

Smoking on the Margins: Evidence, Equity and Outdoor Smoking in Parks and on Beaches in Vancouver



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Project Team

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*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



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Canadian Institutes
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Why Smoke-free Policy?

- **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)
- Aesthetic/Environmental - reducing litter, the risk of fires
- Denormalization - eliminate the perception that smoking is a normative behavior (particularly on youth)



Case Study of Implementation

On September 1, 2010 a smoke-free bylaw banning smoking of any substance in Vancouver'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.

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)



Letourneau, N., & Allen, M. (1999). Post-positivistic critical multiplism: a beginning dialogue. *Journal of Advanced Nursing*, 30(3), 623-630. doi: 10.1046/j.1365-2648.1999.01133.x

Theoretical Approach to Policy

Informed by 3 approaches that view policy development as a process of knowledge exchange and hence look at what evidence is mobilized, by whom, and for what purposes:

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



Primary and Comparison Study Sites

- Examining the development, adoption and implementation of the smoking ban in Vancouver in comparison to similar bylaws in Kelowna, Surrey and Penticton, BC.



Multiple Project Components

Data Sources:

- Interviews and focus groups on the social and built environment
- Parks and beaches observation project
- Population telephone survey
- Park Ranger focus groups
- Comparative policy analysis
- Media analysis
- Beach litter
- By-law citations



Assessment of Policy Adoption

“The vast majority of residents understand that we brought this in for the health issues...” Aaron Jasper, Former Chair, VPB



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

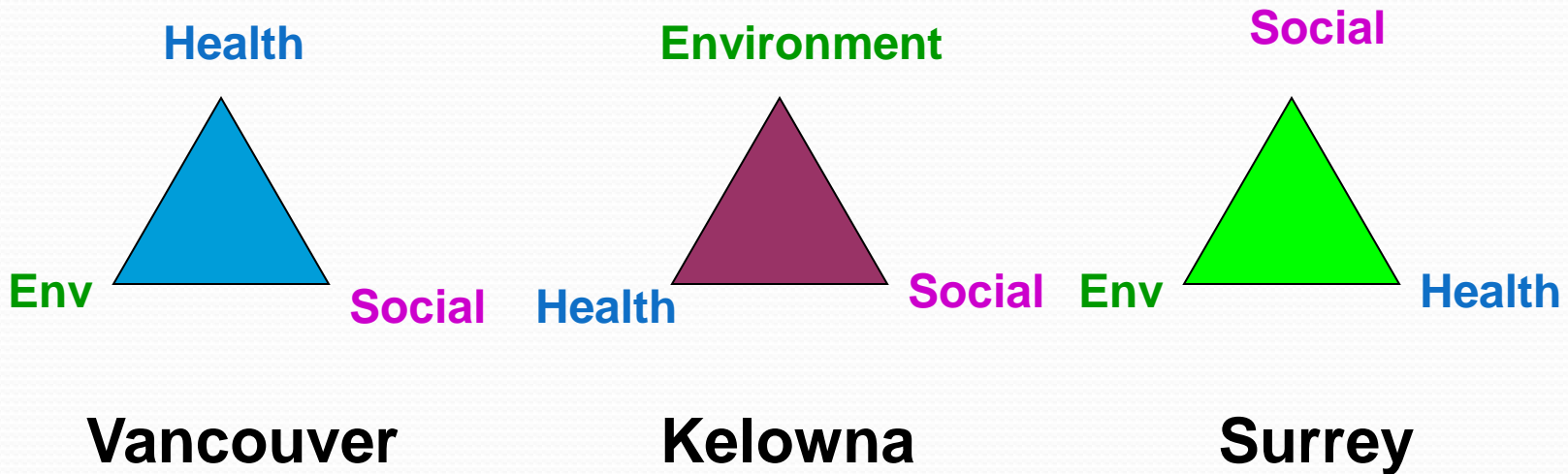
Data Sources

- 8 key informant interviews conducted in Vancouver and 6 interviews in each of Kelowna and Surrey (comparator jurisdictions) but no interviews in Penticton
- Semi-structured interviews covering:
 - History of the process in the municipality
 - Key individual and organizational actors
 - Rationale for the policy
 - Details of the bylaw itself
 - Implementation
 - Impact
- Council and Park Board Minutes and officials records of proceedings examined (from public websites)



Preliminary Findings

- Three factors – health, environmental and social reasons – were given in each jurisdiction to justify introducing regulation but for historical, practical and political reasons, the pattern was different



Initially Three Different Policy Approaches

Partial Ban

Total Ban



**Designated Smoking
Areas**

**Designated Non-smoking
Areas**

100% Smoke-free

Effective February 1, 2011, Kelowna Parks' smoke-free bylaw prohibits smoking in all Kelowna parks, including beaches, trails, playgrounds, sports fields and stadiums.

