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Transforming Our Parks and Beaches

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Transforming our Parks and Beaches



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Project Team

Co-Principal Applicants:

- Dr Chizimuzo Okoli, Kentucky Center for Smoke-free Policy, University of Kentucky
- Ann Pederson, BC Centre of Excellence for Women's Health

Co-Applicants:

- Dr Joan Bottorff, Institute for Healthy Living and Chronic Disease Prevention, UBC Okanagan
- Dr Lorraine Greaves, BC Centre of Excellence for Women's Health
- Natalie Hemsing, BC Centre of Excellence for Women's Health
- Nancy Poole, BC Centre of Excellence for Women's Health

Project Staff

- Wendy Rice & Anna Liwander, Research Coordinators, BC Centre of Excellence for Women's Health



*Institute for Healthy Living and
Chronic Disease Prevention*
partners in research for better health



Collaborators and Partners

- Jack Boomer, Clean Air Coalition of BC
- Dr Ellen J Hahn, Kentucky Center for Smoke-free Policy and University of Kentucky
- Tom Heah, Vancouver Coastal Health Authority Mental Health Services
- Dr Andrew Johnson, University of Kentucky College of Public Health
- Milan Khara, Vancouver Coastal Health Addictions and Metal Health Services



Collaborators and Partners cont.

- Deborah McLellan, International Network of Women Against Tobacco
- Thomas Soulliere, Vancouver Board of Parks and Recreation
- Christina Tonella, Vancouver Coastal Health Tobacco Reduction Strategy



Funding Source

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Canadian Institutes
of Health Research

Instituts de recherche
en santé du Canada

Background

- **Smoke-free policies:** important and effective strategies used in tobacco control to combat the disease burden associated with tobacco use and SHS exposure.
 - With appropriate implementation and adequate enforcement they are associated with:



- Decreases in the incidence of respiratory problems (Goodman, Haw, Kabir & Clancy, 2009)



- Decreases in the incidence of cardiovascular disease (Mackay, Irfan, Haw & Pell, 2010)



- Decreased indoor air pollution (Connolly et al., 2009)



- Decreased smoking prevalence (Bajoga, Lewis, McNeill & Szatkowski, 2011)

Why smoke-free policies in parks and beaches?

- Health-there is no known 'safe-level' of SHS exposure
(USDHHS, 2006)



- Aesthetics/Environmental- reducing litter, the risk of fires



- Denormalization- eliminating the perception that smoking is a normative behavior (particularly on youth)



Context

- On September 1, 2010 a smoke-free bylaw banning smoking of any substance in the city's parks, beaches and recreational facilities was implemented.

A By-law of the City of Vancouver Board of Parks and Recreation to regulate smoking in parks

WHEREAS it has been determined that second-hand smoke is a health hazard and nuisance for people in parks in the City of Vancouver....

3.1 A person must not smoke:

- (a) in a park;
- (b) on a seawall or beach in a park;
- (c) in a building in a park, except in a caretaker's residence;
- (d) in a customer service area in a park;
- (e) in a vehicle for hire in a park;
- (f) on public transit in a park; or
- (g) in an enclosed or partially enclosed shelter in a park where people wait to board a vehicle for hire or public transit.

Fine for offence

4.2 Every person who commits an offence against this By-law is punishable on conviction by a fine of not less than \$250.00 and not more than \$2,000.00 for each offence, except that a person who commits an offence under section 3.2(a), 3.2(b) or 3.2(c) of this By-law is liable to a fine of not less than \$500.00 for each offence.

Project Overview:

Smoking on the Margins (SOTM)

- **Purpose:** To examine the health and health equity impact of the newly implemented smoke-free policy for Vancouver's parks and beaches
- **Methods:** This study employs a mixed-methods approach (observational data, survey research and various qualitative methods including ethnographic and group interviews) to generate a comprehensive understanding of a policy *in context*. Our aims are descriptive and analytical.

**VANCOUVER'S
PARKS &
WILL BE BEACHES
SMOKE-FREE**
STARTING SEPT 1, 2010

vancouverparks.ca



Overall Research Questions



1. Are there any adverse health and health equity effects of a new outdoor smoke-free policy for diverse women and men?
2. What are some of the key barriers to preventing outdoor tobacco use or SHS exposure found in the course of implementing of an outdoor smoke-free policy?
3. How do diverse women and men support and/or resist such a smoke-free policy?

Research Framework: Critical Multiplism

“*Critical* refers to the rational, empirical and consequently inherently social efforts to identify the assumptions and biases present in the options of methods and theories chosen to investigate a phenomenon.... *Multiplism* refers to the fact that research questions can usually be approached from several perspectives, and frequently ‘no single way is known to be uniformly best’...” (Letourneau & Allen, 1999 pg. 624)

Project Components

Primary Elements:

- Ethical Framework
- Parks and beaches observation project
- Population survey
- Park Ranger focus groups
- Description of policy context and policy development
- Media analysis

Other data sources:

- Beach litter
- By-law citations



Ethical Framework

The purpose of the ethical framework is to:

- Develop an understanding of the interplay between evidence and ethics in relation to outdoor smoke-free policies, and the potential impact of such policies on equity;
- Analyze the benefits and burdens of outdoor smoke-free policies, particularly in relation to certain subpopulations; and
- Develop recommendations to ensure future outdoor smoke-free policies are ethical and equitable.

