



# **Final Report on Smokefree Communities in Wyoming: Summary of Surveys Conducted in Laramie, Sheridan, and Evanston, WY**

WYSAC Technical Report No. CHES-617

July 2006

# Final Report on Smokefree Communities in Wyoming: Summary of Surveys Conducted in Laramie, Sheridan, and Evanston, WY

By

Mark McLean, Graduate Assistant  
Laura Feldman, Ed.S., Associate Research Scientist

With the assistance of

Bistra Anatchokova, Ph.D., Associate Research Scientist  
Shana Gillette, Ph.D., Assistant Research Scientist  
Heather Ackerman, Graduate Assistant  
Elissa Hansen, Graduate Assistant  
Shannon Powell, Graduate Assistant  
Shaun Wilhelm, Graduate Assistant

Wyoming Survey & Analysis Center  
University of Wyoming  
710 Garfield • Suite 320  
Laramie, WY 82070  
(307) 742-2223 • [wysac@uwyo.edu](mailto:wysac@uwyo.edu)

Under Contract to  
Wyoming Department of Health  
Substance Abuse Division  
6101 North Yellowstone Room 220  
Cheyenne, WY 82002  
(307) 777-6494 • Fax: (307) 777-7006

Citation for this report: WYSAC (2006) *Final report on smokefree communities in Wyoming: Summary of surveys conducted in Laramie, Sheridan, and Evanston, WY* by M. McLean and L. Feldman. (WYSAC Tech. Rep. No. CHES-617). Laramie, WY: University of Wyoming, Wyoming Survey and Analysis Center.

Short reference: WYSAC (2006), *Final Report on Smokefree Communities in Wyoming*.

© Wyoming Survey & Analysis Center, 2006.

## Table of Contents

1. Executive Summary.....	5
2. Introduction .....	8
3. Organization of Report.....	8
4. Methods .....	9
5. Demographics .....	10
6. Key Findings .....	11
6.1. Key variables that affect a person’s happiness with a smokefree law .....	11
6.2. Comparison of Laramie to Evanston and to Sheridan on the eight key variables to assess support for a smokefree law .....	16
6.3 Effects of Laramie Smokefree Ordinance over time.....	24
7. Conclusions .....	25
8. References and Bibliography.....	28
9. Appendices .....	29
Appendix A. Frequencies .....	29
Appendix B. Explanation of odds and probability.....	57
Appendix C. Logistic regression results.....	59

## List of Figures

Figure 1. Overall Feelings toward a Smokefree Law .....	11
Figure 2. Effect of a Smokefree Law on the City’s Health, by City .....	17
Figure 3. Attitudes toward the Statement, “A Smokefree Law Takes Away Too Much Personal Freedom,” by City.....	18
Figure 4. Support of a Smokefree Law as a Matter of Health vs. Rights, by City.....	18
Figure 5. Right to Smokefree Air vs. Business Owners’ Right to Decide, by City (All Respondents).....	19
Figure 6. People’s Right to Smokefree Air vs. Business Owners’ Right to Decide Smoking Policy, by City (Only Respondents Who Chose Rights over Health) .....	19
Figure 7. Responses to “Breathing Smoke from Other People’s Cigarettes Is Harmful to One’s Health,” by City.....	20
Figure 8. Preferred Smoking Policy in Restaurants, by City.....	21
Figure 9. Preferred Smoking Policy in Bars, by City .....	22

## List of Tables

Table 1. Overall Feelings toward a Smokefree Law .....	5
Table 2. Profile of a Typical Person in Each Group Based on the Most Commonly Reported Answer.....	6
Table 3. Summary of Comparisons of Evanston vs. Laramie and Sheridan vs. Laramie .....	7
Table 4. Survey Date and Sample Size for Each Iteration.....	9
Table 5. Demographics of Respondents from the Smokefree Ordinance Surveys in Three Wyoming Communities.....	10
Table 6. Significant Predictor Variables in the Multinomial Logistic Regression Model.....	12
Table 7. Classification Rates for Individuals Who Were Happy, Neutral, or Unhappy.....	12
Table 8. Each Variable's Effect on an Individual Being Happy vs. Unhappy with a Smokefree Law.....	13
Table 9. The Effect of Each Variable on an Individual Being Neutral vs. Unhappy with a Smokefree Law.....	14

Table 10. Profile of a Typical Person in Each Group (Happy, Neutral, Unhappy) Based on Most Commonly Reported Answers.....15

Table 11. Summary of Comparisons of Sheridan vs. Laramie for the Key Predictor Variables.....22

Table 12. Summary of Comparisons of Evanston vs. Laramie for the Key Predictor Variables .....23

# Final Report on Smokefree Communities in Wyoming: Summary of Surveys Conducted in Laramie, Sheridan, and Evanston, WY

## 1. Executive Summary

In February 2005, the Wyoming Survey and Analysis Center (WYSAC) conducted a telephone survey of Laramie, WY, residents regarding their attitudes toward smokefree environments and a smokefree ordinance. WYSAC repeated this survey in Laramie in July 2005 and again in February 2006. The survey was later adapted for residents in Sheridan, WY, and Evanston, WY and administered in November 2005. WYSAC used information from these surveys to identify the attitudes most influential in determining whether an individual would be happy, neutral, or unhappy with a smokefree law.

Just over one third of respondents considered a smokefree ordinance a health issue, and just under two thirds of respondents considered it a rights issue. When asked *whose* right was more important, about two fifths of people believed an individual's right to smokefree air was more important than a business owner's right to decide his or her own policy.

Table 1 shows overall feelings for a smokefree law in each of the three Wyoming communities. Please note that WYSAC collected the Laramie data after an extensive media campaign and after the citywide vote in November 2004.

Table 1. Overall Feelings toward a Smokefree Law

Feeling	Laramie: Feb. 2005	Evanston	Sheridan
Happy	46%	44%	50%
Neutral	19%	32%	29%
Unhappy	35%	24%	21%

WYSAC then created a significant model ( $\chi^2(16) = 1129.932$ ,  $p < 0.001$  with an overall Nagelkerke  $r^2 = 0.707$ ) that accurately classified individuals (and thus communities) based on their happiness with a smokefree law. WYSAC derived this model from answers on eight key variables that fall into three categories:

- Category 1: Health vs. rights (based on five variables)
  - Is a smokefree law primarily a health issue or a rights issue?
  - Whose right is more important, the right of an individual to breathe smokefree air or the right of the business owners to decide the smoking policy for their businesses?
  - What is the anticipated effect on the city's health?
  - Is secondhand smoke harmful?
  - Does a smokefree law take away too much personal freedom?
- Category 2: Smoking status (based on one variable)
  - Smoking status: 1 = daily or occasional smoker, 2 = non-smoker

Category 3: Preferred smoking policy in restaurants/bars (based on two variables)

- o Preferred smoking policy in restaurants
- o Preferred smoking policy in bars

The model accurately classified individuals into the appropriate group (happy, neutral, or unhappy) 76% of the time. Level of education, income, political affiliation, and sex were *not* significant predictors after controlling for the above eight variables. Based on the most commonly occurring responses, WYSAC created the following profiles of a typical person who is happy, neutral, or unhappy with a smokefree law (see Table 2):

Table 2. Profile of a Typical Person in Each Group Based on the Most Commonly Reported Answer