Evidence & Equity

- Universal policy approaches have potential to disproportionately impose burdens on those groups while benefits are enjoyed by non-smokers (who have more resources)
- Need to understand the interplay between evidence and ethics in relation to outdoor smoke-free policies, and the potential impact of such policies on equity
- Katz argued that public health interventions should balance the benefits and burdens and who bears them (particular certain subpopulations)
- Despite uncertainty of the health effects of SHS exposure outdoors, health issues are most salient in most jurisdictions
- Smoking in British Columbia is lowest in the country but clusters in some groups, including Aboriginal youth (especially girls), people with mental health challenges, and those on low-income

Sources: Katz 2001 *Public Health Ethics Framework*

Mahoney et al. 2004 *Equity-focused Health Impact Assessment*

Social and Built Environment



Interviews and Focus Groups

- Examined how women and men of varied income levels and smoking statuses, experience and manage SHS exposure, and respond to smoking restrictions in Vancouver
- 40 telephone interviews and 3 focus groups held March 2010- Feb 2011
- 11 of these participants spoke about smoking restrictions on beaches and parks

Results

- 7 participants opposed the ban (2 low income, 5 non low income; 4 women and 3 men; 1 current smoker)
- Reasons for opposition: rights of smokers, stigma, issues with enforcement and compliance
- 2 female participants, of mixed income and smoking statuses, identified both pros and cons.
- 2 non-smoking participants (one female, non low income; one male and low income) completely supported bans
- Reasons for support: SHS exposure, litter, sensitivity to SHS

Equity Issues

- Strong de-normalization of smoking
- Potential for stigma and shaming of smokers, particularly socially disadvantaged sub-groups
- Potential loss of “personal rights”, “loss of freedom”