Smoking in Parks and Beaches following the Introduction of a Smoke-Free Law



Observational Study Purpose

- Examine changes in Frequency of smoking in selected Parks (n=3 prelaw, n = 3 postlaw) and on selected Beaches (n=3)
- Examine changes in locations of smoking in selected Parks and on selected Beaches

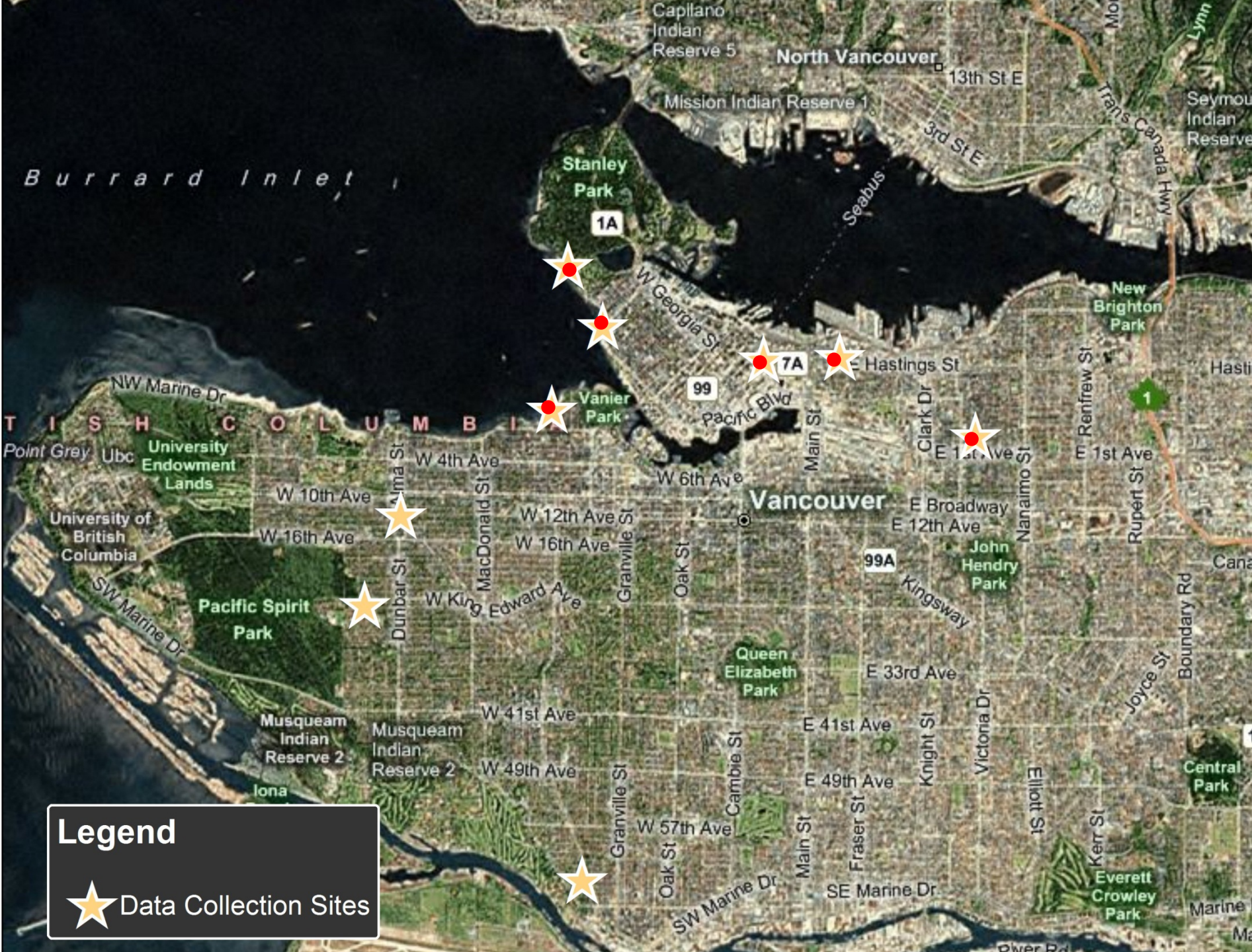
Protocol

- 30 minutes observation, 2 observers per venue

Record:

- time of entry & exit,
- temperature (warm, cool), wind condition (breezy, none breezy),
- number of persons in venue, number of smokers (by gender and approximate age)
- non-smoking signs
- interactions between smokers and nonsmokers