Happy	Neutral	Unhappy
Believes a smokefree law is primarily an issue of health	Believes a smokefree law is primarily an issue of rights	Believes a smokefree law is primarily an issue of rights
Believes an individual citizen's right to smokefree air is more important than the business owners' right to decide the policy for their own business	Believes the business owners' right to decide the smoking policy for their own business is more important than an individual citizen's right to smokefree air	Believes the business owners' right to decide the smoking policy for their own business is more important than an individual citizen's right to smokefree air
Expects a positive effect on the city's public health	Expects a positive effect on the city's public health	Expects little or no effect on the city's public health
Strongly agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."	Strongly agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."	Agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."
Disagrees with the statement, "A smokefree law takes away too much personal freedom."	Agrees with the statement, "A smokefree law takes away too much personal freedom."	Strongly agrees with the statement, "A smokefree law takes away too much personal freedom."
Non-smoker	Non-smoker	Non-smoker <sup>1</sup>
Prefers completely smokefree restaurants	Prefers designated smoking areas for restaurants	Prefers designated smoking areas for restaurants
Prefers completely smokefree bars	Prefers designated smoking areas for bars	Prefers smoking in all areas for bars

<sup>1</sup>Note that because the majority (81%) of the sample was composed of non-smokers, "non-smoker" was the most frequently occurring answer for all three groups (happy, neutral, unhappy). However, it is important to note that the majority (66%) of all smokers were in fact unhappy with a smokefree law (daily and occasional combined).

WYSAC extrapolated that support for a smokefree law equated to happiness with such a law and that lack of support equated to unhappiness with a smokefree law. WYSAC looked at differences in the eight variables and compared results from Sheridan and Evanston to results from the February 2005 Laramie survey (the survey conducted prior to enactment of Laramie's smokefree law) to determine support for a smokefree law in Sheridan and Evanston. This comparison suggests that both Sheridan and Evanston have more support for a smokefree law than Laramie did in February 2005 (see Table 3). When comparing Sheridan to Evanston, both cities support for a smokefree law is approximately the same.

Table 3. Summary of Comparisons of Evanston vs. Laramie and Sheridan vs. Laramie

Key Factor	Variable	Evanston	Sheridan
Health vs. Rights	Q90: Effect on city's health	More support	More support
	Q145: Law takes away freedom	More support	More support
	Q80: Owner's right to decide	More support	More support
	Q130: Health vs. rights	Similar	Similar
	Q140: Secondhand smoke is harmful	Similar	Similar
Smoking Status	Q185: Smoking status	Less support	Similar
Smoking Policy in Bars/ Restaurants	Q65: Preference in restaurants	Similar	More support
	Q70: Preference in bars	Less support	Similar

Results from the three surveys conducted in Laramie show that for *every* variable, support for the ordinance over time either improved or showed no significant change. No variable suggested decreased support over time. Thus, the citizens of Laramie became happier with a smokefree ordinance the longer the ordinance was in effect. Specifically, between February 2005 and February 2006, WYSAC found the following statistically significant changes (alpha = .05):

- Those who preferred completely smokefree restaurants increased by 14 percentage points.
- Those who preferred completely smokefree bars increased by 14 percentage points.
- Those who agreed that the ordinance takes away too much personal freedom decreased by 11 percentage points.
- Those who believed that the ordinance would have a positive effect on the city's health increased by 13 percentage points.
- Those who believed that the individuals right to smokefree air was more important than the owner's right to decide increased by 13 percentage points.
- Those who felt that there would be little or no economic impact on bars increased by 7 percentage points.
- Overall, those who were unhappy with the ordinance decreased by 15 percentage points, and those who were happy with the ordinance increased by 13 percentage points.

## **2. Introduction**

In October 2004, the Laramie City Council passed Ordinance No. 1650 prohibiting smoking in enclosed areas to which the public has access, including restaurants and bars. In November 2004, a majority of Laramie's electorate voted to uphold the ordinance. As a result, on April 6, 2005, Laramie became the first Wyoming city to implement a comprehensive smokefree ordinance.

Under contract to the Wyoming Department of Health, Substance Abuse Division (SAD), the Wyoming Survey and Analysis Center (WYSAC) administered the Laramie Smokefree Ordinance Survey to Laramie residents three times: in February 2005, in July 2005, and in February 2006. The survey allowed WYSAC to assess change in attitudes toward smokefree environments among Laramie residents over time.

WYSAC also administered a slightly modified version of the survey in Sheridan, WY, and Evanston, WY, in November 2005. WYSAC needed to modify the survey because neither Sheridan nor Evanston had proposed a smokefree ordinance. Thus, neither survey could use the exact wording from the Laramie survey. Regardless, the Sheridan and Evanston surveys managed to assess opinions about smokefree laws in general. Using information gathered from Sheridan and Evanston, WYSAC compared the three communities in their opinions regarding smokefree laws. When making comparisons among the three communities, WYSAC used the pre-ordinance data collected in February 2005 for Laramie.

This report presents results and conclusions based on data from all five iterations of the smokefree ordinance survey. The results presented are valid only for Laramie, Sheridan, and Evanston, and are not valid for all of Wyoming.

## **3. Organization of Report**

The remainder of this report organizes information around five main sections. Section 4 describes the methods used to administer the survey and to collect data. Section 5 presents a brief description of the respondents' demographics for each of the five administrations of the survey. Section 6 reports key findings in three areas:

- Key variables that affect a person's happiness with a smokefree law
- Comparison of Laramie to Evanston and to Sheridan on the eight key variables to assess support for a smokefree law
- Effects of the Laramie Smokefree Ordinance over time

Section 7 discusses overall conclusions that the key findings suggest. Section 8 includes references and a bibliography. This report also contains three appendices. Appendix A provides the survey questionnaire and frequency data for each question. Appendix B provides information about odds and probability. Appendix C provides technical information about the development of the statistical model used for determining key variables.

## 4. Methods

WYSAC developed the Laramie Smokefree Ordinance Survey in collaboration with SAD. All but two questions were fixed-response questions (e.g., strongly agree, agree, neutral, disagree, or strongly disagree). Using Random Digit Dialing (RDD), WYSAC's Survey Research Center (SRC) administered the questionnaire to a representative sample of adults, 18 and older, from Laramie, Sheridan, and Evanston households by telephone. The SRC attempted to contact individuals fifteen times before excluding anyone from the sample. Table 4 lists additional information for each iteration.

Table 4. Survey Date and Sample Size for Each Iteration

Iteration	Community	Survey Date	Sample Size
1	Laramie	February 2005	510
2	Laramie	July 2005	505
3	Laramie	February 2006	519
4	Sheridan	November 2005	479
5	Evanston	November 2005	516

Based on these sample sizes, the statistical margin of error when estimating a specific percentage for a given iteration is 4–5%.

WYSAC analyzed the data using SPSS, version 13.0. For all statistical tests in the results section, researchers set statistical significance at  $\alpha = 0.05$ . As with any survey, the chance of spurious results exists; however, setting statistical significance at this level means that we are at least 95% confident that our results are accurate. Statistical analyses include frequencies on all variables. Percentage calculations exclude “missing” values such as “don’t know” or “no response.” Thus, the sample size varies across different questions.