Media Analysis



EDITORIAL
NO SMOKING in outdoor
public places



Methods

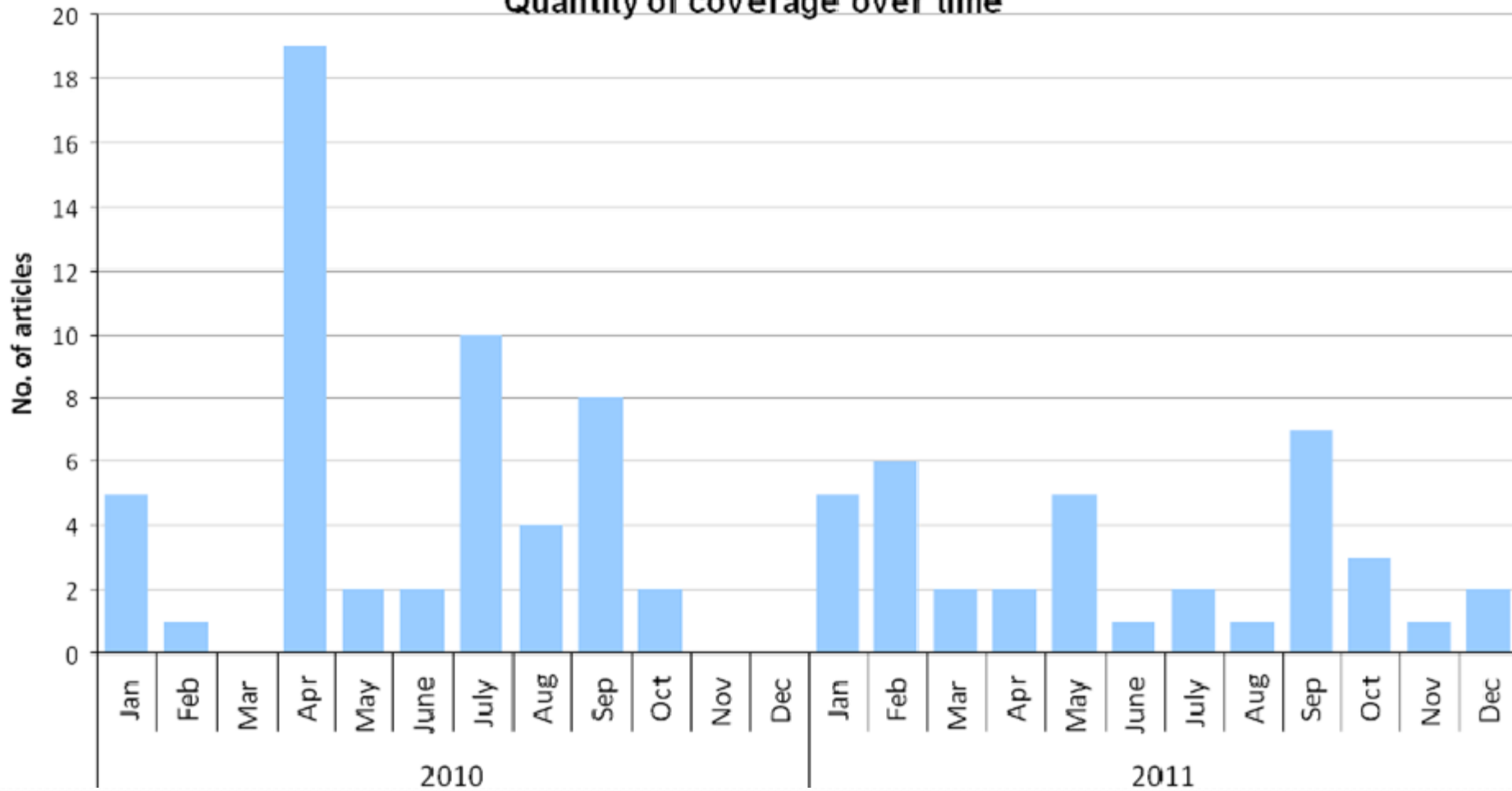
Newspapers

- 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 2011 (N = 90 articles)

Quantity of coverage 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

Results

- Coverage of Vancouver's smoke-free policy was highest when ban was announced and prior to 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 were largely focused on issues related to individual rights and concerns about the regulation of public spaces.