Legend

★ Data Collection Sites

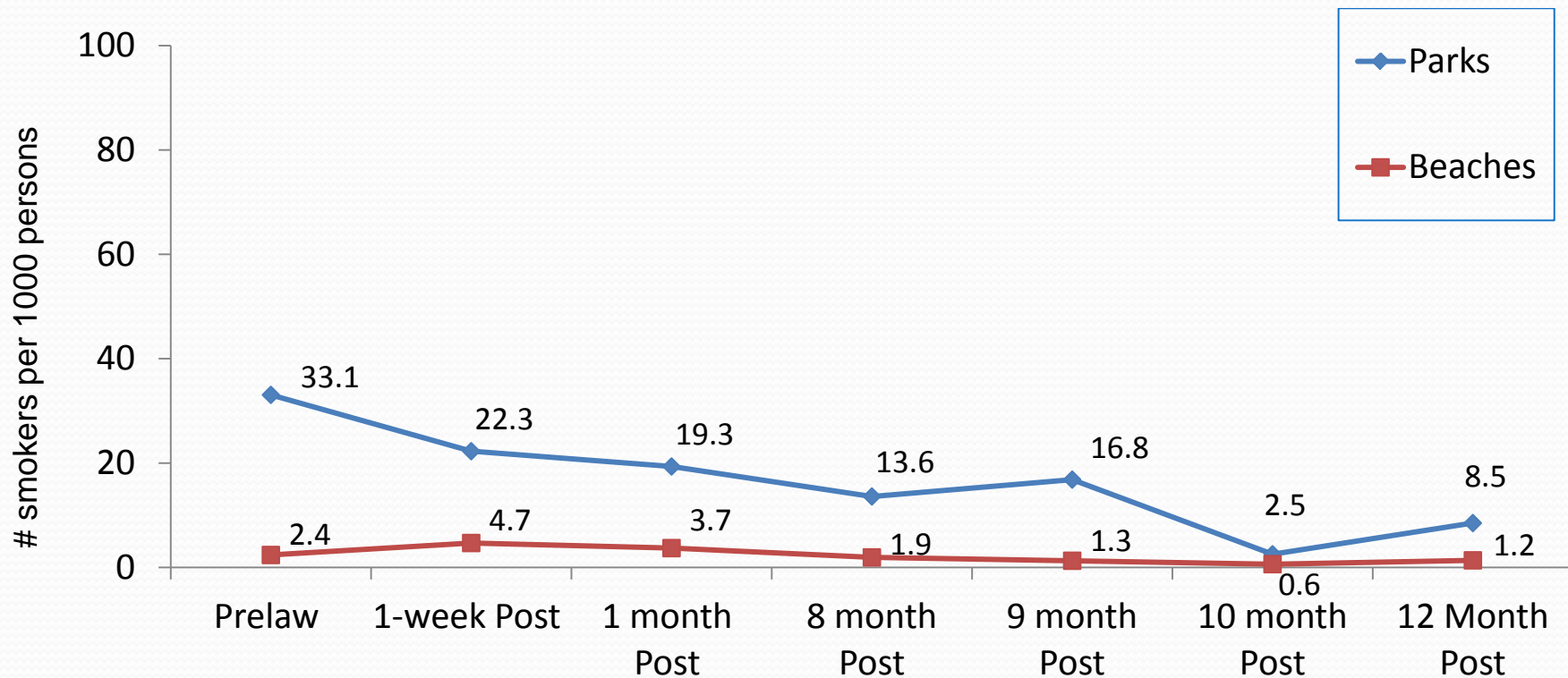
Observed smoking in selected Beach (Prelaw Vs.12-month Postlaw)



Observed smoking in selected Park (Pre-law Vs. 12-month Postlaw)



Changes in smoking rates* in selected Parks and Beaches (Prelaw to 12-month Postlaw)



Smoking rate = $(\# \text{ smokers} / \# \text{ persons in venue}) * 1000$

Difference between prelaw and 12-month mean rates were statistically significant in total venues combined ($p=.036$) and in parks ($p=.009$), but not in beaches ($p = .10$)

Population Survey



Purpose

- To understand self-reported perceptions, attitudes, and behaviour changes in response to a smoke-free policy in parks and beaches in Vancouver.

