

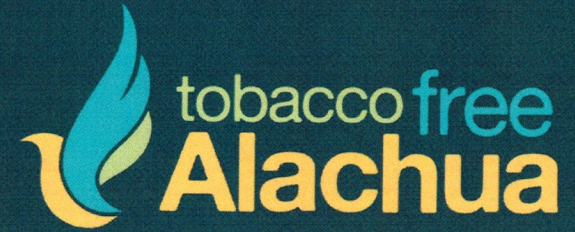


A tobacco-free environment for a  
healthier community

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

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# Comprehensive, Statewide Tobacco Prevention & Control Program



- Based on CDC Best Practice model
- Community-based intervention should create a social and legal climate **“in which tobacco becomes less desirable, less acceptable, and less accessible”**
- Counties are funded to create and maintain a sustainable community partnership that advocates for tobacco-control policies

# Who We Are



- Grant funded community partnership supported by the Alachua County Health Department and funded by the Florida Department of Health
- Our Mission: Foster collaborative initiatives to develop and promote ***policies*** that reduce the use and effects of tobacco
- Members include: Representatives from the local school board, healthcare organizations, law enforcement, county and city officials, and private citizens

# Goals



To develop policies which:

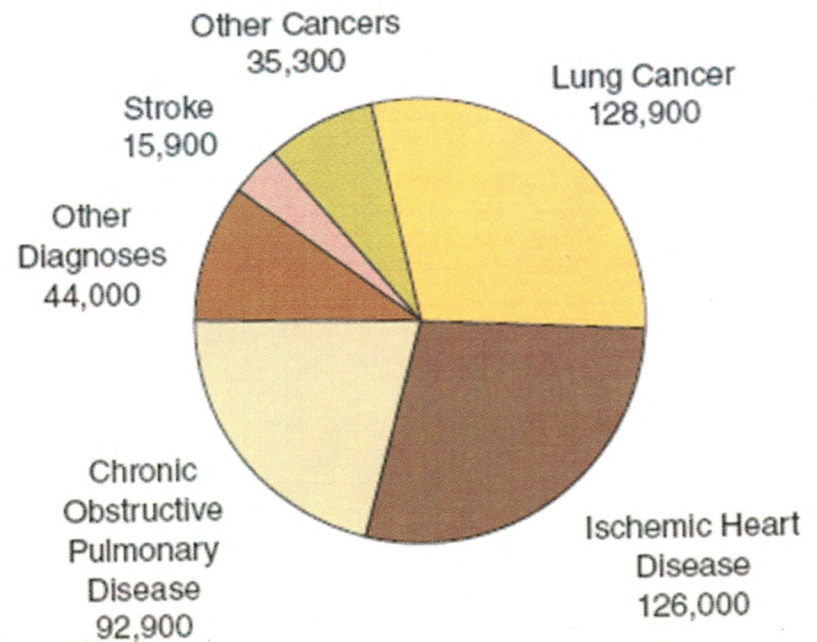
1. Prevent youth and young adults from starting to use tobacco products
2. Protect Alachua County citizens from involuntary exposure to secondhand smoke
3. Provide support for current tobacco users who want to quit

# 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



- Nonsmokers who are exposed to secondhand smoke inhale the same cancer-causing substances and poisons as smokers.
- Even brief secondhand smoke exposure can damage cells in ways that set the cancer process in motion.
- As with active smoking, the longer the duration and the higher the level of exposure to secondhand smoke, the greater the risk of developing lung cancer.

# 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

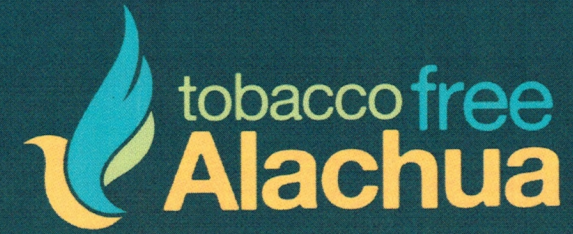
## Chromium

a metallic element

## Polonium-210

a chemical element that gives off radiation

# Secondhand Smoke



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

# Secondhand Smoke



- Breathing secondhand smoke can have immediate adverse effects on your blood and blood vessels, increasing the risk of having a heart attack.
- Communities that enact smoke-free policies have a decrease in hospital admissions for heart attacks.
- People who already have heart disease are at especially high risk of suffering adverse effects from breathing secondhand smoke and should take special precautions to avoid even brief exposures.