Park User & Resident Telephone Survey

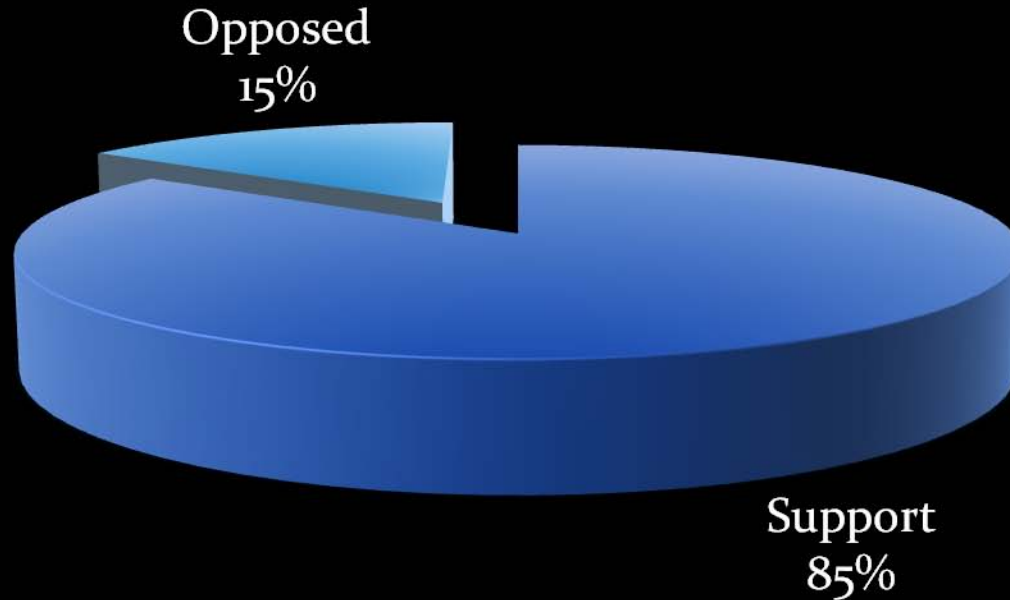


Methods

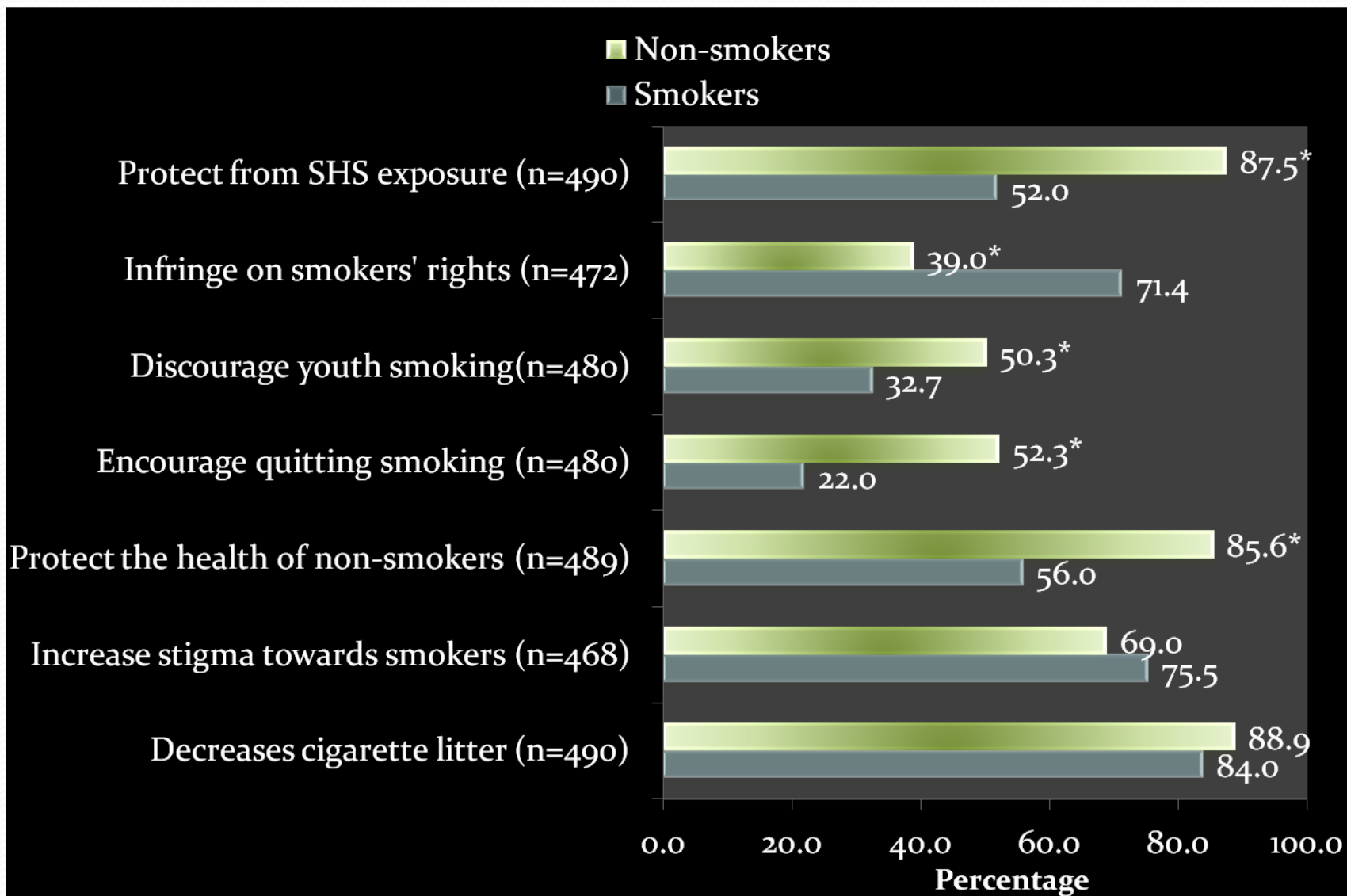
- Sampling: Random-digital-dialing of residents in Vancouver, BC, through a survey research company (NRG Research Group)
- N = 496
- Survey carried out September 2011.
- Information obtained:
 - Demographics (age, sex, income level, ethno-cultural affiliation, education status)
 - Smoking history (i.e., 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