Researchers assessed differences among cities as well as changes over time with the Pearson chi-square test. Subsequent analyses used proportions tests to investigate all significant differences from the chi-square tests. In addition, for chi-square analyses involving smoking status, we retained the three smoking groups (smokes daily, smokes occasionally, or does not smoke). To assess changes in opinions over time for Laramie, analysts made comparisons between the February 2005 survey administration and the February 2006 survey administration. By making comparisons between these two survey iterations, WYSAC was able to compare pre-ordinance and post-ordinance community opinions while controlling for seasonal variations, time of year, and fluctuating community demographics stemming from the academic calendar of the University of Wyoming, which is located in Laramie.

WYSAC used a multinomial logistic regression model to assess the variables that influenced people's happiness (i.e., happy, neutral, or unhappy) regarding a smokefree law and the extent of each variable's influence on their feelings. Because of high correlations between some of the predictors, not every variable needed to be included. Researchers used the stepwise variable selection procedure to determine which variables would be in the final model. In the multinomial logistic regression model, the distinction between daily smoking and occasional smoking was not statistically significant so we combined these two groups.

## 5. Demographics

Table 5 provides the demographics for the respondents on each of the five administrations of the Smokefree Ordinance Surveys.

Table 5. Demographics of Respondents from the Smokefree Ordinance Surveys in Three Wyoming Communities

	Laramie Feb. 05	Laramie July 05	Laramie Feb. 06	Evanston	Sheridan
<b>Average age of respondent</b>	46	48	48	46	51
<b>Sex: % Female/% Male</b>	61/39	58/42	57/43	57/53	56/44
<b>Race: % White</b>	90	91	93	95	97
<b>Political affiliation</b>					
Conservative (%)	37	32	34	44	48
Middle of the road (%)	33	35	32	30	30
Liberal (%)	28	31	31	22	20
Libertarian (%)	2	3	3	4	1
<b>Education</b>					
Less than HS, GED, HS (%)	21	16	15	39	28
Some college, AA, BA/BS (%)	51	55	54	53	57
Graduate, professional (%)	28	29	31	8	15
<b>Smoking status</b>					
Daily (%)	11	11	8	22	12
Occasional (%)	4	5	4	5	4
Non-smoker (%)	85	85	88	73	84
<b>Sample size</b>	510	505	519	479	516

Table 5 shows that Laramie's demographics did not change significantly over the course of the survey administration; however, Laramie's demographics (Feb. 2005) differed significantly from Evanston's and Sheridan's in the following ways:

- The average age of Sheridan's respondents was significantly older than Laramie's respondents, but the average age of Evanston's respondents was similar to that of Laramie's.
- As compared to Laramie, both Evanston and Sheridan had a significantly higher proportion of residents who self-identified as White.
- Significantly more survey respondents in Evanston and Sheridan self-identified as Conservative and fewer respondents self-identified as Liberal in comparison to Laramie.
- Both Evanston and Sheridan had significantly more respondents than Laramie with a high-school diploma or less and fewer respondents with a graduate or professional degree.
- The percentages of daily and occasional smokers were similar for Sheridan and Laramie; however, Evanston had a significantly higher proportion of daily smokers than either Laramie or Sheridan.

## 6. Key Findings

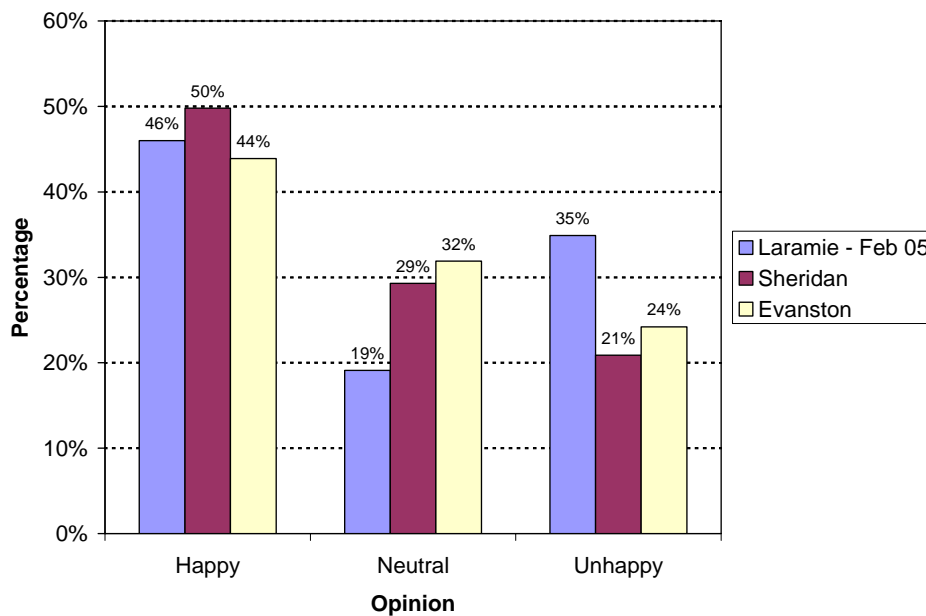
### 6.1. Key variables that affect a person's happiness with a smokefree law

WYSAC evaluated the data from the three cities to determine the proportion of respondents in each city who would be happy, neutral, or unhappy with a smokefree law. In making comparisons to Laramie, WYSAC only used data from the February 2005 study (pre-ordinance) and not from the combined data of the three Laramie studies. Researchers felt that pre-ordinance Laramie data would be more comparable to both Sheridan and Evanston as none of these data had been collected in cities with smokefree laws in effect (unlike the data collected in Laramie in either July 2005 or February 2006). Please note that although WYSAC collected the February 2005 Laramie data *before* the smokefree ordinance went into effect, WYSAC collected the data *after* the citywide vote in November 2004. The timing of the collection of the February 2005 Laramie data may have had an impact on the some of the differences found between Laramie and Sheridan and Laramie and Evanston.

As Figure 1 shows, about half of all respondents reported that they would feel happy if their city passed a smokefree law.

- While Laramie and Evanston had a similar percentage of individuals who would be happy if a law passed, the percentage of Sheridan residents who would be happy was significantly higher than it was in either Laramie or Evanston (50% vs. 46% and 44%).
- The proportion of survey respondents who were neutral (i.e., did not believe they would be either happy or unhappy if a law passed) was significantly higher in both Sheridan and Evanston as compared to Laramie (29% and 32% vs. 19%), whereas the proportion of those who were unhappy was significantly higher in Laramie. Fewer Laramie citizens may have identified as neutral because they may have determined their feelings three months earlier when they voted on Ordinance 1650.

Figure 1. Overall Feelings toward a Smokefree Law



WYSAC then evaluated the opinions and demographic characteristics that were most correlated with an individual's feelings (i.e., happy, neutral, unhappy) toward the passage of a smokefree law. WYSAC analyzed the data using multinomial logistic regression. This procedure used multiple predictor variables to determine the most influential opinions and demographic characteristics for predicting happiness, unhappiness, or neutrality with a smokefree law. Although WYSAC initially considered all 22 predictor variables from the survey, we retained a reduced set of eight statistically significant variables that fell into three general categories (see Table 6). Coding labels and variable numbers are included in Table 6 for reference. Please see Appendix C for further detailed information (e.g., standard errors, p-values) on the multiple logistic regression results.

