King County Dirt Alert
2015 Survey Report Summary

Background

For almost 100 years, a company called Asarco operated a copper smelter in Tacoma. Air pollution from the smelter settled on the surface soil over a large region - more than 1,000 square miles of the Puget Sound basin. Even though the smelter closed in 1986, arsenic, lead and other heavy metals are still in the soil as a result of this pollution. Studies have found soil contamination in parts of King, Pierce, Kitsap, and Thurston counties. This area is called the Tacoma Smelter Plume. King County Dirt Alert (KCDA) is a program at Public Health–Seattle & King County (PHSKC) funded by the Washington State Department of Ecology (Ecology).

Purpose of Survey

The goal was to measure awareness of soil contamination and behaviors people take to reduce contact with soil. It also looked at sources of information and attitudes that can help us develop outreach and education strategies.

Summary of Findings

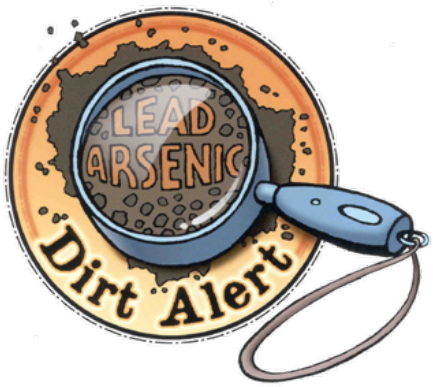
In April 2015, KCDA mailed an English survey to 5,600 households in three King County communities, Federal Way, Burien and Des Moines, impacted by the contamination. The 32% of residents who responded were primarily Caucasian, English-speaking, over the age of 65, and have lived in King County for more than 15 years. In addition, the majority of respondents were homeowners and have gardens or flowerbeds. This report finds that:

- Only 52% of people have heard something about lead and arsenic in soil within the last year.
- This information raised concern but left 56% of people uncertain about what to do next.
- Of the recommended actions to reduce contact with contaminated dirt, 70% reported always washing their hands before eating and 23% reported that they always take off shoes. If the respondent took off his or her shoes at the door, family members tended to also be more likely to take their shoes off.
- Of those who have children under the age of 10 living at home, 30% reported that their kids always wash their hands after playing outside and 53% reported that their kids always washed their hands before eating.

Next Steps

As a whole, the survey indicates that there is a moderate amount of awareness of soil pollution caused by the Asarco Smelter. We will focus future outreach on broad-based television ads and printed forms of communication, such as direct mailings, to try to increase the number of folks who know about Dirt Alert. Because more respondents from Burien tended to respond that they were uncertain on what to do to protect themselves and their families, KCDA will explore more effective communication methods in that area. KCDA will continue to conduct outreach via media publications, community events, and presentations to programs serving young children.

2015 Dirt Alert King County Awareness Survey Report



Public Health—Seattle & King County
Washington State Department of Ecology

August 26, 2015

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2015 King County Dirt Alert Awareness Survey Report

Public Health - Seattle & King County and
Washington State Department of Ecology

Abstract

In April of 2015, Public Health–Seattle & King County (PHSKC) surveyed residents of three areas with arsenic and lead soil contamination from the former Asarco smelter: Burien, Federal Way, and Normandy Park.

The goal of the survey was to measure awareness of soil contamination and PHSKC's King County Dirt Alert (Dirt Alert) outreach program. It also measured rates of behaviors that can reduce soil exposure, such as hand washing and taking off shoes.

Methods: PHSKC sent a mail survey in English to 5,600 households. The response rate for the survey was 32%. PHSKC analyzed survey results.

Results: Approximately 70% of the sample is aware of Asarco soil contamination, and 18% is aware of the Dirt Alert program. There was a slight decrease in the number of people who are aware of the Asarco contamination when compared to the 2013 King County result, but there was an increase in the number of people who are aware of the Dirt Alert program.

More people wash hands on a regular basis than take off shoes or wash fruits and vegetables grown at home. These behaviors varied by city, demographic, and awareness.

Discussion: A significant number of the survey respondents are white, English-speaking, over the age of 65, and homeowners. Based on survey results, future outreach methods should focus on broad-based television ads and printed forms of communication, including newspaper, direct mail, and email. While these methods have helped some respondents plan and feel empowered to protect themselves and their families, a greater number of respondents were concerned by the information but left uncertain about what to do next. Because respondents living in Burien tended to indicate they were concerned but uncertain on what to do, future outreach should focus on effective communication methods in that area.

Future outreach should also focus on diverse and limited English speaking communities, younger adults, and families with young children. Compared to the baseline survey results in 2013, future studies should continue to use focus groups, interviews, or targeted surveys to get more information about how to better serve these groups.

1.0 Introduction

In April 2015, PHSKC mailed 5,600 English surveys to three King County communities. The goal was to measure awareness of arsenic and lead soil contamination and the King County Dirt Alert outreach program.

Dirt Alert is part of the Washington Department of Ecology (Ecology) Tacoma Smelter Plume project, which funded and collaborated on the survey.

1.1 Tacoma Smelter Plume

For almost 100 years, a company called Asarco operated a copper smelter in Tacoma. Air pollution from the smelter settled on the surface soil over a large region - more than 1,000 square miles of the Puget Sound basin. This area is called the Tacoma Smelter Plume. Arsenic, lead, and other heavy metals are still in the soil as a result of this pollution. Studies have found soil contamination in parts of King, Pierce, Kitsap, and Thurston counties.

1.2 Dirt Alert Program

For over a decade, PHSKC and Ecology have worked together to address arsenic and lead soil contamination in areas of King County. PHSKC runs the Dirt Alert outreach and education program that provides both broad-based outreach to impacted areas and targeted outreach to children, their parents and caretakers, and certain populations and communities. The two main goals are:

1. To raise awareness about soil contamination.
2. To promote behaviors—"healthy actions"—to reduce contact with soils.

From May, 2010 to September, 2012, PHSKC's outreach program was on hold. In September of 2012, PHSKC and Ecology signed an interagency agreement to restart the Dirt Alert program.

1.3 Purpose of the Baseline Survey

Even before 2010, residents in south King County received limited broad-based outreach. PHSKC's program targeted specific populations and broader outreach consisted mainly of cable television advertising. In the spring of 2013, PHSKC began rebuilding the Dirt Alert program and increasing broad-based outreach in the summer. Spring was a good time to gather baseline data about awareness and behaviors.

Ecology plans to fund the PHSKC Dirt Alert program at least through 2021. Follow-up surveys over the next six years will help PHSKC evaluate and further develop its broad-based outreach methods.

1.4 Past Dirt Alert Surveys in Pierce County

Tacoma-Pierce County Health Department (TPCHD) also has a Dirt Alert program, with similar activities to PHSKC. TPCHD has completed six major mail surveys over the past ten years:

- 2003 – University Place (general population)
- 2004 – University Place (general population)

- 2005 – Lakewood, Steilacoom, and Tacoma (baseline survey, households with children)
- 2007 – University Place, Lakewood, Steilacoom, and Tacoma (follow up)
- 2007 – Ruston (residences within the Superfund site)
- 2009 – University Place, Lakewood, Steilacoom, and Tacoma (follow up)
- 2014 – University Place, Lakewood, Steilacoom, and Tacoma (follow up

The surveys measured level of awareness and behavior change in Pierce County communities. One key finding of the follow up surveys was that awareness and behavior change seems to be related to the level of contact, with direct mail and television being the most influential methods of contact.

1.5 Past Surveys in King County

2009 King County Phone Survey - In June, 2009, PHSKC's contractor PRR conducted a baseline telephone survey of families with children under the age of 18, within certain zip codes of the Tacoma Smelter Plume. It measured the following:

- Level of concern about soil contamination.
- Level of awareness.
- Method of hearing about the Tacoma Smelter Plume.
- Changes made to reduce exposure.

The survey had a response rate of 16% and was not representative of the population being surveyed. As more people replace home phones with cell phones, phone surveys are becoming less useful.

2010 King County Mail Survey - In January, 2010, Ecology and PHSKC sent a mail survey to 2,400 Federal Way households and 1,600 Normandy Park households. The response rate was around 26%. Forty-nine percent of respondents indicated they knew "a little" or "quite a bit" about soil pollution caused by the Asarco smelter. Ecology has not completed analysis of the data.

2013 King County Mail Survey – In November, 2013, Ecology and PHSKC sent a mail survey to 9,900 households in Burien, Des Moines, Federal Way, Normandy Park, and Vashon Island. The response rate was 27%. Fifty percent of respondents indicated that they knew "a little" or "a lot" about contamination caused by the Asarco smelter.

2.0 Methods

2.1 Survey Instrument

This survey instrument closely follows TPCHD's 2009 and PHSKC's 2013 surveys. This allows for comparison across counties and between years. The survey asks about awareness of soil contamination and behaviors people take to reduce contact with soil. It also looks at sources of information and attitudes about the issue.

The survey is designed to gather the following data:

- Awareness of ASARCO smelter contamination and the Dirt Alert program.
- Where people found information on these topics.
- Healthy practices such as hand washing and taking off shoes at the door.
- Demographics such as age, race, and homeownership.

The survey instrument is in **Appendix A**.

2.2 Survey Implementation, Processing, and Analysis

Surveys went to 5,600 English-speaking residents of three communities within King County— Burien, Federal Way, and Normandy Park, Burien. Federal Way and Burien are more socio-economically diverse and have received less past outreach. Normandy Park is a more affluent community that has historically received more outreach.

PHSKC purchased mailing lists for the following areas:

- In Federal Way, within the Soil Safety Program Service Area (Figure 1).
- In Normandy Park, and Burien, from throughout the city limits.

PHSKC's contractor Cascadia Consulting Group (Cascadia) mailed out all of the surveys on scannable forms, with a postage-paid return envelope. Respondents were given the option of mailing in the completed survey or responding to the survey online. PHSKC sent out a reminder post card about one week after surveys were mailed.

Cascadia scanned the surveys and hand-entered written responses. They provided PHSKC and Ecology with a database of results. The online responses were downloaded and reviewed by PHSKC. Online respondents were more likely to be male, between the age or 46-65, and white; however, it did not appear that these differences made any significant difference on the results. Given this, the online results were merged with the scanned results.

PHSKC analyzed the data using SPSS 18 for frequencies and chi-square tests and Stata 11 for logistic regression. Open-ended responses were coded by PHSKC. Graphs were created in SPSS.

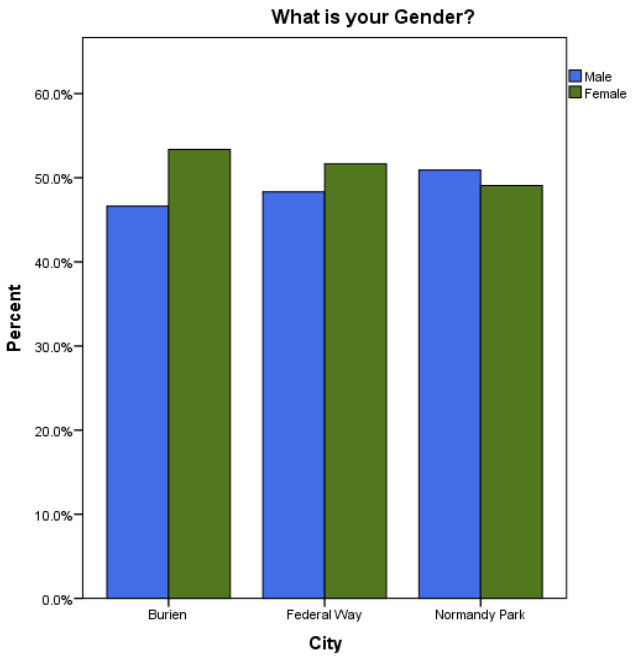
3.0 Demographics and Home Environment

The response rate for the survey was 32%, with 1,817 responses.

Area	Surveys Mail	Mailed Responses	Online responses	Total Responses	Response rate
Burien	2,000	593	62	655	33%
Federal Way	2,000	512	81	593	30%
Normandy Park	1,600	500	69	569	36%
Total	**5,600**	**1,605**	**212**	**1,817**	**32%**

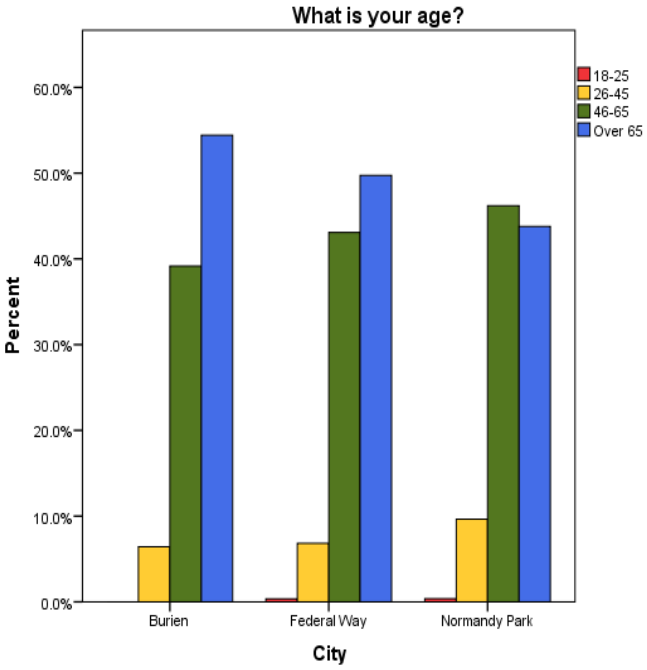
3.1 Gender: 49% were female

Respondents were 49% female and 46% male. Gender of respondent did not vary significantly by region, $\chi^2(2, N = 1737) = 2.15$, $p > .01$.



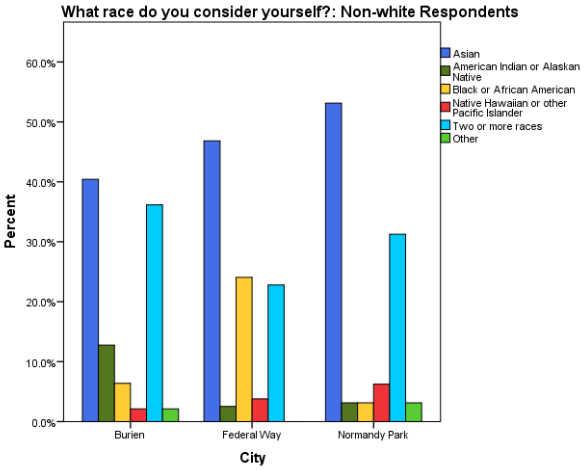
3.2 Age: 47% were 65 years old or older

The largest age category was 65 years old or older (47%), followed by 46-65 years old (41%). There appears to be more respondents over the age of 65 living in Burien compared to Normandy Park, $\chi^2(6, N = 1733) = 16.8$, $p < .01$.



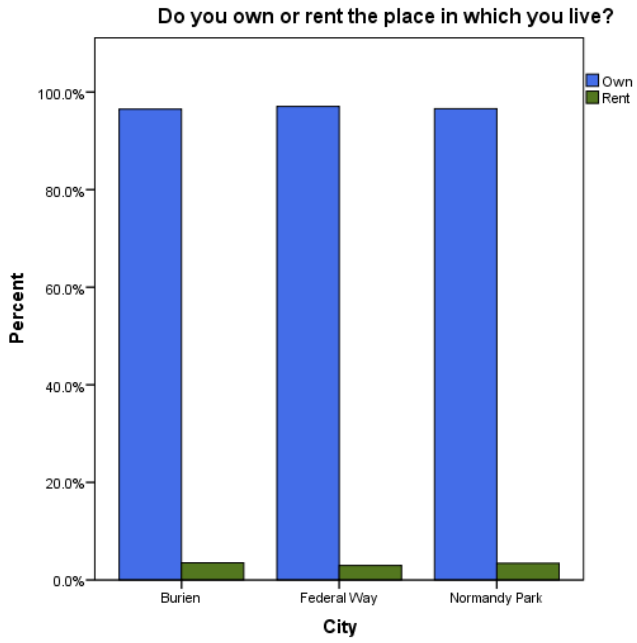
3.3 Race: 84% were white

Race was asked separately from Hispanic, Latino, or Spanish-speaking origin. Most respondents were white (84%). The next largest group was Asian (4%). Only 2% were of a Hispanic, Latino, or Spanish-speaking background. Federal Way appeared to have the largest number of non-White respondents, χ^2 (2, N = 1688) = 25.1, p < .01.



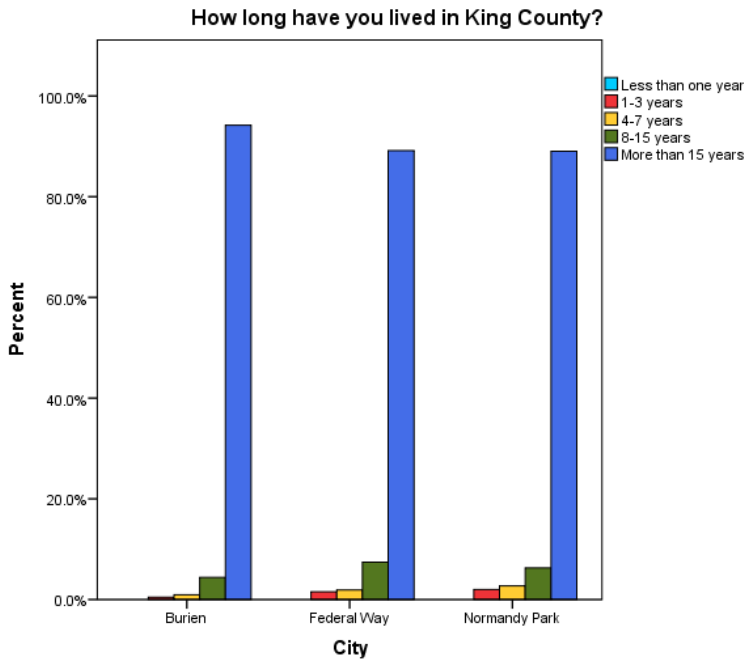
3.4 Housing: 94% were homeowners

Homeowners made up 94% of the sample. There were no significant differences in homeownership by city, χ^2 (2, N = 1758) = .33, p > .01. Most respondents reported living in a house (93%), with 2% living in an apartment and the rest in condos, duplexes, or "other." There were no differences in type of residence by city, χ^2 (6, N = 1766) = 8.22, p > .01.



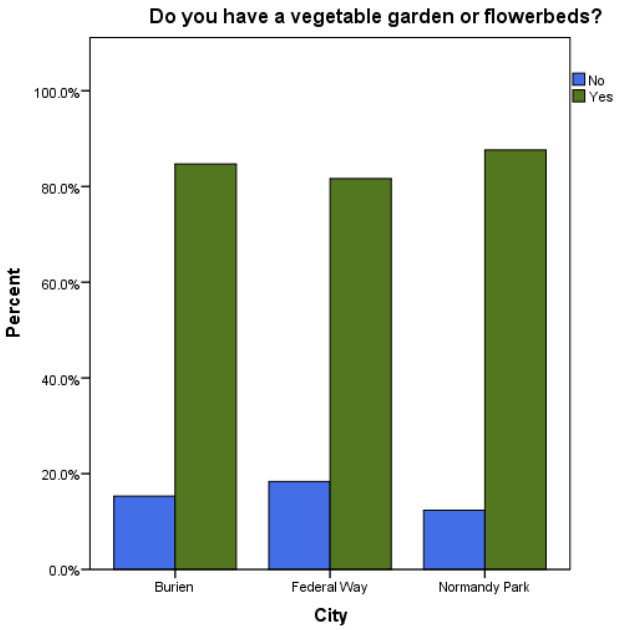
3.5 Years Lived in King County: 89% lived here for 15+ years

Most of the respondents have lived in King County more than 15 years (89%). Six percent of respondents lived in King County 8-15 years, and two percent of respondents have lived in King County for 4-7 years. Those living in Burien appeared to live in King County longer than those living in Normandy Park, χ^2 (6, N = 1773) = 16.7, p < .01.

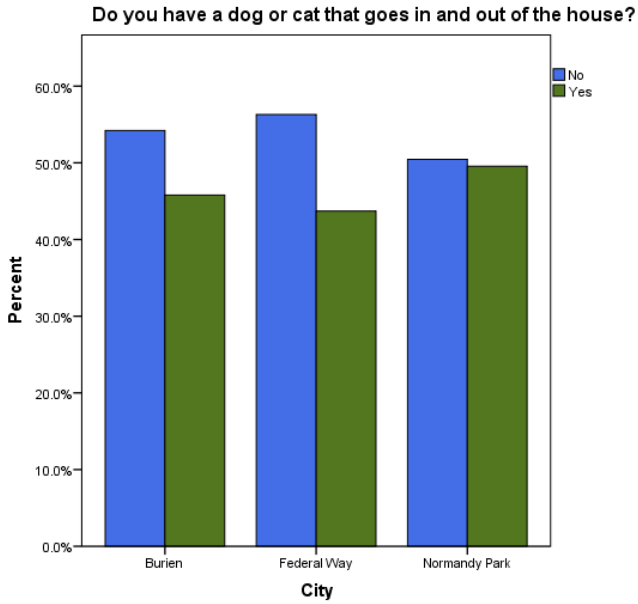


3.6 Home Environment: 83% have gardens and 46% have pets

The majority of respondents (83%) have gardens or flowerbeds. Those living in Normandy Park tended to be more likely to have a garden or flower bed compared to those living in Federal Way, χ^2 (2, N = 1786) = 7.9, p < .05.



Around half (46%) have dogs or cats that go in and out of the home. There were no differences by city, χ^2 (2, N = 1804) = 4.1, p > .05, but females did tend to be more likely to have a pet that went in and out of the house when compared to males, χ^2 (2, N = 1727) = 13.5, p< .01.



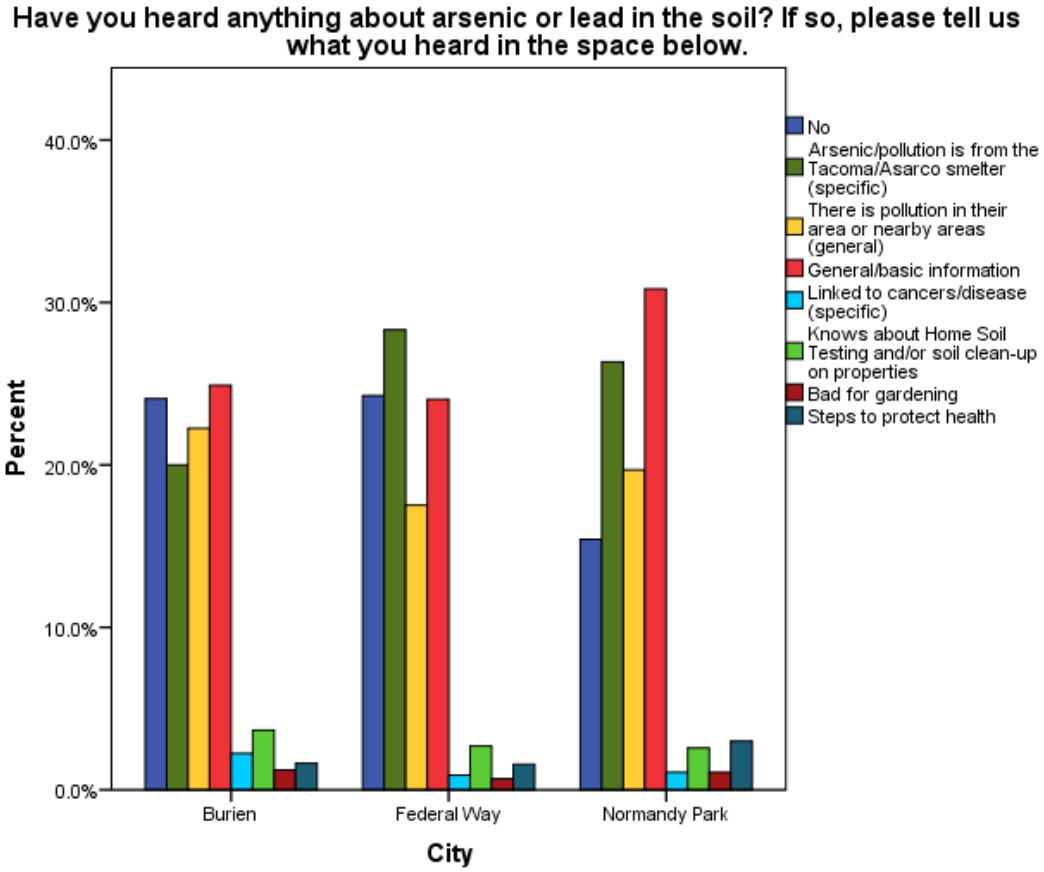
4.0 Results

4.1 Level of Awareness

Respondents were asked to freely write what they have heard about arsenic and lead in the soil. 21% were able to provide general or basic information, 19% were able to provide specific information about the Tacoma/Asarco Smelter, and 15% were able to provide information about pollution in general. Example quotations are provided in the table below.