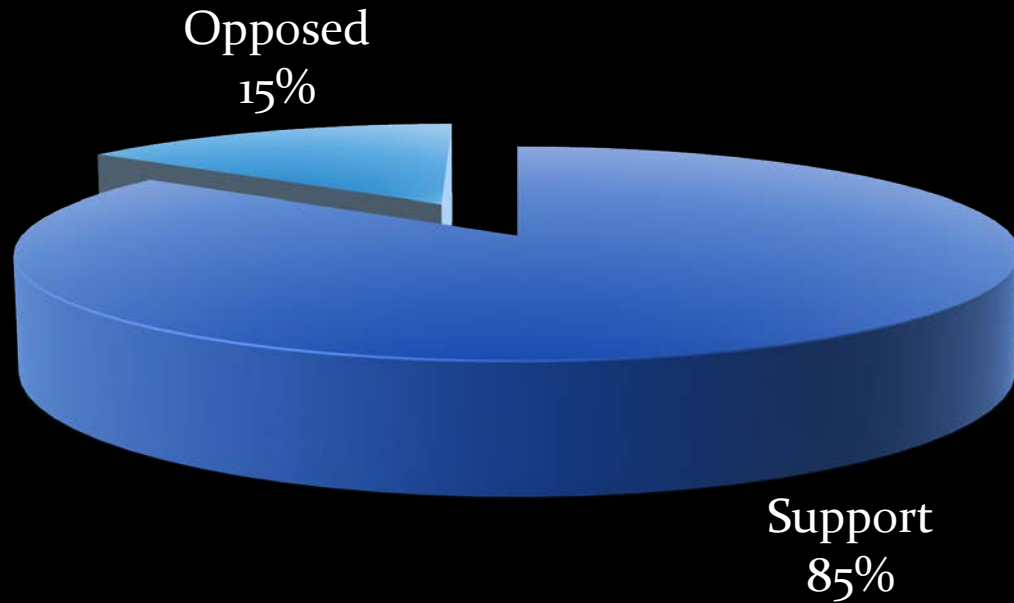


Methods



- Sampling: Random-digital-dialing of residents in Vancouver, BC, through a survey research company (NRG Research Group)
- N = 496
- Survey carried out September 2011.
- Information obtained:
 - Demographics (age, sex, income level, ethno-cultural affiliation, education status)
 - Smoking history (i.e., current smoking status, cigarettes smoked per day and nicotine dependence for smokers)
 - SHS exposure (sources and frequency of exposure)
 - Opinions regarding the smoke-free policy
 - Behaviour changes in using parks and beaches since the smoke-free policy was introduced.

Support for the Smoke-free Law in Parks and on Beaches

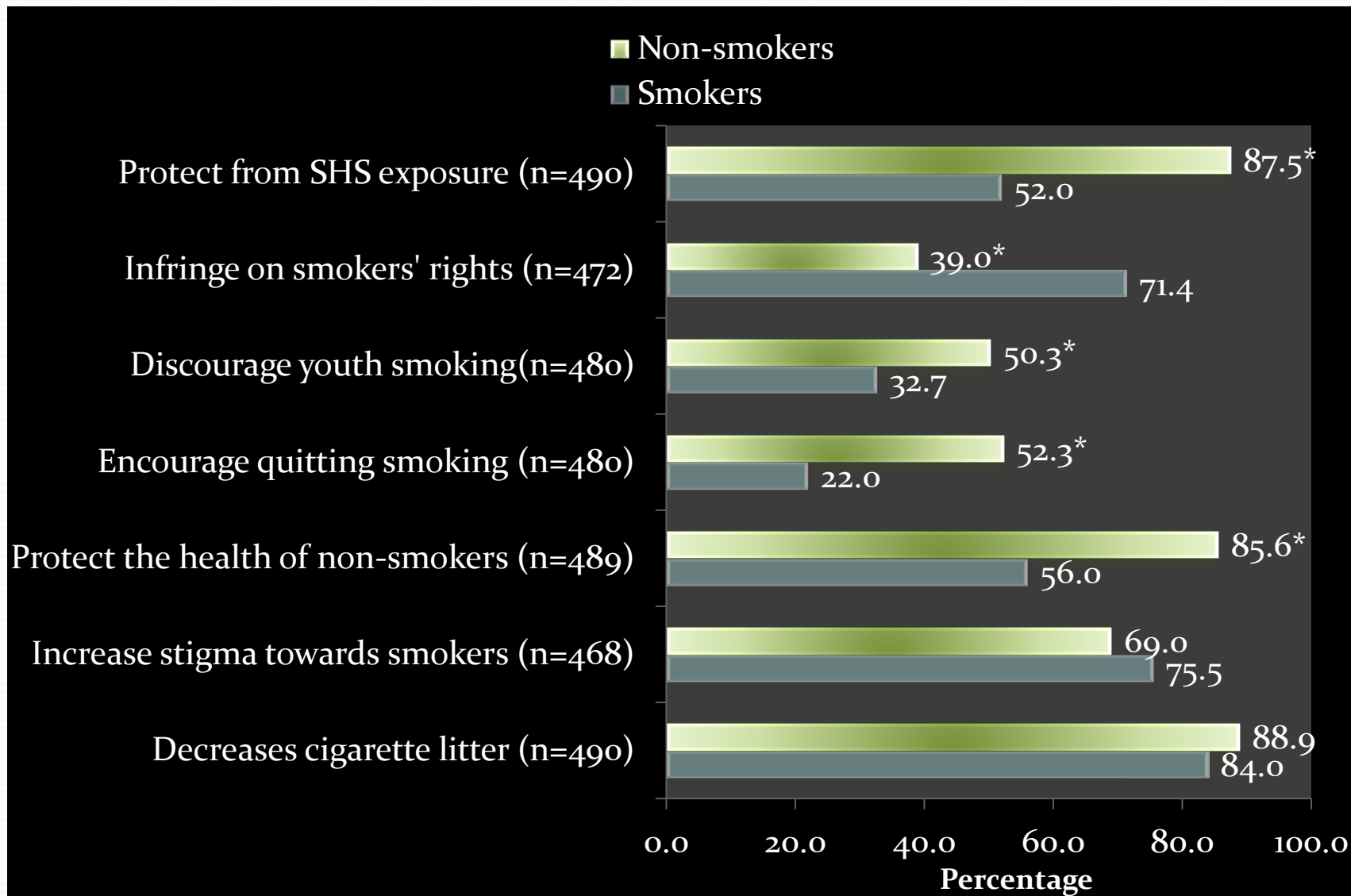


Significant demographic variables associated with support for a smoke-free law (support vs. oppose) in parks and beaches