Table 6. Significant Predictor Variables in the Multinomial Logistic Regression Model

Variable	Category
Q130: Belief that a smokefree law is primarily an issue of health (1) or an issue of rights (2)	Health vs. Rights
Q80: Belief that a smokefree law is about an individual citizen's right to smokefree air (1) or the business owners' right to decide the smoking policy for their own business (2)	
Q90: Expected effect on the city's public health (positive = 1, little or none = 2, negative = 3)	
Q140: Opinion on the statement, "Breathing smoke from other people's cigarettes is harmful to one's health." (5-point scale: 1 = strongly agree, 5 = strongly disagree)	
Q145: Opinion on the statement, "A smokefree law takes away too much personal freedom." (5-point scale: 1 = strongly agree, 5 = strongly disagree)	
Q185: Smoking status: 2 categories (daily or occasional smoker = 1, non-smoker = 2)	Smoking Status
Q65: Preferred smoking policy for restaurants (allowed in all areas = 1, designated areas only = 2, completely smokefree = 3)	Preferred Smoking Policy
Q70: Preferred smoking policy for bars (allowed in all areas = 1, designated areas only = 2, completely smokefree = 3)	

Level of education, income, political affiliation, and sex were *not* significant predictors after we controlled for the above eight variables. Using respondents' opinions on the eight variables (in Table 6), researchers developed a model that correctly classifies individuals into one of the groups (happy, neutral, or unhappy) just over three quarters (76%) of the time. Thus, these eight variables are highly effective in understanding an individual's happiness with a smokefree law. As Table 7 shows, the model easily classified individuals who were happy or unhappy with a smokefree law, but it had more difficulty correctly identifying individuals who were neutral. Note that individuals who were neutral comprised only 24% of the sample.

Table 7. Classification Rates for Individuals Who Were Happy, Neutral, or Unhappy

Actual category	Respondents who chose this category	Percentage in Each Predicted Category <sup>1</sup>			Number of people correctly identified
		Happy	Neutral	Unhappy	
Happy	562	<b>90%</b>	7%	3%	507
Neutral	185	29%	<b>44%</b>	27%	125
Unhappy	318	5%	14%	<b>81%</b>	258
Total	1,165				890

<sup>1</sup>Correct classifications are in **bold**. Overall correct classification rate = 890/1,165 = 76%

After determining that the above eight variables relate significantly to a person's feelings about a smokefree law, WYSAC then assessed *how* each variable relates to those feelings. For each variable, we analyzed two aspects of the relationship:

- The *direction* of the relationship: for example, if people had a certain opinion, then were they *more* likely or *less* likely to be happy with a smokefree law?
- The *size* of that relationship: for example, if people were more likely to be happy with a smokefree law, then were they *two* times more likely or *twenty* times more likely to be happy with it?

Table 8 lists the relationship between each variable and a person's happiness with a smokefree law. The first column displays the *direction* of the relationship, and the second column displays the *size* of that relationship. For example, the first row presents information on how an individual's smoking status relates to that individual being happy (or unhappy) with a smokefree law.

- From column one, we can see the *direction* of the relationship: an individual who is a non-smoker is *more* likely to be happy with a smokefree law than someone who smokes daily or occasionally.
- From column 2, we can see the *size* of the relationship when a person has this characteristic: the odds of a person being happy are 7.4 times higher if the person is a non-smoker. Note that some researchers also refer to this number as the odds ratio. For more information on odds and probability, please see Appendix B.

We can interpret the size of the specific relationship as a measure of how influential a variable is in determining a person's happiness with a smokefree law. The larger the number from column two, the more influence this variable has on a person switching from unhappy to happy; the smaller the number in column two, the less influence this variable has on a person switching from unhappy to happy. Table 8 ranks the variables from most influential to least influential on a person's happiness with a smokefree law, holding everything else constant.

**Table 8. Each Variable's Effect on an Individual Being Happy vs. Unhappy with a Smokefree Law**

<b>Characteristic: Individuals are more likely to be happy if they...</b>	<b>This characteristic increases the odds of being happy by a factor of ...</b>
Are non-smokers (as opposed to daily or occasional smokers)	7.4
Believe that a smokefree law is primarily an issue of health (and not rights)	6.2
Believe that a smokefree law is about an individual's right to smokefree air (and not the business owners' right to decide their own smoking policy)	6.0
Believe that restaurants should be non-smoking (as opposed to having designated smoking areas)	3.4
Believe that a smokefree law will have a positive effect on the city's public health (as opposed to no effect)	3.1
Believe that bars should be non-smoking (as opposed to preferring smoking in all areas of a bar)	2.5
Disagree with the statement, "A smokefree law takes away too much personal freedom" (as opposed to being neutral with the statement)	2.4
Strongly agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health" (as opposed to just agreeing with the statement)	2.3

In addition to comparing those who were happy with those who were unhappy with a smokefree law, WYSAC also analyzed the relationship between each variable and a person being *neutral* versus being *unhappy* with such a law. Table 9 displays the relationship between each variable and a person's neutrality about a smokefree law. Based on the relationships depicted in Table 9, we can interpret the size of the specific relationship as a measure of how much influence a variable has on a person switching from unhappy to neutral. The larger the number in column two, the more influence this variable has on a person switching from unhappy to neutral; the smaller the number from column two, the less influence this variable has on a person switching from unhappy to neutral. Table 9 ranks the variables from most influential to least influential on a person's switch from unhappiness to neutrality about a smokefree law, holding everything else constant.

**Table 9. The Effect of Each Variable on an Individual Being Neutral vs. Unhappy with a Smokefree Law**

<b>Characteristic: Individuals are more likely to be neutral if they...</b>	<b>This characteristic increases the odds of being neutral by a factor of ...</b>
Believe that a smokefree law is primarily an issue of health (and not rights)	3.5
Are non-smokers (as opposed to daily or occasional smokers)	2.8
Believe that a smokefree law is about an individual's right to smokefree air (and not the business owners' right to decide their own smoking policy)	2.5
Believe that a smokefree law will have a positive effect on the city's public health (as opposed to no effect)	1.8
Disagree with the statement, "A smokefree law takes away too much personal freedom" (as opposed to being neutral with the statement)	1.7
Agree with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health" (as opposed to being neutral with the statement)	1.5
Believe that restaurants should have designated smoking areas (as opposed to smoking allowed in all areas)	1.3 <sup>1</sup>
Believe that bars should have designated smoking areas (as opposed to smoking allowed in all areas)	1.0 <sup>1</sup>

<sup>1</sup>These values are not significantly different from 1.0 (which would imply no effect on the odds).

By comparing Tables 8 and 9, we can better understand which opinions or characteristics relate to a person's shift away from neutrality and toward either happiness or unhappiness about a smokefree law. In Table 9, the first six variables relate to either smoking status or health vs. rights. These six variables have a significant relationship with people's attitude toward a smokefree law, and these relationships are in the same *direction* as they are in Table 8. However, the *size* of each variable's effect on a person's feeling is greater for switching to happiness (from unhappiness) than for switching to neutrality (from unhappiness). From these two statements, we can infer that a continuum exists for these six variables: if a person moves from one extreme to the other (i.e., from strongly agreeing to strongly disagreeing with a characteristic), then it is likely that the person will also transition from being unhappy to neutral and then on to happy with a smokefree law. Thus, in a quantitative sense, neutral people are those who respond "in the middle" of the continuum for these six variables.

