

**LEGISLATIVE #**

**100187**



# AN ASSESSMENT OF SMOKE-FREE SIGNAGE IN GAINESVILLE PUBLIC PARKS

Steven B. Pokorny, Ph.D.  
Director of Health Promotion  
[Steven\\_Pokorny@doh.state.fl.us](mailto:Steven_Pokorny@doh.state.fl.us)

# Who We Are



- Community partnership supported by the Alachua County Health Department and funded by the Florida Department of Health Bureau of Tobacco Prevention Program
- Our Mission: Foster collaborative initiatives to develop and promote *policies* that reduce the use and effects of tobacco

# Goals



To develop policies which:

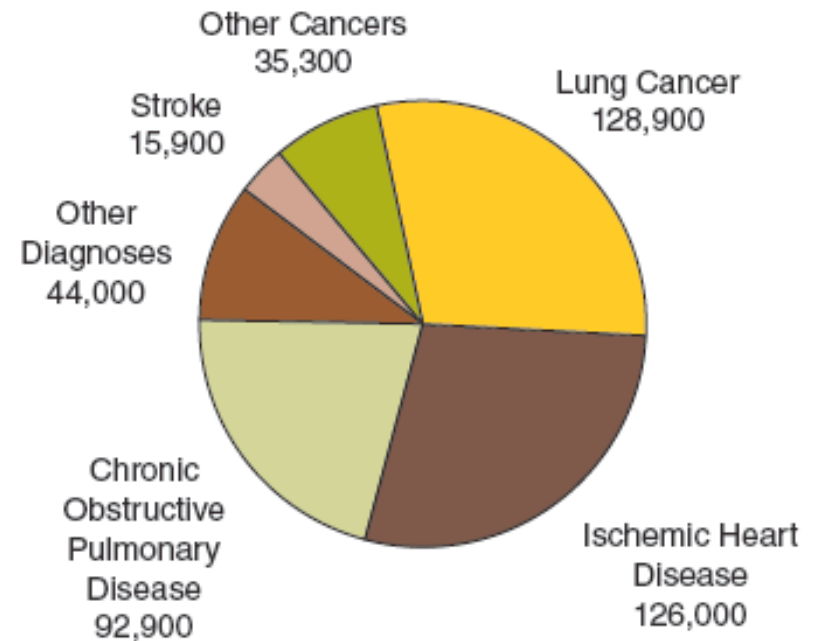
1. Prevent youth and young adults from starting to use tobacco products
2. Protect Alachua County citizens from involuntary exposure to secondhand smoke
3. Provide support for current tobacco users who want to quit

# Effects of Smoking



- Smoking is the most preventable cause of death in the United States
- The adverse health effects from cigarette smoking account for nearly 1 of every 5 deaths, in the US.

**About 443,000 U.S. Deaths Attributable Each Year to Cigarette Smoking\***



\* Average annual number of deaths, 2000–2004.  
Source: *MMWR* 2008;57(45):1226–1228.

# Smoking Affects Everyone



- **15.5%** of Alachua County residents classify themselves as smokers (State average 19.3%)
- **28,600** Florida adults die each year from their own smoking
- **\$6.32 billion** in annual Florida health care costs directly caused by smoking
- **\$583 per household** in state and federal taxes from smoking related government expenditures

# Goals



To develop policies which:

1. Prevent youth and young adults from starting to use tobacco products
- 2. Protect Alachua County citizens from involuntary exposure to secondhand smoke**
3. Provide support for current tobacco users who want to quit



**Mainstream smoke:** smoke that the smoker exhales.

**Sidestream Smoke:** smoke coming directly from the burning tobacco.



# Secondhand Smoke Contains

Over 4,000 chemical compounds

- **200** of which are known to be **poisonous**
- More than **50** of these are known to **cause cancer**

## Cadmium

a metal used in batteries

## Arsenic

a heavy metal toxin

## Ethylene oxide

a chemical used to sterilize medical devices

## Vinyl chloride

a toxic substance used in plastics manufacture

## Beryllium

a toxic metal

## Nickel

a metallic element

## Benzene

a chemical found in gasoline

## Chromium

a metallic element

## Polonium-210

a chemical element that gives off radiation

# Secondhand Smoke



- Nonsmokers inhale the same cancer-causing substances and poisons as smokers
- Even brief exposure can damage cells in ways that set the cancer process in motion
- longer durations of exposure and higher levels of exposure increase the risk of developing lung cancer.

# Secondhand Smoke



- Exposure has immediate adverse effects on the cardiovascular system and can cause coronary heart disease
- Causes an estimated 46,000 premature deaths from heart disease each year in the United States among nonsmokers

# Secondhand Smoke



- Exposure can have immediate adverse effects on your blood and blood vessels, increasing your risk of having a heart attack
- Communities that enact smoke-free policies have a decrease in hospital admissions for heart attacks
- Individuals with heart disease are at high-risk and should avoid even brief exposures

# Secondhand Smoke



- Exposure can cause serious health problems in children - Can trigger an asthma attack
- Children with asthma have more severe and frequent asthma attacks
- A severe asthma attack can put a child's life in danger

# Secondhand Smoke Exposure



- **16.4%** of Alachua County adult residents reported being exposed to secondhand smoke over the last 7 days (State average 14.9%)
- **43%** of Alachua County Middle School and **50%** of High School Students reported being exposed to secondhand smoke during the past 7 days (State average 47% and 54%)

# Secondhand Smoke



- **2,750** Florida adult nonsmokers die each year from exposure to secondhand smoke