	B (SE)	OR (95% CI)
Gender		
Female	1.0 (0.3)	2.8 (1.5-5.1)
Male (referent)		1.0
Marital status		
Never married	-0.8 (0.4)	0.5 (0.2-1.0)
Divorced/Separated/Widowed	-1.1 (0.4)	0.3 (0.2-0.7)
Married, living with spouse/common law (referent)		1.0
Education status		
High school graduate or less (referent)		1.0
Some College or Community College	0.6 (0.5)	1.7 (0.6-5.0)
Community College/University Graduate	0.9 (0.4)	2.5 (1.1-5.5)
Post Graduate degree	0.9 (0.5)	2.5 (1.0-6.0)
Smoking Status		
Non-smoker	1.8 (0.4)	6.1 (2.9-12.7)
Smoker (referent)		1.0

B = coefficient for the constant, SE = standard error, OR = Odds Ratio, 95% CI = 95% Confidence Interval

Opinions regarding support for smoke free law



* indicates significant differences between smokers and nonsmokers

Vancouver Park Ranger Focus Groups



Purpose

- To determine the perceptions of Vancouver Park Rangers on the changes in smoking patterns in parks and beaches and describe the experiences of enforcing the smoke-free by-law



Methods

- Two focus groups (n= 5 - 7 in each group) have been conducted with the Vancouver Park Rangers, one in 2011 and one in 2012 (following implementation of the ban).
- The focus groups were digitally recorded and transcribed verbatim.
- Data will be analyzed thematically.
- These data will be used in a paper discussing enforcement of the bylaw, including implications for the bylaw enforcement officers and descriptions of their experiences.

Assessment of Policy Context



Source: 24 Hours <http://vancouver.24hrs.ca/News/local/2011/08/28/18610831.html>

Overview

- The policy analysis examines the development, adoption and implementation of the smoking ban in Vancouver and draws some comparisons to experiences with similar bylaws in Kelowna, Surrey and Penticton, BC.



Theoretical Framework

Informed by 3 approaches:

1. **Sabatier's Advocacy Coalition Framework** (1988, 2007) – stresses policy learning
2. **UK Overseas Development Institute's research-policy framework** (Crewe & Young 2002)
- stresses context, evidence, links
3. **Equity-focused Health Impact Assessment** (Mahoney et al. 2004) – stresses incorporating equity lens

All three address approaches view policy development as a process of knowledge exchange and hence look at what evidence is mobilized, by whom, and for what purposes.

Key informant interviews

- 8 key informant interviews have been carried out in Vancouver.
- Research Assistants have been trained to carry out further interviews in comparator jurisdictions.
 - 4-6 in Kelowna and Surrey
 - 1-2 in Penticton
- Data will be used to inform journal article examining the factors influencing the development and implementation of outdoor smoke-free policies.

Media Analysis



EDITORIAL
NO SMOKING in outdoor
public places



Background and Purpose

- Media plays a significant role in policy making as a mechanism of information dissemination and in shaping public opinion
- Purpose of this component is to assess the potential effects the media may have had on public opinion regarding the smoke-free policy



Methods

Newspapers

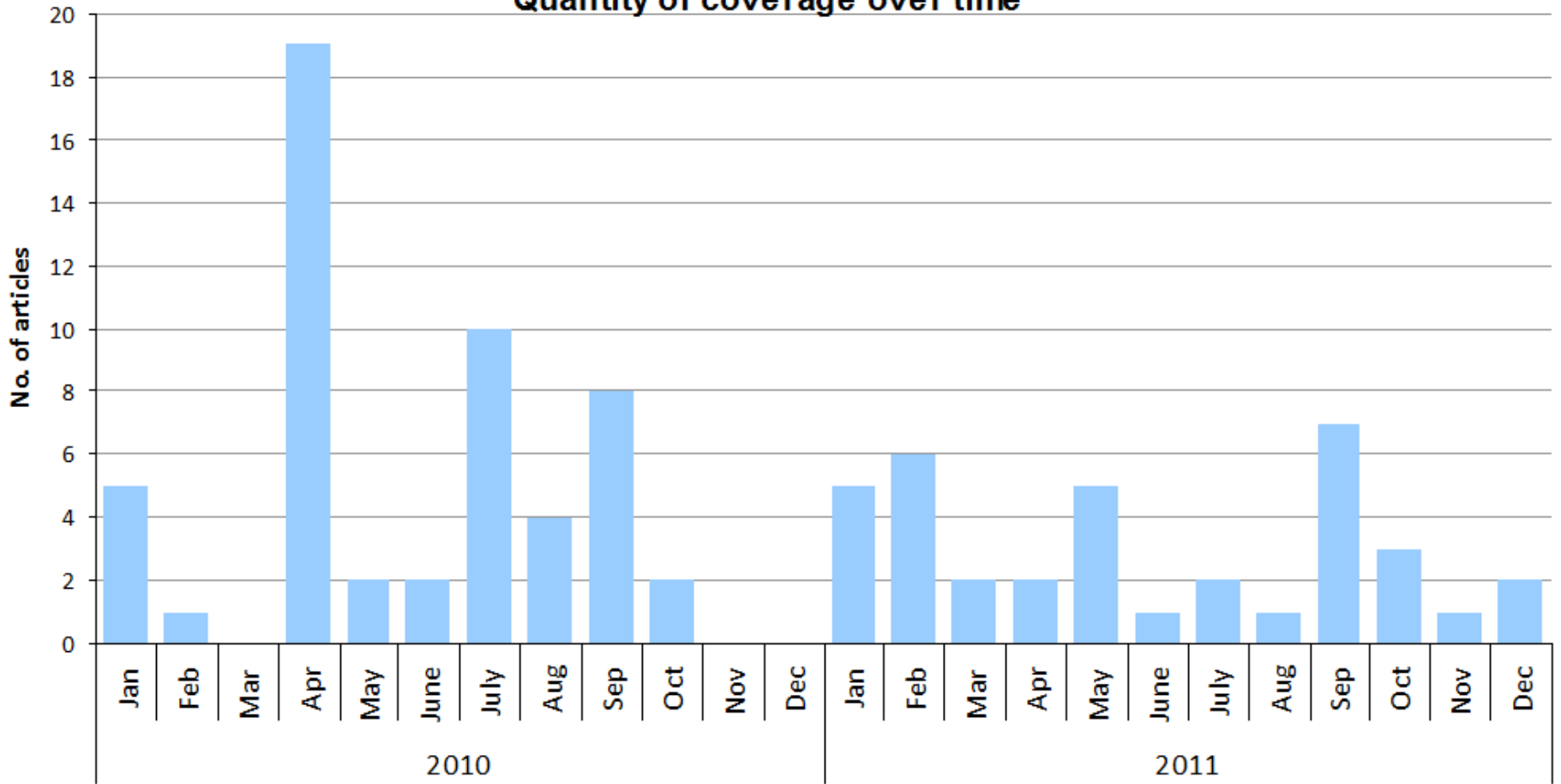
- The Vancouver Sun
- The Province
- The Globe and Mail (BC Edition)
- The Georgia Straight
- The Surrey Leader
- Kelowna Capital News
- Penticton Western News