The final two variables, the variables that deal with preferred smoking policies in restaurants and bars, do not exhibit this type of relationship. From Table 8, we see that people are more likely to be happy with a smokefree law if they prefer completely smokefree bars or restaurants. However, in

Table 9, we see that a person's preferred smoking policy in bars and restaurants is not very helpful in trying to distinguish those who are neutral from those who are unhappy, as these variables are non-significant. In terms of the continuum discussed above, we do *not* see a transition from unhappy to neutral to happy for these two variables. Unhappy and neutral people respond similarly on these two variables, and happy people respond differently.

While we want to know which variables relate to changes in a person's happiness, we also want to be able to describe the typical person who is happy, neutral, or unhappy with a smokefree law. Frequency analysis shows the most common characteristic for each variable. Using frequencies, WYSAC created profiles of a typical person who is happy, a typical person who is neutral, and a typical person who is unhappy with a smokefree law (Table 10).

**Table 10. Profile of a Typical Person in Each Group (Happy, Neutral, Unhappy) Based on Most Commonly Reported Answers**

Happy	Neutral	Unhappy
Believes a smokefree law is primarily an issue of health	Believes a smokefree law is primarily an issue of rights	Believes a smokefree law is primarily an issue of rights
Believes an individual citizen's right to smokefree air is more important than the business owners' right to decide the policy for their own business	Believes the business owners' right to decide the smoking policy for their own business is more important than an individual citizen's right to smokefree air	Believes the business owners' right to decide the smoking policy for their own business is more important than an individual citizen's right to smokefree air
Expects a positive effect on the city's public health	Expects a positive effect on the city's public health	Expects little or no effect on the city's public health
Strongly agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."	Strongly agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."	Agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."
Disagrees with the statement, "A smokefree law takes away too much personal freedom."	Agrees with the statement, "A smokefree law takes away too much personal freedom."	Strongly agrees with the statement, "A smokefree law takes away too much personal freedom."
Non-smoker	Non-smoker	Non-smoker <sup>1</sup>
Prefers completely smokefree restaurants	Prefers designated smoking areas for restaurants	Prefers designated smoking areas for restaurants
Prefers completely smokefree bars	Prefers designated smoking areas for bars <sup>2</sup>	Prefers smoking in all areas for bars <sup>2</sup>

<sup>1</sup>Note that because the majority (81%) of the sample was composed of non-smokers, "non-smoker" was the most frequently occurring answer for all three groups (happy, neutral, unhappy). However, it is important to note that the majority (66%) of all smokers were in fact unhappy with a smokefree law (daily and occasional combined).

<sup>2</sup> Even though the most commonly reported answer is not identical for the neutral and unhappy groups, the proportion of those who prefer designated smoking areas or smoking in all areas is not significantly different for these groups. In both cases, the majority of neutral respondents (91%) and the majority of unhappy respondents (96%) preferred either designated smoking areas or smoking in all areas of bars.

In summary, by combining the information in Tables 8, 9, and 10 with information from Appendix A, we are able to identify the following:

- The characteristics of the typical person who is happy, neutral, or unhappy with a smokefree law
- The specific opinions and characteristics that relate significantly to a person's transition from unhappy to neutral to happy
- The specific opinions and characteristics that are most *influential* in a person's transition from unhappy to neutral to happy with a smokefree law

## 6.2. Comparison of Laramie to Evanston and to Sheridan on the eight key variables to assess support for a smokefree law

After developing a model that could identify individuals as being happy, neutral, or unhappy, WYSAC used this model to compare Laramie to Evanston and Laramie to Sheridan, assessing each city's *support* for a smokefree law. WYSAC defined *support* as scoring higher on the variables associated with being happy and scoring lower on the variables associated with being unhappy about a smokefree law. For example, if a person believes a smokefree law is about an individual's right to smokefree air (as opposed to the business owners' right to decide), then we know that this person is more likely to be happy with a smokefree law. If either city as a whole has a greater fraction of people with this opinion compared to Laramie, we can conclude that the city as a whole shows more support for a smokefree law than Laramie did on this variable. At the end of this section, we make an overall assessment of Sheridan's and Evanston's support for a smokefree law by combining the information on all influential variables.

Researchers considered the margin of error when comparing Laramie's responses to Evanston's and Sheridan's responses. That is, if the difference between Laramie and Sheridan or the difference between Laramie and Evanston was less than the margin of error (precision based on the sample size), then WYSAC concluded that the two cities were similar (not significantly different).

Please remember that WYSAC compared the Laramie: February 2005 Laramie data set with data from Evanston and Sheridan because it was the closest to pre-ordinance Laramie data available. These data are not exactly comparable to the Evanston and Sheridan data because WYSAC obtained the February 2005 Laramie data *after* the vote in Laramie, but *before* the smokefree ordinance went into effect. Additionally, Laramie residents had been exposed to many pro-ordinance and anti-ordinance messages prior to the November vote on the ordinance, as well as prior to data collection in February 2005. Neither Sheridan nor Evanston residents had been exposed to similar messages since neither city was considering a smokefree law.

### 6.2.1. Effect of a smokefree law on the city's health (Q90)

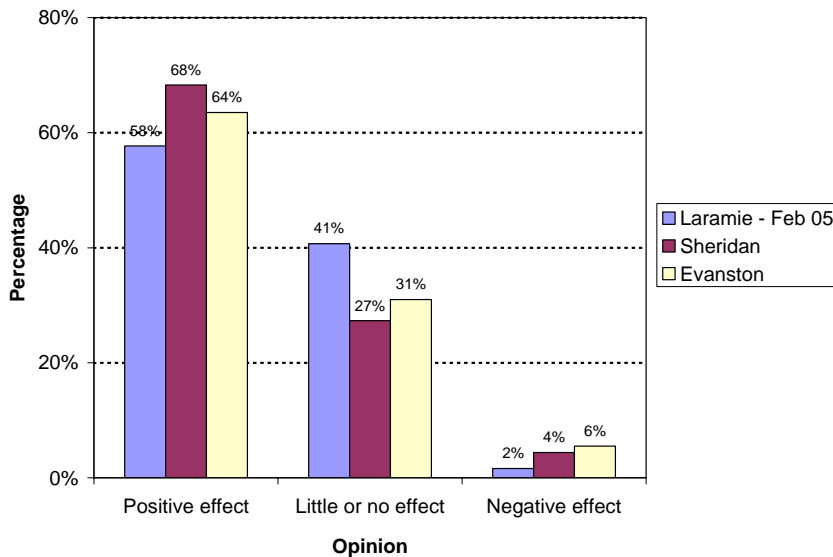
In all three cities, the majority of respondents felt that a smokefree law would improve their city's health (see Figure 2).

- Significantly more residents in both Sheridan and Evanston believed that a smokefree law would have a positive effect on their city's health in comparison to Laramie residents in February 2005 (68% and 64% vs. 58%).

- Significantly fewer residents in both Sheridan and Evanston believed that a smokefree law would have little or no effect on the city’s health in comparison to Laramie residents in February 2005 (27% and 31% vs. 41%).