# Secondhand Smoke



- Secondhand smoke can cause serious health problems in children.
- Secondhand smoke can trigger an asthma attack in a child. Children with asthma who are around secondhand smoke have more severe and frequent asthma attacks. A severe asthma attack can put a child's life in danger.

# Secondhand Smoke Exposure



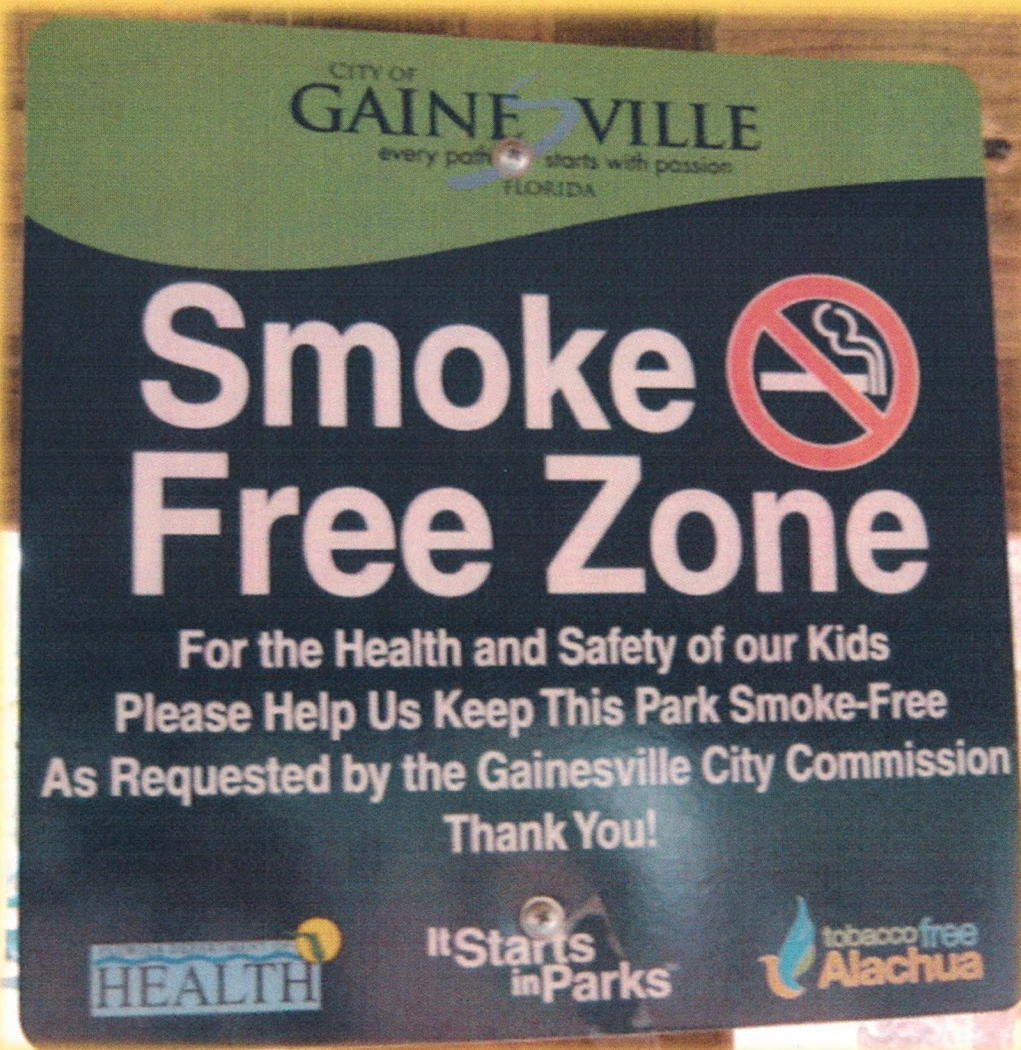
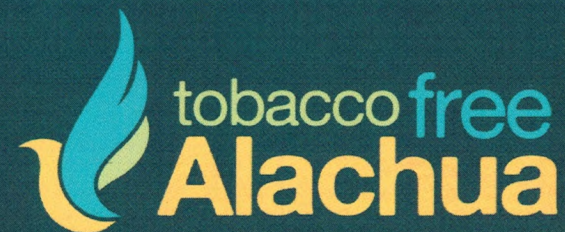
- **16.4%** of Alachua County adult residents reported being exposed to secondhand smoke over the last 7 days (State average 14.9%)
- **43%** of Alachua County Middle School and **50%** of High School Students reported being exposed to second hand smoke during the past 7 days

