florida:**

- In general, the consumption of prescription pain opioids such as methadone, hydrocodone and oxycodone over the past two years has declined 14% among Broward County residents ages 12 – 65+. Inversely, there has been a 14% increase in prescription pain opioid related deaths in 2007.
- Prescription benzodiazepines consumption rates have also decreased by 33% among Broward high school students. However, Rx benzodiazepines related deaths have increased by 9% in 2007.

## Opiate-Related Deaths in Florida 2000 - 2007



Source: FDLE Florida Medical Examiners Commission Reports 2000-2007

While heroin related deaths have decreased over time, there has been a sharp increase in opiate-related death between 2000-2007.

Deaths associated with the use of prescription narcotics are likely to result from a complex interplay of illicit experimentation with specific drugs, medical prescribing (overprescribing) of specific pain medications, addiction to pain killers from legitimate and illicit origins, and mixing of pain killers with other substances.

## Top 25 Dispensing Practitioners of Oxycodone in the U.S., January-June 2008

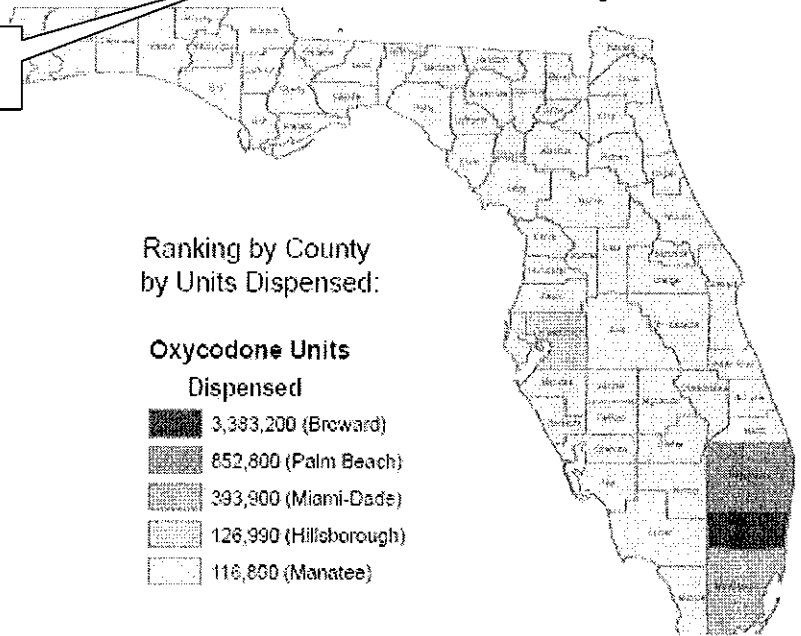
ALL are in Florida

The top 25 sellers of prescription pain medications, known by law enforcement as "pill mills," in the nation operate in Florida. All 25 dispensing practitioners are concentrated in 5 counties. Broward holds 68% of the top practitioners and 69.4% of the total units dispensed.

Ranking by County by Units Dispensed:

Oxycodone Units Dispensed

3,383,200 (Broward)
852,800 (Palm Beach)
393,900 (Miami-Dade)
126,990 (Hillsborough)
116,800 (Manatee)



1. Office of National Drug Control Policy. (2004). Press Release: U.S. Drug Prevention, Treatment, Enforcement Agencies Take on "Doctor Shoppers," "Pill Mills." Retrieved December 2008 from <http://www.whitehousedrugpolicy.gov/news/press04/030104.htm>

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For more information, visit: <http://ww3.med.miami.edu/tpeg/x55.xml>



## Adult and Underage Alcohol Use in Florida

Perhaps no other substance has as widespread consumption and acceptance in the United States as alcohol. It is the drug most used by adolescents today. Recent research show that those who begin drinking in their early teens are at greater risk of developing alcohol dependence at some point in their lives, more quickly and at younger ages, and of developing chronic, relapsing dependence (NIH News, 2006).