Date Range

- January 2010 – December 2012 (N = 90 articles)

Quantity of coverage over time

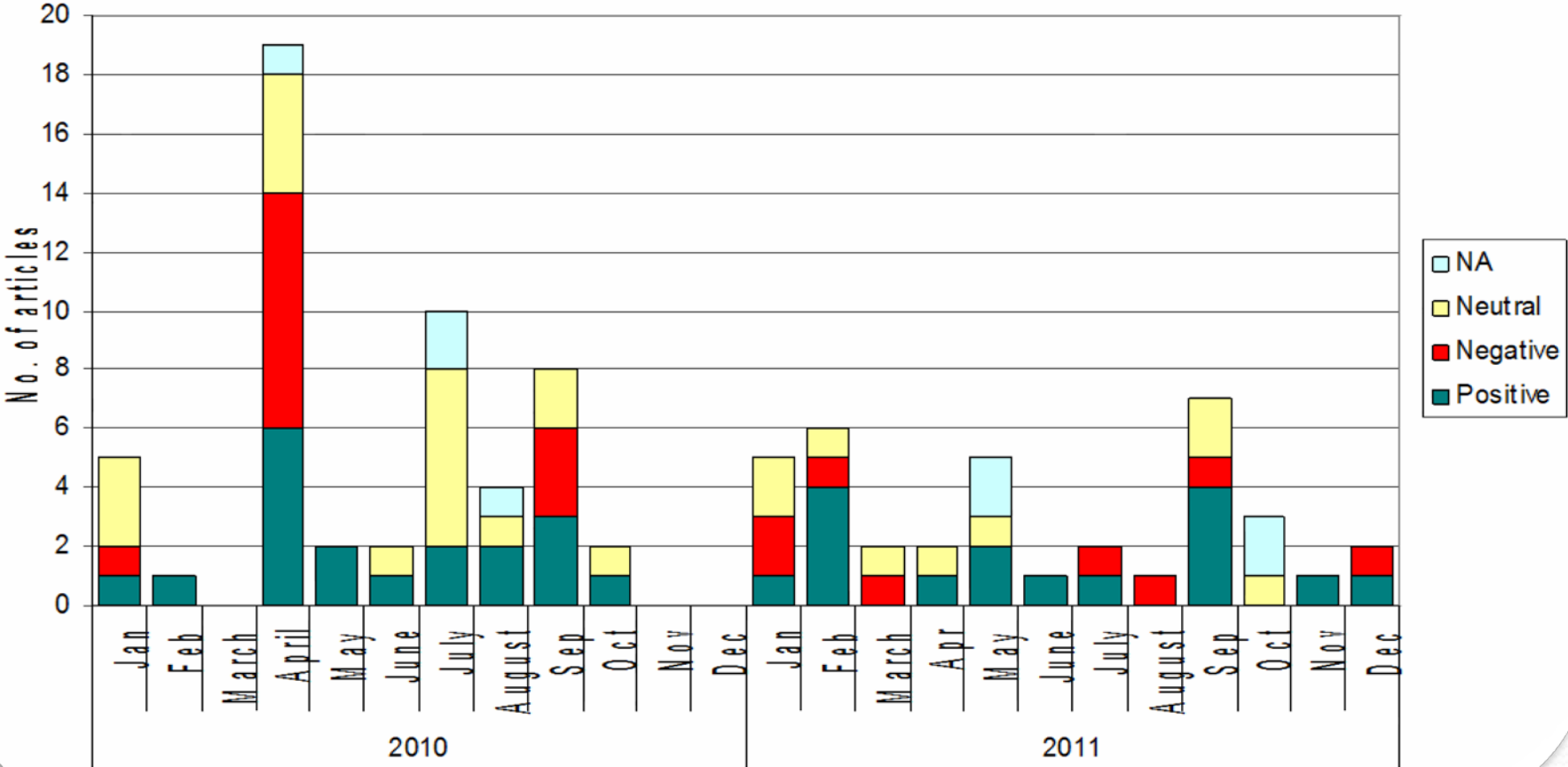


2010

2011

Jan Feb Mar Apr May June July Aug Sep Oct Nov Dec Jan Feb Mar Apr May June July Aug Sep Oct Nov Dec

Slant over time



Article Slant

	Positive (%, n)	Neutral (%, n)	Negative (%, n)	N/A (%, n)
All Articles	38.9%, 35	30.0%, 27	22.2%, 20	8.9%, 8
News reports	50.0%, 27	38.9%, 21	7.4%, 4	3.7%, 2
Letters to the Editor	23.5%, 4	5.9%, 1	64.7%, 11	5.9%, 1

Preliminary Results

- Coverage of Vancouver's smoke-free policy was highest when the ban was announced, and to a lesser extent, prior to its implementation.
- This implies that the potential for agenda setting effects of news media was greatest when the ban was announced to the public.