Opinions on Smoke-free Bylaw



* indicates significant differences between smokers and nonsmokers

Observational Study

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

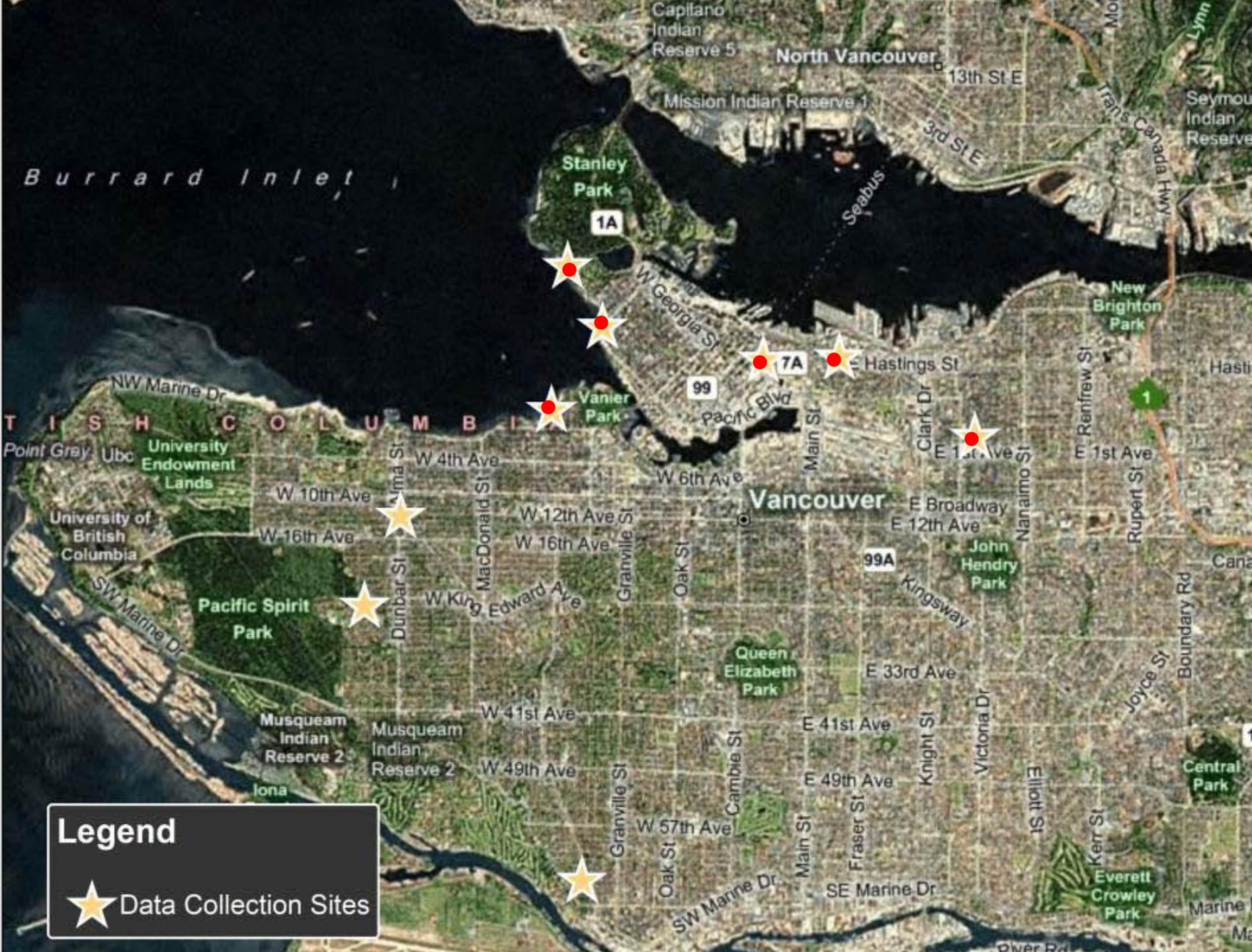
Protocol

- 30 minutes observation, 2-3 observers per venue

Record:

- time of entry & exit,
- temperature (warm, cool), wind condition (breezy, not breezy),
- number of persons in venue, number of smokers (by gender and approximate age)
- non-smoking signs
- interactions between smokers and nonsmokers