### Consumption of Alcohol

**Youth.** Of the students surveyed in Florida in 2008, 53.2% have used alcohol on at least one occasion in their lifetimes. Current use is substantially lower. Overall, 29.8% of surveyed Florida students reported the use of alcohol in the past 30 days.

Lifetime Prevalence	Grade Level		
	8 <sup>th</sup> grade	10 <sup>th</sup> grade	12 <sup>th</sup> grade
Alcohol	47.9	66.0	73.9
Cigarettes	23.7	33.1	40.3
Marijuana	15.2	29.8	38.0
Inhalants	15.1	10.6	8.6
Any Illicit drug other than marijuana	21.4	22.6	25.4

Source: 2008 Florida Youth Substance Abuse Survey

**Adults.** Data from the Behavioral Risk Factor Surveillance System (BRFSS) and the National Survey on Drug Use and Health (NSDUH) continue to show that alcohol consumption by adult Floridians is at or below the levels of the nation except among persons 65 or older, where 30 day use is substantially higher than the national average and binge drinking is slightly higher.

### Consequences of Alcohol Use

Florida reports a rate of alcohol related motor vehicle deaths per million miles traveled that is slightly higher than the national average. Similarly, Florida's three year age-adjusted death rate from chronic liver disease and cirrhosis is slightly above the national average. Among Florida counties, the highest rates of both of these fatal consequences occur in rural counties.

Data from Florida's Youth Substance Abuse Survey (FYSAS) and Youth Risk Behavior Survey (YBRS) show that high school students who began drinking before the age of 13 are at much greater risk than all other students of engaging in a variety of risky behaviors related to sexuality, use of illicit drugs, carrying weapons, etc. While the very early alcohol use may not be causal, it is at the very least a sign of a syndrome of youth behavior and family dynamics that places young people at very high risk of harm.

- **Females** ages 11 to 18 were more likely than males to report past 30 day alcohol use (30.6 percent vs. 29 percent) and lifetime use of alcohol (54.9 percent vs. 51.5 percent).
- **Males** ages 11 to 18 were more likely to report binge drinking, which is defined as having had five or more alcoholic drinks in a row in the past two weeks (15.6 percent vs. 14.0 percent).
- Among three broad categories of **ethnicity**, White, non-Hispanic youth (34.5%) were most likely to have reported past 30 day alcohol use followed by Hispanic (31.5%) and African American youth (20.1%).
- Overall in 2008, alcohol use increased with increasing age among Florida students:

	Age 11	Age 18
Lifetime Use	18.3%	73.2%
Past 30 Day Use	6.8%	47.9%
Binge Drinking	1.8%	29.8%

Source: 2008 Florida Youth Substance Abuse Survey

## Binge Drinking

Binge drinking rates in Florida's 2004 FYSAS were 12.5%, 21.6% and 27.9% respectively while rates for 2007 were 12.2% for eighth graders, 20.6% for tenth graders and 30.0% for 12th graders; Florida has seen a slight decrease since 2004 in binge drinking rates for younger adolescents, but a notable increase among 12th graders. About one-third of counties showed increases in binge drinking between 2004 and 2006, one-third showed decreases and one-third showed no change.

### *Consequences of Binge Drinking*

Episodic heavy drinking, often referred to in the prevention literature as "binge drinking," is operationally defined in the FYSAS survey as reporting consumption of 5 or more drinks in a row at least once in the past two weeks. The Centers for Disease Control and Prevention report that youth who drink alcohol are more likely to experience the following:

- School problems, such as higher absence and poor or failing grades
- Social problems, such as fighting and lack of participation in youth activities.
- Legal problems, such as arrest for driving or physically hurting someone while drunk.
- Physical problems, such as hangovers or illnesses.
- Unwanted, unplanned, and unprotected sexual activity.
- Disruption of normal growth and sexual development.
- Physical and sexual assault.
- Higher risk for suicide and homicide.
- Alcohol-related car crashes and other unintentional injuries, such as burns, falls, and drowning.
- Memory problems.
- Abuse of other drugs.
- Changes in brain development that may have life-long effects.
- Death from alcohol poisoning.

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