# Secondhand Smoke



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

# Our Study:





# Methods



- A time series quasi-experimental design was used to assess the impact of smoke-free signage in four parks.
- The four parks had a control observation period (no signage), which was followed by an intervention observation 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).

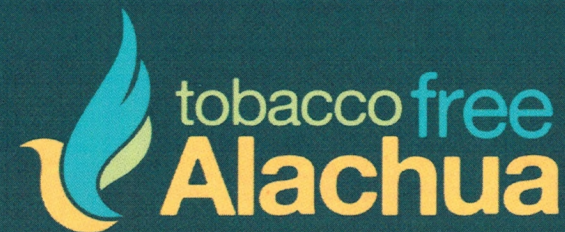


GAINESVILLE  
**Smoke Free**  
For the Health and Safety of our City  
Please Help Us Keep This Park Smoke-Free  
As Requested by the Gainesville City Commission  
Thank You!

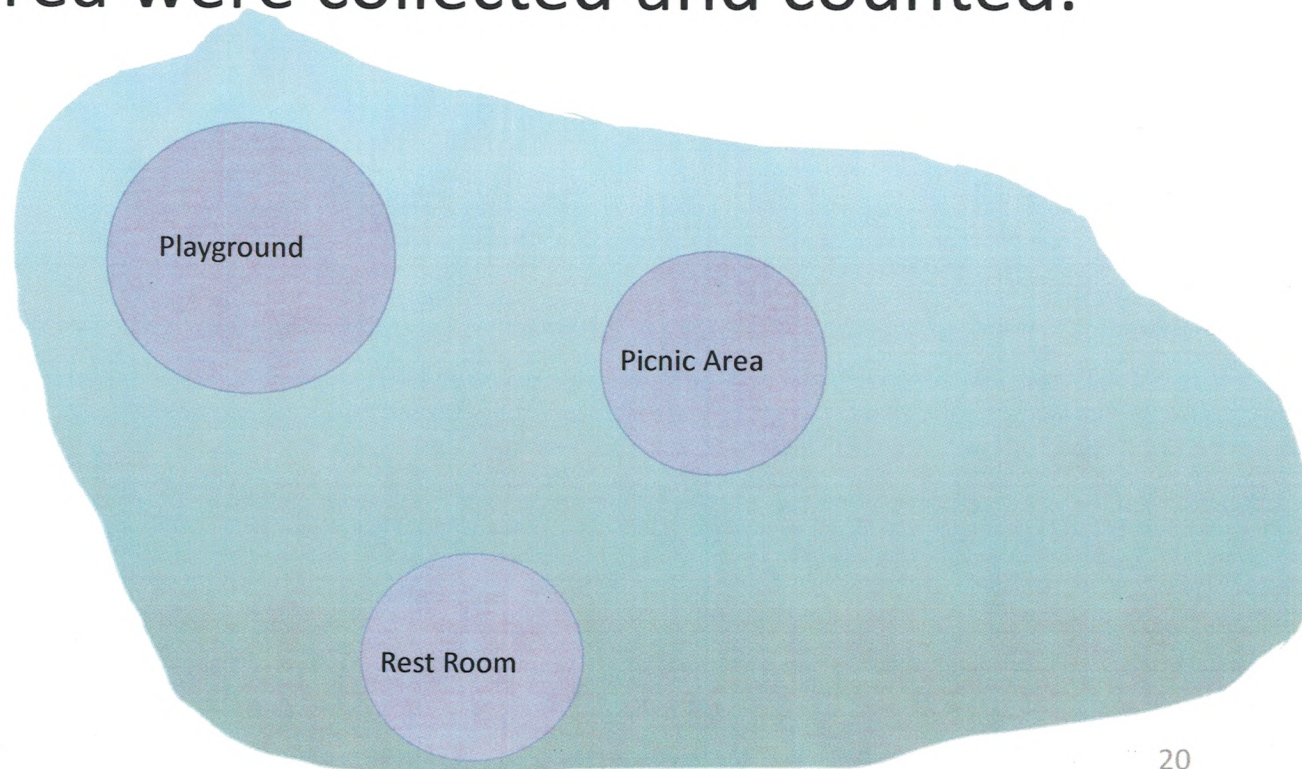
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# Methods