Burrard Inlet

T I S H C O L U M B I A

Legend

★ Data Collection Sites

Observed Smoking on Selected Beach

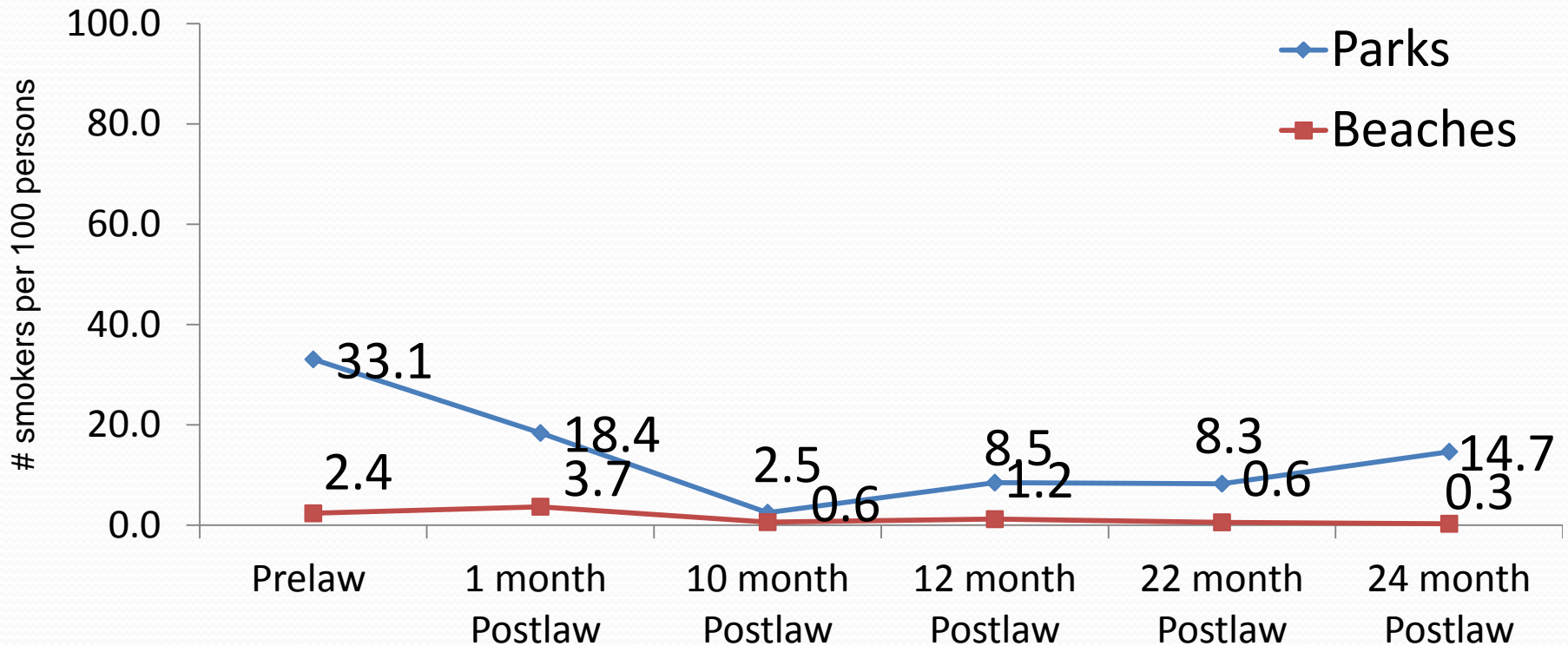
(Prelaw Vs.12-month Postlaw)



Observed Smoking in Selected Park (Prelaw Vs.12-month Postlaw)



Changes in Smoking Rates* in Selected Parks and Beaches (Prelaw to 24-month Postlaw)



Note:
Smoking rate = $(\# \text{ smokers} / \# \text{ persons in venue}) * 100$
Despite significant overall decreases in smoking rates in the total venues and parks, differences between prelaw and 12-month and prelaw and 24-month mean rates were not statistically significant (using Bonferonni corrections) in total venues combined and in beaches.