Response Theme	Percent
Didn't answer the question	23% (416 respondents)
General/basic information • "I am aware that there has been a problem in the past but haven't heard anything recently"	21% (373 respondents)
Pollution is from the Tacoma/Asarco smelter (specific) • "The ASARCO smelter plant formerly in Tacoma gave off smoke that contained lead and with winds [unreadable] blown in our direction could have contaminated our soil. The lead could impact our health"	19% (384 respondents)
No	16% (298 respondents)
There is pollution in their area or nearby areas (general) • "A couple of years ago Des Moines and Normandy Park talked about arsenic or lead in the soil. Guess it was minimal"	15% (279 respondents)
Knows about Home Soil Testing/oil clean-up on properties • "I have heard that the soil around our area may be contaminated due to the Asarco plant and that we can get our soil tested for free"	2% (42 respondents)
Steps to protect health • "I heard that there was arsenic and that bare feet of humans and pets should be washed before coming in the house"	2% (29 respondents)
Linked to cancers/disease (specific) • "It's poisonous. Extended exposure can lead to long term adverse side effects such as cancer, abnormal birth defects, etc."	1% (20 respondents)
Bad for gardening • "Toxic soil-things do not grow in the ground much--use containers with purchased soil"	1% (14 respondents)

The types of information provided by respondents varied by city, χ^2 (16, N = 1817) = 45.9, $p < .01$.



4.1.1 Awareness of arsenic and lead in soil within the last year is 52%.

52% of respondents indicated that they have heard something about lead and arsenic in soil within the last year. As a whole, respondents remember seeing information from broad-based communication sources.

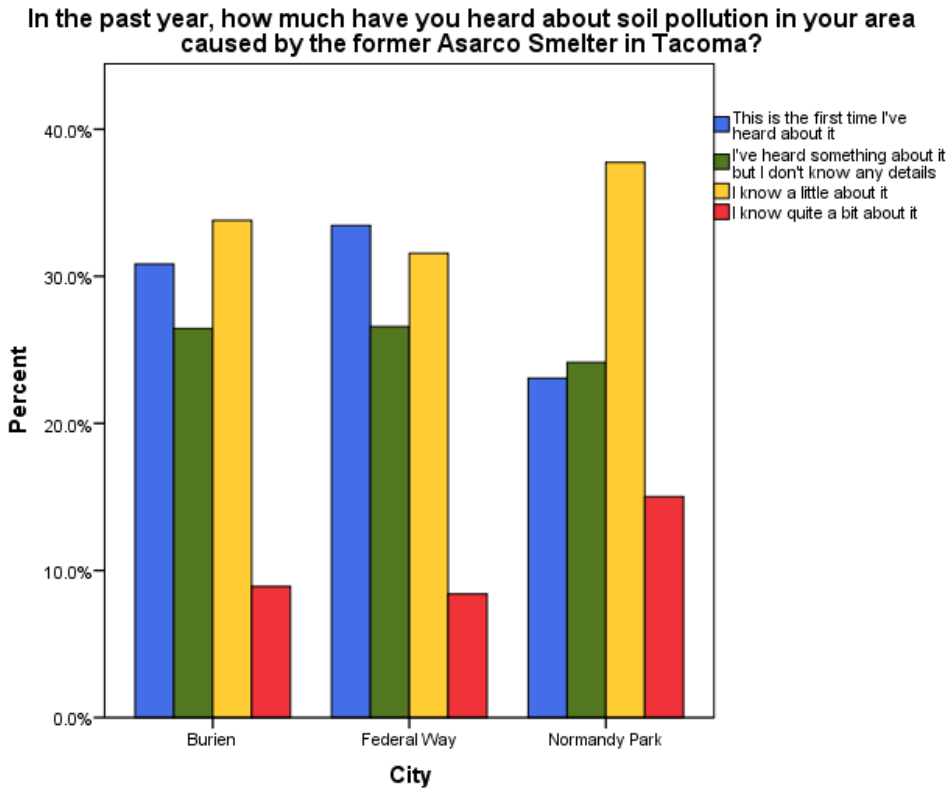
Television was the most often reported source of information (31%) for those who saw something about lead and arsenic in the last year. There were several significant differences between characteristics of the respondents and whether they saw information about lead and arsenic in the soil from a particular source. These differences are noted in the table below.

Information Source	Percent
I haven't seen any information • Males (OR = .79, 95% CI: .64-.96) • KC: 7 years or less (OR = .46, 95% CI: .25-.83) • Garden: No (OR = .53, 95%CI: .40-.71)	48% (867 respondents)
TV ad or program • 44 years old and younger (OR = .50, 95%CI: .26-.96)	31% (557 respondents)
Newspaper ad or article • Males (OR = .63, 95%CI: .47-.83)	23% (409 respondents)

• 45 years old or older (OR = 4.33, 95%CI: 1.97 – 9.50)	
Information mailed to my home • Normandy Park (OR= 1.30, 95%CI: 1.30 – 2.86)	11% (200 respondents)
Radio • Males (OR = .61, 95%CI: .39-.95)	6% (113 respondents)
Internet ad or website • Males (OR = .60, 95%CI: .38-.93)	6% (112 respondents)
Fairs or community events	4% (70 respondents)
Information from my child's school or daycare	2% (29 respondents)
Facebook	1% (13 respondents)
Other	8% (151 respondents)

4.1.2 Awareness of Asarco contamination is 70%.

Respondents were relatively evenly split on how much information they have heard about soil pollution from the Asarco Smelter Plume in the past year. 29% heard about it for the first time in the survey, 25% of heard something about it but didn't know any details, 34% knew a little a bit about it, and 11% knew quite a bit about it. Those living in Normandy Park tended to indicate that they know quite a bit about soil pollution from the Asarco Smelter in Tacoma compared to the other the other cities, χ^2 (6, N = 1781) = 30.0, p < .01). Most people had at least heard something about the issue.



On average, males, those who were 45 years old or older, those who were white, and those were had a garden were more likely to indicate they heard at least some information about soil pollution caused by the Asarco Smelter.

The table below highlights the percentages and odds ratios for each significant characteristic.

In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?

Variable	First Time	Some, but no details	A little	Quite a bit	Odds Ratio
Male	27% (227)	26% (218)	35% (287)	12% (101)	OR = .83, 95%CI .69-.99
Female	31% (266)	26% (223)	35% (305)	9% (78)	
The odds of knowing something about soil pollution are 18% higher for males than females.					
44 years old -	39% (52)	24% (32)	33% (43)	4% (5)	OR = 1.76, 95%CI 1.21-2.57
45 year old+	38% (438)	26% (411)	35% (547)	11% (173)	
The odds of knowing something about soil pollution are 76% higher for those who were 45 years old than 44 years old and younger.					
White	27% (412)	26% (389)	36% (542)	11% (165)	OR = .56, 95%CI = .40-.78
Non-White	48% (73)	24% (37)	20% (31)	7% (11)	
The odds of knowing something about soil pollution are 44% higher for Whites than non-Whites.					
Garden: No	39% (103)	29% (78)	25%(65)	7% (18)	OR = 1.67, 95%CI: 1.29-2.17
Garden: Yes	27% (408)	25% (376)	36% (538)	11% (167)	
The odds of knowing something about soil pollution are 67% higher for those who have a garden than those who do not have a garden.					

Note. Percentages were calculated by row count/cell count. Numbers in parentheses are the counts.

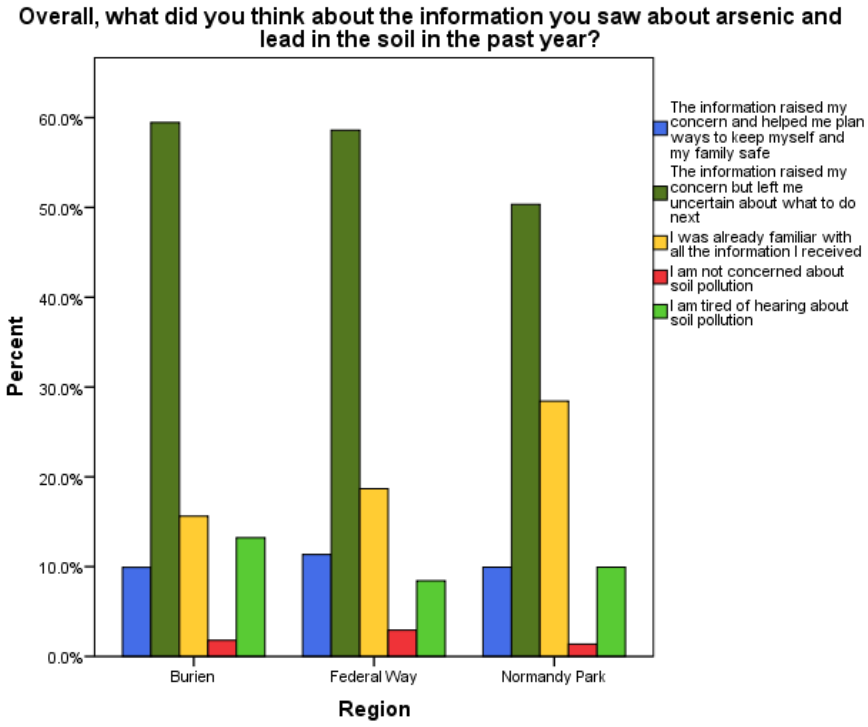
Individuals who heard information about soil pollution from television/video (OR = 5.70, 95%CI: 3.70-8.79), direct mail (OR = 3.01, 95%CI: 2.02-4.49), fairs (OR= 2.60, 95%CI: 1.38-4.90), Internet (OR = 1.74, 95%CI: 1.03-2.94), and newspaper (OR = .50, 95%CI: .34-.72) were more likely to indicate that they knew something about soil pollution.

4.1.2 Soil pollution information raised concern but left 56% uncertain about next steps.

When asked what they thought about soil pollution information, 45% of those responding to the question answered that they had not seen any. Of the respondents who had heard about the issue, the information tended to raise concern, but leave them

concerned about what to do next (56%), while 10% felt that the information helped them plan a way to keep their family safe. Twenty-one percent were already familiar with the information they received and 10% were tired of hearing about soil pollution.

Those living in Burien tended indicate that the information raised their concern but left them uncertain about what to do next, while those living in Normandy Park tended to think that they were already familiar with the information they received, χ^2 (8, N = 898) = 21.5, p < .01.



Whether the information helped people plan or left them indeterminate varied by the method of contact, individuals who heard the information at a fair or through direct mail were more likely to be empowered.

Contact Method	N	Helped me plan	Left me uncertain	Proportion
Fairs	***65***	***18***	***17***	***1.06***
Direct mail	***184***	***33***	***76***	***.43***
Internet	106	18	53	.33
Radio	102	14	51	.27
TV	515	53	292	.18
School or daycare	25	3	14	.21
Newspaper	378	33	202	.16

Note. Proportion was calculated by *(Helped my plan/Left me uncertain).*

Additionally, those who were non-White were more likely to not be empowered by the information they heard (OR = .20, 95%CI: .10-.38).

4.1.4 Awareness of Dirt Alert is 18%

Of the total survey respondents, 18% had heard of the Dirt Alert program. Females and those who were 44 years old or younger tended to indicate that they had heard about the "Dirt Alert" program.

The table below highlights the percentages and odds ratios for each significant characteristic.

Have you heard about a program called "Dirt Alert"?

Variable	Yes	No	Odds Ratio
Male	12% (69)	88% (488)	OR = 2.08, 95%CI: 1.49-2.91
Female	24% (149)	76% (481)	
The odds of hearing about "Dirt Alert" were 108% higher for females than males.			
45 year old+	17% (187)	83% (918)	OR = .36, 95%CI: .20-.66
44 years old -	35% (28)	65% (52)	
The odds of hearing about "Dirt Alert" were 64% higher for those 45 years old or older than those who were 44 years old or younger.			

Note. Percentages were calculated by row count/cell count. Numbers in parentheses are the counts.

Respondents who knew about the "Dirt Alert" program were likely to have heard information about soil pollution through television (OR = 6.56, 95%CI: 4.59-9.39), direct mail (OR = 3.14, 95%CI: 2.13-4.67), fairs (OR = 2.67, 95%CI: 1.43-5.00), and the Internet (OR = 1.80, 95%CI: 1.06-3.04). Respondents who knew about the "Dirt Alert" program were less likely to have heard information about soil pollution from the newspaper (OR = .51, 95%CI: .35-.78).

4.1.5 Contact Preferences: 68% preferred mailings.

As a whole, respondents preferred more board-based communication compared to one-on-one contact. For each method of contact, there were several types of respondents who indicated a stronger preference than others.

Communication Preference	Percent
Mailings or email • Children under 10 (OR = 1.77, 95%CI: 1.18-2.65)	68% (1231 respondents)
Radio or newspaper	43% (776 respondents)
Videos (TV or Online) • Non-white (1.80 95%CI: 1.27-2.55)	32% (583 respondents)
Websites (Including Facebook) • 44 years old and younger (OR = .38 95%CI: .25-.59)	21% (373 respondents)
Fairs or community events	11% (206 respondents)

• Female (OR = 1.64, 95%CI: 1.18-2.28)	
Family, friends, or neighbors • 44 years old and younger (OR = .50, 95%CI: .28-.89)	9% (157 respondents)
My child's school or care provider • 44 years old and younger (OR = .33, 95%CI: .18-.59) • White (OR = 2.58, 95%CI: 1.35-4.95) • Own Home (OR = 3.93, 95%CI: 1.58-9.79) • Children under 10 (OR = 8.59, 95%CI: 4.93-14.95)	5% (88 respondents)
Community or religious leaders • Non-white (OR = 3.12, 95%CI: 1.70-5.75)	4% (74 respondents)
Other	5% (91 respondents)

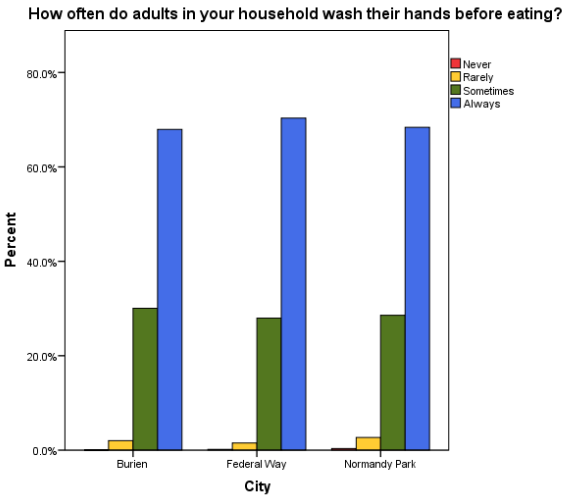
4.2 Adult Actions to Reduce Soil Contact

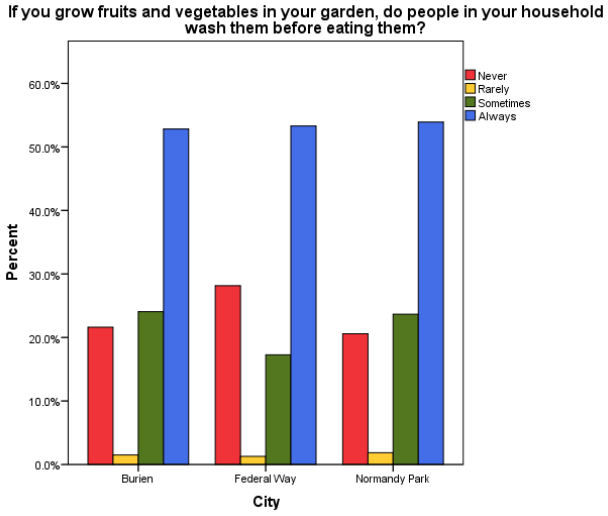
4.2.1 Personal Health Actions: 70% always wash their hands.

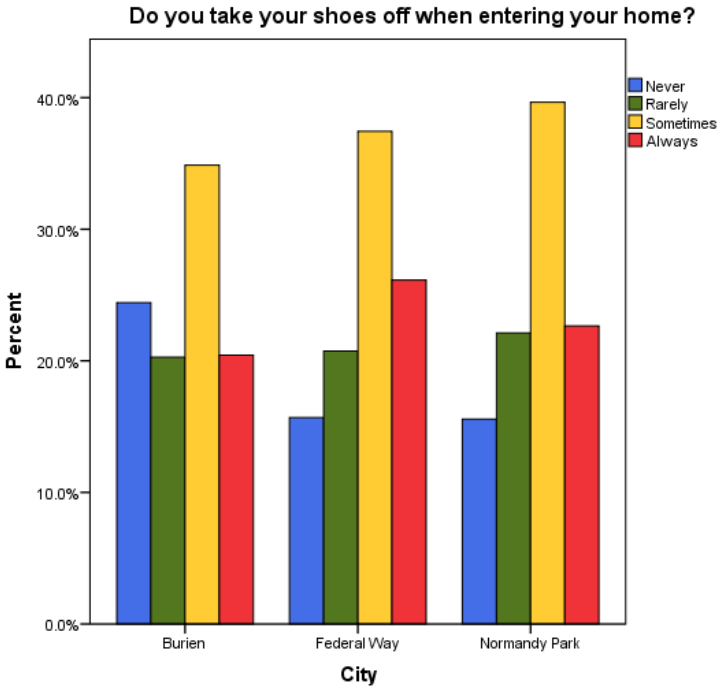
Seventy percent of respondents reported always washing their hands before eating, 47% reported always washing fruits and vegetables grown at home (47%), and 23% reported that they always take off shoes.

There were no differences in hand washing behavior by city. Those in Federal Way tended to indicate that they never wash their fruits and vegetables that were grown at home, χ^2 (6, N = 1487) = 13.9, p < .05.

If the respondent took off his or her shoes before entering the house, family members tended to also be more likely to take their shoes off (Cramer's V = .71, p < .05). Those living in Burien tended to be more likely to never take their shoes off (χ^2 (6, N = 1809) = 23.9, p < .01) when compared to the other cities.







Respondents with certain characteristics tended to be more likely to engage in behaviors that reduced soil contact.

Non-whites, those who do not have children under the age of 10 living at home, and those who do not have a garden were likely to indicate that the adults in their household always wash their hands before eating. The table below highlights percentages and odds ratios for each significant characteristic.

How often do the adults in your household wash their hands before eating?

Variable	Never	Rarely	Sometimes	Always	Odds Ratio
White	0% (1)	2% (35)	30% (462)	67% (1022)	(OR = 1.95, 95%CI: 1.27-2.99)
Not-White	0% (1)	1% (2)	18% (28)	80% (127)	
The odds of washing one's hands before eating were 95% higher for non-Whites than Whites.					
Children: No	0% (2)	2% (31)	27% (424)	70% (1092)	(OR = .54, 95%CI: .39-.77)
Children: Yes	0% (0)	2% (5)	38% (85)	60% (134)	
The odds of washing one's hands before eating were 45% higher for those without children were than those with children.					
Garden: No	0% (0)	2% (6)	22% (60)	76% (205)	(OR = .71, 95%CI: .51-.99)
Garden: Yes	0% (3)	2% (31)	30% (448)	68% (1020)	
The odds of washing one's hands before eating were 29% higher for those who do not have a garden that those with a garden					

Note. Percentages were calculated by row count/cell count. Numbers in parentheses are the counts.

Those who are younger, non-White, do not have a pet that goes in and outside of the house tended to be more likely to take their shoes off when entering the home. The table below highlights percentages and odds ratios for each significant characteristic.

Do you take your shoes off when entering your home?

Variable	Never	Rarely	Sometimes	Always	Odds Ratio
44 year old-	8% (11)	15 (11%)	46% (62)	34% (46)	OR = .48, 95%CI: .33-.70
45 years old +	20% (314)	22% (345)	37% (587)	22% (348)	
The odds of taking one's shoes off are 52% higher for those who are 44 years old and younger than those who are 45 years old or older					
White	20% (300)	22% (336)	39% (590)	20% (300)	OR = 3.34, 95%CI: 2.38-4.69
Non-White	12% (18)	11% (17)	27% (43)	50% (79)	
The odds of taking one's shoes off are 234% higher for those who are non-Whites than those who are White.					
Pet: No	18% (172)	20% (196)	35% (334)	27% (262)	OR = .72 95%CI: .60-.87
Pet: Yes	20% (168)	22% (181)	40% (333)	18% (153)	
The odds of taking one's shoes off are 28% higher for those who do not have a pet that goes in and out of the house than those who do have a pet that goes in and out of the house.					

Note. Percentages were calculated by row count/cell count. Numbers in parentheses are the counts.

Those who are non-White tended to be more likely to always wash fruits and vegetables grown at home.

If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?

Variable	Never	Rarely	Sometimes	Always	Odds Ratio
White	24% (306)	2% (21)	23% (290)	52% (659)	OR = 2.01 95%CI: 1.31-3.13
Not-White	28% (21)	0% (0)	11% (12)	69% (75)	
The odds of washing fruits and vegetable grown at home are 101% higher for those who are non-White than those who are White.					

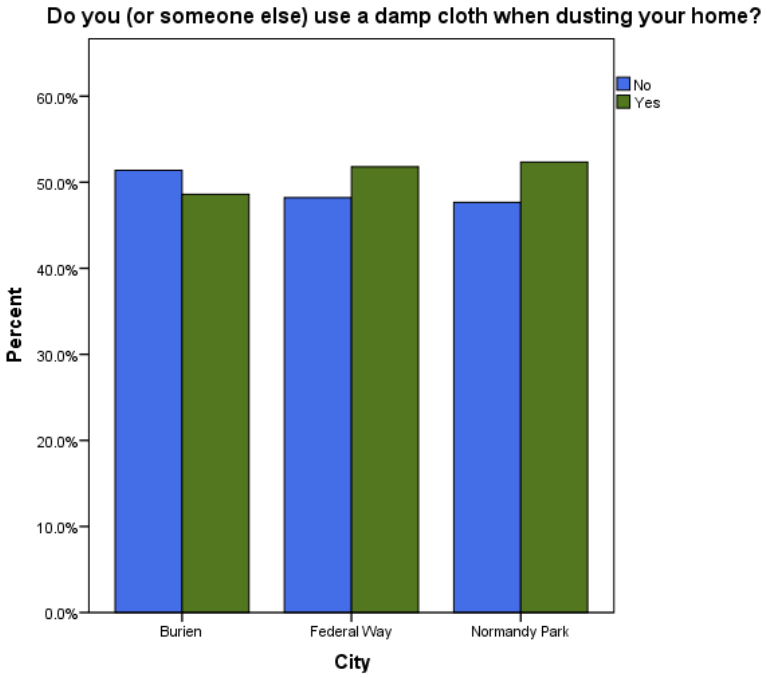
Note. Percentages were calculated by row count/cell count. Numbers in parentheses are the counts.

4.2.2 Home Cleaning Actions: 50% dust with a damp cloth.

About half of the respondents reported dusting with a damp cloth (50%). Those who were male, non-White, and had a pet were tended to be more likely to use a damp cloth.

Do you (or someone else) use a damp cloth when dusting your home?

Variable	No	Yes	Odds Ratio
Male	46% (378)	54% (451)	OR = .76, 95%CI: .62-.93
Female	53% (464)	47% (416)	
The odds of using a damp cloth when dusting were 24% higher for males than females.			
White	51% (767	49% (743)	OR = 1.71, 95%CI: 1.20-2.46
Not White	38% (59)	62% (96)	
The odds of using a damp cloth when dusting were 71% higher for those who were non-White than those who were White.			
Pet: No	52% (497)	48% (455)	OR = 1.43 95%CI: 1.17-1.76
Pet: Yes	46% (376)	54% (447)	
The odds of using a damp cloth to dust were 43% higher for those who had a pet that went outside than those who do not have a pet that goes outside.			

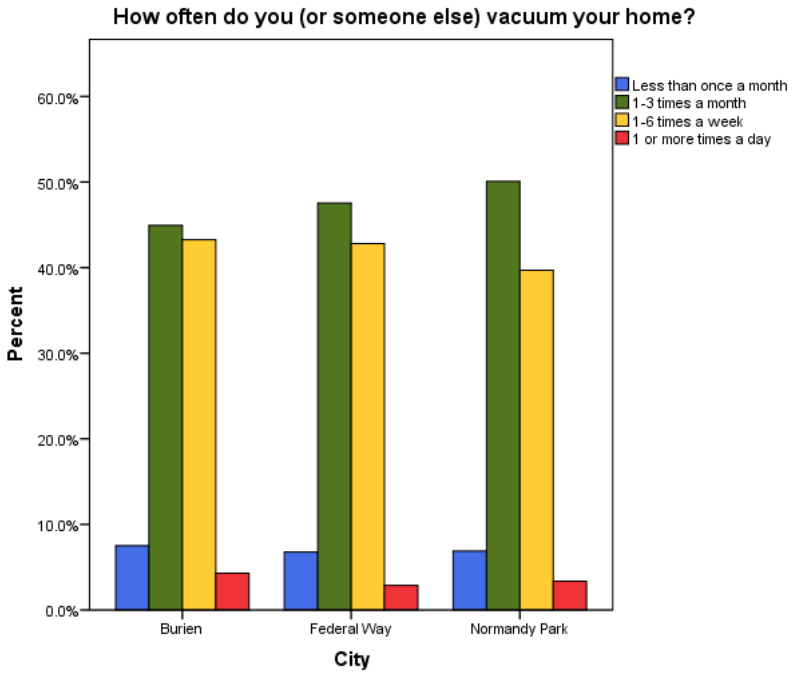


47% of respondents vacuum their home 1-3 times a month and 42% of respondents vacuum their home 1-6 times a week. Males, those with a garden, those with a pet that goes in and out of the house, and those who have children under the age of 10 living in the homes tended to be more likely to vacuum at least once a month.