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

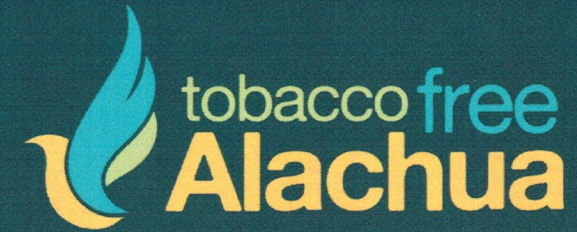


# Methods



- 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 in the study parks 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

# Results



Northeast Park experienced the greatest reduction in cigarette butts followed by Possum, Roper and lastly Greentree.

Park	Before Signs		After Signs		P Value
	Mean	SD	Mean	SD	
Northeast	44.17	45.44	18.47	16.5	0.264
Possum	22.58	1.3	15.9	1.27	0.002*
Greentree	15.4	10.51	12.13	4.64	0.567
Roper	28.4	31.96	22.2	21.21	0.564

\*p<.05

# Results



Picnic Pavilion's experienced the greatest reduction in cigarette butts followed by Playgrounds and lastly restrooms.

Amenity	Before Signs		After Signs		P Value
	Mean	SD	Mean	SD	
Playground	20.06	9.55	11.90	4.01	0.108
Picnic Pavilion	46.17	36.6	26.5	12.48	0.236
Restroom	7.88	4.64	7.2	0.00	0.869



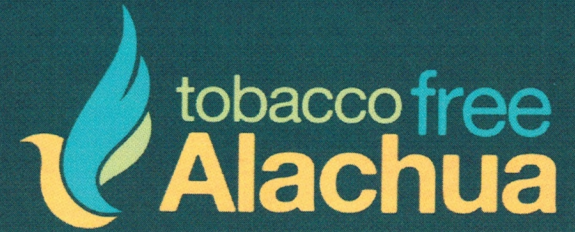


# Bo Diddley Plaza Observations



- Observed people's smoking behavior within specific targeted areas for five minute intervals.
- After the signs were placed throughout the plaza, smoking behavior showed no stable trends.
- Mid-day is a high time of park patrons and smoking behaviors.

# Bo Diddley Observations



- Prior to signs being inserted a total of 72 people were observed in the plaza. 17 were observed smoking (23.6%).
- After the signs were installed a total of 282 people were observed in the plaza. 46 were observed smoking (16.3%)
- East area had highest population and highest observed smoking rates (21.6% pre and 20.4% post)

# Preliminary Survey Data



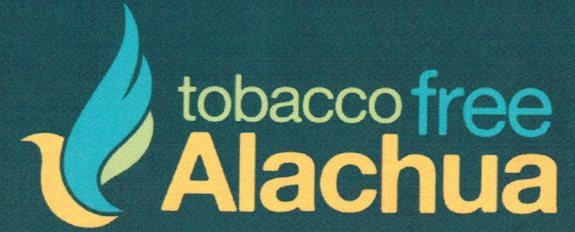
- 121 Surveys conducted- addresses attitudes towards smoking and personal smoking behaviors
- Surveys were completed at City of Gainesville public parks over the past several months.

# Demographics



- 48 Male, 73 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 were current smokers

# Preliminary Survey Data



- 81.8% of survey respondents either agreed or strongly agreed that they were bothered by secondhand smoke
- 83.4% of survey respondents either agreed or strongly agreed that they would support a city ordinance that banned smoking in public parks

# Conclusions