Equity Analysis

- Lower compliance in the parks than on the beaches
- Parks in the eastside of Vancouver were frequented more often than those on the westside, including by smokers



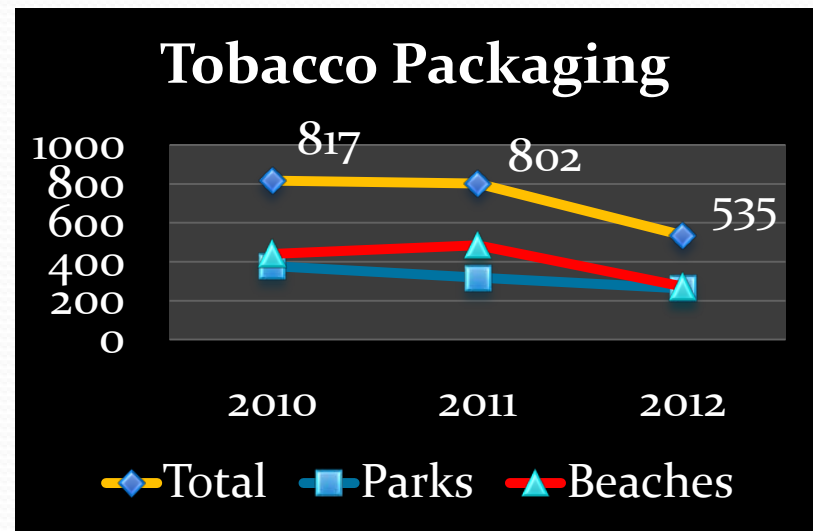
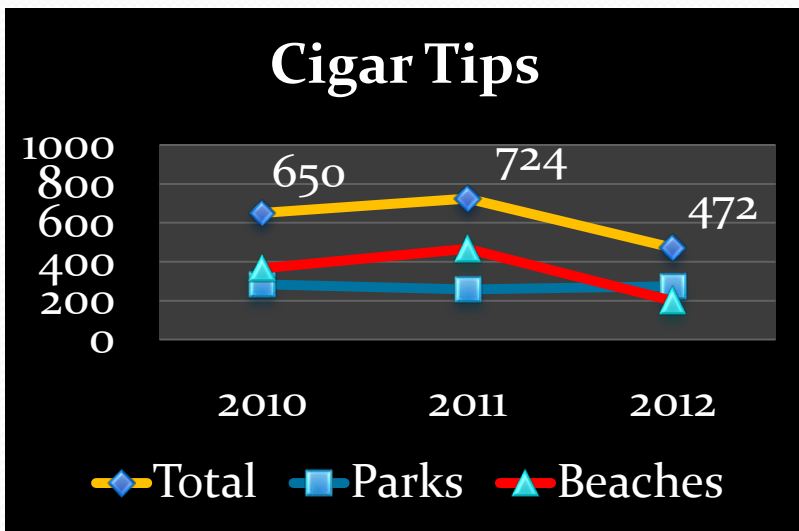
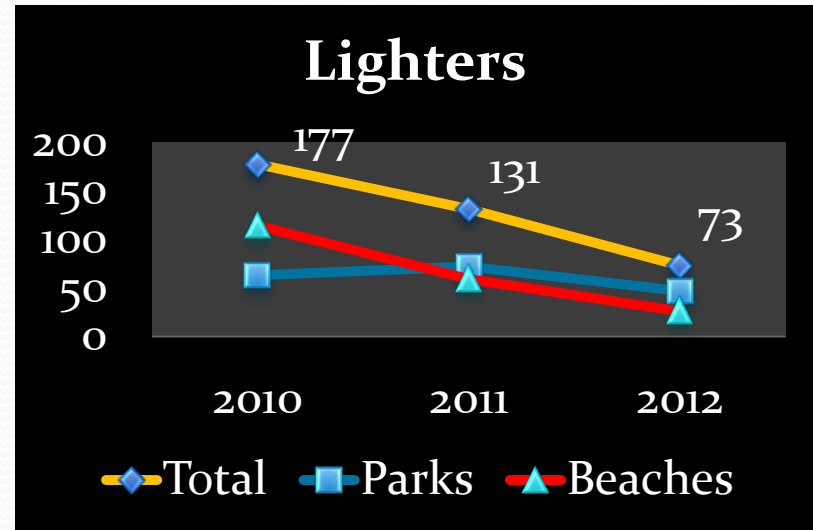
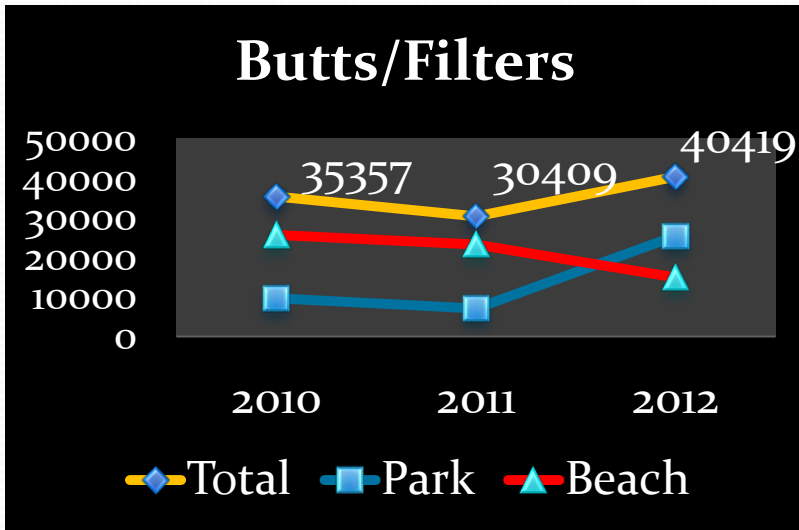
Great Canadian Shoreline Cleanup 2010 - 2012

