LEGISLATIVE

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FLORIDA DEPARTMENT OF HEALTH

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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

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- 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 polices

Who We Are

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- 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

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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

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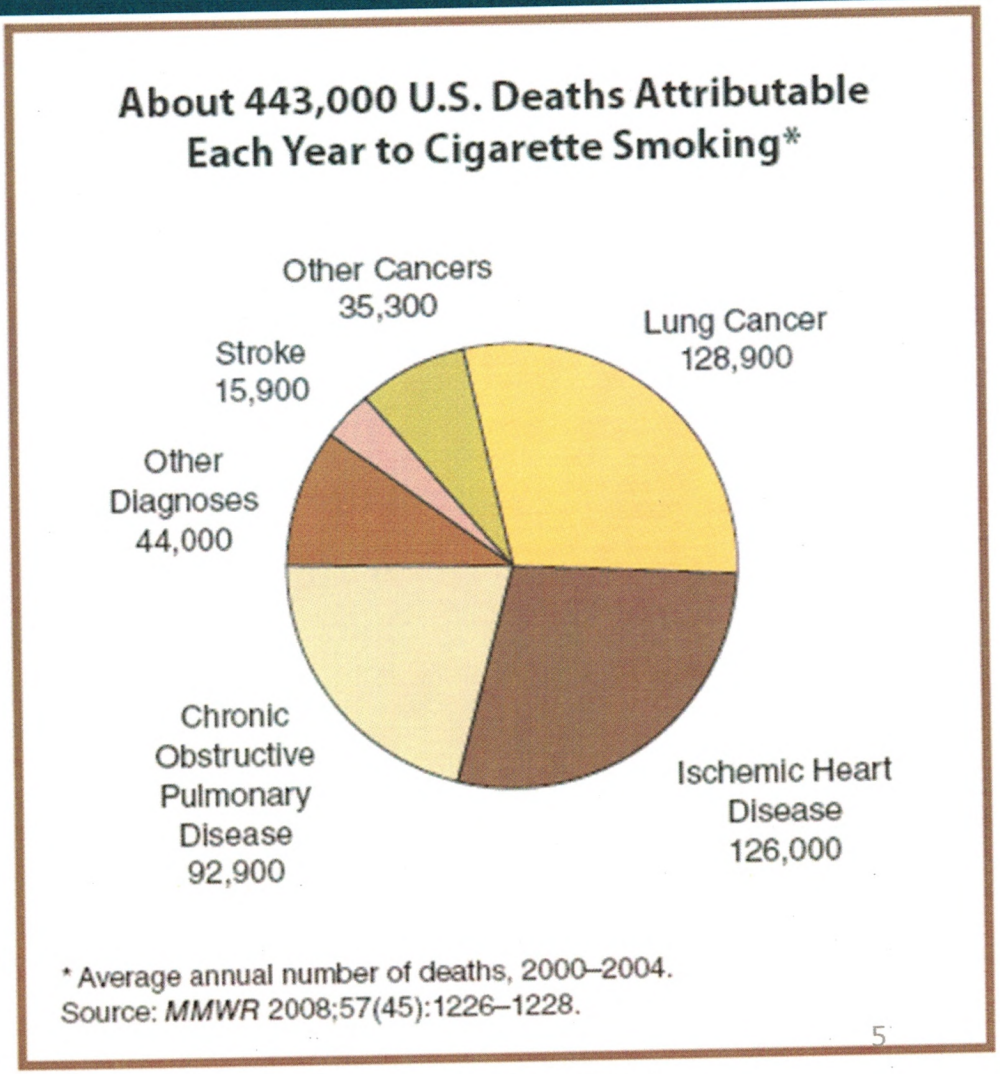
- Smoking is the most preventable cause of death in the United States

- The adverse health effects from cigarette smoking account for nearly 1 of every 5 deaths, in the US.



Centers for Disease Control and Prevention (CDC). (2008). Annual smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000–2004. *Morbidity and Mortality Weekly Report, 57*(45),1226–1228.

Smoking Affects Everyone

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- **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

Florida Charts. (2007). Prevalence of current exposure and exposure to secondhand smoke. Retrieved from Florida Charts Website: http://www.floridacharts.com/charts/DisplayHTML.aspx?ContentType=0&ReportType=7243&year=2007&group=1&indNumber=0010

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Goals

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Mainstream smoke: smoke that the smoker exhales.
Sidestream Smoke: smoke coming directly from the burning tobacco.

Secondhand Smoke

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- 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.

U.S. Department of Health and Human Services. (2006). The health consequences of involuntary exposure to tobacco smoke: A report of the surgeon general. Retrieved from http://www.surgeongeneral.gov/library/secondhandsmoke/

U.S. Department of Health and Human Services. (2010). A report of the surgeon general: How tobacco smoke causes disease. Retrieved from http://www.surgeongeneral.gov/library/tobaccosmoke/

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

National Toxicology Program. Report on Carcinogens. Eleventh Edition. U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program, 2005.

Secondhand Smoke

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- 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.

U.S. Department of Health and Human Services. (2006). The health consequences of involuntary exposure to tobacco smoke: A report of the surgeon general. Retrieved from http://www.surgeongeneral.gov/library/secondhandsmoke/

Centers for Disease Control and Prevention (CDC). (2008). Annual smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000–2004. *Morbidity and Mortality Weekly Report, 57*(45),1226–1228.