For this variable, both Sheridan and Evanston showed more support for a smokefree law compared to Laramie.

Figure 2. Effect of a Smokefree Law on the City’s Health, by City



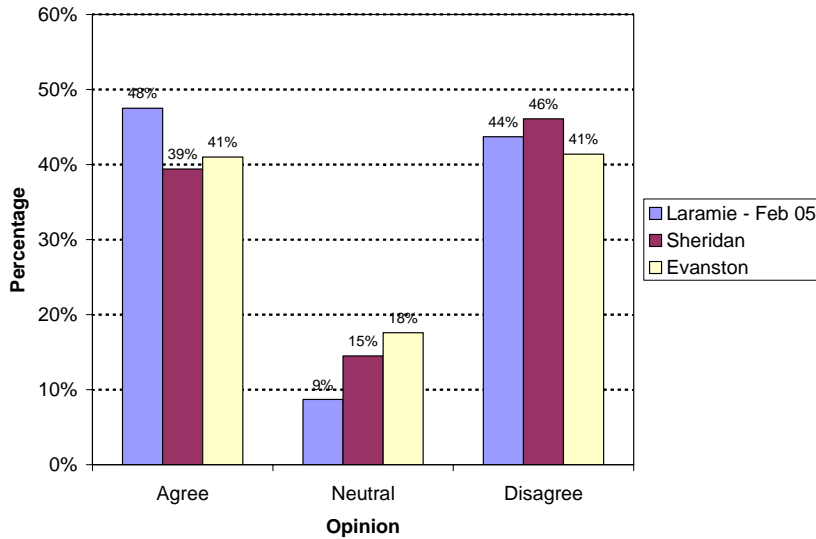
**6.2.2. Attitudes toward “A smokefree law takes away too much personal freedom” (Q145)**

In Laramie, just under half (48%) of the respondents agreed that a smokefree ordinance takes away too much personal freedom. About two-fifths (44%) of the respondents disagreed, and only one in ten (9%) were neutral (see Figure 3).

- For both Sheridan and Evanston, significantly fewer respondents agreed that a smokefree law takes away too much personal freedom as compared to Laramie in February 2005 (39% and 41% vs. 48%).
- For both Sheridan and Evanston, significantly more residents were neutral on the issue of personal freedom as compared to Laramie in February 2005 (15% and 18% vs. 9%).
- For all three cities, a similar proportion of residents disagreed with the statement, “A smokefree law takes away too much personal freedom.”

For this variable, both Sheridan and Evanston showed more support for a smokefree law compared to Laramie.

Figure 3. Attitudes toward the Statement, “A Smokefree Law Takes Away Too Much Personal Freedom,” by City

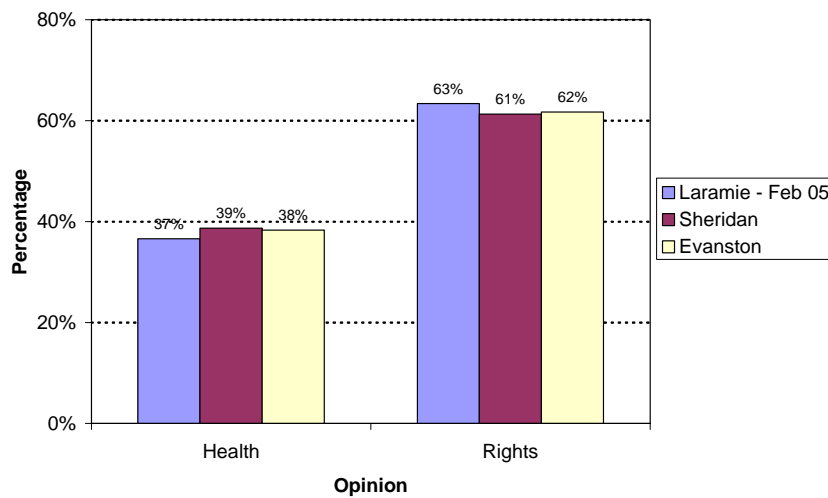


6.2.3. Health vs. Rights (Q130)

When asked if a smokefree law was primarily an issue of health or an issue of rights, just over one third of the respondents felt that “it comes down to a question of health,” and just under two thirds of the respondents felt that “it comes down to a question of rights.” The three cities did not differ significantly in their responses to this question (see Figure 4). Note that although an *individual’s* response to this question was highly predictive of his or her happiness with a smokefree law (see Section 6.1), the responses of the cities as a whole were not different.

For this variable, both Sheridan and Evanston showed similar support for a smokefree law as compared to Laramie.

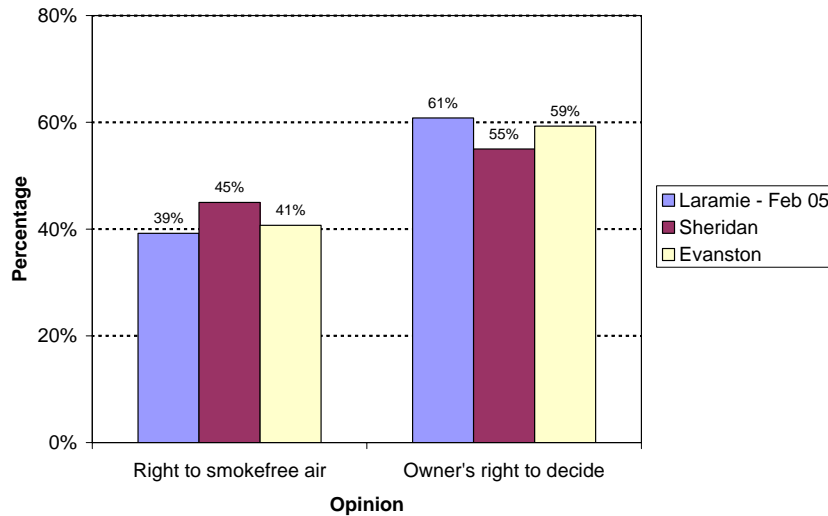
Figure 4. Support of a Smokefree Law as a Matter of Health vs. Rights, by City



### 6.2.4. Opinion on “Right to smokefree air vs. Owner’s right to decide” (Q80)

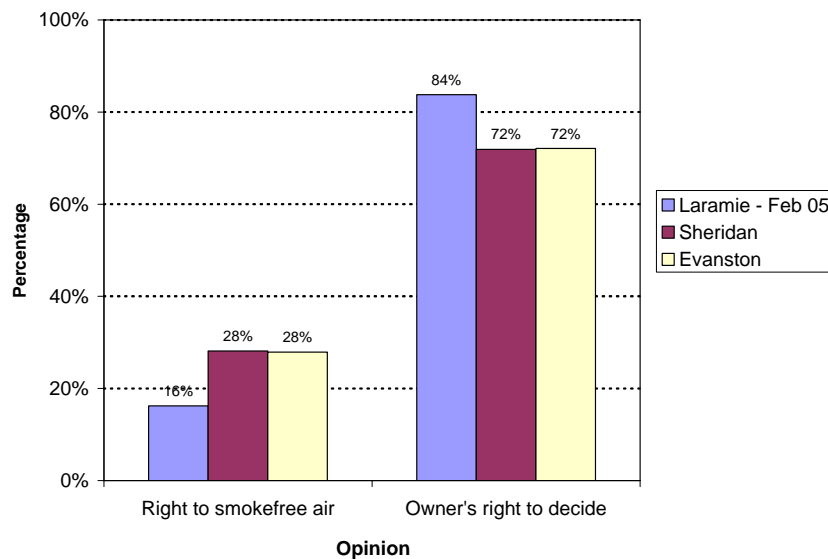
As Figure 5 shows, approximately two fifths of all respondents agreed that an individual should have the right to smokefree air, and about three fifths of respondents felt that the business owners should have the right to choose the smoking policy for their businesses. These proportions did not differ significantly among the three cities.