How often do you (or something else) vacuum your home?

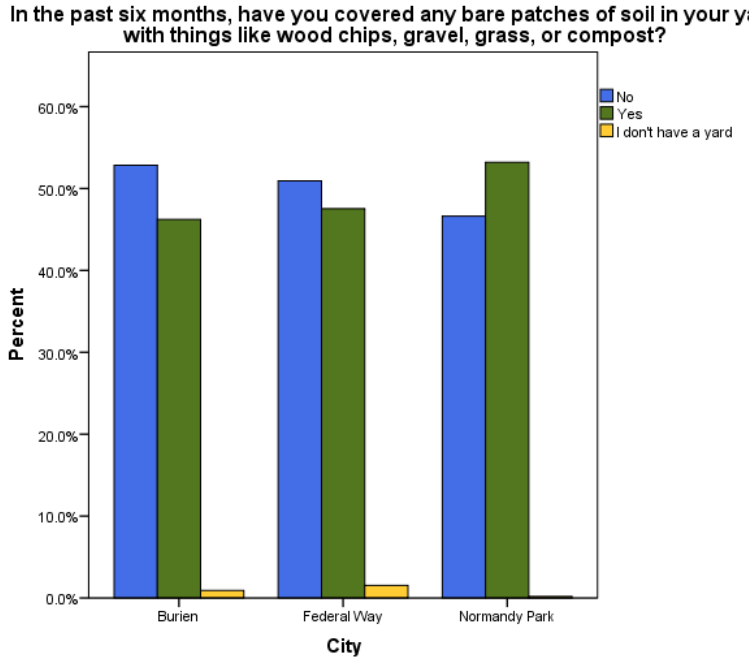
Variable	Less than	1-3 times a month	1-6 times a week	1 or more	Odds Ratio

	once a month			times a day	
Male	6% (51)	47% (393)	45% (381)	2% (18)	OR = .76, 95%CI: .66-.97
Female	8% (67)	48% (428)	40% (352)	5% (43)	
The odds of vacuuming one's home more than once a month were 24% higher for males than females.					
Garden: No	11% (30)	49% (133)	39% (105)	2% (5)	OR = 1.52, 95%CI: 1.16-2.00
Garden: Yes	6% (95)	47% (712)	43% (645)	3% (58)	
The odds of vacuuming one's home more than once a month were 52% higher for those who have a garden than those who do not have a garden.					
Pet: No	9% (85)	50% (484)	38% (367)	3% (29)	OR = 1.41 95%CI: 1.16-1.71
Pet: Yes	5% (41)	45% (372)	46% (387)	4% (35)	
The odds of vacuuming one's home more than once a month were 41% higher for those who have a pet that goes in and out of the house than those who do not have a pet that goes in and out of the house.					
Children: No	7% (110)	49% (758)	41% (637)	3% (52)	OR = 1.44 95%CI: 1.04-2.00
Children: Yes	7% (16)	39% (87)	49% (108)	5% (11)	
The odds of vacuuming one's home more than once a month were 44% higher for those who have children than those who do not have children.					



4.2.3 Covering Bare Soil with Materials: 48% did in the last six months.

In the past six months, 48% of respondents have covered over bare patches of soil in their yard with some material.



Those who had a garden, had a pet that went in and out of the house, and had children under 10 living at home were more likely to cover bare patches in the yard.

In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?

Variable	No	Yes	Odds Ratio
Garden: No	70% (75)	25% (27)	OR = 3.46, 95%CI: 2.51-4.76
Garden: Yes	43% (335)	56% (436)	
The odds of coving bare patches were 246% higher for those who have a garden than those who do not have a garden.			
Pet: No	47% (221)	50% (230)	OR = 1.23 95%CI: 1.03-1.56
Pet: Yes	44% (192)	55% (237)	
The odds of covering bare patches were 3% higher for those who have a pet that goes in and out of the house compared to those who do not have a pet that goes in and out of the house.			
Children: No	49% (376)	50% (385)	OR = 1.53 95%CI: 1.09-2.17
Children: Yes	31% (35)	67% (75)	
The odds of covering bare patched were 53% higher for those who have children under 10 compared to those who do not have children under 10.			

4.2.4 Adult actions were related to level of soil pollution awareness.

Of the six actions (washing food grown at home, covering bare soil patches, taking off shoes, washing hands before eating, vacuuming, and damp dusting), two actions varied significantly by awareness of soil pollution.

Variable	First Time	Some, but no details	A little	Quite a bit	Odds Ratio
Covering bares patches	No = 56% (289) Yes = 43% (220)	No = 50% (228) Yes = 50% (222)	No = 46% (278) Yes = 54% (324)	No = 47% (87) Yes = 54% (102)	OR = 1.17, 95%CI: 1.07-1.30
The odds of covering bare patches in the yard were 17% higher for those who heard something about soil pollution.					
Wash Fruits	Never = 24% (98) Rarely = 2% (8) Sometimes =23% (92) Always = 51% (204)	Never = 26% (96) Rarely = 2% (8) Sometimes = 21% (77) Always = 51% (191)	Never = 23 (121) Rarely = 1% (4) Sometimes = 22% (117) Always = 54% (285)	Never = 16% (26) Rarely = 2% (3) Sometimes = 21% (35) Always = 61% (101)	OR = 1.12, 95%CI: 1.01-1.23
The odds of washing fruits and vegetable grown at home are 12% higher for those who heard something about soil pollution.					

Several actions were also related to what the individual thought about the information they heard:

- The odds of washing hands before eating were 206% higher for those who indicated that the information they heard helped them plan compared to those who indicated that the information left them uncertain. (OR = 3.06, 95%CI: .1.69-5.55)
- The odds of taking off shoes before entering the home were 95% higher for those who indicated that the information they heard helped them plan compared to those who indicated that the information left them uncertain. (OR = 1.95, 95%CI: 1.31-2.88)
- The odds for taking off shoes was 40% higher for those were left uncertain compared to those who are tired of hearing information about soil pollution (OR = .60, 95%CI: .41-.87).
- The odds of damp dusting were 77% higher for those who indicated that the information helped them plan compared to those who were left uncertain (OR 1.77, 95%CI: 1.13-2.80)
- The odds of covering bare patches was 31% higher for those who were left uncertain compared to those who heard the information about soil pollution for the first time on the survey. (OR = .69, 95%CI: .56-.87)

4.2.5 Adult actions were related to the level of Dirt Alert awareness.

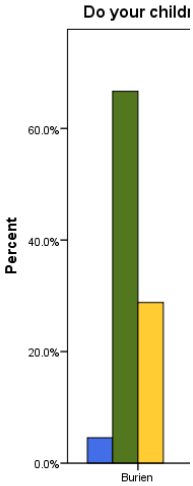
Of the six actions described in this section, only covering bare patches varied significantly by awareness of Dirt Alert.

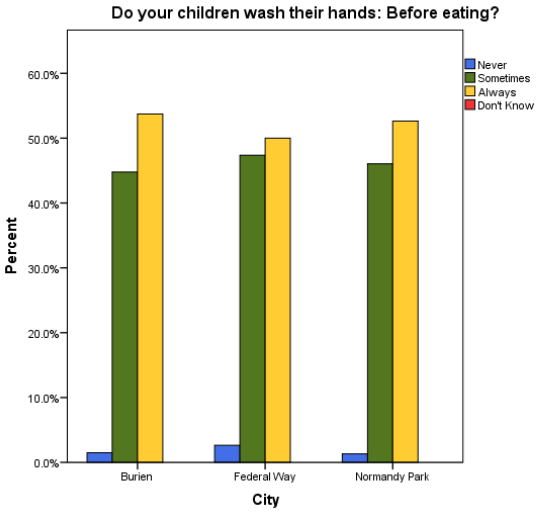
Variable	Aware of Dirt Alert	Odds Ratio
Covering bare patches	Yes:45% (98) No: 56% (122) I don't have a yard: 0% (0)	OR = .70, 95%CI: .52-.94

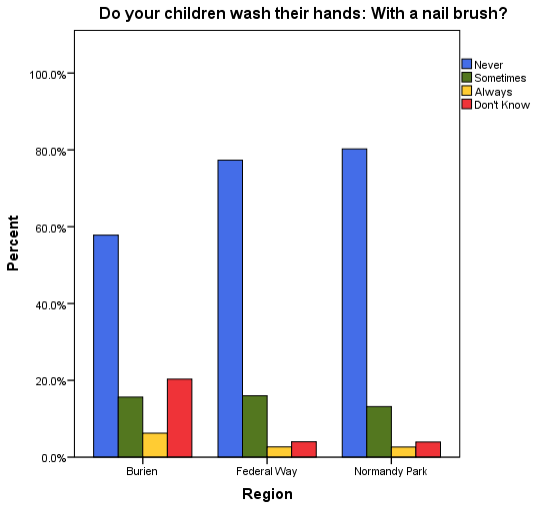
4.3 Child Actions to Reduce Soil Contact

Thirteen percent of respondents had children under the age of 10 living in the home.

Of those who have children living at home, 30% have children who always wash their hands after playing outside and 62% have children who sometimes wash their hands after playing outside. 53% have children who always wash their hands before eating, and 45% have children who sometimes wash their hands before eating. 70% have children who never use a nail brush. Those living in Burien tended to never use a nail brush compared to the other cities (χ^2 (6, N = 215) =







18.2, p < .01).

5.0 Discussion

5.1 Sample Representativeness

Respondents to the survey were evenly split between male and female which is reflective of the demographics in the three areas that were surveyed. People who are Caucasian, over the age of 65 and homeowners were significantly overrepresented in the sample (Appendix B). It is possible that the results of the survey are skewed toward the responses from these three groups.

5.2 Implications for Outreach Programs

As a whole, the survey indicates that there is a moderate amount of awareness of soil pollution caused by the Asarco Smelter. Most of the respondents had at least heard something about soil pollution; however, about half of those respondents were uncertain about what steps they could take to protect themselves and their families. Additionally, many of the respondents follow the recommended actions, though it is unclear if this is because of awareness of the issue or due to other factors.

Direct mail or email appeared to be a preferred and impactful way to communication with the survey population. Direct may be an effective way to balance sending out the information broadly as well as creating a feeling of empowerment. Outreach in the future will want to consider how to use this information source effectively.

Awareness by itself does not necessarily indicate that the individual will follow the advocated actions. This is evident in the fact that many of the specific actions explored in the survey were not related to knowing something about the issue. Additional work is needed to explore how outreach materials can be tailored to different audience groups. Future outreach efforts may want center on decreasing the barriers that individuals face when trying to engage in the action and highlighting motivators to doing the actions.

Based on the survey, future outreach may want to target the following demographic groups:

- Those living in Burien
- Those who are non-Caucasian
- Families with young children

5.3 Comparison to King County Data

This section compares survey data to the 2013 King County Baseline Survey Report.

There were fewer female respondents in the 2015 survey compared to the 2013 survey. 2015 respondents were also older, more likely to own their home, and lived in King County longer than those who responded to the 2013 survey.

Variable	2013	2015
Awareness of soil pollution	71%	70%
Awareness of Dirt Alert	15%	18%
Most common source of information	Television, newspaper, direct mail	Television, newspaper
Most empowering source of information	School/daycare, fair	Fairs, direct mail

Note. The 2013 report surveyed Burien, Des Moines, Federal Way, Normandy Park, and Vashon Island. Des Moines and Vashon Island were removed for this comparison analysis.

Respondents to the 2015 survey appear to be more uncertain about what to do next regarding the information they heard (56%) when compared to the 2013 survey (38%).

On average, there was not much change in the percentage of respondents who always follow the advocated actions. There were a few exceptions.

Variable	2013	2015
Hand Washing	73% (Normandy Park)	68% (Normandy Park)
Take off Shoes	35% (Federal Way)	26% (Federal Way)
Cover Bare Patches	37% (Federal Way)	48% (Federal Way)

5. 4 Strengths, Limitations, and Lessons Learned

There were several strengths of this survey. First, there were several groups who are appropriately represented in the survey. Most of the respondents were homeowners which is a primary target audience for outreach. There was also an adequate split between male and female respondents. Second, the response rate for the survey was higher than expected. The online option for respondents may have boosted the response rate.

One of the major limitations of the survey is that the respondents to the survey were not representative of the population as a whole, thus caution should be taken in applying the findings to the population. Another limitation is that the survey cannot be used to make any causal inferences between awareness of the “Dirt Alert” program or knowledge of soil pollution.

In the future, attention should be paid to the wording of the questions asked on the survey. The awareness questions were prefaced by the phrase “in the past year.” It is unclear if the responses to the questions took this into account or not. It is possible that someone could have heard about soil pollution in the past, but not in the last year so they would have indicated that they had not heard any information. This could potentially skew the results.

Appendix A. Survey Instrument

Tacoma Smelter Plume King County Awareness Survey

1. Have you heard anything about arsenic or lead in the soil? If so, please tell us what you heard in the space below.

2. Do you have a vegetable garden or flowerbeds? ☐ Yes ☐ No

3. If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?

- ☐ Always
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ I don't grow fruits and vegetables.

4. In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?

☐ Yes ☐ No ☐ I don't have a yard

5. Do you have a dog or cat that goes in and out of the house?

☐ Yes ☐ No

6. Do you take your shoes off when entering your home?

☐ Always ☐ Sometimes ☐ Rarely ☐ Never

7. Do other members of your household take their shoes off when entering your home?

☐ Always ☐ Sometimes ☐ Rarely ☐ Never

8. Do your guests take their shoes off when entering your home?

☐ Always ☐ Sometimes ☐ Rarely ☐ Never

9. How often do you (or someone else) vacuum your home? (Select one.)

- ☐ 1 or more times a day
- ☐ 1-6 times a week
- ☐ 1-3 times a month
- ☐ Less than once a month

1 Burien

10. Do you (or someone else) use a damp cloth when dusting your home?

☐ Yes ☐ No

11. How often do adults in your household wash their hands before eating?

☐ Always ☐ Sometimes ☐ Rarely ☐ Never

12. Do you have any children under 10 living in your home some or all the time?

☐ Yes ☐ No >> please skip to question 14

13. Do your children wash their hands...

	Always	Sometimes	Never	Don't know
After playing outside?	☐	☐	☐	☐
Before eating?	☐	☐	☐	☐
With a nail brush?	☐	☐	☐	☐

14. In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma? Pick just one.

☐ This is the first time I've heard about it.
☐ I've heard something about it but don't know any details.
☐ I know a little about it.
☐ I know quite a bit about it.

15. In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself? Please check all that apply.

a. I haven't seen any information ☐
b. TV ad or program ☐
c. Internet ad or website ☐
d. Information mailed to your home ☐
e. Information from your child's school or daycare ☐
f. Newspaper ad or article ☐
g. Fairs or community events ☐
h. Facebook ☐
i. Radio ☐

j. Other ☐

16. Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year? Pick one statement.

- ☐ I don't recall seeing any information. >> please skip to question 18
- ☐ The information raised my concern and helped me plan ways to keep myself and my family safe.
- ☐ The information raised my concern but left me uncertain about what to do next.
- ☐ I was already familiar with all the information I received.
- ☐ I am not concerned about soil pollution.
- ☐ I am tired of hearing about soil pollution.

17. Have you heard about a program called "Dirt Alert"?

☐ Yes ☐ No

18. How do you prefer getting information about soil pollution and what you can do? Check all that apply.

- a. Videos (TV or online) ☐
- b. Websites (including Facebook) ☐
- c. Mailings or e-mail ☐
- d. My child's school or care provider ☐
- e. Family, friends, or neighbors ☐
- f. Community or religious leaders ☐
- g. Radio or newspaper ☐
- h. Fairs or community events ☐
- i. Other ☐

Now we have some questions about you. This information will help us provide better service to your community. If you do not feel comfortable answering a question, skip it.

19. What is your gender? ☐ Male ☐ Female

20. What is your age?

☐ 18-25 ☐ 26-45 ☐ 46-65 ☐ Over 65

21. Are you from a Hispanic, Latino, or Spanish-speaking background?

☐ Yes ☐ No

22. What race do you consider yourself?

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White or Caucasian
- ☐ Two or more races

Other ☐

23. Do you own or rent the place in which you live? ☐ Own ☐ Rent

24. Which of the following best describes your housing?

- ☐ House
- ☐ Apartment
- ☐ Condominium or townhouse
- ☐ Duplex or triplex

Other ☐

25. How long have you lived in King County?

- ☐ Less than one year
- ☐ 1-3 years
- ☐ 4-7 years
- ☐ 8-15 years
- ☐ More than 15 years

26. Do you have anything else you'd like to tell us?

27. I would like to receive information about:

- ☐ Dirt Alert Program and free Home Soil Testing
- ☐ Survey Results

Name:

Phone Number:

Email Address:

Street Address:

City:

Zip Code:

Thank you for participating in this important survey!

Appendix B. Survey Demographics vs. Census by City

Burien

Survey Response Rate = 33%

Demographic	2010 Census	Survey
Population	49,858	655
Female	49.7%	50.8%
White/Caucasian	63.5%	92.3%
Hispanic origin	20.7%	2.1%
Persons over age 65 by all adults	12.8%	54.4%
Lived in King County 15+ years	n/a	94.2%
Home ownership	52.7%	96.5%
Median income	$50,805	n/a

Federal Way

Survey Response Rate = 30%

Demographic	2010 Census	Survey
Population	92,743	593
Female	51.0%	49.4%
White/Caucasian	57.5%	85.6%
Hispanic origin	16.2%	2.2%
Persons over age 65 by all adults	10.3%	49.7%
Lived in King County 15+ years	n/a	89.1%
Home ownership	55.1%	97%
Median income	$55,872	n/a

Normandy Park

Survey Response Rate = 36%

Demographic	2010 Census	Survey
Population	6,335	569
Female	51.2%	47.1%

White/Caucasian	86.4%	93.9%
Hispanic origin	5.2%	1.3%
Persons over age 65 by all adults	21.2%	43.8%
Lived in King County 15+ years	n/a	89%
Home ownership	73.5%	96.6%
Median income	$84,679	n/a

Appendix D. SPSS Outputs

Frequencies

Online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mail	1605	88.2	88.2	88.2
	Online	214	11.8	11.8	100.0
	Total	1819	100.0	100.0	

City

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Burien	655	36.0	36.0	36.0
	Federal Way	593	32.6	32.6	68.7
	Normandy Park	569	31.3	31.3	100.0
	Total	1817	99.9	100.0	
Missing	System	2	.1		
Total		1819	100.0		

Have you heard anything about arsenic or lead in the soil? If so, please tell us what you heard in the space below.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		416	22.9	22.9	22.9
	No	298	16.4	16.4	39.3
	Arsenic/pollution is from the Tacoma/Asarco smelter (specific)	348	19.1	19.1	58.4
	There is pollution in their area or nearby areas (general)	279	15.3	15.3	73.7
	General/basic information	373	20.5	20.5	94.2
	Linked to cancers/disease (specific)	20	1.1	1.1	95.3

	Knows about Home Soil Testing and/or soil clean-up on properties	42	2.3	2.3	97.6
	Bad for gardening	14	.8	.8	98.4
	Steps to protect health	29	1.6	1.6	100.0
	Total	1819	100.0	100.0	

Do you have a vegetable garden or flowerbeds?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	275	15.1	15.4	15.4
	Yes	1513	83.2	84.6	100.0
	Total	1788	98.3	100.0	
Missing	System	31	1.7		
Total		1819	100.0		

If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	347	22.9	23.3	23.3
	Rarely	23	1.5	1.5	24.8
	Sometimes	325	21.5	21.8	46.7
	Always	794	52.5	53.3	100.0
	Total	1489	98.4	100.0	
Missing	System	24	1.6		
Total		1513	100.0		

In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	905	49.8	50.2	50.2
	Yes	881	48.4	48.9	99.1
	I don't have a yard	16	.9	.9	100.0
	Total	1802	99.1	100.0	
Missing	System	17	.9		
Total		1819	100.0		

Do you have a dog or cat that goes in and out of the house?

		Frequency	Percent	Valid Percent	Cumulative Percent
	No	970	53.3	53.7	53.7
Valid	Yes	836	46.0	46.3	100.0
	Total	1806	99.3	100.0	
Missing	System	13	.7		
Total		1819	100.0		

Do you take your shoes off when entering your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Never	340	18.7	18.8	18.8
	Rarely	380	20.9	21.0	39.8
Valid	Sometimes	673	37.0	37.2	76.9
	Always	418	23.0	23.1	100.0
	Total	1811	99.6	100.0	
Missing	System	8	.4		
Total		1819	100.0		

Do other members of your household take their shoes off when entering your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Never	331	18.2	18.8	18.8
	Rarely	397	21.8	22.6	41.4
Valid	Sometimes	707	38.9	40.2	81.6
	Always	324	17.8	18.4	100.0
	Total	1759	96.7	100.0	
Missing	System	60	3.3		
Total		1819	100.0		

Do your guests take their shoes off when entering your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	424	23.3	23.4	23.4
	Rarely	452	24.8	25.0	48.4
	Sometimes	772	42.4	42.7	91.0
	Always	162	8.9	9.0	100.0
	Total	1810	99.5	100.0	
Missing	System	9	.5		
Total		1819	100.0		

How often do you (or someone else) vacuum your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than once a month	128	7.0	7.1	7.1
	1-3 times a month	860	47.3	47.5	54.5
	1-6 times a week	760	41.8	41.9	96.5
	1 or more times a day	64	3.5	3.5	100.0
	Total	1812	99.6	100.0	
Missing	System	7	.4		
Total		1819	100.0		

Do you (or someone else) use a damp cloth when dusting your home?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	879	48.3	49.2	49.2
	Yes	908	49.9	50.8	100.0
	Total	1787	98.2	100.0	
Missing	System	32	1.8		
Total		1819	100.0		

How often do adults in your household wash their hands before eating?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	.2	.2	.2
	Rarely	38	2.1	2.1	2.3
	Sometimes	520	28.6	28.9	31.1
	Always	1240	68.2	68.9	100.0
	Total	1801	99.0	100.0	
Missing	System	18	1.0		
Total		1819	100.0		

Do you have any children under 10 living in your home some or all the time?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1560	85.8	87.4	87.4
	Yes	224	12.3	12.6	100.0
	Total	1784	98.1	100.0	
Missing	System	35	1.9		
Total		1819	100.0		

Do your children wash their hands: After playing outside?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	14	6.3	6.4	6.4
	Sometimes	137	61.2	62.6	68.9
	Always	68	30.4	31.1	100.0
	Total	219	97.8	100.0	
Missing	System	5	2.2		
Total		224	100.0		

Do your children wash their hands: Before eating?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	4	1.8	1.8	1.8
	Sometimes	101	45.1	45.9	47.7
	Always	115	51.3	52.3	100.0
	Total	220	98.2	100.0	
Missing	System	4	1.8		
Total		224	100.0		

Do your children wash their hands: With a nail brush?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	157	70.1	72.7	72.7
	Sometimes	32	14.3	14.8	87.5
	Always	8	3.6	3.7	91.2
	Don't Know	19	8.5	8.8	100.0
	Total	216	96.4	100.0	
Missing	System	8	3.6		
Total		224	100.0		

In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	This is the first time I've heard about it	521	28.6	29.2	29.2
	I've heard something about it but I don't know any details	459	25.2	25.8	55.0
	I know a little about it	611	33.6	34.3	89.3
	I know quite a bit about it	191	10.5	10.7	100.0
	Total	1782	98.0	100.0	
Missing	System	37	2.0		
Total		1819	100.0		

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: I haven't seen any information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	952	52.3	52.3	52.3
	Check	867	47.7	47.7	100.0
	Total	1819	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?:TV ad or program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	406	42.6	42.6	42.6
	Check	546	57.4	57.4	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?:Internet ad or website

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	844	88.7	88.7	88.7
	Check	108	11.3	11.3	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information mailed to my home

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	760	79.8	79.8	79.8
	Check	192	20.2	20.2	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information from my child's school or daycare

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	927	97.4	97.4	97.4
	Check	25	2.6	2.6	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Newspaper ad or article

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	554	58.2	58.2	58.2
	Check	398	41.8	41.8	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Fairs or community events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	886	93.1	93.1	93.1
	Check	66	6.9	6.9	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Facebook

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	940	98.7	98.7	98.7
	Check	12	1.3	1.3	100.0
	Total	952	100.0	100.0	

In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Radio

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	843	88.6	88.6	88.6
	Check	109	11.4	11.4	100.0
	Total	952	100.0	100.0	

Have you heard about a program called "Dirt Alert"?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	995	54.7	81.8	81.8
	Yes	221	12.1	18.2	100.0
	Total	1216	66.8	100.0	
Missing	System	603	33.2		
Total		1819	100.0		

How do you prefer getting information about soil pollution and what you can do?: Videos (TV or online)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1236	67.9	67.9	67.9
	Check	583	32.1	32.1	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Websites (including Facebook)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1446	79.5	79.5	79.5
	Check	373	20.5	20.5	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Mailings or email

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	588	32.3	32.3	32.3
	Check	1231	67.7	67.7	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: My child's school or care provider

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1731	95.2	95.2	95.2
	Check	88	4.8	4.8	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Family, friends, or neighbors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1662	91.4	91.4	91.4
	Check	157	8.6	8.6	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Community or religious leaders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1745	95.9	95.9	95.9
	Check	74	4.1	4.1	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Radio or newspaper

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1043	57.3	57.3	57.3
	Check	776	42.7	42.7	100.0
	Total	1819	100.0	100.0	

How do you prefer getting information about soil pollution and what you can do?: Fairs or community events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Check	1613	88.7	88.7	88.7
	Check	206	11.3	11.3	100.0
	Total	1819	100.0	100.0	

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	844	46.4	48.6	48.6
	Female	894	49.1	51.4	100.0
	Total	1738	95.5	100.0	
Missing	System	81	4.5		
Total		1819	100.0		

What is your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	4	.2	.2	.2
	26-45	131	7.2	7.6	7.8
	46-65	739	40.6	42.6	50.4
	Over 65	860	47.3	49.6	100.0
	Total	1734	95.3	100.0	
Missing	System	85	4.7		
Total		1819	100.0		

Are you from a Hispanic, Latino, or Spanish-speaking background?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1675	92.1	98.1	98.1
	Yes	32	1.8	1.9	100.0
	Total	1707	93.8	100.0	
Missing	System	112	6.2		
Total		1819	100.0		

What race do you consider yourself?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White or Caucasian	1531	84.2	90.6	90.6
	Asian	73	4.0	4.3	95.0
	American Indian or Alaskan Native	9	.5	.5	95.5
	Black or African American	23	1.3	1.4	96.9
	Native Hawaiian or other Pacific Islander	6	.3	.4	97.2
	Two or more races	45	2.5	2.7	99.9
	Other	2	.1	.1	100.0
	Total	1689	92.9	100.0	
Missing	System	130	7.1		
Total		1819	100.0		

How long have you lived in King County?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-3 years	23	1.3	1.3	1.3
	4-7 years	33	1.8	1.9	3.2
	8-15 years	106	5.8	6.0	9.1
	More than 15 years	1612	88.6	90.9	100.0
	Total	1774	97.5	100.0	
Missing	System	45	2.5		
Total		1819	100.0		

Chi-Square Results

Question by City

Crosstab

Count

		Have you heard anything about arsenic or lead in the soil? If so, please tell us what you heard in the space below.									Total
			No	Arsenic/ pollution is from the Tacoma/ Asarco smelter (specific)	There is pollution in their area or nearby areas (general)	General / basic infor-mation	Linked to cancers/ disease (specific)	Knows about Home Soil Testing and/or soil clean-up on properties	Bad for gardening	Steps to protect health	
Region	Burien	165	118	98	109	122	11	18	6	8	655
	Federal Way	148	108	126	78	107	4	12	3	7	593
	Normandy Park	102	72	123	92	144	5	12	5	14	569
Total		415	298	347	279	373	20	42	14	29	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.915[a]	16	.000
Likelihood Ratio	46.428	16	.000
N of Valid Cases	1817		

a. 2 cells (7.4%) have expected count less than 5. The minimum expected count is 4.38.