- General coverage of the smoke-free policy focused on health reasons for the ban, increasing the potential for the public to place importance on health as the salient issue regarding smoking regulation.
- News articles, which made up over half the sample, identified health and environmental factors as the primary reasons for the need for smoke-free policy.
- Letters to the editor, however, were largely focused on issues related to individual rights and concerns about the regulation of public spaces.

Other Data Sources – Beach Litter

- Purpose – to determine the changes in smoking-related litter on the beaches.
- Data obtained from the Great Canadian Shoreline Cleanup, both pre- and post- ban.
- Frequencies of total cigarette butts per beach count data will be reported by year.

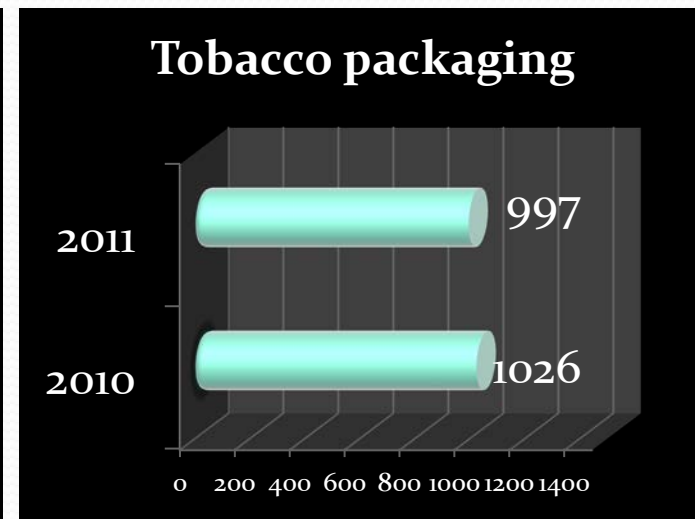
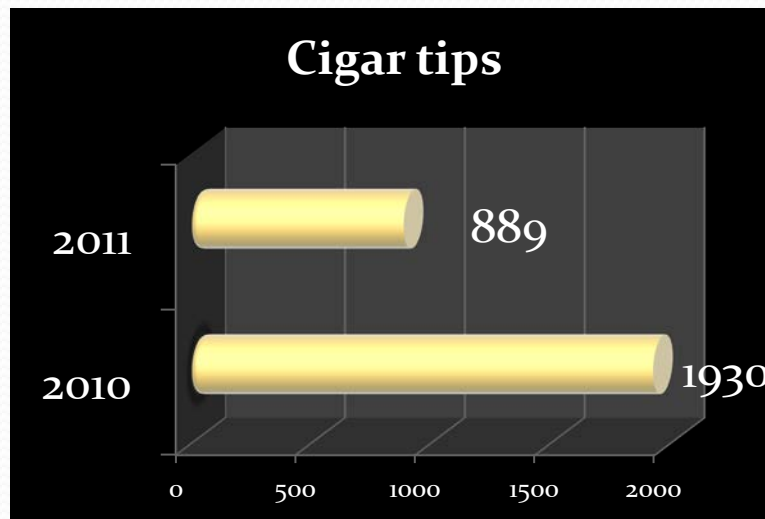
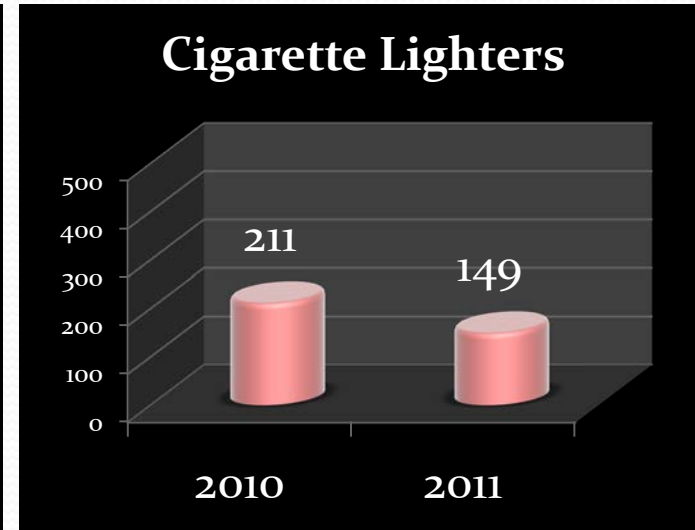
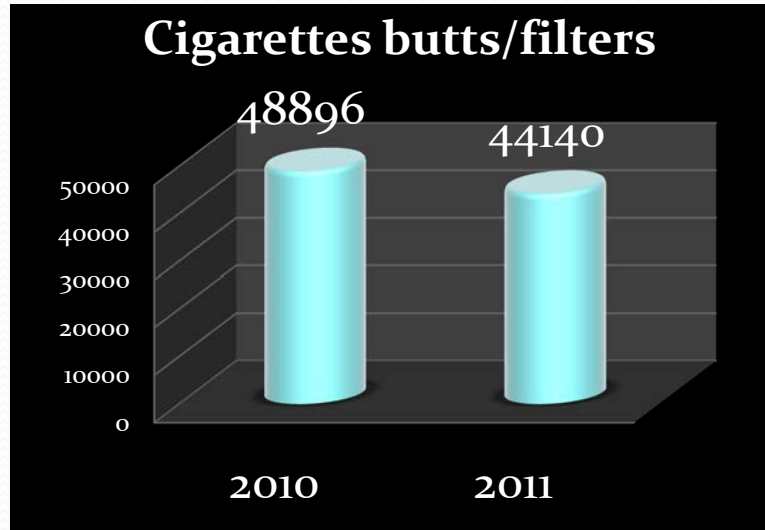