Figure 5. Right to Smokefree Air vs. Business Owners’ Right to Decide, by City (All Respondents)



In addition to our analysis of *all* respondents from the three iterations (n = 1,505), depicted in Figure 5, we further analyze *only* those who saw a smokefree law as a matter of rights (n = 864). Figure 6 displays the results for this subset of the sample.

Figure 6. People’s Right to Smokefree Air vs. Business Owners’ Right to Decide Smoking Policy, by City (Only Respondents Who Chose Rights over Health)



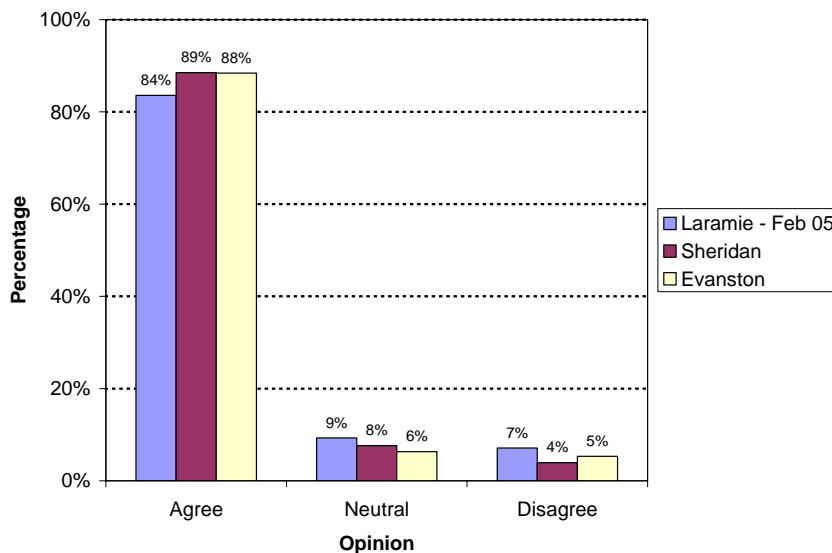
- As Figure 6 shows, Sheridan and Evanston were similar to each other. Of those who viewed an ordinance as primarily a question of rights, 72% thought the owners’ right to decide was more important than an individual’s right to smokefree air.
- The proportion of Laramie residents who thought the owners’ right to decide was more important (84%) was significantly higher than that of either Sheridan or Evanston.

For this variable, both Sheridan and Evanston show more support for a smokefree law than did Laramie.

**6.2.5. Belief that breathing other people’s cigarettes is harmful to one’s health (Q140)**

For all three cities, the overwhelming majority of respondents agreed that secondhand smoke is harmful (see Figure 7), and these percentages did not differ significantly from each other. Thus, although this variable can differentiate individuals, the three cities showed similar support for a smokefree law with regard to it.

Figure 7. Responses to “Breathing Smoke from Other People’s Cigarettes Is Harmful to One’s Health,” by City



**6.2.6. Smoking status (Q185)**

For this variable, WYSAC combined daily and occasional smokers as “smokers.” As shown in the demographics summary (Table 5), Evanston had a significantly higher proportion of smokers (27%) than both Sheridan (16%) and Laramie (15%). Thus, for this influential demographic variable, Evanston showed less support; however, Sheridan showed similar support when compared to Laramie.

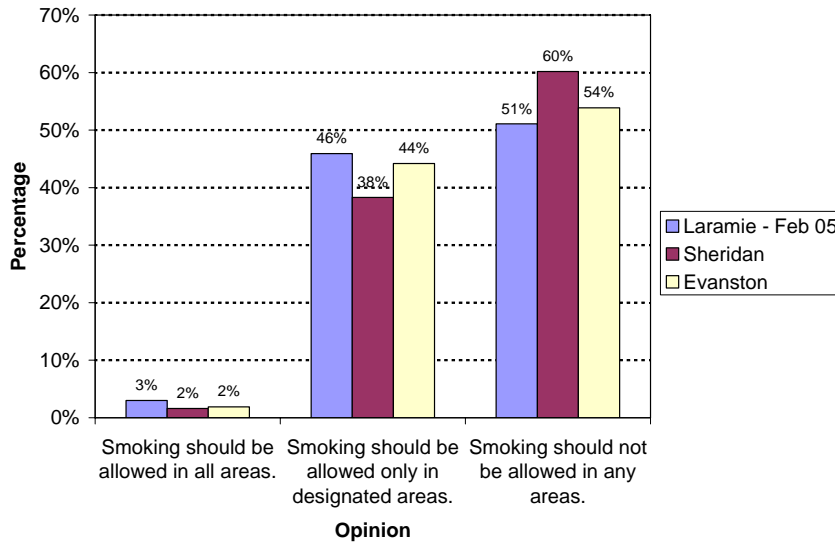
**6.2.7. Preferred smoking policy in restaurants (Q65)**

If given a choice among three identical restaurants that only differed in smoking policy, the majority of respondents in all three cities preferred completely smokefree restaurants (see Figure 8).

- Responses for Evanston residents were not significantly different from those of Laramie.
- Significantly more residents in Sheridan preferred completely smokefree restaurants than did Laramie and Evanston residents (60% vs. 51% and 54%), and significantly fewer Sheridan residents preferred designated smoking areas than did Laramie and Evanston residents (38% vs. 46% and 44%).

For this variable, Sheridan showed more support; however, Evanston showed similar support when compared to Laramie.

Figure 8. Preferred Smoking Policy in Restaurants, by City



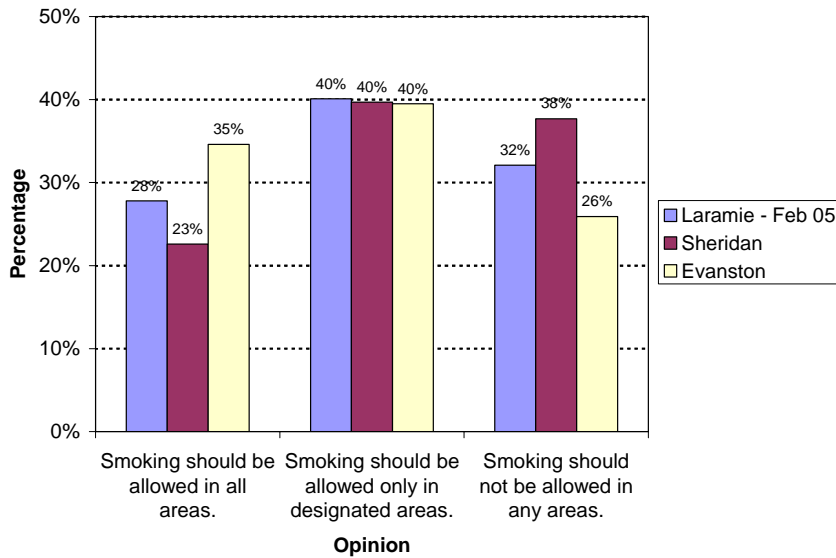
**6.2.8. Preferred smoking policy in bars (Q70)**

Although most individuals preferred smokefree restaurants, this opinion did not transfer to bars and cocktail lounges. If given a choice between three identical bars that differed only in smoking policy, most individuals in all three cities preferred bars with designated smoking areas (see Figure 9).