Crosstab

Count

	Do you have a vegetable garden or flowerbeds?		Total
	No	Yes	

Region	Burien	98	542	640
	Federal Way	108	480	588
	Normandy Park	69	489	558
Total		275	1511	1786

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.922[a]	2	.019
Likelihood Ratio	7.968	2	.019
Linear-by-Linear Association	1.722	1	.189
N of Valid Cases	1786		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 85.92.

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
Region	Burien	115	8	128	281	532
	Federal Way	132	6	81	250	469
	Normandy Park	100	9	115	262	486
Total		347	23	324	793	1487

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.917[a]	6	.031
Likelihood Ratio	13.984	6	.030
Linear-by-Linear Association	.101	1	.750
N of Valid Cases	1487		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.25.

Crosstab

Count

	In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
	No	Yes	I don't have a yard	

	Burien	344	301	6	651
Region	Federal Way	299	279	9	587
	Normandy Park	262	299	1	562
Total		905	879	16	1800

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.644[a]	4	.020
Likelihood Ratio	12.707	4	.013
Linear-by-Linear Association	3.372	1	.066
N of Valid Cases	1800		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 5.00.

Crosstab

Count

		Do you have a dog or cat that goes in and out of the house?		Total
		No	Yes	
	Burien	354	299	653
Region	Federal Way	331	257	588
	Normandy Park	284	279	563
Total		969	835	1804

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.059[a]	2	.131
Likelihood Ratio	4.057	2	.132
Linear-by-Linear Association	1.556	1	.212
N of Valid Cases	1804		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 260.59.

Crosstab

Count

		Do you take your shoes off when entering your home?				Total
		Never	Rarely	Sometimes	Always	
Region	Burien	159	132	227	133	651
	Federal Way	93	123	222	155	593
	Normandy Park	88	125	224	128	565
Total		340	380	673	416	1809

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.974[a]	6	.001
Likelihood Ratio	23.360	6	.001
Linear-by-Linear Association	9.954	1	.002
N of Valid Cases	1809		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 106.19.

Crosstab

Count

		Do other members of your household take their shoes off when entering your home?				Total
		Never	Rarely	Sometimes	Always	
Region	Burien	163	136	230	103	632
	Federal Way	92	130	237	117	576
	Normandy Park	76	131	239	103	549
Total		331	397	706	323	1757

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.345[a]	6	.000
Likelihood Ratio	32.587	6	.000
Linear-by-Linear Association	17.880	1	.000
N of Valid Cases	1757		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 100.93.

Crosstab

Count

		Do your guests take their shoes off when entering your home?				Total
		Never	Rarely	Sometimes	Always	
Region	Burien	198	163	244	47	652
	Federal Way	115	134	275	68	592
	Normandy Park	111	155	252	46	564
Total		424	452	771	161	1808

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.148[a]	6	.000
Likelihood Ratio	36.359	6	.000
Linear-by-Linear Association	14.773	1	.000
N of Valid Cases	1808		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 50.22.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Region	Burien	49	293	282	28	652
	Federal Way	40	281	253	17	591
	Normandy Park	39	284	225	19	567
Total		128	858	760	64	1810

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.892[a]	6	.558
Likelihood Ratio	4.881	6	.559
Linear-by-Linear Association	1.551	1	.213
N of Valid Cases	1810		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.05.

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Region	Burien	332	314	646
	Federal Way	281	302	583
	Normandy Park	265	291	556
Total		878	907	1785

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.003[a]	2	.367
Likelihood Ratio	2.003	2	.367
Linear-by-Linear Association	1.725	1	.189
N of Valid Cases	1785		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 273.48.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Region	Burien	0	13	195	441	649
	Federal Way	1	9	165	415	590
	Normandy Park	2	15	160	383	560
Total		3	37	520	1239	1799

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.948[a]	6	.550
Likelihood Ratio	5.713	6	.456
Linear-by-Linear Association	.071	1	.790
N of Valid Cases	1799		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .93.

Crosstab

Count

		Do you have any children under 10 living in your home some or all the time?		Total
		No	Yes	
Region	Burien	578	68	646
	Federal Way	505	79	584
	Normandy Park	476	76	552
Total		1559	223	1782

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.672[a]	2	.159
Likelihood Ratio	3.754	2	.153
Linear-by-Linear Association	2.989	1	.084
N of Valid Cases	1782		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 69.08.

Crosstab

Count

		Do your children wash their hands: After playing outside?			Total
		Never	Sometimes	Always	
Region	Burien	3	44	19	66
	Federal Way	7	44	25	76
	Normandy Park	4	48	24	76
Total		14	136	68	218

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.084[a]	4	.720
Likelihood Ratio	2.030	4	.730
Linear-by-Linear Association	.052	1	.820
N of Valid Cases	218		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 4.24.

Crosstab

Count

		Do your children wash their hands: Before eating?			Total
		Never	Sometimes	Always	
Region	Burien	1	30	36	67
	Federal Way	2	36	38	76
	Normandy Park	1	35	40	76
Total		4	101	114	219

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.574[a]	4	.966
Likelihood Ratio	.556	4	.968
Linear-by-Linear Association	.007	1	.935
N of Valid Cases	219		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.22.

Crosstab

Count

		Do your children wash their hands: With a nail brush?				Total
		Never	Sometimes	Always	Don't Know	
Region	Burien	37	10	4	13	64
	Federal Way	58	12	2	3	75
	Normandy Park	61	10	2	3	76
Total		156	32	8	19	215

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.159[a]	6	.006
Likelihood Ratio	16.615	6	.011
Linear-by-Linear Association	13.283	1	.000
N of Valid Cases	215		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.38.

Crosstab

Count

		In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?				Total
		This is the first time I've heard about it	I've heard something about it but I don't know any details	I know a little about it	I know quite a bit about it	
Region	Burien	197	169	216	57	639
	Federal Way	195	155	184	49	583
	Normandy Park	129	135	211	84	559
Total		521	459	611	190	1781

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.012[a]	6	.000
Likelihood Ratio	29.605	6	.000
Linear-by-Linear Association	16.079	1	.000
N of Valid Cases	1781		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.64.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: I haven't seen any information		Total
		No Check	Check	
Region	Burien	348	307	655
	Federal Way	294	299	593
	Normandy Park	308	261	569
Total		950	867	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.705[a]	2	.259

Likelihood Ratio	2.704	2	.259
Linear-by-Linear Association	.081	1	.776
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 271.50.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?:TV ad or program		Total
		No Check	Check	
Region	Burien	141	207	348
	Federal Way	128	166	294
	Normandy Park	135	173	308
Total		404	546	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.912[a]	2	.634
Likelihood Ratio	.914	2	.633
Linear-by-Linear Association	.757	1	.384
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 125.03.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Internet ad or website		Total
		No Check	Check	
Region	Burien	314	34	348
	Federal Way	262	32	294
	Normandy Park	266	42	308
Total		842	108	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.523[a]	2	.283
Likelihood Ratio	2.480	2	.289
Linear-by-Linear Association	2.385	1	.122
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 33.42.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information mailed to my home		Total
		No Check	Check	
Region	Burien	287	61	348
	Federal Way	261	33	294
	Normandy Park	211	97	308
Total		759	191	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.741[a]	2	.000
Likelihood Ratio	40.208	2	.000
Linear-by-Linear Association	18.436	1	.000
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.11.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information from my child's school or daycare		Total
		No Check	Check	
Region	Burien	340	8	348
	Federal Way	285	9	294
	Normandy Park	300	8	308
Total		925	25	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.364[a]	2	.834
Likelihood Ratio	.360	2	.835
Linear-by-Linear Association	.066	1	.797
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.74.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Newspaper ad or article		Total
		No Check	Check	
Region	Burien	190	158	348
	Federal Way	166	128	294
	Normandy Park	197	111	308
Total		553	397	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.423[a]	2	.040
Likelihood Ratio	6.474	2	.039

Linear-by-Linear Association	5.756	1	.016
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 122.86.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Fairs or community events		Total
		No Check	Check	
Region	Burien	326	22	348
	Federal Way	274	20	294
	Normandy Park	285	23	308
Total		885	65	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.338[a]	2	.845
Likelihood Ratio	.336	2	.845
Linear-by-Linear Association	.334	1	.563
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.12.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Facebook		Total
		No Check	Check	
Region	Burien	344	4	348
	Federal Way	289	5	294
	Normandy Park	305	3	308
Total		938	12	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.694[a]	2	.707
Likelihood Ratio	.668	2	.716
Linear-by-Linear Association	.030	1	.863
N of Valid Cases	950		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 3.71.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Radio		Total
		No Check	Check	
Region	Burien	309	39	348
	Federal Way	262	32	294
	Normandy Park	270	38	308
Total		841	109	950

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.351[a]	2	.839
Likelihood Ratio	.348	2	.840
Linear-by-Linear Association	.194	1	.660
N of Valid Cases	950		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 33.73.

Crosstab

Count

	Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	Total

		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
Region	Burien	281	33	198	52	6	44	614
	Federal Way	289	31	160	51	8	23	562
	Normandy Park	245	29	147	83	4	29	537
Total		815	93	505	186	18	96	1713

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.798[a]	10	.003
Likelihood Ratio	25.880	10	.004
Linear-by-Linear Association	.005	1	.944
N of Valid Cases	1713		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.64.

Crosstab

Count

		Have you heard about a program called "Dirt Alert"?		Total
		No	Yes	
Region	Burien	376	91	467
	Federal Way	310	55	365
	Normandy Park	309	74	383
Total		995	220	1215

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.252[a]	2	.197
Likelihood Ratio	3.343	2	.188
Linear-by-Linear Association	.026	1	.873
N of Valid Cases	1215		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 66.09.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Videos (TV or online)		Total
		No Check	Check	
Region	Burien	446	209	655
	Federal Way	388	205	593
	Normandy Park	400	169	569
Total		1234	583	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.174[a]	2	.205
Likelihood Ratio	3.172	2	.205
Linear-by-Linear Association	.579	1	.447
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 182.57.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Websites (including Facebook)		Total
		No Check	Check	
Region	Burien	538	117	655
	Federal Way	473	120	593
	Normandy Park	434	135	569
Total		1445	372	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.459[a]	2	.040

Likelihood Ratio	6.419	2	.040
Linear-by-Linear Association	6.380	1	.012
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 116.49.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Mailings or email		Total
		No Check	Check	
Region	Burien	222	433	655
	Federal Way	193	400	593
	Normandy Park	171	398	569
Total		586	1231	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.090[a]	2	.352
Likelihood Ratio	2.099	2	.350
Linear-by-Linear Association	2.029	1	.154
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 183.51.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: My child's school or care provider		Total
		No Check	Check	
Region	Burien	628	27	655
	Federal Way	561	32	593
	Normandy Park	540	29	569
Total		1729	88	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.212[a]	2	.546
Likelihood Ratio	1.235	2	.539
Linear-by-Linear Association	.676	1	.411
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 27.56.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Family, friends, or neighbors		Total
		No Check	Check	
Region	Burien	590	65	655
	Federal Way	550	43	593
	Normandy Park	521	48	569
Total		1661	156	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.856[a]	2	.240
Likelihood Ratio	2.859	2	.239
Linear-by-Linear Association	.965	1	.326
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 48.85.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Community or religious leaders		Total
		No Check	Check	
Region	Burien	630	25	655
	Federal Way	567	26	593

	Normandy Park	546	23	569
Total		1743	74	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.259[a]	2	.879
Likelihood Ratio	.258	2	.879
Linear-by-Linear Association	.047	1	.828
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.17.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Radio or newspaper		Total
		No Check	Check	
Region	Burien	355	300	655
	Federal Way	335	258	593
	Normandy Park	351	218	569
Total		1041	776	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.209[a]	2	.027
Likelihood Ratio	7.241	2	.027
Linear-by-Linear Association	6.862	1	.009
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 243.01.

Crosstab

Count

		How do you prefer getting information about soil pollution and what you can do?: Fairs or community events		Total
		No Check	Check	
Region	Burien	589	66	655
	Federal Way	519	74	593
	Normandy Park	504	65	569
Total		1612	205	1817

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.811[a]	2	.404
Likelihood Ratio	1.818	2	.403
Linear-by-Linear Association	.620	1	.431
N of Valid Cases	1817		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 64.20.

Crosstab

Count

		What is your gender?		Total
		Male	Female	
Region	Burien	291	333	624
	Federal Way	274	293	567
	Normandy Park	278	268	546
Total		843	894	1737

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.151[a]	2	.341
Likelihood Ratio	2.151	2	.341
Linear-by-Linear Association	2.119	1	.145
N of Valid Cases	1737		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 264.98.

Crosstab

Count

		What is your age?				Total
		18-25	26-45	46-65	Over 65	
Region	Burien	0	40	244	339	623
	Federal Way	2	39	246	284	571
	Normandy Park	2	52	249	236	539
Total		4	131	739	859	1733

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.811[a]	6	.010
Likelihood Ratio	18.013	6	.006
Linear-by-Linear Association	14.967	1	.000
N of Valid Cases	1733		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.24.

Crosstab

Count

		Are you from a Hispanic, Latino, or Spanish-speaking background?		Total
		No	Yes	
Region	Burien	606	13	619
	Federal Way	546	12	558
	Normandy Park	522	7	529
Total		1674	32	1706

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.276[a]	2	.528
Likelihood Ratio	1.359	2	.507
Linear-by-Linear Association	.883	1	.347
N of Valid Cases	1706		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.92.

Crosstab

Count

		What race do you consider yourself?							Total
		White or Caucasian	Asian	American Indian or Alaskan Native	Black or African American	Native Hawaiian or other Pacific Islander	Two or more races	Other	
Region	Burien	564	19	6	3	1	17	1	611
	Federal Way	470	37	2	19	3	18	0	549
	Normandy Park	496	17	1	1	2	10	1	528
Total		1530	73	9	23	6	45	2	1688

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.753[a]	12	.000
Likelihood Ratio	46.660	12	.000
Linear-by-Linear Association	.791	1	.374
N of Valid Cases	1688		

a. 9 cells (42.9%) have expected count less than 5. The minimum expected count is .63.

Crosstab

Count

		Do you own or rent the place in which you live?		Total
		Own	Rent	
Region	Burien	605	22	627
	Federal Way	559	17	576
	Normandy Park	536	19	555
Total		1700	58	1758

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.332[a]	2	.847
Likelihood Ratio	.337	2	.845
Linear-by-Linear Association	.010	1	.919

N of Valid Cases	1758			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.31.

Crosstab

Count

		Which of the following best describes your housing?				Total
		House	Apartment	Condominium or townhome	Duplex or triplex	
Region	Burien	620	5	7	4	636
	Federal Way	549	6	19	2	576
	Normandy Park	534	3	14	3	554
Total		1703	14	40	9	1766

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.218[a]	6	.223
Likelihood Ratio	8.814	6	.184
Linear-by-Linear Association	1.289	1	.256
N of Valid Cases	1766		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is 2.82.

Crosstab

Count

		How long have you lived in King County?				Total
		1-3 years	4-7 years	8-15 years	More than 15 years	
Region	Burien	3	6	28	600	637
	Federal Way	9	11	43	517	580
	Normandy Park	11	15	35	495	556
Total		23	32	106	1612	1773

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.675[a]	6	.011
Likelihood Ratio	17.831	6	.007
Linear-by-Linear Association	13.086	1	.000

N of Valid Cases	1773		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.21.

Awareness by Demographic

Crosstab

Count

		What is your gender?		Total
		Male	Female	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	227	266	493
	I've heard something about it but I don't know any details	218	223	441
	I know a little about it	287	305	592
	I know quite a bit about it	101	78	179
Total		833	872	1705

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.755[a]	3	.124
Likelihood Ratio	5.764	3	.124
Linear-by-Linear Association	3.574	1	.059
N of Valid Cases	1705		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 87.45.

Crosstab

Count

		What is your age?				Total
		18-25	26-45	46-65	Over 65	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	1	51	205	233	490
	I've heard something about it but I don't know any details	1	31	181	230	443
	I know a little about it	1	42	257	290	590
	I know quite a bit about it	0	5	88	85	178
Total		3	129	731	838	1701

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.669[a]	9	.100
Likelihood Ratio	16.080	9	.065
Linear-by-Linear Association	2.084	1	.149
N of Valid Cases	1701		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is .31.

Crosstab

Count

		Are you from a Hispanic, Latino, or Spanish-speaking background?		Total
		No	Yes	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	474	14	488
	I've heard something about it but I don't know any details	430	10	440
	I know a little about it	568	5	573
	I know quite a bit about it	173	1	174
Total		1645	30	1675

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.015[a]	3	.046
Likelihood Ratio	8.634	3	.035
Linear-by-Linear Association	7.520	1	.006
N of Valid Cases	1675		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.12.

Crosstab

Count

		RaceWhite		Total
		White	Non-White	
In the past year, how much have you heard about soil pollution in	This is the first time I've heard about it	412	73	485

your area caused by the former Asarco Smelter in Tacoma?	I've heard something about it but I don't know any details	389	37	426
	I know a little about it	542	31	573
	I know quite a bit about it	165	11	176
Total		1508	152	1660

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.832[a]	3	.000
Likelihood Ratio	30.569	3	.000
Linear-by-Linear Association	26.541	1	.000
N of Valid Cases	1660		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 16.12.

Crosstab

Count

		Do you own or rent the place in which you live?		Total
		Own	Rent	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	478	26	504
	I've heard something about it but I don't know any details	436	10	446
	I know a little about it	580	15	595
	I know quite a bit about it	179	6	185
Total		1673	57	1730

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.166[a]	3	.043
Likelihood Ratio	7.666	3	.053
Linear-by-Linear Association	3.680	1	.055
N of Valid Cases	1730		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.10.

Crosstab

Count

		How long have you lived in King County?				Total
		1-3 years	4-7 years	8-15 years	More than 15 years	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	10	15	43	443	511
	I've heard something about it but I don't know any details	6	8	24	408	446
	I know a little about it	6	7	26	559	598
	I know quite a bit about it	1	3	10	173	187
Total		23	33	103	1583	1742

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.288[a]	9	.044
Likelihood Ratio	16.866	9	.051
Linear-by-Linear Association	12.002	1	.001
N of Valid Cases	1742		

a. 2 cells (12.5%) have expected count less than 5. The minimum expected count is 2.47.

Crosstab

Count

		Do you have a vegetable garden or flowerbeds?		Total
		No	Yes	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	104	408	512
	I've heard something about it but I don't know any details	78	376	454
	I know a little about it	65	538	603
	I know quite a bit about it	18	167	185
Total		265	1489	1754

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.315[a]	3	.000
Likelihood Ratio	25.713	3	.000
Linear-by-Linear Association	23.721	1	.000
N of Valid Cases	1754		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 27.95.

Crosstab

Count

		Do you have a dog or cat that goes in and out of the house?		Total
		No	Yes	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	279	239	518
	I've heard something about it but I don't know any details	254	202	456
	I know a little about it	307	299	606
	I know quite a bit about it	109	81	190
Total		949	821	1770

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.015[a]	3	.260
Likelihood Ratio	4.017	3	.260
Linear-by-Linear Association	.055	1	.814
N of Valid Cases	1770		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 88.13.

Crosstab

Count

	Do you have any children under 10 living in your home some or all the time?		Total
	No	Yes	

In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	443	73	516
	I've heard something about it but I don't know any details	394	56	450
	I know a little about it	529	72	601
	I know quite a bit about it	164	23	187
Total		1530	224	1754

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.295[a]	3	.730
Likelihood Ratio	1.277	3	.735
Linear-by-Linear Association	.954	1	.329
N of Valid Cases	1754		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.88.

Dirt Alert by Demographic

Crosstab

Count

		What is your gender?		Total
		Male	Female	
Have you heard about a program called "Dirt Alert"?	No	488	481	969
	Yes	69	149	218
Total		557	630	1187

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25.014[a]	1	.000		
Continuity Correction[b]	24.268	1	.000		
Likelihood Ratio	25.613	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	24.992	1	.000		
N of Valid Cases	1187				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 102.30.

b. Computed only for a 2x2 table

Crosstab

Count

		What is your age?				Total
		18-25	26-45	46-65	Over 65	
Have you heard about a program called "Dirt Alert"?	No	2	50	398	520	970
	Yes	0	28	116	71	215
Total		2	78	514	591	1185

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38.726[a]	3	.000
Likelihood Ratio	37.520	3	.000
Linear-by-Linear Association	35.746	1	.000
N of Valid Cases	1185		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .36.

Crosstab

Count

		Are you from a Hispanic, Latino, or Spanish-speaking background?		Total
		No	Yes	
Have you heard about a program called "Dirt Alert"?	No	940	17	957
	Yes	208	3	211
Total		1148	20	1168

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.129[a]	1	.719		
Continuity Correction[b]	.004	1	.947		
Likelihood Ratio	.135	1	.713		
Fisher's Exact Test				1.000	.499
Linear-by-Linear Association	.129	1	.719		
N of Valid Cases	1168				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.61.

b. Computed only for a 2x2 table

Crosstab

Count

		RaceWhite		Total
		White	Non-White	
Have you heard about a program called "Dirt Alert"?	No	850	80	930
	Yes	194	15	209
Total		1044	95	1139

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.453[a]	1	.501		
Continuity Correction[b]	.286	1	.593		
Likelihood Ratio	.469	1	.493		
Fisher's Exact Test				.581	.303
Linear-by-Linear Association	.453	1	.501		
N of Valid Cases	1139				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.43.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you own or rent the place in which you live?		Total
		Own	Rent	
Have you heard about a program called "Dirt Alert"?	No	944	26	970
	Yes	206	7	213
Total		1150	33	1183

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.236[a]	1	.627		
Continuity Correction[b]	.066	1	.798		
Likelihood Ratio	.227	1	.634		
Fisher's Exact Test				.645	.382
Linear-by-Linear Association	.236	1	.627		
N of Valid Cases	1183				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.94.

b. Computed only for a 2x2 table

Crosstab

Count

		How long have you lived in King County?				Total
		1-3 years	4-7 years	8-15 years	More than 15 years	
Have you heard about a program called "Dirt Alert"?	No	13	12	49	902	976
	Yes	0	5	16	196	217
Total		13	17	65	1098	1193

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.217[a]	3	.101
Likelihood Ratio	8.234	3	.041
Linear-by-Linear Association	.023	1	.879
N of Valid Cases	1193		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.36.