Great Canadian Shoreline Cleanup, 2010 & 2011

	2010	2011
Sites	55	65
Number of Volunteers	1421	1963
Distance Cleaned	74.9 km	95 km
Cigarettes butts/filters	50087	58632
Cigarette Lighters	221	192
Cigar tips	1992	994
Tobacco packaging	1085	1221

Changes in beach litter, 2010 to 2011

	2010	2011
Number of Volunteers	1263	1723
Distance Cleaned	61.9	74.9



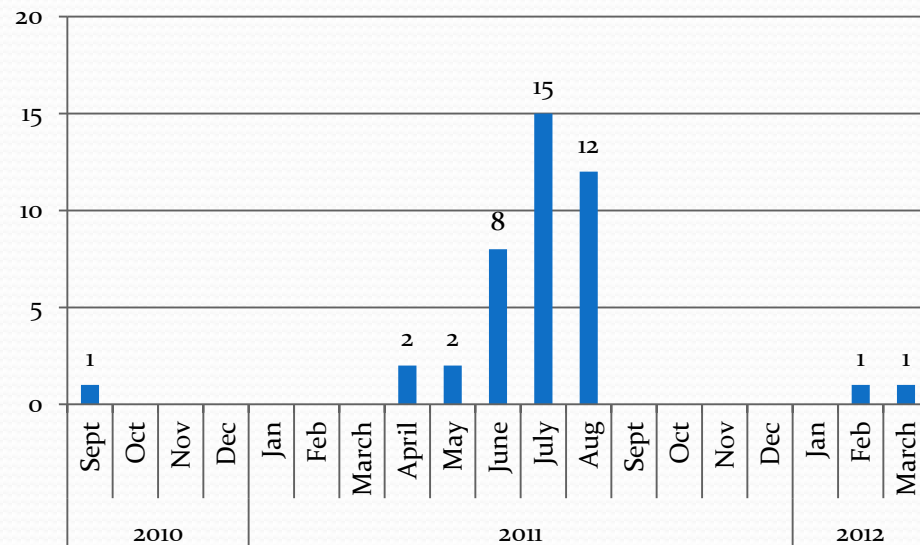
No statistically significant changes over time

Other Data Sources - By-Law Citations

- Purpose - to examine changes in smoking citations during summer and fall months (May, June, July, August, Sept, October)
- Data on citations has been obtained from the Vancouver Board of Parks and Recreation for September 2010-March 2012
- Frequencies of citations will be assessed by month and by venue of citation (low socioeconomic venue vs. high socioeconomic venue).

Vancouver outdoor smoke-free bylaw enforcement statistics (September 2010-March 2012)

	2010	2011	2012
Voluntary compliance	723	6274	23
Formal verbal warning		20	
Written warning		61	
MTI	1	37	1



Preliminary Conclusions

- Smoke-free law is well received and supported by city park and beach users. However, there are differences in support of the law by smoking status
- There is evidence for compliance with the law; selected parks have a significant decrease in observed smoking rates as compared to beaches.
- Important issues surrounding unintended consequences of the law need to be addressed--data still being analyzed

Questions? Comments?