	2010	2011	2012
Sites	55	65	59
Number of Volunteers*	961	1225	1035
Distance Cleaned*	49.9 km	66.2 km	67 km

* n = 40 sites from which litter was collected
in all three years



Changes in Beach Litter, 2010 – 2012 (N = 40)



No statistically significant changes over time

Vancouver Park Ranger Focus Groups



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 (both following implementation of the ban).
- Focus groups were digitally recorded and transcribed verbatim and discussion analyzed thematically.
- These data were used in a paper discussing enforcement of the bylaw, including implications for the bylaw enforcement officers and descriptions of their experiences.



Focus Group Findings

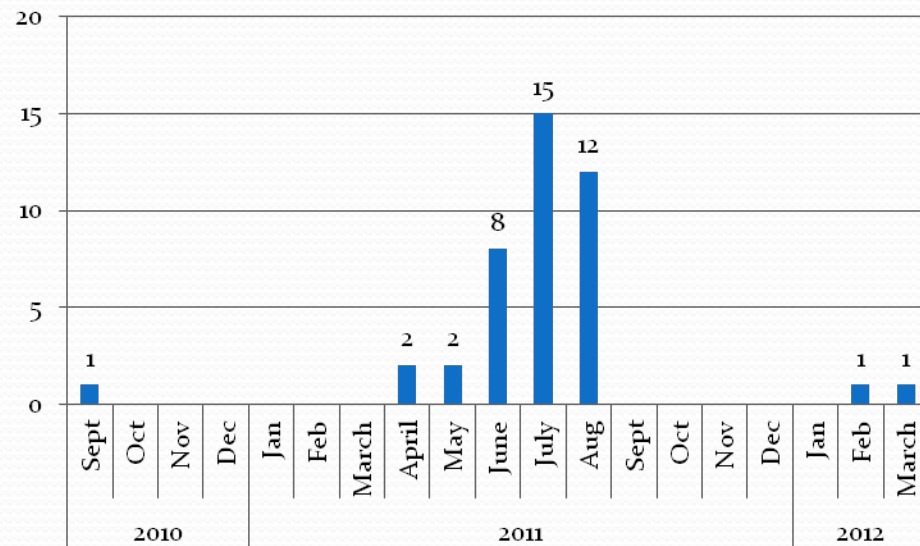
- Park Rangers job changed with creation of ban – from “ambassador to the park” to “by-law enforcement officer”
- First year found it more challenging to enforce by-law and ticket violators; with increased training, were more comfortable in the role
- Consistent with our observational data, confirmed that some areas were priority – especially beaches in the summer time
- Limited staff mean that enforcement varies
- Described assessing a person’s capacity to pay the fine (\$250) as an element of their approach in a given situation - informal “equity officers” – used discretion

By-Law Citations

- Examined changes in smoking citations during summer and fall months (May, June, July, August, Sept, October)
- Data on citations have 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



Study Reflections

- Smoke-free law is well received and supported by city park and beach users, though 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) but also resistance.
- Ban is intended to be self-enforcing; formal enforcement is uneven, concentrated in some areas and requires balancing local park usage with by-law enforcement
- Important issues surrounding unintended consequences of the law need to be explored; data still being analyzed
- Equity concerns received only limited attention

Questions?

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

vancouverparks.ca



Thank you!