Crosstab

Count

		Do you have a vegetable garden or flowerbeds?		Total
		No	Yes	
Have you heard about a program called "Dirt Alert"?	No	133	848	981
	Yes	34	180	214
Total		167	1028	1195

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.794[a]	1	.373		
Continuity Correction[b]	.612	1	.434		
Likelihood Ratio	.771	1	.380		
Fisher's Exact Test				.384	.215
Linear-by-Linear Association	.793	1	.373		
N of Valid Cases	1195				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 29.91.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you have a dog or cat that goes in and out of the house?		Total
		No	Yes	
Have you heard about a program called "Dirt Alert"?	No	534	456	990
	Yes	111	107	218
Total		645	563	1208

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.656[a]	1	.418		
Continuity Correction[b]	.540	1	.463		
Likelihood Ratio	.655	1	.418		
Fisher's Exact Test				.453	.231
Linear-by-Linear Association	.655	1	.418		
N of Valid Cases	1208				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 101.60.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you have any children under 10 living in your home some or all the time?		Total
		No	Yes	
Have you heard about a program called "Dirt Alert"?	No	868	108	976
	Yes	179	38	217
Total		1047	146	1193

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.868[a]	1	.009		
Continuity Correction[b]	6.281	1	.012		
Likelihood Ratio	6.332	1	.012		
Fisher's Exact Test				.012	.008

Linear-by-Linear Association	6.862	1	.009		
N of Valid Cases	1193				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.56.

b. Computed only for a 2x2 table

Reaction by Information Source

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?:TV ad or program		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	60	21	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	31	53	84
	The information raised my concern but left me uncertain about what to do next	171	292	463
	I was already familiar with all the information I received	77	95	172
	I am not concerned about soil pollution	5	10	15
	I am tired of hearing about soil pollution	30	44	74
Total		374	515	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.030[a]	5	.000
Likelihood Ratio	41.195	5	.000
Linear-by-Linear Association	7.710	1	.005
N of Valid Cases	889		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.31.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Internet ad or website		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	75	6	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	66	18	84
	The information raised my concern but left me uncertain about what to do next	410	53	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	68	6	74
Total		783	106	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.300[a]	5	.031
Likelihood Ratio	13.200	5	.022
Linear-by-Linear Association	.783	1	.376
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.79.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information mailed to my home		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	73	8	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	51	33	84
	The information raised my concern but left me uncertain about what to do next	387	76	463
	I was already familiar with all the information I received	122	50	172
	I am not concerned about soil pollution	12	3	15
	I am tired of hearing about soil pollution	60	14	74
Total		705	184	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.128[a]	5	.000
Likelihood Ratio	34.257	5	.000
Linear-by-Linear Association	.708	1	.400
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.10.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information from my child's school or daycare		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	81	0	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	81	3	84
	The information raised my concern but left me uncertain about what to do next	449	14	463
	I was already familiar with all the information I received	165	7	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	73	1	74
Total		864	25	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.604[a]	5	.466
Likelihood Ratio	7.304	5	.199
Linear-by-Linear Association	.114	1	.735
N of Valid Cases	889		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .42.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Newspaper ad or article		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	64	17	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	51	33	84
	The information raised my concern but left me uncertain about what to do next	261	202	463
	I was already familiar with all the information I received	77	95	172
	I am not concerned about soil pollution	10	5	15
	I am tired of hearing about soil pollution	48	26	74
Total		511	378	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.501[a]	5	.000
Likelihood Ratio	30.736	5	.000
Linear-by-Linear Association	5.229	1	.022
N of Valid Cases	889		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.38.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Fairs or community events		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	79	2	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	66	18	84
	The information raised my concern but left me uncertain about what to do next	446	17	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	14	1	15
	I am tired of hearing about soil pollution	70	4	74
Total		824	65	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.284[a]	5	.000
Likelihood Ratio	39.604	5	.000
Linear-by-Linear Association	.046	1	.831
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.10.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Facebook		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	81	0	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	82	2	84
	The information raised my concern but left me uncertain about what to do next	455	8	463
	I was already familiar with all the information I received	171	1	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	74	0	74
Total		878	11	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.546[a]	5	.474
Likelihood Ratio	6.506	5	.260
Linear-by-Linear Association	.660	1	.417
N of Valid Cases	889		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .19.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Radio		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	76	5	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	70	14	84
	The information raised my concern but left me uncertain about what to do next	412	51	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	13	2	15
	I am tired of hearing about soil pollution	67	7	74
Total		787	102	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.524[a]	5	.355
Likelihood Ratio	5.672	5	.339
Linear-by-Linear Association	.099	1	.753
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.72.

Wash Fruits by Demographics

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
What is your gender?	Male	157	8	129	386	680
	Female	174	13	181	374	742
Total		331	21	310	760	1422

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.288[a]	3	.040
Likelihood Ratio	8.325	3	.040
Linear-by-Linear Association	1.408	1	.235
N of Valid Cases	1422		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.04.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
What is your age?	18-25	1	0	0	1	2
	26-45	16	1	33	60	110
	46-65	128	10	145	329	612
	Over 65	186	11	133	369	699
Total		331	22	311	759	1423

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.751[a]	9	.053
Likelihood Ratio	17.315	9	.044
Linear-by-Linear Association	5.725	1	.017
N of Valid Cases	1423		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .03.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
RaceWhite	White	306	21	290	659	1276
	Non-White	21	0	12	75	108
Total		327	21	302	734	1384

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.750[a]	3	.002
Likelihood Ratio	17.201	3	.001
Linear-by-Linear Association	5.435	1	.020
N of Valid Cases	1384		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 1.64.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
Do you own or rent the place in which you live?	Own	326	23	313	748	1410
	Rent	10	0	6	18	34
Total		336	23	319	766	1444

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.431[a]	3	.698
Likelihood Ratio	1.952	3	.582
Linear-by-Linear Association	.275	1	.600
N of Valid Cases	1444		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is .54.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
How long have you lived in King County?	1-3 years	2	0	4	13	19
	4-7 years	4	2	6	12	24
	8-15 years	9	2	21	49	81
	More than 15 years	326	19	288	698	1331
Total		341	23	319	772	1455

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.108[a]	9	.034
Likelihood Ratio	16.376	9	.059
Linear-by-Linear Association	5.503	1	.019
N of Valid Cases	1455		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .30.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
Do you have a dog or cat that goes in and out of the house?	No	195	13	137	425	770
	Yes	150	10	184	365	709
Total		345	23	321	790	1479

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.209[a]	3	.002

Likelihood Ratio	15.230	3	.002
Linear-by-Linear Association	.598	1	.439
N of Valid Cases	1479		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.03.

Crosstab

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
Do you have any children under 10 living in your home some or all the time?	No	315	19	258	677	1269
	Yes	29	4	56	106	195
Total		344	23	314	783	1464

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.029[a]	3	.005
Likelihood Ratio	13.469	3	.004
Linear-by-Linear Association	4.704	1	.030
N of Valid Cases	1464		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.06.

Cover Bare Patches by Demographics

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
What is your gender?	Male	408	429	3	840
	Female	450	422	11	883
Total		858	851	14	1723

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.615[a]	2	.060
Likelihood Ratio	5.901	2	.052
Linear-by-Linear Association	.365	1	.546
N of Valid Cases	1723		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.83.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
What is your age?	18-25	3	1	0	4
	26-45	62	66	3	131
	46-65	341	384	7	732
	Over 65	448	400	4	852
Total		854	851	14	1719

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.400[a]	6	.077
Likelihood Ratio	10.522	6	.104
Linear-by-Linear Association	4.996	1	.025
N of Valid Cases	1719		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .03.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
RaceWhite	White	739	772	11	1522

Non-White	90	60	4	154
Total	829	832	15	1676

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.153[a]	2	.002
Likelihood Ratio	10.627	2	.005
Linear-by-Linear Association	3.352	1	.067
N of Valid Cases	1676		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 1.38.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you own or rent the place in which you live?	Own	835	844	6	1685
	Rent	33	15	10	58
Total		868	859	16	1743

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	181.435[a]	2	.000
Likelihood Ratio	55.920	2	.000
Linear-by-Linear Association	1.903	1	.168
N of Valid Cases	1743		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is .53.

Crosstab

Count

	In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
	No	Yes	I don't have a yard	
1-3 years	9	14	0	23

How long have you lived in King County?	4-7 years	14	18	1	33
	8-15 years	50	52	2	104
	More than 15 years	807	778	13	1598
Total		880	862	16	1758

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.173[a]	6	.522
Likelihood Ratio	4.491	6	.611
Linear-by-Linear Association	2.460	1	.117
N of Valid Cases	1758		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .21.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have a vegetable garden or flowerbeds?	No	199	59	13	271
	Yes	689	809	3	1501
Total		888	868	16	1772

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	136.812[a]	2	.000
Likelihood Ratio	124.487	2	.000
Linear-by-Linear Association	45.018	1	.000
N of Valid Cases	1772		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.45.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have a dog or cat that goes in and out of the house?	No	513	433	10	956
	Yes	387	442	6	835
Total		900	875	16	1791

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.606[a]	2	.005
Likelihood Ratio	10.620	2	.005
Linear-by-Linear Association	8.118	1	.004
N of Valid Cases	1791		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.46.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have any children under 10 living in your home some or all the time?	No	797	736	13	1546
	Yes	95	125	3	223
Total		892	861	16	1769

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.502[a]	2	.039
Likelihood Ratio	6.475	2	.039
Linear-by-Linear Association	6.497	1	.011
N of Valid Cases	1769		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.02.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
RaceWhite	White	739	772	11	1522
	Non-White	90	60	4	154
Total		829	832	15	1676

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.153[a]	2	.002
Likelihood Ratio	10.627	2	.005
Linear-by-Linear Association	3.352	1	.067
N of Valid Cases	1676		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 1.38.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you own or rent the place in which you live?	Own	835	844	6	1685
	Rent	33	15	10	58
Total		868	859	16	1743

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	181.435[a]	2	.000
Likelihood Ratio	55.920	2	.000
Linear-by-Linear Association	1.903	1	.168
N of Valid Cases	1743		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is .53.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
How long have you lived in King County?	1-3 years	9	14	0	23
	4-7 years	14	18	1	33
	8-15 years	50	52	2	104
	More than 15 years	807	778	13	1598
Total		880	862	16	1758

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.173[a]	6	.522
Likelihood Ratio	4.491	6	.611
Linear-by-Linear Association	2.460	1	.117
N of Valid Cases	1758		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .21.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have a vegetable garden or flowerbeds?	No	199	59	13	271
	Yes	689	809	3	1501
Total		888	868	16	1772

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	136.812[a]	2	.000
Likelihood Ratio	124.487	2	.000
Linear-by-Linear Association	45.018	1	.000
N of Valid Cases	1772		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.45.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have a dog or cat that goes in and out of the house?	No	513	433	10	956
	Yes	387	442	6	835
Total		900	875	16	1791

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.606[a]	2	.005
Likelihood Ratio	10.620	2	.005
Linear-by-Linear Association	8.118	1	.004
N of Valid Cases	1791		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.46.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Do you have any children under 10 living in your home some or all the time?	No	797	736	13	1546
	Yes	95	125	3	223

Total	892	861	16	1769

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.502[a]	2	.039
Likelihood Ratio	6.475	2	.039
Linear-by-Linear Association	6.497	1	.011
N of Valid Cases	1769		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.02.

Shoes off at Door by Demographics

Crosstab

Count

		What is your gender?		Total
		Male	Female	
Do you take your shoes off when entering your home?	Never	157	167	324
	Rarely	193	169	362
	Sometimes	300	348	648
	Always	192	206	398
Total		842	890	1732

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.621[a]	3	.202
Likelihood Ratio	4.622	3	.202
Linear-by-Linear Association	.664	1	.415
N of Valid Cases	1732		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 157.51.

Crosstab

Count

		What is your age?				Total
		18-25	26-45	46-65	Over 65	
	Never	1	10	112	202	325

Do you take your shoes off when entering your home?	Rarely	1	14	167	178	360
	Sometimes	0	62	272	315	649
	Always	2	44	187	161	394
Total		4	130	738	856	1728

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.345[a]	9	.000
Likelihood Ratio	57.021	9	.000
Linear-by-Linear Association	40.064	1	.000
N of Valid Cases	1728		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is .75.

Crosstab

Count

		Are you from a Hispanic, Latino, or Spanish-speaking background?		Total
		No	Yes	
Do you take your shoes off when entering your home?	Never	315	5	320
	Rarely	349	8	357
	Sometimes	625	11	636
	Always	380	8	388
Total		1669	32	1701

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.574[a]	3	.902
Likelihood Ratio	.571	3	.903
Linear-by-Linear Association	.064	1	.801
N of Valid Cases	1701		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.02.

Crosstab

Count

		RaceWhite		Total
		White	Non-White	
Do you take your shoes off when entering your home?	Never	300	18	318
	Rarely	336	17	353
	Sometimes	590	43	633
	Always	300	79	379
Total		1526	157	1683

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.790[a]	3	.000
Likelihood Ratio	66.773	3	.000
Linear-by-Linear Association	45.549	1	.000
N of Valid Cases	1683		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 29.66.

Crosstab

Count

		Do you own or rent the place in which you live?		Total
		Own	Rent	
Do you take your shoes off when entering your home?	Never	315	12	327
	Rarely	356	11	367
	Sometimes	635	24	659
	Always	389	11	400
Total		1695	58	1753

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.863[a]	3	.834
Likelihood Ratio	.879	3	.831
Linear-by-Linear Association	.201	1	.654
N of Valid Cases	1753		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.82.

Crosstab

Count

		How long have you lived in King County?				Total
		1-3 years	4-7 years	8-15 years	More than 15 years	
Do you take your shoes off when entering your home?	Never	4	3	13	310	330
	Rarely	5	5	13	348	371
	Sometimes	12	10	42	601	665
	Always	2	15	37	348	402
Total		23	33	105	1607	1768

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.261[a]	9	.001
Likelihood Ratio	27.415	9	.001
Linear-by-Linear Association	7.832	1	.005
N of Valid Cases	1768		

a. 2 cells (12.5%) have expected count less than 5. The minimum expected count is 4.29.

Crosstab

Count

		Do you have a vegetable garden or flowerbeds?		Total
		No	Yes	
Do you take your shoes off when entering your home?	Never	67	268	335
	Rarely	50	323	373
	Sometimes	82	581	663
	Always	74	336	410
Total		273	1508	1781

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.511[a]	3	.004

Likelihood Ratio	13.304	3	.004
Linear-by-Linear Association	.683	1	.409
N of Valid Cases	1781		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 51.35.

Crosstab

Count

		Do you have a dog or cat that goes in and out of the house?		Total
		No	Yes	
Do you take your shoes off when entering your home?	Never	172	168	340
	Rarely	196	181	377
	Sometimes	334	333	667
	Always	262	153	415
Total		964	835	1799

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.128[a]	3	.000
Likelihood Ratio	20.355	3	.000
Linear-by-Linear Association	9.108	1	.003
N of Valid Cases	1799		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 157.81.

Crosstab

Count

		Do you have any children under 10 living in your home some or all the time?		Total
		No	Yes	
Do you take your shoes off when entering your home?	Never	302	30	332
	Rarely	336	36	372
	Sometimes	561	100	661
	Always	356	56	412
Total		1555	222	1777

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.982[a]	3	.012
Likelihood Ratio	11.275	3	.010
Linear-by-Linear Association	6.958	1	.008
N of Valid Cases	1777		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 41.48.

Hand Washing by Demographic

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
What is your gender?	Male	1	16	243	577	837
	Female	1	18	258	610	887
Total		2	34	501	1187	1724

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.034[a]	3	.998
Likelihood Ratio	.034	3	.998
Linear-by-Linear Association	.012	1	.914
N of Valid Cases	1724		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .97.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
What is your age?	18-25	0	0	2	2	4
	26-45	0	3	45	83	131
	46-65	1	14	222	501	738
	Over 65	1	17	232	597	847

Total	2	34	501	1183	1720

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.494[a]	9	.876
Likelihood Ratio	4.602	9	.868
Linear-by-Linear Association	2.721	1	.099
N of Valid Cases	1720		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .00.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
RaceWhite	White	1	35	462	1022	1520
	Non-White	1	2	28	127	158
Total		2	37	490	1149	1678

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.042[a]	3	.001
Likelihood Ratio	15.440	3	.001
Linear-by-Linear Association	8.834	1	.003
N of Valid Cases	1678		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .19.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Do you own or rent the place in which you live?	Own	3	37	501	1148	1689
	Rent	0	0	13	45	58
Total		3	37	514	1193	1747

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.134[a]	3	.371
Likelihood Ratio	4.518	3	.211
Linear-by-Linear Association	2.986	1	.084
N of Valid Cases	1747		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .10.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
How long have you lived in King County?	1-3 years	0	1	4	17	22
	4-7 years	0	2	11	20	33
	8-15 years	0	1	32	72	105
	More than 15 years	3	34	466	1098	1601
Total		3	38	513	1207	1761

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.645[a]	9	.775
Likelihood Ratio	5.324	9	.805
Linear-by-Linear Association	.021	1	.886
N of Valid Cases	1761		

a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .04.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Do you have a vegetable garden or flowerbeds?	No	0	6	60	205	271
	Yes	3	31	448	1020	1502

Total	3	37	508	1225	1773

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.289[a]	3	.063
Likelihood Ratio	8.028	3	.045
Linear-by-Linear Association	5.338	1	.021
N of Valid Cases	1773		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .46.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Do you have a dog or cat that goes in and out of the house?	No	2	18	262	673	955
	Yes	1	19	256	558	834
Total		3	37	518	1231	1789

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.003[a]	3	.391
Likelihood Ratio	3.005	3	.391
Linear-by-Linear Association	2.315	1	.128
N of Valid Cases	1789		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.40.

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Do you have any children under 10 living in your home some or all the time?	No	2	31	424	1092	1549
	Yes	0	5	85	134	224
Total		2	36	509	1226	1773

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.188[a]	3	.011
Likelihood Ratio	10.969	3	.012
Linear-by-Linear Association	8.249	1	.004
N of Valid Cases	1773		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .25.

Vacuum by Demographic

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
What is your gender?	Male	51	393	381	18	843
	Female	67	428	352	43	890
Total		118	821	733	61	1733

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.790[a]	3	.003
Likelihood Ratio	14.095	3	.003
Linear-by-Linear Association	.287	1	.592
N of Valid Cases	1733		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 29.67.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
What is your age?	18-25	1	0	3	0	4

	26-45	13	52	61	4	130
	46-65	39	339	332	28	738
	Over 65	66	429	334	28	857
Total		119	820	730	60	1729

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.021[a]	9	.035
Likelihood Ratio	19.138	9	.024
Linear-by-Linear Association	5.031	1	.025
N of Valid Cases	1729		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .14.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
RaceWhite	White	109	734	633	52	1528
	Non-White	12	72	67	6	157
Total		121	806	700	58	1685

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.318[a]	3	.957
Likelihood Ratio	.317	3	.957
Linear-by-Linear Association	.078	1	.780
N of Valid Cases	1685		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.40.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Do you own or rent the place in which you live?	Own	118	808	710	60	1696
	Rent	7	24	25	2	58
Total		125	832	735	62	1754

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.542[a]	3	.468
Likelihood Ratio	2.216	3	.529
Linear-by-Linear Association	.201	1	.654
N of Valid Cases	1754		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.05.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
How long have you lived in King County?	1-3 years	0	16	7	0	23
	4-7 years	5	15	12	1	33
	8-15 years	7	44	50	3	104
	More than 15 years	112	764	674	59	1609
Total		124	839	743	63	1769

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.660[a]	9	.300
Likelihood Ratio	12.085	9	.209

Linear-by-Linear Association	.856	1	.355
N of Valid Cases	1769		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .82.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Do you have a vegetable garden or flowerbeds?	No	30	133	105	5	273
	Yes	95	712	645	58	1510
Total		125	845	750	63	1783

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.034[a]	3	.012
Likelihood Ratio	10.652	3	.014
Linear-by-Linear Association	8.550	1	.003
N of Valid Cases	1783		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.65.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Do you have a dog or cat that goes in and out of the house?	No	85	484	367	29	965
	Yes	41	372	387	35	835
Total		126	856	754	64	1800

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.837[a]	3	.000

Likelihood Ratio	22.087	3	.000
Linear-by-Linear Association	20.937	1	.000
N of Valid Cases	1800		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 29.69.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Do you have any children under 10 living in your home some or all the time?	No	110	758	637	52	1557
	Yes	16	87	108	11	222
Total		126	845	745	63	1779

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.901[a]	3	.048
Likelihood Ratio	7.849	3	.049
Linear-by-Linear Association	4.991	1	.025
N of Valid Cases	1779		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.86.

Damp Dusting by Demographic

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
What is your gender?	Male	378	451	829
	Female	464	416	880
Total		842	867	1709

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.683[a]	1	.003		
Continuity Correction[b]	8.400	1	.004		
Likelihood Ratio	8.690	1	.003		
Fisher's Exact Test				.004	.002
Linear-by-Linear Association	8.677	1	.003		
N of Valid Cases	1709				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 408.44.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
What is your age?	18-25	2	2	4
	26-45	58	71	129
	46-65	322	405	727
	Over 65	456	389	845
Total		838	867	1705

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.610[a]	3	.001
Likelihood Ratio	15.634	3	.001
Linear-by-Linear Association	12.168	1	.000
N of Valid Cases	1705		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.97.

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
RaceWhite	White	767	743	1510

Non-White	59	96	155
Total	826	839	1665

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.113[a]	1	.003		
Continuity Correction[b]	8.611	1	.003		
Likelihood Ratio	9.198	1	.002		
Fisher's Exact Test				.003	.002
Linear-by-Linear Association	9.107	1	.003		
N of Valid Cases	1665				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 76.89.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Do you own or rent the place in which you live?	Own	830	843	1673
	Rent	27	31	58
Total		857	874	1731

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.210[a]	1	.647		
Continuity Correction[b]	.105	1	.745		
Likelihood Ratio	.210	1	.647		
Fisher's Exact Test				.690	.373
Linear-by-Linear Association	.210	1	.647		
N of Valid Cases	1731				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 28.72.

b. Computed only for a 2x2 table

Crosstab

Count

	Do you (or someone else) use a damp cloth when dusting your home?	Total

		No	Yes	
How long have you lived in King County?	1-3 years	10	13	23
	4-7 years	15	18	33
	8-15 years	47	57	104
	More than 15 years	790	796	1586
Total		862	884	1746

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.371[a]	3	.712
Likelihood Ratio	1.374	3	.712
Linear-by-Linear Association	1.178	1	.278
N of Valid Cases	1746		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.36.

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Do you have a vegetable garden or flowerbeds?	No	136	131	267
	Yes	731	760	1491
Total		867	891	1758

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.330[a]	1	.566		
Continuity Correction[b]	.258	1	.611		
Likelihood Ratio	.330	1	.566		
Fisher's Exact Test				.595	.306
Linear-by-Linear Association	.330	1	.566		
N of Valid Cases	1758				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 131.68.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Do you have a dog or cat that goes in and out of the house?	No	497	455	952
	Yes	376	447	823
Total		873	902	1775

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.506[a]	1	.006		
Continuity Correction[b]	7.248	1	.007		
Likelihood Ratio	7.512	1	.006		
Fisher's Exact Test				.007	.004
Linear-by-Linear Association	7.502	1	.006		
N of Valid Cases	1775				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 404.78.

b. Computed only for a 2x2 table

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Do you have any children under 10 living in your home some or all the time?	No	765	775	1540
	Yes	99	121	220
Total		864	896	1760

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.684[a]	1	.194		
Continuity Correction[b]	1.502	1	.220		
Likelihood Ratio	1.687	1	.194		
Fisher's Exact Test				.220	.110
Linear-by-Linear Association	1.683	1	.195		
N of Valid Cases	1760				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 108.00.

b. Computed only for a 2x2 table

Reaction by Information Source

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?:TV ad or program		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	60	21	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	31	53	84
	The information raised my concern but left me uncertain about what to do next	171	292	463
	I was already familiar with all the information I received	77	95	172
	I am not concerned about soil pollution	5	10	15
	I am tired of hearing about soil pollution	30	44	74
Total		374	515	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.030[a]	5	.000
Likelihood Ratio	41.195	5	.000
Linear-by-Linear Association	7.710	1	.005
N of Valid Cases	889		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.31.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Internet ad or website		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	75	6	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	66	18	84
	The information raised my concern but left me uncertain about what to do next	410	53	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	68	6	74
Total		783	106	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.300[a]	5	.031
Likelihood Ratio	13.200	5	.022
Linear-by-Linear Association	.783	1	.376
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.79.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information mailed to my home		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	73	8	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	51	33	84
	The information raised my concern but left me uncertain about what to do next	387	76	463
	I was already familiar with all the information I received	122	50	172
	I am not concerned about soil pollution	12	3	15
	I am tired of hearing about soil pollution	60	14	74
Total		705	184	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.128[a]	5	.000
Likelihood Ratio	34.257	5	.000
Linear-by-Linear Association	.708	1	.400
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.10.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Information from my child's school or daycare		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	81	0	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	81	3	84
	The information raised my concern but left me uncertain about what to do next	449	14	463
	I was already familiar with all the information I received	165	7	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	73	1	74
Total		864	25	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.604[a]	5	.466
Likelihood Ratio	7.304	5	.199
Linear-by-Linear Association	.114	1	.735
N of Valid Cases	889		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .42.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Newspaper ad or article		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	64	17	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	51	33	84
	The information raised my concern but left me uncertain about what to do next	261	202	463
	I was already familiar with all the information I received	77	95	172
	I am not concerned about soil pollution	10	5	15
	I am tired of hearing about soil pollution	48	26	74
Total		511	378	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.501[a]	5	.000
Likelihood Ratio	30.736	5	.000
Linear-by-Linear Association	5.229	1	.022
N of Valid Cases	889		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.38.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Fairs or community events		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	79	2	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	66	18	84
	The information raised my concern but left me uncertain about what to do next	446	17	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	14	1	15
	I am tired of hearing about soil pollution	70	4	74
Total		824	65	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.284[a]	5	.000
Likelihood Ratio	39.604	5	.000
Linear-by-Linear Association	.046	1	.831
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.10.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Facebook		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	81	0	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	82	2	84
	The information raised my concern but left me uncertain about what to do next	455	8	463
	I was already familiar with all the information I received	171	1	172
	I am not concerned about soil pollution	15	0	15
	I am tired of hearing about soil pollution	74	0	74
Total		878	11	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.546[a]	5	.474
Likelihood Ratio	6.506	5	.260
Linear-by-Linear Association	.660	1	.417
N of Valid Cases	889		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .19.