Secondhand Smoke

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- 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.

U.S. Department of Health and Human Services. (2006). The health consequences of involuntary exposure to tobacco smoke: A report of the surgeon general. Retrieved from http://www.surgeongeneral.gov/library/secondhandsmoke/

Centers for Disease Control and Prevention (CDC). (2008). Annual smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000–2004. *Morbidity and Mortality Weekly Report, 57*(45),1226–1228.

Secondhand Smoke

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- 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.

U.S. Department of Health and Human Services. (2006). The health consequences of involuntary exposure to tobacco smoke: A report of the surgeon general. Retrieved from http://www.surgeongeneral.gov/library/secondhandsmoke/

Secondhand Smoke Exposure

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- **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

Florida Charts. (2007). Prevalence of current exposure and exposure to secondhand smoke. Retrieved from Florida Charts Website: http://www.floridacharts.com/charts/DisplayHTML.aspx?ContentType=0&ReportType=7243&year=2007&group=1&indNumber=0010

Centers for Disease Control and Prevention (CDC). (2008). Annual smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000–2004. *Morbidity and Mortality Weekly Report, 57*(45),1226–1228.

Secondhand Smoke

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

Lisa, J. (2011). Retrieved from EPA website: http://www.epa.gov/smokefree/healtheffects.html
Centers for Disease Control and Prevention (CDC). (2008). Annual smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000–2004. *Morbidity and Mortality Weekly Report, 57*(45),1226–1228.

Our Study:

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Methods

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- 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

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- 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).

Smoke
Free Zone

Methods

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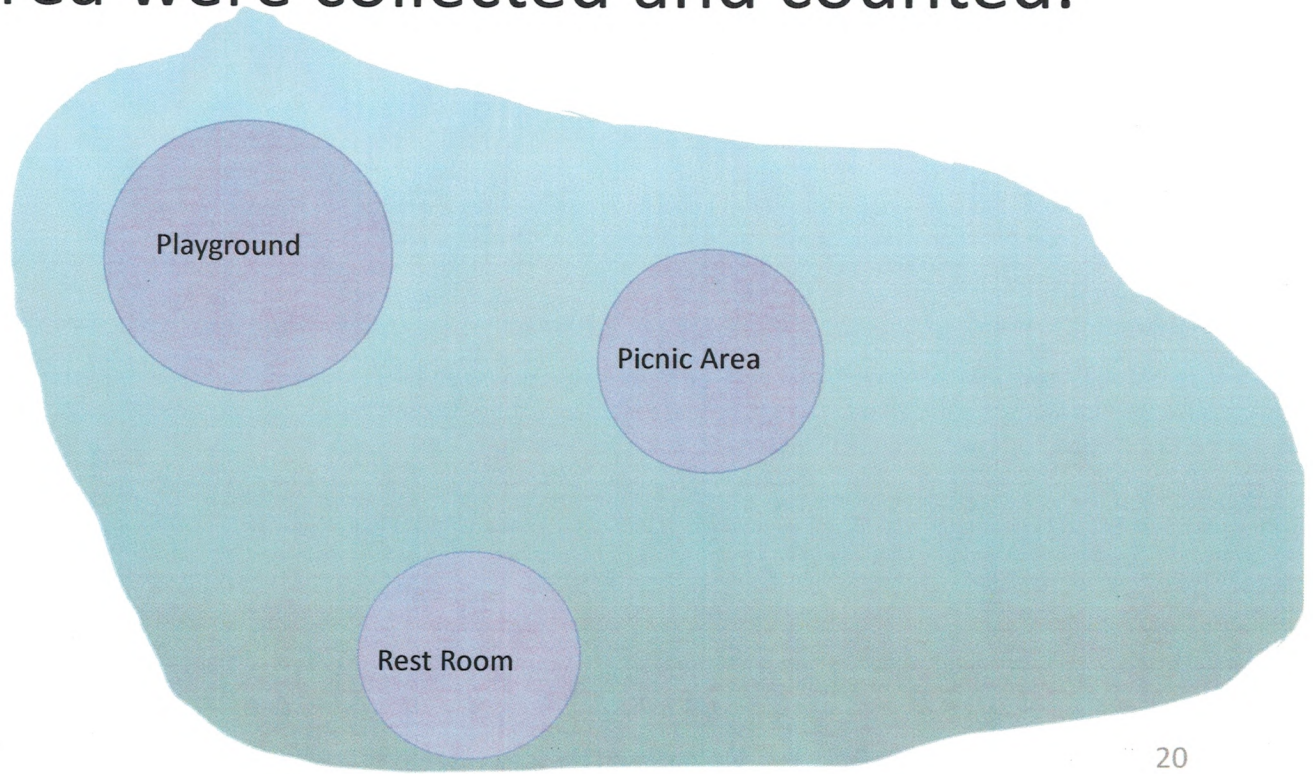
- A 25 foot perimeter was measured around each amenity, and all cigarette and cigarillo butts within that area were collected and counted.



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%.

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

T(9)=2.00, p=.076

Results

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

	Before Signs		After Signs		
Park	**Mean**	**SD**	**Mean**	**SD**	**P Value**
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

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

	Before Signs		After Signs		
Amenity	**Mean**	**SD**	**Mean**	**SD**	**P Value**
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

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- 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

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- 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

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- 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

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- 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