# Our Study:





# Methods

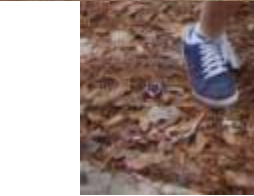


- A time series design was used to assess the impact of smoke-free signage in four parks
- Four parks were observed
- Control Observational Period (no signage), followed by an Intervention Observational Period (posted signage)

# Methods

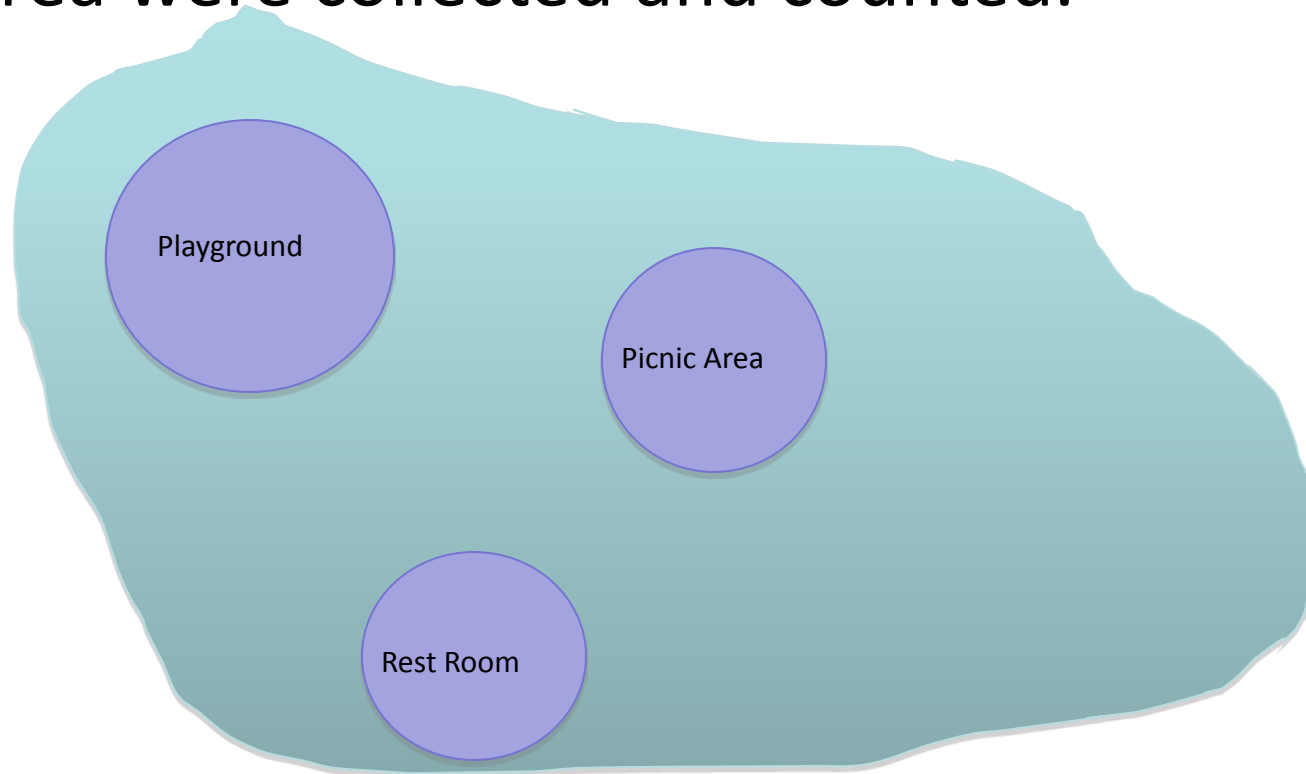


- The rate of smoking in the parks was measured by counting the number of discarded cigarette and cigarillo butts near selected park amenities (e.g., rest rooms, picnic pavilions, and playgrounds).



# Methods

- A 25 foot perimeter was measured around each amenity, and all cigarette and cigarillo butts within that area were collected and counted.





# Methods



- There were six observations completed before the smoke-free signage was installed, followed by six weeks of completed observations after the smoke-free signage was installed.

# Results



- After the smoke-free signage was installed, the average number of observed cigarette and cigarillo butts declined by nearly 50%

Parks	Before Signs		After Signs	
	Mean	SD	Mean	SD
All Parks	28.07	27.3	16.80	11.41

T(9)=2.00, p=.076



# Bo Diddley Plaza Observations



- Observed people's smoking behavior within four specific targeted areas for 5 minute intervals
- Difficult to establish stable trends of observed smoking
- Compared to evenings, Mid-day periods had higher rates of foot traffic and patrons who were smoking



# Bo Diddley Observations



- Prior to signs being installed
  - 72 people were observed in the plaza during two separate periods
  - 17 people were observed smoking (23.6%).
- After the signs were installed
  - 282 people were observed in the plaza during five separate periods
  - 46 were observed smoking (16.3%)

# Preliminary Survey Data



- Surveys were conducted over the past several months and administered by Tobacco Free Alachua Interns during the weekends usually around mid-afternoon
- 121 Surveys completed - assessed attitudes towards smoking restrictions, exposure to secondhand smoke and personal smoking behaviors

# Demographics



- 40% Male, 60% Female
- Ethnicity:
  - 107 Non Hispanic or Latino
  - 11 Hispanic or Latino
- Annual Total Household Income:
  - 64 were above \$38,597
  - 50 were below \$38,597
- 16 (13%) were current smokers

# Preliminary Survey Data



- 64% of survey respondents reported that they were exposed to secondhand smoke at our city parks
- 82% of survey respondents indicated that they were bothered by secondhand smoke

# Preliminary Survey Data



- 83% of survey respondents indicated that they **would support a city ordinance** that banned smoking in public parks