Crosstab

Count

		In the past year where have you seen information about lead and arsenic in the soil and how to protect yourself?: Radio		Total
		No Check	Check	
Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	I don't recall seeing any information	76	5	81
	The information raised my concern and helped me plan ways to keep myself and my family safe	70	14	84
	The information raised my concern but left me uncertain about what to do next	412	51	463
	I was already familiar with all the information I received	149	23	172
	I am not concerned about soil pollution	13	2	15
	I am tired of hearing about soil pollution	67	7	74
Total		787	102	889

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.524[a]	5	.355
Likelihood Ratio	5.672	5	.339
Linear-by-Linear Association	.099	1	.753
N of Valid Cases	889		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 1.72.

Crosstab

Count

		Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?						Total
		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?	Never	154	15	89	40	4	27	329
	Rarely	13	0	6	2	0	1	22
	Sometimes	155	11	96	31	4	10	307
	Always	322	53	238	88	5	44	750
Total		644	79	429	161	13	82	1408

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.564[a]	15	.120
Likelihood Ratio	23.418	15	.076
Linear-by-Linear Association	.030	1	.862
N of Valid Cases	1408		

a. 6 cells (25.0%) have expected count less than 5. The minimum expected count is .20.

Reaction by Behavior

Crosstab

Count

		Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?						Total
		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?	No	434	36	226	96	10	49	851
	Yes	364	54	272	90	7	46	833
	I don't have a yard	7	2	6	0	0	0	15
Total		805	92	504	186	17	95	1699

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)

Crosstab

Count

		Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?						Total
		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
Do you take your shoes off when entering your home?	Never	175	8	78	33	5	25	324
	Rarely	153	10	121	41	4	29	358
	Sometimes	287	47	208	64	7	26	639
	Always	198	28	95	48	2	16	387
Total		813	93	502	186	18	96	1708

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.813[a]	15	.000
Likelihood Ratio	49.533	15	.000
Linear-by-Linear Association	2.715	1	.099
N of Valid Cases	1708		

a. 3 cells (12.5%) have expected count less than 5. The minimum expected count is 3.41.

Pearson Chi-Square	19.507[a]	10	.034
Likelihood Ratio	21.678	10	.017
Linear-by-Linear Association	1.354	1	.245
N of Valid Cases	1699		

a. 5 cells (27.8%) have expected count less than 5. The minimum expected count is .15.

Crosstab

Count

	Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?	Total

		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
How often do you (or someone else) vacuum your home?	Less than once a month	67	7	36	10	0	3	123
	1-3 times a month	394	43	218	82	11	54	802
	1-6 times a week	325	41	231	87	5	36	725
	1 or more times a day	27	1	19	8	2	3	60
Total		813	92	504	187	18	96	1710

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.312[a]	15	.160
Likelihood Ratio	21.676	15	.117
Linear-by-Linear Association	3.637	1	.057
N of Valid Cases	1710		

a. 4 cells (16.7%) have expected count less than 5. The minimum expected count is .63.

Crosstab

Count

		Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?						Total
		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
Do you (or someone else) use a damp cloth when dusting your home?	No	381	35	261	99	11	41	828
	Yes	419	57	239	87	7	53	862
Total		800	92	500	186	18	94	1690

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.549[a]	5	.061
Likelihood Ratio	10.609	5	.060
Linear-by-Linear Association	.948	1	.330
N of Valid Cases	1690		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.82.

Crosstab

Count

		Overall, what did you think about the information you saw about arsenic and lead in the soil in the past year?						Total
		I don't recall seeing any information	The information raised my concern and helped me plan ways to keep myself and my family safe	The information raised my concern but left me uncertain about what to do next	I was already familiar with all the information I received	I am not concerned about soil pollution	I am tired of hearing about soil pollution	
How often do adults in your	Never	2	0	0	0	0	0	2
	Rarely	16	0	11	4	1	3	35

household wash their hands before eating?	Sometimes	235	14	165	52	4	26	496
	Always	557	79	326	128	12	66	1168
Total		810	93	502	184	17	95	1701

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.670[a]	15	.185
Likelihood Ratio	22.927	15	.086
Linear-by-Linear Association	.228	1	.633
N of Valid Cases	1701		

a. 11 cells (45.8%) have expected count less than 5. The minimum expected count is .02.

Awareness by Behavior

In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma? * If you grow fruits and vegetables in your garden, do people in your household wash them before eating them? Crosstabulation

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	98	8	92	204	402
	I've heard something about it but I don't know any details	96	8	77	191	372
	I know a little about it	121	4	117	285	527
	I know quite a bit about it	26	3	35	101	165
Total		341	23	321	781	1466

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.030[a]	9	.212
Likelihood Ratio	12.830	9	.170

Linear-by-Linear Association	5.395	1	.020
N of Valid Cases	1466		

a. 1 cells (6.2%) have expected count less than 5. The minimum expected count is 2.59.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	289	220	6	515
	I've heard something about it but I don't know any details	228	222	5	455
	I know a little about it	278	324	4	606
	I know quite a bit about it	87	102	1	190
Total		882	868	16	1766

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.309[a]	6	.018
Likelihood Ratio	15.400	6	.017
Linear-by-Linear Association	9.813	1	.002
N of Valid Cases	1766		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.72.

Crosstab

Count

		Do you take your shoes off when entering your home?				Total
		Never	Rarely	Sometimes	Always	
In the past year, how much have you	This is the first time I've heard about it	113	91	174	142	520

heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	I've heard something about it but I don't know any details	94	108	163	93	458
	I know a little about it	93	132	256	126	607
	I know quite a bit about it	31	41	71	47	190
Total		331	372	664	408	1775

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.834[a]	9	.002
Likelihood Ratio	25.843	9	.002
Linear-by-Linear Association	.681	1	.409
N of Valid Cases	1775		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 35.43.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	51	243	202	24	520
	I've heard something about it but I don't know any details	27	215	203	11	456
	I know a little about it	34	297	259	21	611
	I know quite a bit about it	14	87	81	8	190
Total		126	842	745	64	1777

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.146[a]	9	.117

Likelihood Ratio	13.897	9	.126
Linear-by-Linear Association	1.603	1	.205
N of Valid Cases	1777		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.84.

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	253	259	512
	I've heard something about it but I don't know any details	222	229	451
	I know a little about it	306	300	606
	I know quite a bit about it	84	104	188
Total		865	892	1757

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.952[a]	3	.583
Likelihood Ratio	1.955	3	.582
Linear-by-Linear Association	.247	1	.619
N of Valid Cases	1757		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 92.56.

Crosstab

Count

	How often do adults in your household wash their hands before eating?				Total
	Never	Rarely	Sometimes	Always	

In the past year, how much have you heard about soil pollution in your area caused by the former Asarco Smelter in Tacoma?	This is the first time I've heard about it	1	14	149	355	519
	I've heard something about it but I don't know any details	1	9	126	322	458
	I know a little about it	0	11	186	409	606
	I know quite a bit about it	1	4	47	136	188
Total		3	38	508	1222	1771

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.287[a]	9	.711
Likelihood Ratio	6.758	9	.662
Linear-by-Linear Association	.251	1	.616
N of Valid Cases	1771		

a. 5 cells (31.2%) have expected count less than 5. The minimum expected count is .32.

Dirt Alert by Behavior

Have you heard about a program called "Dirt Alert"? * If you grow fruits and vegetables in your garden, do people in your household wash them before eating them? Crosstabulation

Count

		If you grow fruits and vegetables in your garden, do people in your household wash them before eating them?				Total
		Never	Rarely	Sometimes	Always	
Have you heard about a program called "Dirt Alert"?	No	182	14	173	464	833
	Yes	45	1	45	86	177
Total		227	15	218	550	1010

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.876[a]	3	.181
Likelihood Ratio	5.134	3	.162

Linear-by-Linear Association	1.737	1	.188
N of Valid Cases	1010		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.63.

Crosstab

Count

		In the past six months, have you covered any bare patches of soil in your yard with things like wood chips, gravel, grass, or compost?			Total
		No	Yes	I don't have a yard	
Have you heard about a program called "Dirt Alert"?	No	461	516	10	987
	Yes	122	98	0	220
Total		583	614	10	1207

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.194[a]	2	.027
Likelihood Ratio	8.961	2	.011
Linear-by-Linear Association	6.439	1	.011
N of Valid Cases	1207		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 1.82.

Crosstab

Count

		Do you take your shoes off when entering your home?				Total
		Never	Rarely	Sometimes	Always	
Have you heard about a program called "Dirt Alert"?	No	167	228	377	220	992
	Yes	44	43	90	43	220
Total		211	271	467	263	1212

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.958[a]	3	.398
Likelihood Ratio	2.963	3	.397

Linear-by-Linear Association	.543	1	.461
N of Valid Cases	1212		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 38.30.

Crosstab

Count

		How often do you (or someone else) vacuum your home?				Total
		Less than once a month	1-3 times a month	1-6 times a week	1 or more times a day	
Have you heard about a program called "Dirt Alert"?	No	68	466	422	34	990
	Yes	11	97	103	10	221
Total		79	563	525	44	1211

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.635[a]	3	.451
Likelihood Ratio	2.665	3	.446
Linear-by-Linear Association	2.603	1	.107
N of Valid Cases	1211		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.03.

Crosstab

Count

		Do you (or someone else) use a damp cloth when dusting your home?		Total
		No	Yes	
Have you heard about a program called "Dirt Alert"?	No	489	488	977
	Yes	114	103	217
Total		603	591	1194

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.438[a]	1	.508		
Continuity Correction[b]	.344	1	.557		
Likelihood Ratio	.438	1	.508		

Fisher's Exact Test				.548	.279
Linear-by-Linear Association	.438	1	.508		
N of Valid Cases	1194				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 107.41.

b. Computed only for a 2x2 table

Crosstab

Count

		How often do adults in your household wash their hands before eating?				Total
		Never	Rarely	Sometimes	Always	
Have you heard about a program called "Dirt Alert"?	No	0	17	272	693	982
	Yes	2	7	69	143	221
Total		2	24	341	836	1203

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.435[a]	3	.006
Likelihood Ratio	10.106	3	.018
Linear-by-Linear Association	5.533	1	.019
N of Valid Cases	1203		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .37.

Appendix E: STATA Output

Regression Results

Demographics on Information Source

```
. logit   InformationNone i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlower
> s  i.CatsDogs i.Children, or

Iteration 0:   log likelihood = -1089.6295
Iteration 1:   log likelihood = -1068.8783
Iteration 2:   log likelihood =  -1068.855
Iteration 3:   log likelihood =  -1068.855

Logistic regression                     Number of obs   =      1574
                                LR chi2(10)     =     41.55
                                Prob > chi2     =    0.0000
Log likelihood =  -1068.855             Pseudo R2       =    0.0191

------------------------------------------------------------------------------
Informati~ne | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |    1.1058   .1372698     0.81   0.418     .8669849    1.410397
          2  |   .9426097   .1187489    -0.47   0.639     .7363741    1.206605
             |
    1.Gender |   .7881583   .0811505    -2.31   0.021     .6441276     .964395
     1.Age45 |    .844475   .1801766    -0.79   0.428     .5558723    1.282917
  1.RaceWhite |   1.275799   .2287903     1.36   0.174     .8977089    1.813131
    1.OwnRent |   .8118118   .2329658    -0.73   0.468     .4625789    1.424705
 1.KingCoun~8 |    .455361   .1401941    -2.56   0.011     .2490534    .8325669
 1.GardenFl~s |   .5294367   .0783445    -4.30   0.000     .3961463    .7075748
   1.CatsDogs |   .9876201   .1024097    -0.12   0.904     .8059831    1.210191
   1.Children |   1.049713   .1792607     0.28   0.776     .7511209    1.467004
------------------------------------------------------------------------------
logit   InformationTV i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers
> i.CatsDogs i.Children, or

Iteration 0:   log likelihood = -558.66174
Iteration 1:   log likelihood = -551.54339
Iteration 2:   log likelihood = -551.51964
Iteration 3:   log likelihood = -551.51963

Logistic regression                     Number of obs   =       820
                                LR chi2(10)     =     14.28
                                Prob > chi2     =    0.1604
Log likelihood = -551.51963             Pseudo R2       =    0.0128

------------------------------------------------------------------------------
Informatio~V | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .8268448   .1449462    -1.08   0.278      .586419    1.165843
          2  |   .8680586   .1512314    -0.81   0.417     .6169564     1.22136
             |
    1.Gender |   1.241623    .179395     1.50   0.134     .9354155    1.648068
     1.Age45 |   .5019249   .1655844    -2.09   0.037     .2629229    .9581845
  1.RaceWhite |   1.389757    .388987     1.18   0.240     .8029547    2.405395
    1.OwnRent |   .9909653   .4025003    -0.02   0.982      .447019    2.196802
 1.KingCoun~8 |   1.661828   .8403813     1.00   0.315     .6167884    4.477505
 1.GardenFl~s |   .7303915    .17555    -1.31   0.191     .4560044    1.169883
   1.CatsDogs |   1.191481   .1719936     1.21   0.225     .8978709    1.581104
   1.Children |   .8039375   .1942274    -0.90   0.366     .5006983    1.290828
```

logit InformationInternet i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFl
> owers i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -291.99854
Iteration 1:   log likelihood = -285.81694
Iteration 2:   log likelihood = -285.49447
Iteration 3:   log likelihood =  -285.4935
Iteration 4:   log likelihood =  -285.4935

Logistic regression                     Number of obs   =        820
                                        LR chi2(10)     =      13.01
                                        Prob > chi2     =     0.2231
Log likelihood =  -285.4935             Pseudo R2       =     0.0223

------------------------------------------------------------------------------
Informatio~t | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.001021   .2830126     0.00   0.997     .5751595    1.742201
          2  |   1.279858   .3422497     0.92   0.356     .7577744    2.161641
             |
    1.Gender |   .5968995    .13451    -2.29   0.022     .3837822    .9283626
     1.Age45 |   .8184047   .3516994    -0.47   0.641     .3525127    1.900035
  1.RaceWhite |    1.01432   .3989264     0.04   0.971     .4692481    2.192541
    1.OwnRent |   .7956575   .5093739    -0.36   0.721     .2268785    2.790352
 1.KingCoun~8 |   .4941268   .2939543    -1.19   0.236      .153979    1.585679
 1.GardenFl~s |   .6093897   .1947891    -1.55   0.121     .3256955    1.140193
   1.CatsDogs |   .8850216   .1988364    -0.54   0.587     .5697912     1.37465
   1.Children |   1.383563   .4788269     0.94   0.348     .7021227    2.72637
```

---

logit InformationMail i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowe
> rs i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -415.81456
Iteration 1:   log likelihood = -397.03245
Iteration 2:   log likelihood = -396.36068
Iteration 3:   log likelihood = -396.35883
Iteration 4:   log likelihood = -396.35883

Logistic regression                     Number of obs   =        820
                                        LR chi2(10)     =      38.91
                                        Prob > chi2     =     0.0000
Log likelihood = -396.35883             Pseudo R2       =     0.0468

------------------------------------------------------------------------------
Informatio~l | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .5269507   .1312551    -2.57   0.010     .3234068      .8586
          2  |   1.928694   .3886995     3.26   0.001      1.29932    2.862927
             |
    1.Gender |   .9617469    .172933    -0.22   0.828     .6760909    1.368096
     1.Age45 |   .9811622   .3572223    -0.05   0.958     .4806563    2.002843
  1.RaceWhite |   1.531586   .4801238     1.36   0.174     .8285246    2.831244
    1.OwnRent |   1.492938   .6914762     0.87   0.387     .6022753    3.700737
 1.KingCoun~8 |   2.468139   1.925123     1.16   0.247     .5351079    11.38408
 1.GardenFl~s |   1.168544   .3497953     0.52   0.603     .6498961    2.101097
   1.CatsDogs |   .8466848   .1523412    -0.92   0.355     .5950698    1.204691
   1.Children |   1.499658   .4145115     1.47   0.143     .8724018    2.57791
```

---

logit InformationChild i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowe
> rs i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -104.87201
Iteration 1:   log likelihood = -93.029776
```

```
Iteration 2:   log likelihood =  -91.57971
Iteration 3:   log likelihood = -91.570497
Iteration 4:   log likelihood = -91.570493

Logistic regression                     Number of obs   =        820
                                        LR chi2(10)     =      26.60
                                        Prob > chi2     =     0.0030
Log likelihood = -91.570493             Pseudo R2       =     0.1268

------------------------------------------------------------------------------
Informatio~d | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.115476   .5800678     0.21   0.834     .4025498    3.091011
          2  |   .7714953    .435953    -0.46   0.646     .2548826    2.335212
             |
    1.Gender |      1.0042    .457306     0.01   0.993     .4113281    2.451612
     1.Age45 |    .5912212   .3424012    -0.91   0.364      .190013    1.839572
  1.RaceWhite |   1.960961   1.165342     1.13   0.257     .6118216    6.285116
   1.OwnRent |   .7668971   .8659403    -0.24   0.814     .0838696    7.012446
1.KingCoun~8 |   .7927706   .8862314    -0.21   0.835     .0886333    7.090851
1.GardenFl~s |   .6090142   .3835367    -0.79   0.431     .1772431    2.092597
  1.CatsDogs |   1.065128   .4777691     0.14   0.888     .4421712    2.565742
  1.Children |   6.869126   3.445109     3.84   0.000      2.57036    18.35731
------------------------------------------------------------------------------
```

logit InformationNewspaper i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.Garden
> Flowers i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -561.24779
Iteration 1:   log likelihood = -538.27865
Iteration 2:   log likelihood =  -538.0214
Iteration 3:   log likelihood = -538.02064
Iteration 4:   log likelihood = -538.02064

Logistic regression                     Number of obs   =        820
                                        LR chi2(10)     =      46.45
                                        Prob > chi2     =     0.0000
Log likelihood = -538.02064             Pseudo R2       =     0.0414

------------------------------------------------------------------------------
Informat~per | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .9687782   .1707345    -0.18   0.857     .6858216    1.368477
          2  |   .6550421   .1165216    -2.38   0.017     .4622255    .9282918
             |
    1.Gender |   .6246608   .0918757    -3.20   0.001     .4682188    .8333736
     1.Age45 |   4.328824   1.736097     3.65   0.000     1.972383    9.500547
  1.RaceWhite |    .81469   .2307988    -0.72   0.469     .4675737    1.419498
   1.OwnRent |    .716786   .3084254    -0.77   0.439     .3084087    1.665914
1.KingCoun~8 |    .330295    .179435    -2.04   0.041     .1138888    .9579064
1.GardenFl~s |   1.591655   .3949568     1.87   0.061     .9786557    2.588618
  1.CatsDogs |   1.121881   .1642564     0.79   0.432     .8420171    1.494763
  1.Children |   .8679114   .2190554    -0.56   0.575     .5292215    1.423355
------------------------------------------------------------------------------
```

logit InformationFair i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlow
> ers i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -209.53259
Iteration 1:   log likelihood = -206.84798
Iteration 2:   log likelihood = -206.64165
Iteration 3:   log likelihood = -206.64134
Iteration 4:   log likelihood = -206.64134

Logistic regression                     Number of obs   =        820
```

```
                                LR chi2(10)    =      5.78
                                Prob > chi2    =    0.8332
Log likelihood = -206.64134                     Pseudo R2      =    0.0138

------------------------------------------------------------------------------
Informati~ir | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.282677   .4404722     0.72   0.468     .6543563    2.51432
          2  |   1.324322   .4470923     0.83   0.405     .6833249    2.566611
             |
    1.Gender |   .9066171   .2507366    -0.35   0.723     .5272459    1.558959
     1.Age45 |   2.233385   1.743297     1.03   0.303     .4836682    10.31288
  1.RaceWhite |   .4089073   .3034678    -1.20   0.228     .0954798    1.75121
   1.OwnRent |   .5512835   .5706707    -0.58   0.565     .0724834    4.192867
1.KingCoun~8 |   .5086127   .3991993    -0.86   0.389     .1092187    2.368521
1.GardenFl~s |   1.212131   .5957315     0.39   0.695      .4626    3.176094
  1.CatsDogs |   1.016008   .2809155     0.06   0.954     .5909477    1.746809
  1.Children |   1.037064   .4961241     0.08   0.939     .4060661    2.648588
```

. logit InformationFacebook i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.Garde
> nFlowers i.CatsDogs i.Children, or

```
note: 1.KingCounty8 != 1 predicts failure perfectly
    1.KingCounty8 dropped and 17 obs not used

Iteration 0:   log likelihood = -62.351263
Iteration 1:   log likelihood = -57.443663
Iteration 2:   log likelihood = -56.346277
Iteration 3:   log likelihood = -56.337924
Iteration 4:   log likelihood =  -56.33792

Logistic regression                     Number of obs   =        803
                                LR chi2(9)     =      12.03
                                Prob > chi2    =     0.2118
Log likelihood =  -56.33792                     Pseudo R2      =     0.0964

------------------------------------------------------------------------------
Informatio~k | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |    1.60831   1.127381     0.68   0.498     .4070999    6.353875
          2  |    .915791   .7211636    -0.11   0.911      .195657    4.286445
             |
    1.Gender |   1.093436    .669931     0.15   0.884     .3290604    3.633383
     1.Age45 |   2.263122   2.673259     0.69   0.489     .2234839    22.91762
  1.RaceWhite |   4.122405   3.165118     1.84   0.065     .9154015    18.56478
   1.OwnRent |   3.328385   3.804243     1.05   0.293     .3542714    31.27023
0.KingCoun~8 |  (empty)
1.KingCoun~8 |  (omitted)
1.GardenFl~s |   2.004141   2.381045     0.59   0.558     .1952753    20.56881
  1.CatsDogs |   3.686515   2.556035     1.88   0.060     .9471917    14.34809
  1.Children |   3.192084   2.210462     1.68   0.094     .8215465    12.40271
```

logit InformationRadio i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlower
> s i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -285.81119
Iteration 1:   log likelihood = -279.65001
Iteration 2:   log likelihood = -279.35232
Iteration 3:   log likelihood = -279.34975
Iteration 4:   log likelihood = -279.34975

Logistic regression                     Number of obs   =        820
```

```
                                LR chi2(10)    =     12.92
                                Prob > chi2    =    0.2280
Log likelihood = -279.34975                     Pseudo R2      =    0.0226

------------------------------------------------------------------------------
Informatio~o | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
           1 |   1.037237   .2944168     0.13   0.898     .5946578    1.809211
           2 |   1.277314   .3451139     0.91   0.365     .7521661    2.169109
             |
    1.Gender |   .6061642   .1381545    -2.20   0.028     .3877822    .9475295
     1.Age45 |   1.241351   .6579126     0.41   0.683     .4392987    3.507753
  1.RaceWhite |   .5671231   .2791276    -1.15   0.249     .2161382    1.488069
   1.OwnRent |   .3017696   .3113917    -1.16   0.246     .0399331    2.280437
 1.KingCoun~8 |   2.157274   2.259799     0.73   0.463     .2768536    16.80972
 1.GardenFl~s |   .7190024   .2458413    -0.96   0.335     .3678642    1.405313
  1.CatsDogs |   .7341118   .1683024    -1.35   0.178     .4683989    1.150558
  1.Children |    1.07174   .4199399     0.18   0.860     .4972368     2.31002
```

Demographics on Awareness

ologit HeardPollutionAST i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlow
> ers i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood =  -2026.516
Iteration 1:   log likelihood = -1985.7303
Iteration 2:   log likelihood = -1985.6415
Iteration 3:   log likelihood = -1985.6414

Ordered logistic regression                     Number of obs   =       1551
                                LR chi2(10)    =     81.75
                                Prob > chi2    =    0.0000
Log likelihood = -1985.6414                     Pseudo R2      =    0.0202

------------------------------------------------------------------------------
HeardPollu~T | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
           1 |   .9607265   .1082285    -0.36   0.722     .7703881    1.198091
           2 |   1.576171   .1810155     3.96   0.000     1.258482    1.974057
             |
    1.Gender |   .8262023   .0772451    -2.04   0.041     .6878663    .9923591
     1.Age45 |   1.762024   .3406427     2.93   0.003     1.206296    2.573772
  1.RaceWhite |   .5574157   .0942801    -3.46   0.001      .400137    .7765145
   1.OwnRent |   .7861837   .2134843    -0.89   0.376     .4617261    1.33864
 1.KingCoun~8 |   1.654535   .4446257     1.87   0.061     .9770822    2.801693
 1.GardenFl~s |   1.672581    .223409     3.85   0.000     1.287333    2.173118
  1.CatsDogs |   1.065824   .1002028     0.68   0.498     .8864628    1.281477
  1.Children |   1.072702   .1664394     0.45   0.651     .7914214    1.453954
-------------+----------------------------------------------------------------
       /cut1 |   .5324154   .3471427               -.1479719    1.212803
       /cut2 |    1.66415   .3493953                .9793481    2.348952
       /cut3 |   3.715427   .3597639                3.010302    4.420551
```

Information Source on Awareness

ologit HeardPollutionAST i.InformationTV i.InformationInternet i.InformationMail i.InformationCh
> ild i.InformationNewspaper i.InformationFair i.InformationFacebook i.InformationRadio, or

```
Iteration 0:   log likelihood = -1138.1584
Iteration 1:   log likelihood = -1090.1039
Iteration 2:   log likelihood = -1089.4926
Iteration 3:   log likelihood = -1089.4918
```

```
Iteration 4:   log likelihood = -1089.4918

Ordered logistic regression                     Number of obs   =        931
                                                LR chi2(8)      =      97.33
                                                Prob > chi2     =     0.0000
Log likelihood = -1089.4918                     Pseudo R2       =     0.0428

------------------------------------------------------------------------------
HeardPollu~T | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
1.Informat~V |   1.617392   .2082461     3.73   0.000     1.256665    2.081666
1.Informat~t |   1.306716    .260384     1.34   0.179     .8842314    1.931065
1.Informat~l |   2.490842   .3921281     5.80   0.000     1.829545    3.391166
1.Informat~d |   1.550496   .5987865     1.14   0.256     .7273521     3.30519
1.Inform~per |   2.156013    .278445     5.95   0.000     1.673865    2.777042
1.Informa~ir |   1.783057   .4393144     2.35   0.019     1.100129    2.889925
1.Informat~k |   1.431054   .8430908     0.61   0.543     .4510032    4.540803
1.Informat~o |    1.65481   .3269881     2.55   0.011     1.123445    2.437499
-------------+----------------------------------------------------------------
       /cut1 |  -1.562893    .152739                     -1.862256   -1.26353
       /cut2 |   .3603644    .129032                      .1074664   .6132624
       /cut3 |   2.693141   .1607671                      2.378043   3.008239
```

Information Source on Reaction

mlogit ThinkInformation i.InformationTV i.InformationInternet i.InformationMail i.InformationChi
> ld i.InformationNewspaper i.InformationFair i.InformationFacebook i.InformationRadio, base (2) rrr

```
Iteration 0:   log likelihood = -1221.9992
Iteration 1:   log likelihood = -1139.1763
Iteration 2:   log likelihood = -1124.1578
Iteration 3:   log likelihood = -1122.9798
Iteration 4:   log likelihood = -1122.7652
Iteration 5:   log likelihood = -1122.7268
Iteration 6:   log likelihood = -1122.7182
Iteration 7:   log likelihood = -1122.7161
Iteration 8:   log likelihood = -1122.7156
Iteration 9:   log likelihood = -1122.7155
Iteration 10:  log likelihood = -1122.7155

Multinomial logistic regression                 Number of obs   =        889
                                                LR chi2(40)     =     198.57
                                                Prob > chi2     =     0.0000
Log likelihood = -1122.7155                     Pseudo R2       =     0.0812

------------------------------------------------------------------------------
ThinkInfor~n |      RRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
I_don_t_re~m |
1.Informat~V |    .10648   .0323255    -7.38   0.000     .0587298    .1930536
1.Informat~t |    .323133   .1581396    -2.31   0.021     .1238248    .8432469
1.Informat~l |   .2796067   .1197983    -2.97   0.003     .1207391    .6475113
1.Informat~d |   5.08e-07   .0003061    -0.02   0.981            0           .
1.Inform~per |   .1789151   .0573626    -5.37   0.000     .0954422    .3353927
1.Informa~ir |   .2860695   .2239354    -1.60   0.110     .0616809    1.326761
1.Informat~k |   5.76e-07   .0005531    -0.01   0.988            0           .
1.Informat~o |   .4795447   .2530099    -1.39   0.164     .1705028    1.348735
-------------+----------------------------------------------------------------
The_inform~r |
1.Informat~V |   1.366425   .3627281     1.18   0.240     .8121343    2.299026
1.Informat~t |   2.065548   .6657415     2.25   0.024     1.098213    3.884936
1.Informat~l |   3.043844   .8152191     4.16   0.000     1.800731    5.145124
1.Informat~d |   .9144666   .6317988    -0.13   0.897     .2360905     3.54207
1.Inform~per |   .7793218   .2026939    -0.96   0.338     .4680882    1.297496
1.Informa~ir |   6.977682   2.655999     5.10   0.000     3.309086    14.71344
```

```
1.Informat~k |   1.314364   1.110898    0.32   0.746    .2507734    6.888895
1.Informat~o |   1.603461   .5646202    1.34   0.180    .8041333    3.197338
-------------+----------------------------------------------------------------
_eq_3        | (base outcome)
-------------+----------------------------------------------------------------
I_was_alre~_ |
1.Informat~V |   .8851505   .1681508   -0.64   0.521    .6099799    1.284454
1.Informat~t |   1.166314   .3227359    0.56   0.578    .6780724    2.006112
1.Informat~l |   1.921891   .4136032    3.04   0.002    1.260506    2.930305
1.Informat~d |   1.445662   .7154019    0.74   0.456    .5480755    3.813233
1.Inform~per |   1.630145   .3063601    2.60   0.009    1.127863    2.356113
1.Informa~ir |   3.848806   1.323155    3.92   0.000    1.961991    7.550138
1.Informat~k |   .2753874   .2974785   -1.19   0.233    .0331483    2.287849
1.Informat~o |   1.098036   .3071443    0.33   0.738    .6346254    1.899836
-------------+----------------------------------------------------------------
I_am_not_c~o |
1.Informat~V |     1.0398   .6118701    0.07   0.947    .3281413    3.294877
1.Informat~t |   6.32e-07   .0005891   -0.02   0.988           0           .
1.Informat~l |    1.34501   .9032784    0.44   0.659    .3606429    5.016183
1.Informat~d |   5.66e-07   .0010425   -0.01   0.994           0           .
1.Inform~per |   .6306869   .3607365   -0.81   0.420    .2055648    1.934991
1.Informa~ir |   1.753185   1.908478    0.52   0.606    .2076005    14.80563
1.Informat~k |   1.09e-06   .0028638   -0.01   0.996           0           .
1.Informat~o |   1.313996    1.02958    0.35   0.727    .2829022     6.10312
-------------+----------------------------------------------------------------
I_am_tired~l |
1.Informat~V |   .7858559    .211445   -0.90   0.370    .463784     1.331588
1.Informat~t |   .6929967   .3151644   -0.81   0.420    .2841958    1.689837
1.Informat~l |    1.1505    .3774657    0.43   0.669    .6048074    2.188547
1.Informat~d |   .3995062   .4192522   -0.87   0.382    .0510799    3.124616
1.Inform~per |   .6750477   .1816295   -1.46   0.144    .3983903    1.143827
1.Informa~ir |   1.328386   .7709682    0.49   0.625    .4258968    4.14328
1.Informat~k |   4.41e-07   .0006258   -0.01   0.992           0           .
1.Informat~o |   .9081478   .3889925   -0.22   0.822    .3922438    2.102601
```

Demographics on "Dirt Alert"

logit HeardDirtAlert i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers
> i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -500.03566
Iteration 1:   log likelihood = -480.46194
Iteration 2:   log likelihood = -479.08296
Iteration 3:   log likelihood = -479.08183
Iteration 4:   log likelihood = -479.08183

Logistic regression                     Number of obs   =       1068
                                        LR chi2(10)     =      41.91
                                        Prob > chi2     =     0.0000
Log likelihood = -479.08183             Pseudo R2       =     0.0419

------------------------------------------------------------------------------
HeardDirtA~t | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
           1 |   .8349848   .1708531    -0.88   0.378     .5591229    1.246952
           2 |   1.031402   .2011188     0.16   0.874     .7037975    1.511501
             |
    1.Gender |   2.080513   .3577941     4.26   0.000     1.485203    2.914439
     1.Age45 |   .3618481   .1103464    -3.33   0.001     .1990446    .6578125
  1.RaceWhite |   .8125336   .2519901    -0.67   0.503     .4424449    1.492188
    1.OwnRent |   1.027687   .4752199     0.06   0.953     .4151935    2.543729
 1.KingCoun~8 |    1.6623   .9489512     0.89   0.373     .5429837    5.088992
 1.GardenFl~s |   .764377   .1807028    -1.14   0.256     .4809268    1.214888
  1.CatsDogs |   1.002492   .1660468     0.02   0.988     .7245908    1.386976
```

1.Children	1.313646	.3374423	1.06	0.288	.7940102	2.173353

Information Source on Dirt Alert

logit HeardDirtAlert i.InformationTV i.InformationInternet i.InformationMail i.InformationChild
> i.InformationNewspaper i.InformationFair i.InformationFacebook i.InformationRadio, or

Iteration 0: log likelihood = -474.23528
Iteration 1: log likelihood = -416.53355
Iteration 2: log likelihood = -412.15963
Iteration 3: log likelihood = -412.13845
Iteration 4: log likelihood = -412.13845

Logistic regression Number of obs = 876
LR chi2(8) = 124.19
Prob > chi2 = 0.0000
Log likelihood = -412.13845 Pseudo R2 = 0.1309

HeardDirtA~t	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1.Informat~V	5.704568	1.259654	7.89	0.000	3.700536	8.793886
1.Informat~t	1.740126	.4644274	2.08	0.038	1.031338	2.936029
1.Informat~l	3.01386	.61291	5.42	0.000	2.02311	4.489797
1.Informat~d	1.101026	.5712952	0.19	0.853	.3982265	3.044143
1.Inform~per	.4966841	.0945134	-3.68	0.000	.3420631	.7211977
1.Informa~ir	2.605152	.8404093	2.97	0.003	1.38433	4.9026
1.Informat~k	.3388843	.3726869	-0.98	0.325	.0392596	2.925213
1.Informat~o	.9493914	.2620352	-0.19	0.851	.5527272	1.630721

Demographics on Preference

. logit PreferVideo i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.
> CatsDogs i.Children, or

Iteration 0: log likelihood = -995.03889
Iteration 1: log likelihood = -984.20104
Iteration 2: log likelihood = -984.15231
Iteration 3: log likelihood = -984.15231

Logistic regression Number of obs = 1574
LR chi2(10) = 21.77
Prob > chi2 = 0.0163
Log likelihood = -984.15231 Pseudo R2 = 0.0109

PreferVideo	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
City						
1	1.090985	.1428474	0.67	0.506	.8440483	1.410166
2	.969468	.1302738	-0.23	0.818	.7449925	1.261581
1.Gender	1.087878	.1186601	0.77	0.440	.878487	1.347177
1.Age45	.6855779	.1484752	-1.74	0.081	.4484486	1.048096
1.RaceWhite	1.798742	.3203016	3.30	0.001	1.268807	2.550012
1.OwnRent	1.07339	.3156442	0.24	0.810	.6031853	1.910136
1.KingCoun~8	1.256088	.3946536	0.73	0.468	.6785452	2.325205
1.GardenFl~s	.8232701	.1238972	-1.29	0.196	.6129735	1.105715
1.CatsDogs	1.027057	.1127596	0.24	0.808	.8282125	1.273641
1.Children	1.02721	.1828282	0.15	0.880	.7246991	1.455997

. logit PreferWebsite i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers

> i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -817.44729
Iteration 1:   log likelihood = -788.65678
Iteration 2:   log likelihood = -787.19428
Iteration 3:   log likelihood = -787.19405
Iteration 4:   log likelihood = -787.19405

Logistic regression                     Number of obs   =      1574
                                        LR chi2(10)     =     60.51
                                        Prob > chi2     =    0.0000
Log likelihood = -787.19405             Pseudo R2       =    0.0370

------------------------------------------------------------------------------
PreferWebs~e | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.119392   .1741223     0.73   0.468     .8252344    1.518404
          2  |   1.244825   .1920443     1.42   0.156     .9200041    1.684328
             |
    1.Gender |   .9081112    .115172    -0.76   0.447     .7082468    1.164376
     1.Age45 |    .384078   .0852622    -4.31   0.000     .2485762    .5934434
  1.RaceWhite |   1.184964   .2506662     0.80   0.422     .7827852    1.793773
   1.OwnRent |   1.437367   .4590675     1.14   0.256     .7686171    2.687974
1.KingCoun~8 |   .6767982   .2146626    -1.23   0.218     .3634799    1.260196
1.GardenFl~s |   1.310601   .2487433     1.43   0.154     .9034793    1.901178
  1.CatsDogs |    1.60028   .2040597     3.69   0.000     1.246393    2.054646
  1.Children |   1.314109   .2510952     1.43   0.153     .9036218    1.911067
------------------------------------------------------------------------------
```

. logit PreferWebsite i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers
> i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -817.44729
Iteration 1:   log likelihood = -788.65678
Iteration 2:   log likelihood = -787.19428
Iteration 3:   log likelihood = -787.19405
Iteration 4:   log likelihood = -787.19405

Logistic regression                     Number of obs   =      1574
                                        LR chi2(10)     =     60.51
                                        Prob > chi2     =    0.0000
Log likelihood = -787.19405             Pseudo R2       =    0.0370

------------------------------------------------------------------------------
PreferWebs~e | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.119392   .1741223     0.73   0.468     .8252344    1.518404
          2  |   1.244825   .1920443     1.42   0.156     .9200041    1.684328
             |
    1.Gender |   .9081112    .115172    -0.76   0.447     .7082468    1.164376
     1.Age45 |    .384078   .0852622    -4.31   0.000     .2485762    .5934434
  1.RaceWhite |   1.184964   .2506662     0.80   0.422     .7827852    1.793773
   1.OwnRent |   1.437367   .4590675     1.14   0.256     .7686171    2.687974
1.KingCoun~8 |   .6767982   .2146626    -1.23   0.218     .3634799    1.260196
1.GardenFl~s |   1.310601   .2487433     1.43   0.154     .9034793    1.901178
  1.CatsDogs |    1.60028   .2040597     3.69   0.000     1.246393    2.054646
  1.Children |   1.314109   .2510952     1.43   0.153     .9036218    1.911067
------------------------------------------------------------------------------
```

. logit PreferMail i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.
> CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -953.57676
Iteration 1:   log likelihood = -939.63916
```

```
Iteration 2:   log likelihood = -939.52218
Iteration 3:   log likelihood = -939.52214

Logistic regression                             Number of obs   =      1574
                                                LR chi2(10)     =     28.11
                                                Prob > chi2     =    0.0017
Log likelihood = -939.52214                     Pseudo R2       =    0.0147

------------------------------------------------------------------------------
 PreferMail | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
       City |
         1  |   1.079101   .1456908     0.56   0.573     .8282099    1.405996
         2  |   1.113327   .1534548     0.78   0.436      .849763    1.458638
            |
   1.Gender |   1.218321   .1366738     1.76   0.078     .9778497    1.517928
    1.Age45 |   1.165788   .2801671     0.64   0.523     .7278725     1.86717
 1.RaceWhite |   .7138018   .1326861    -1.81   0.070     .4958506    1.027554
  1.OwnRent |   1.113364   .3538923     0.34   0.735     .5971394    2.075864
1.KingCoun~8 |    .750832   .2565441    -0.84   0.402     .3843301    1.466835
1.GardenFl~s |   1.220943    .187347     1.30   0.193     .9038224     1.64933
 1.CatsDogs |   1.311631   .1489135     2.39   0.017     1.049958    1.638518
 1.Children |   1.772357   .3648563     2.78   0.005     1.183923    2.653255
------------------------------------------------------------------------------
```

. logit PreferChild i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i
> .CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -313.34572
Iteration 1:   log likelihood = -251.63383
Iteration 2:   log likelihood = -240.95624
Iteration 3:   log likelihood = -240.79538
Iteration 4:   log likelihood = -240.79531
Iteration 5:   log likelihood = -240.79531

Logistic regression                             Number of obs   =      1574
                                                LR chi2(10)     =    145.10
                                                Prob > chi2     =    0.0000
Log likelihood = -240.79531                     Pseudo R2       =    0.2315

------------------------------------------------------------------------------
 PreferChild | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
       City |
         1  |   1.077809   .3364206     0.24   0.810     .5845926     1.98715
         2  |   .9876232   .3154636    -0.04   0.969     .5280841    1.847053
            |
   1.Gender |   .9526123   .2497916    -0.19   0.853     .5697918    1.592635
    1.Age45 |   .3252403   .0995388    -3.67   0.000     .1785241    .5925322
 1.RaceWhite |    2.58522   .8563705     2.87   0.004     1.350615    4.948384
  1.OwnRent |   3.934514   1.830704     2.94   0.003     1.580638    9.793767
1.KingCoun~8 |   1.220421   .6967852     0.35   0.727     .3985899    3.736744
1.GardenFl~s |   1.446525   .5697613     0.94   0.349     .6684242    3.130398
 1.CatsDogs |   1.367222   .3609993     1.18   0.236     .8148709    2.293976
 1.Children |   8.588546   2.429605     7.60   0.000     4.933148    14.95255
------------------------------------------------------------------------------
```

. logit PreferFamily i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers
> i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -465.32792
Iteration 1:   log likelihood = -454.06923
Iteration 2:   log likelihood = -452.37537
Iteration 3:   log likelihood = -452.37332
Iteration 4:   log likelihood = -452.37332
```

```
Logistic regression                     Number of obs   =      1574
                                        LR chi2(10)     =     25.91
                                        Prob > chi2     =    0.0039
Log likelihood = -452.37332             Pseudo R2       =    0.0278

------------------------------------------------------------------------------
PreferFamily | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .6562826   .1461516    -1.89   0.059     .4241619    1.01543
          2  |   .7790928   .1694487    -1.15   0.251     .5086947    1.193222
             |
    1.Gender |   1.420162   .2628688     1.90   0.058     .9880581    2.041237
     1.Age45 |   .4982163   .1473324    -2.36   0.018      .279062    .8894778
  1.RaceWhite |   1.568549   .4336144     1.63   0.103     .9124086     2.69654
   1.OwnRent |   .9673063   .4761092    -0.07   0.946     .3686393    2.538203
 1.KingCoun~8 |    1.92254   1.186686     1.06   0.290     .5734188    6.44583
 1.GardenFl~s |   1.127836   .3007214     0.45   0.652     .6687831    1.901984
  1.CatsDogs |   1.010304   .1856398     0.06   0.956     .7047685    1.448296
  1.Children |   1.554905   .4020332     1.71   0.088     .9367399    2.581005
------------------------------------------------------------------------------
```

. logit PreferCommunity i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlow
> ers i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -286.32147
Iteration 1:   log likelihood = -280.02711
Iteration 2:   log likelihood =  -276.3853
Iteration 3:   log likelihood = -276.36545
Iteration 4:   log likelihood = -276.36544

Logistic regression                     Number of obs   =      1574
                                        LR chi2(10)     =     19.91
                                        Prob > chi2     =    0.0301
Log likelihood = -276.36544             Pseudo R2       =    0.0348

------------------------------------------------------------------------------
PreferComm~y | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .9138321   .2784501    -0.30   0.767     .5029215    1.660476
          2  |    1.09483   .3348057     0.30   0.767     .6012346    1.993652
             |
    1.Gender |   1.607319   .4087944     1.87   0.062      .976368    2.646006
     1.Age45 |   .7937924   .3483573    -0.53   0.599     .3358579     1.87611
  1.RaceWhite |   3.128925   .9715132     3.67   0.000     1.702558    5.750271
   1.OwnRent |    .586765   .4422358    -0.71   0.479     .133945    2.570406
 1.KingCoun~8 |   .8694771    .54463    -0.22   0.823     .2547274     2.96784
 1.GardenFl~s |   .6538493   .2019546    -1.38   0.169     .3569167    1.197812
  1.CatsDogs |   1.042754   .2617821     0.17   0.868     .6375125    1.705591
  1.Children |   1.136387   .4220377     0.34   0.731     .5487855    2.353153
```

---

logit PreferRadio i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers
> i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -1078.2728
Iteration 1:   log likelihood =  -1069.274
Iteration 2:   log likelihood = -1069.2548
Iteration 3:   log likelihood = -1069.2548

Logistic regression                     Number of obs   =      1574
                                        LR chi2(10)     =     18.04
                                        Prob > chi2     =    0.0544
Log likelihood = -1069.2548             Pseudo R2       =    0.0084

------------------------------------------------------------------------------
```

```
 PreferRadio | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   .9601353   .1187019    -0.33   0.742     .7535257    1.223395
          2  |   .7875404   .0994612    -1.89   0.059     .6148535    1.008728
             |
   1.Gender  |    1.046401   .1077052     0.44   0.659     .8552329    1.280299
    1.Age45  |    1.325124   .2927928     1.27   0.203     .8593679    2.043308
 1.RaceWhite |    .8861242   .1594518    -0.67   0.502     .6227689    1.260847
  1.OwnRent  |    .8206123   .2394242    -0.68   0.498     .4632218    1.453741
1.KingCoun~8 |    1.371428   .4204595     1.03   0.303     .7519812    2.501144
1.GardenFl~s |    1.166094   .1710262     1.05   0.295     .8747646    1.554446
 1.CatsDogs  |    .9612863   .0996138    -0.38   0.703     .7845968    1.177766
 1.Children  |    .7379232   .1287704    -1.74   0.082     .5241714    1.038841
-------------------------------------------------------------------------------
```

. logit PreferFair i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.
> CatsDogs i.Children, or

```
Iteration 0:   log likelihood = -549.29273
Iteration 1:   log likelihood = -536.92653
Iteration 2:   log likelihood = -536.50253
Iteration 3:   log likelihood = -536.50188
Iteration 4:   log likelihood = -536.50188

Logistic regression                             Number of obs     =       1574
                                                LR chi2(10)       =      25.58
                                                Prob > chi2       =     0.0043
Log likelihood = -536.50188                     Pseudo R2         =     0.0233

-------------------------------------------------------------------------------
 PreferFair | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.234904   .2441356     1.07   0.286     .8382122    1.819334
          2  |   1.157723   .2345989     0.72   0.470     .7782492    1.722228
             |
   1.Gender  |   1.639458   .2744609     2.95   0.003     1.180867    2.276143
    1.Age45  |   .9068215   .2765617    -0.32   0.748      .498796     1.64862
 1.RaceWhite |   1.623503   .4121517     1.91   0.056      .987102    2.670201
  1.OwnRent  |   1.372973   .5573534     0.78   0.435     .6196118    3.042315
1.KingCoun~8 |   1.087358   .4935461     0.18   0.854     .4467004    2.646845
1.GardenFl~s |   1.607756    .423287     1.80   0.071     .9596598    2.693536
 1.CatsDogs  |   1.372582   .2265778     1.92   0.055     .9931779    1.896923
 1.Children  |   1.292381    .312972     1.06   0.290     .8040033    2.077416
```

Demographics on Behaviors

ologit AdultsHands i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i
> .CatsDogs i.Children, or

```
Iteration 0:   log likelihood =  -1083.297
Iteration 1:   log likelihood = -1065.9744
Iteration 2:   log likelihood = -1065.7349
Iteration 3:   log likelihood = -1065.7347
Iteration 4:   log likelihood = -1065.7347

Ordered logistic regression                     Number of obs     =       1566
                                                LR chi2(10)       =      35.12
                                                Prob > chi2       =     0.0001
Log likelihood = -1065.7347                     Pseudo R2         =     0.0162

-------------------------------------------------------------------------------
 AdultsHands | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
```

```
      City |
        1  |   1.05473   .1404293     0.40   0.689    .8124752    1.369217
        2  |   1.100842   .1489487     0.71   0.478    .8444103    1.435146
           |
  1.Gender |   1.063935   .1180068     0.56   0.576     .856059    1.322289
   1.Age45 |   .9921965   .2209491    -0.04   0.972     .641278    1.535144
1.RaceWhite |   1.952271   .4260314     3.07   0.002    1.272882     2.99428
  1.OwnRent |   1.590338   .5389673     1.37   0.171    .8184952    3.090029
1.KingCoun~8 |   .9572645   .3097309    -0.13   0.893    .5077134    1.804868
1.GardenFl~s |   .7096879   .1193377    -2.04   0.041    .5104267    .9867369
 1.CatsDogs |   .8720302   .0970343    -1.23   0.218    .7011564    1.084546
 1.Children |   .5483957   .0949399    -3.47   0.001    .3905993    .7699396
-------------+----------------------------------------------------------------
     /cut1 |  -7.731981   1.080892                      -9.85049   -5.613471
     /cut2 |  -4.346437   .4504077                     -5.22922   -3.463654
     /cut3 |  -1.146303   .4123165                     -1.954428   -.338177
```

. ologit WashFruitsVegs i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowe
> rs i.CatsDogs i.Children, or

```
note: 1.GardenFlowers omitted because of collinearity
Iteration 0:   log likelihood = -1400.3178
Iteration 1:   log likelihood = -1391.2418
Iteration 2:   log likelihood = -1391.2052
Iteration 3:   log likelihood = -1391.2052

Ordered logistic regression                     Number of obs   =      1312
                                  LR chi2(9)    =     18.23
                                  Prob > chi2   =    0.0326
Log likelihood = -1391.2052                     Pseudo R2     =    0.0065

------------------------------------------------------------------------------
WashFruits~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      City |
        1  |   .8164522   .1060983    -1.56   0.119     .6328733    1.053282
        2  |   .9924143   .1273144    -0.06   0.953     .7717816     1.27612
           |
  1.Gender |    .824773   .0884548    -1.80   0.072     .6684136    1.017709
   1.Age45 |   .9872766   .2150005    -0.06   0.953     .6442754    1.512886
1.RaceWhite |   2.011935   .4484179     3.14   0.002     1.299867    3.114073
  1.OwnRent |    1.01435   .3631035     0.04   0.968     .5029055    2.045925
1.KingCoun~8 |   .7342831    .234594    -0.97   0.334     .3925687    1.373446
1.GardenFl~s |  (omitted)
 1.CatsDogs |   1.022856   .1098757     0.21   0.833     .8286632    1.262557
 1.Children |   1.073787    .18351     0.42   0.677     .7681534    1.501026
-------------+----------------------------------------------------------------
     /cut1 |  -1.581997   .3827999                     -2.332271   -.8317226
     /cut2 |  -1.499025   .3824969                     -2.248705   -.7493451
     /cut3 |  -.5530934   .3805322                     -1.298923    .192736
------------------------------------------------------------------------------
```

. ologit SelfShoes i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.Ca
> tsDogs i.Children, or

```
Iteration 0:   log likelihood = -2108.1242
Iteration 1:   log likelihood = -2059.2095
Iteration 2:   log likelihood =  -2058.989
Iteration 3:   log likelihood =  -2058.989

Ordered logistic regression                     Number of obs   =      1568
                                  LR chi2(10)   =     98.27
                                  Prob > chi2   =    0.0000
Log likelihood =  -2058.989                     Pseudo R2     =    0.0233
```

```
------------------------------------------------------------------------------
  SelfShoes | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
      City |
        1  |   1.310637   .1467929     2.42   0.016     1.052318    1.632368
        2  |   1.276519   .1444859     2.16   0.031     1.022544    1.593575
           |
   1.Gender |   1.095299   .1014647     0.98   0.326     .9134404    1.313364
    1.Age45 |   .4796998    .092448    -3.81   0.000     .3287953    .6998637
 1.RaceWhite |   3.340068   .5792931     6.95   0.000     2.377524    4.692298
  1.OwnRent |   .7239361   .1836877    -1.27   0.203     .4402719    1.190363
1.KingCoun~8 |   .7691613   .2041771    -0.99   0.323     .4571538    1.294114
1.GardenFl~s |    1.30115   .1762747     1.94   0.052      .997723    1.696856
 1.CatsDogs |   .7219319   .0674046    -3.49   0.000     .6012043    .8669028
 1.Children |   .9643194   .1458055    -0.24   0.810     .7169995    1.296949
------------+-----------------------------------------------------------------
      /cut1 |   -2.07339   .3448822                     -2.749347   -1.397433
      /cut2 |  -1.015471   .3424167                     -1.686595   -.3443464
      /cut3 |   .7206955   .3415335                      .0513022    1.390089
------------------------------------------------------------------------------
```

. logit Dust i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.CatsDog
> s i.Children, or

```
Iteration 0:   log likelihood = -1076.4495
Iteration 1:   log likelihood = -1060.6964
Iteration 2:   log likelihood = -1060.6895
Iteration 3:   log likelihood = -1060.6895

Logistic regression                             Number of obs     =      1553
                                                LR chi2(10)       =     31.52
                                                Prob > chi2       =    0.0005
Log likelihood = -1060.6895                     Pseudo R2         =    0.0146

------------------------------------------------------------------------------
        Dust | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        City |
          1  |   1.071356   .1333959     0.55   0.580     .8393627    1.367471
          2  |    1.23399   .1561862     1.66   0.097     .9628863    1.581424
             |
     1.Gender |   .7584222   .0784404    -2.67   0.008     .6192626    .9288536
      1.Age45 |    1.03541   .2208465     0.16   0.870     .6816418    1.572781
   1.RaceWhite |   1.717857   .3136313     2.96   0.003     1.201108    2.456925
    1.OwnRent |   1.004584   .2833844     0.02   0.987     .5779225    1.746235
  1.KingCoun~8 |   .9362608   .2725197    -0.23   0.821     .5292191    1.656373
  1.GardenFl~s |   1.130204   .1658078     0.83   0.404      .847775    1.506723
   1.CatsDogs |   1.433872   .1492475     3.46   0.001     1.16926    1.758367
   1.Children |   1.137594   .1945202     0.75   0.451     .8136508     1.59051
------------------------------------------------------------------------------
```

. ologit Vacuum i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowers i.Cats
> Dogs i.Children, or

```
Iteration 0:   log likelihood = -1593.7016
Iteration 1:   log likelihood = -1574.9491
Iteration 2:   log likelihood =  -1574.915
Iteration 3:   log likelihood =  -1574.915

Ordered logistic regression                     Number of obs     =      1570
                                                LR chi2(10)       =     37.57
                                                Prob > chi2       =    0.0000
Log likelihood =  -1574.915                     Pseudo R2         =    0.0118

------------------------------------------------------------------------------
      Vacuum | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
```

```
-------------+----------------------------------------------------------------
      City |
        1  |   .8808536   .1040728    -1.07   0.283    .6987702    1.110384
        2  |   .8056521   .0968631    -1.80   0.072    .6365141    1.019734
           |
  1.Gender  |   .7967972   .0782181    -2.31   0.021    .6573384    .9658431
   1.Age45  |    1.091412   .2262457     0.42   0.673    .7270058    1.638474
1.RaceWhite |    1.028698   .1751368     0.17   0.868    .7368346     1.43617
  1.OwnRent |    1.046437   .2905556     0.16   0.870    .6072494    1.803264
1.KingCoun~8 |    1.427118   .3992043     1.27   0.204    .8248125    2.469247
1.GardenFl~s |     1.52218   .2141074     2.99   0.003    1.155413     2.00537
 1.CatsDogs |    1.413587   .1396721     3.50   0.000    1.164711    1.715644
 1.Children |    1.446967   .2383057     2.24   0.025    1.047783    1.998231
-------------+----------------------------------------------------------------
      /cut1 |  -1.893274   .3673359                      -2.613239   -1.173309
      /cut2 |    .958002   .3606381                      .2511642    1.66484
      /cut3 |   4.146411   .3857062                      3.390441    4.902381
------------------------------------------------------------------------------
```

. logit CoverBarePatches i.City i.Gender i.Age45 i.RaceWhite i.OwnRent i.KingCounty8 i.GardenFlowe
> rs i.CatsDogs i.Children, or

```
Iteration 0:   log likelihood =  -1081.964
Iteration 1:   log likelihood = -1035.2391
Iteration 2:   log likelihood = -1035.1427
Iteration 3:   log likelihood = -1035.1427

Logistic regression                             Number of obs   =       1561
                                                LR chi2(10)     =      93.64
                                                Prob > chi2     =     0.0000
Log likelihood = -1035.1427                     Pseudo R2       =     0.0433

------------------------------------------------------------------------------
CoverBareP~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      City |
        1  |   1.179069   .1495671     1.30   0.194     .9195234    1.511875
        2  |   1.240517   .1591211     1.68   0.093      .96476    1.595094
           |
  1.Gender  |   .8570068   .0901674    -1.47   0.142     .6973128    1.053273
   1.Age45  |   1.306785   .2853839     1.23   0.220     .8517529     2.00491
1.RaceWhite |   .8083873   .1507093    -1.14   0.254     .5609552    1.164959
  1.OwnRent |   .9531546   .2835142    -0.16   0.872     .5320775    1.707465
1.KingCoun~8 |   .6988257   .2113157    -1.19   0.236     .3863462    1.264041
1.GardenFl~s |   3.455117    .562971     7.61   0.000     2.510553    4.755062
 1.CatsDogs |   1.266862   .1337301     2.24   0.025     1.030092    1.558053
 1.Children |   1.538727   .2711471     2.45   0.014     1.089349    2.173483
```

Awareness on Behavior

ologit AdultsHands HeardPollutionAST, or

```
Iteration 0:   log likelihood = -1252.9566
Iteration 1:   log likelihood = -1252.8756
Iteration 2:   log likelihood = -1252.8756

Ordered logistic regression                     Number of obs   =       1771
                                                LR chi2(1)      =       0.16
                                                Prob > chi2     =     0.6872
Log likelihood = -1252.8756                     Pseudo R2       =     0.0001

------------------------------------------------------------------------------
 AdultsHands | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardPollu~T |   1.020935   .0525445     0.40   0.687     .922974    1.129294
-------------+----------------------------------------------------------------
```

```
     /cut1 |   -6.35307   .5813837               -7.492561   -5.213579
     /cut2 |   -3.71633   .1705696               -4.05064    -3.38202
     /cut3 |  -.7740441   .0825653               -.9358691   -.6122191
------------------------------------------------------------------------------
```

ologit WashFruitsVegs HeardPollutionAST, or

```
Iteration 0:   log likelihood = -1598.5872
Iteration 1:   log likelihood =  -1595.908
Iteration 2:   log likelihood = -1595.9075
Iteration 3:   log likelihood = -1595.9075

Ordered logistic regression                     Number of obs   =      1493
                                  LR chi2(1)    =      5.36
                                  Prob > chi2   =    0.0206
Log likelihood = -1595.9075                     Pseudo R2     =    0.0017

------------------------------------------------------------------------------
WashFruits~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardPollu~T |   1.121242   .0554952     2.31   0.021     1.017583    1.235462
-------------+----------------------------------------------------------------
     /cut1 |  -1.043926   .0877472               -1.215907   -.8719446
     /cut2 |  -.9593931   .0869139               -1.129741   -.7890449
     /cut3 |   .0147519   .0828109               -.1475544    .1770582
------------------------------------------------------------------------------
```

. ologit SelfShoes HeardPollutionAST, or

```
Iteration 0:   log likelihood = -2389.9753
Iteration 1:   log likelihood = -2389.8446
Iteration 2:   log likelihood = -2389.8446

Ordered logistic regression                     Number of obs   =      1775
                                  LR chi2(1)    =      0.26
                                  Prob > chi2   =    0.6092
Log likelihood = -2389.8446                     Pseudo R2     =    0.0001

------------------------------------------------------------------------------
  SelfShoes | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardPollu~T |   1.022433   .0443672     0.51   0.609     .9390699    1.113196
-------------+----------------------------------------------------------------
     /cut1 |  -1.444578    .082485               -1.606246   -1.28291
     /cut2 |  -.3930202   .0744736               -.5389858   -.2470547
     /cut3 |   1.237848   .0797169                1.081606    1.39409
------------------------------------------------------------------------------
```

. logit Dust HeardPollutionAST, or

```
Iteration 0:   log likelihood = -1217.6521
Iteration 1:   log likelihood = -1217.5283
Iteration 2:   log likelihood = -1217.5283

Logistic regression                             Number of obs   =      1757
                                  LR chi2(1)    =      0.25
                                  Prob > chi2   =    0.6188
Log likelihood = -1217.5283                     Pseudo R2     =    0.0001

------------------------------------------------------------------------------
      Dust | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardPollu~T |   1.024118   .0490555     0.50   0.619     .9323462    1.124923
------------------------------------------------------------------------------
```

. ologit Vacuum HeardPollutionAST, or

```
Iteration 0:   log likelihood = -1822.6876
Iteration 1:   log likelihood = -1821.9714
Iteration 2:   log likelihood = -1821.9714

Ordered logistic regression                     Number of obs   =      1777
                                                LR chi2(1)      =      1.43
                                                Prob > chi2     =    0.2314
Log likelihood = -1821.9714                     Pseudo R2       =    0.0004

------------------------------------------------------------------------------
     Vacuum | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
HeardPollu~T |   1.056448   .0484834     1.20   0.231     .9655707    1.155879
------------+-----------------------------------------------------------------
      /cut1 |  -2.504135    .108546                -2.716881   -2.291388
      /cut2 |   .2497615   .0757138                 .1013652    .3981578
      /cut3 |    3.35819    .14072                 3.082384    3.633996
------------------------------------------------------------------------------
```

. ologit CoverBarePatches HeardPollutionAST, or

```
Iteration 0:   log likelihood =  -1304.141
Iteration 1:   log likelihood = -1298.6865
Iteration 2:   log likelihood = -1298.6861
Iteration 3:   log likelihood = -1298.6861

Ordered logistic regression                     Number of obs   =      1766
                                                LR chi2(1)      =     10.91
                                                Prob > chi2     =    0.0010
Log likelihood = -1298.6861                     Pseudo R2       =    0.0042

------------------------------------------------------------------------------
CoverBareP~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
HeardPollu~T |   1.170447   .0559227     3.29   0.001     1.065816     1.28535
------------+-----------------------------------------------------------------
      /cut1 |   .1976572   .0772249                .0462992    .3490153
      /cut2 |   4.906719   .2597269                4.397664    5.415775
```

Reaction on Behavior

ologit WashFruitsVegs Think1 Think2 Think4 Think5 Think6, or

```
Iteration 0:   log likelihood = -1534.9445
Iteration 1:   log likelihood = -1529.9057
Iteration 2:   log likelihood = -1529.8951
Iteration 3:   log likelihood = -1529.8951

Ordered logistic regression                     Number of obs   =      1433
                                                LR chi2(5)      =     10.10
                                                Prob > chi2     =    0.0725
Log likelihood = -1529.8951                     Pseudo R2       =    0.0033

------------------------------------------------------------------------------
WashFruits~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
      Think1 |   .8070659    .094815    -1.82   0.068     .6410751    1.016036
      Think2 |   1.505777   .3823366     1.61   0.107     .9154387    2.476805
      Think4 |   .9029391   .1590292    -0.58   0.562     .6393542    1.275192
      Think5 |    .550989   .2810059    -1.17   0.243     .2027812    1.497125
      Think6 |   .7549406   .1781902    -1.19   0.234     .4753373    1.199012
------------+-----------------------------------------------------------------
      /cut1 |  -1.304136   .0996876                -1.49952   -1.108752
      /cut2 |  -1.219975   .0987811                -1.413583  -1.026368
```

```
     /cut3 |   -.243834    .093095                -.4262968   -.0613712
```

ologit AdultsHands Think1 Think2 Think4 Think5 Think6, or

```
Iteration 0:   log likelihood = -1199.7653
Iteration 1:   log likelihood = -1191.5881
Iteration 2:   log likelihood = -1191.4873
Iteration 3:   log likelihood = -1191.4872

Ordered logistic regression                     Number of obs   =      1701
                                                LR chi2(5)      =     16.56
                                                Prob > chi2     =    0.0054
Log likelihood = -1191.4872                     Pseudo R2       =    0.0069

------------------------------------------------------------------------------
 AdultsHands | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    Think1 |   1.180715   .1413112     1.39   0.165     .9338364    1.49286
    Think2 |   3.060266   .9306911     3.68   0.000     1.686129    5.554276
    Think4 |   1.225637   .2262972     1.10   0.270     .8534917    1.760049
    Think5 |   1.218283   .6609204     0.36   0.716     .4206973    3.527982
    Think6 |   1.203408   .2899677     0.77   0.442     .7504322     1.92981
-------------+----------------------------------------------------------------
     /cut1 |  -6.592869   .7114816                -7.987347   -5.19839
     /cut2 |  -3.653599   .1823345                -4.010968   -3.29623
     /cut3 |  -.6217976   .0930662                 -.804204   -.4393913
```

ologit SelfShoes Think1 Think2 Think4 Think5 Think6, or

```
Iteration 0:   log likelihood = -2300.7969
Iteration 1:   log likelihood = -2289.6033
Iteration 2:   log likelihood = -2289.5922
Iteration 3:   log likelihood = -2289.5922

Ordered logistic regression                     Number of obs   =      1708
                                                LR chi2(5)      =     22.41
                                                Prob > chi2     =    0.0004
Log likelihood = -2289.5922                     Pseudo R2       =    0.0049

------------------------------------------------------------------------------
  SelfShoes | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    Think1 |     1.0139    .10313     0.14   0.892     .8306428    1.237588
    Think2 |   1.948269   .3894077     3.34   0.001     1.316789    2.882582
    Think4 |   1.109817   .1723245     0.67   0.502     .8186207    1.504596
    Think5 |   .6070041    .259155    -1.17   0.242     .2628927    1.401537
    Think6 |   .6061612   .1209537    -2.51   0.012     .4099576    .8962669
-------------+----------------------------------------------------------------
     /cut1 |  -1.444221   .0900989               -1.620811   -1.26763
     /cut2 |  -.3902021    .081559               -.5500547   -.2303494
     /cut3 |   1.263079   .0879141                1.090771    1.435388
------------------------------------------------------------------------------
```

. ologit Dust Think1 Think2 Think4 Think5 Think6, or

```
Iteration 0:   log likelihood = -1171.0767
Iteration 1:   log likelihood = -1165.7731
Iteration 2:   log likelihood =  -1165.772
Iteration 3:   log likelihood =  -1165.772

Ordered logistic regression                     Number of obs   =      1690
                                                LR chi2(5)      =     10.61
                                                Prob > chi2     =    0.0597
Log likelihood =  -1165.772                     Pseudo R2       =    0.0045
```

```
------------------------------------------------------------------------------
      Dust | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    Think1 |   1.200969   .1370727     1.60   0.109     .9602397    1.502047
    Think2 |   1.778484   .4137826     2.47   0.013     1.127221     2.80602
    Think4 |   .9596805   .1651397    -0.24   0.811     .6849419     1.34462
    Think5 |   .6949405   .3417114    -0.74   0.459     .2650945    1.821774
    Think6 |   1.411675   .3196553     1.52   0.128     .9057142    2.200281
-------------+----------------------------------------------------------------
     /cut1 |   .0880569   .0895294                     -.0874176    .2635313
```

ologit CoverBarePatches Think1 Think2 Think4 Think5 Think6, or

```
Iteration 0:   log likelihood = -1253.0434
Iteration 1:   log likelihood = -1244.9272
Iteration 2:   log likelihood = -1244.9259
Iteration 3:   log likelihood = -1244.9259

Ordered logistic regression                     Number of obs   =      1699
                                  LR chi2(5)    =      16.24
                                  Prob > chi2   =     0.0062
Log likelihood = -1244.9259                     Pseudo R2     =     0.0065

------------------------------------------------------------------------------
CoverBareP~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    Think1 |   .6946547   .0789328    -3.21   0.001     .5559657    .8679406
    Think2 |   1.287868   .2970453     1.10   0.273     .8194885    2.023951
    Think4 |   .7483295    .127762    -1.70   0.089     .5355099    1.045727
    Think5 |   .5617107   .2801733    -1.16   0.248     .2113224    1.493069
    Think6 |   .7493246   .1666547    -1.30   0.194     .4845708    1.158731
-------------+----------------------------------------------------------------
     /cut1 |  -.2098279   .0892643                     -.3847828    -.034873
     /cut2 |   4.527689   .2686865                      4.001073    5.054305
```

Reaction on Dirt Alert

. logit CoverBarePatches HeardDirtAlert, or

```
Iteration 0:   log likelihood = -835.93216
Iteration 1:   log likelihood = -833.17508
Iteration 2:   log likelihood = -833.17507

Logistic regression                             Number of obs   =      1207
                                  LR chi2(1)    =       5.51
                                  Prob > chi2   =     0.0189
Log likelihood = -833.17507                     Pseudo R2     =     0.0033

------------------------------------------------------------------------------
CoverBareP~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardDirtA~t |   .7040142   .1055344    -2.34   0.019     .5247871    .9444517
------------------------------------------------------------------------------
```

. ologit   SelfShoes HeardDirtAlert, or

```
Iteration 0:   log likelihood = -1622.0044
Iteration 1:   log likelihood = -1621.7925
Iteration 2:   log likelihood = -1621.7925

Ordered logistic regression                     Number of obs   =      1212
                                  LR chi2(1)    =       0.42
                                  Prob > chi2   =     0.5151
Log likelihood = -1621.7925                     Pseudo R2     =     0.0001
```

```
------------------------------------------------------------------------------
  SelfShoes | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
HeardDirtA~t |   .9158928   .1236038    -0.65   0.515     .7030257    1.193213
------------+-----------------------------------------------------------------
     /cut1 |  -1.572914    .079721                -1.729164   -1.416664
     /cut2 |   -.431038   .0636328                -.555756    -.30632
     /cut3 |   1.267443   .0737359                1.122924    1.411963
------------------------------------------------------------------------------
```

. ologit Vacuum HeardDirtAlert, or

```
Iteration 0:   log likelihood = -1231.5221
Iteration 1:   log likelihood = -1230.3023
Iteration 2:   log likelihood = -1230.3022
Iteration 3:   log likelihood = -1230.3022

Ordered logistic regression                     Number of obs   =      1211
                                  LR chi2(1)    =       2.44
                                  Prob > chi2   =     0.1183
Log likelihood = -1230.3022                     Pseudo R2       =     0.0010

------------------------------------------------------------------------------
    Vacuum | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
HeardDirtA~t |   1.249281   .1781722     1.56   0.119     .9446309    1.652184
------------+-----------------------------------------------------------------
     /cut1 |  -2.624574   .1186907               -2.857203   -2.391944
     /cut2 |   .1615858   .0633011                .037518    .2856536
     /cut3 |   3.322087   .1563753                3.015597    3.628577
------------------------------------------------------------------------------
```

. logit Dust HeardDirtAlert, or

```
Iteration 0:   log likelihood = -827.55743
Iteration 1:   log likelihood =  -827.3383
Iteration 2:   log likelihood =  -827.3383

Logistic regression                             Number of obs   =      1194
                                  LR chi2(1)    =       0.44
                                  Prob > chi2   =     0.5080
Log likelihood =  -827.3383                     Pseudo R2       =     0.0003

------------------------------------------------------------------------------
      Dust | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
HeardDirtA~t |   .9053602   .1360297    -0.66   0.508     .6744178    1.215385
------------------------------------------------------------------------------
```

. ologit AdultsHands HeardDirtAlert, or

```
Iteration 0:   log likelihood = -840.90115
Iteration 1:   log likelihood = -839.16186
Iteration 2:   log likelihood = -839.15865
Iteration 3:   log likelihood = -839.15865

Ordered logistic regression                     Number of obs   =      1203
                                  LR chi2(1)    =       3.48
                                  Prob > chi2   =     0.0619
Log likelihood = -839.15865                     Pseudo R2       =     0.0021

------------------------------------------------------------------------------
 AdultsHands | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardDirtA~t |    .744174   .1166335    -1.89   0.059     .547352    1.011771
```

```
-------------+----------------------------------------------------------------
      /cut1 |  -6.458562   .7085389                -7.847273   -5.069852
      /cut2 |  -3.872347   .2011489                -4.266592   -3.478102
      /cut3 |  -.8791725   .0699149                -1.016203   -.7421417
------------------------------------------------------------------------------
```

ologit WashFruitsVegs HeardDirtAlert, or

```
Iteration 0:   log likelihood = -1091.3606
Iteration 1:   log likelihood = -1090.3449
Iteration 2:   log likelihood = -1090.3445
Iteration 3:   log likelihood = -1090.3445

Ordered logistic regression                     Number of obs   =       1031
                                                LR chi2(1)      =       2.03
                                                Prob > chi2     =     0.1540
Log likelihood = -1090.3445                     Pseudo R2       =     0.0009

------------------------------------------------------------------------------
WashFruits~s | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
HeardDirtA~t |   .8030168   .1230813    -1.43   0.152     .5946452    1.084405
-------------+----------------------------------------------------------------
      /cut1 |  -1.272321    .080141                -1.429395   -1.115248
      /cut2 |  -1.190893   .0786356                -1.345016    -1.03677
      /cut3 |  -.2207431   .0686712                -.3553361    -.08615
------------------------------------------------------------------------------
```