- Responses of Sheridan residents were not significantly different from those of Laramie.
- Significantly more Evanston respondents than Laramie and Sheridan respondents preferred bars that allowed smoking in all areas (35% vs. 28% and 23%), and significantly fewer Evanston respondents than Laramie and Sheridan respondents preferred bars that were completely smokefree (26% vs. 32% and 38%).

For this variable, Evanston showed less support; however, Sheridan showed similar support when compared to Laramie.

Figure 9. Preferred Smoking Policy in Bars, by City



Tables 11 and 12 summarize the results of this section’s comparisons. For each of the seven opinion variables and the one demographic variable, WYSAC assessed whether Evanston and Sheridan respondents were more, less, or similarly supportive of a smokefree law than Laramie respondents in February 2005.

Table 11. Summary of Comparisons of Sheridan vs. Laramie for the Key Predictor Variables

Key Factor	Variable	Sheridan vs. Laramie	Sheridan shows...
Health vs. Rights	Q90	The percentage of people who believe that a smokefree ordinance will have a positive effect on the city’s health is larger in Sheridan.	More support
	Q145	The percentage of people who agree that a smokefree law takes away too much personal freedom is smaller in Sheridan.	More support
	Q130	The percentage of people who believe that a smokefree ordinance is primarily a matter of health (and not rights) is approximately the same for the two cities.	Similar support
	Q80	Of those who believe a smokefree ordinance is a rights issue, the percentage of people who believe that an individual’s right to smokefree air is more important is larger in Sheridan.	More support
	Q140	The percentage of people who agree that secondhand smoke is harmful is approximately the same for the two cities.	Similar support
Smoking Status	Q185	The percentage of people who smoke (daily or occasionally) is approximately the same for the two cities.	Similar support
Preferred Smoking Policy	Q65	The percentage of people who prefer smokefree restaurants is larger in Sheridan.	More support
	Q70	The percentage of people who prefer smokefree bars is approximately the same for the two cities.	Similar support

- On four of the eight key variables, Sheridan showed more support for a smokefree law than did Laramie.
- On four of the eight key variables, Sheridan and Laramie had similar support.
- Sheridan indicated less support than Laramie on *none* of the variables.

Overall, Sheridan residents possess *more* support for a smokefree law than Laramie residents did in February 2005.

Table 12. Summary of Comparisons of Evanston vs. Laramie for the Key Predictor Variables

Key Factor	Variable	Evanston vs. Laramie	Evanston shows...
Health vs. Rights	Q90	The percentage of people who believe that a smokefree ordinance will have a positive effect on the city's health is larger in Evanston.	More support
	Q145	The percentage of people who agree that a smokefree law takes away too much personal freedom is smaller in Evanston.	More support
	Q130	The percentage of people who believe that a smokefree ordinance is primarily a matter of health (and not rights) is approximately the same for the two cities.	Similar support
	Q80	Of those who believe a smokefree ordinance is a rights issue, the percentage of people who believe that an individual's right to smokefree air is more important is larger in Evanston.	More support
	Q140	The percentage of people who agree that secondhand smoke is harmful is approximately the same for the two cities.	Similar support
Smoking Status	Q185	The percentage of people who smoke (daily or occasionally) is higher in Evanston.	Less support
Preferred Smoking Policy	Q65	The percentage of people who prefer smokefree restaurants is approximately the same for the two cities.	Similar support
	Q70	The percentage of people who prefer smokefree bars is smaller in Evanston.	Less support

- On three of the eight key variables, Evanston showed more support for a smokefree law than did Laramie.
- On three of the eight key variables, Evanston and Laramie had similar support
- On two of the eight key variables, Evanston showed less support than did Laramie.

Because respondents in Evanston showed more support for some key variables and less support for others, analysts must consider how *influential* each variable was when determining a city's overall support for a smokefree law. While people's smoking status highly influences their happiness with a smokefree law, their preferred smoking policy in bars does not impact their stance nearly as much. Furthermore, for the very influential category of health vs. rights, Evanston shows support greater than or equal to that of Laramie on every variable. Thus, Evanston residents overall possess more support for a smokefree law than did Laramie residents in 2005.

Based on Tables 11 and 12, we can also compare Sheridan's support to Evanston's support for a smokefree law. With regard to smoking status, Sheridan shows more support since they have fewer

daily and occasional smokers than Evanston does. For the category of preferred smoking policies, Sheridan shows slightly more support when compared to Evanston. For *all* variables in the very influential category of health vs. rights, the two cities are not significantly different. Thus, although there is some evidence that Sheridan may have more support than Evanston does for a smokefree law, these differences do not appear to be very large because of the strong similarity between the two cities in the category of health vs. rights.

In addition to gathering data for the Smokefree Communities Survey, WYSAC collected data for the 2006 Adult Tobacco Survey (ATS). Using data from the 2006 ATS, researchers estimated that 74% of Sheridan residents would vote for a local smokefree law (margin of error = 9%) and that 76% of Evanston residents would vote for a local smokefree law (margin of error = 10%). Therefore, for each city, we have significant evidence that more than 50% of people would vote for a smokefree law. These results are consistent with the ones reported above. Note that the ATS asks how a person would *vote* for such a law, whereas the Smokefree Communities Survey asks how a person would *feel* about it. In addition, the ATS question includes only two response categories (yes or no); however, the Smokefree Communities Survey allows three choices (happy, neutral, or unhappy).

### 6.3 Effects of Laramie Smokefree Ordinance over time

In addition to 1) developing a model that can classify individuals as being happy, neutral, or unhappy with a smokefree law and 2) comparing results among the three cities, WYSAC analyzed which opinions and behaviors changed over time in Laramie. To assess these changes over time, we compared the first iteration (February 2005) and the third iteration (February 2006) of the Laramie Smokefree Ordinance Survey. This comparison allowed us to compare pre-ordinance and post-ordinance community opinions while controlling for seasonal variations, time of year, and fluctuating community demographics due to the academic calendar of the University of Wyoming, which is located in Laramie. Furthermore, our comparison of these two iterations accounted for the longest interval between assessments.

To evaluate changes over time, WYSAC grouped pertinent survey questions into four categories: preferred smoking policies, health vs. rights, economic impacts, and overall happiness about the ordinance. For each of the questions in these categories, if the observed change on a variable was smaller than the surveys' margin of error, then the difference is non-significant; otherwise, we report the change as the percentage point increase (or decrease) from February 2005 to February 2006.

#### 6.3.1. Variables related to preferred smoking policies

- Restaurants
  - The percentage of those who preferred completely smokefree restaurants increased by 14 percentage points.
  - The percentage of those who preferred designated smoking areas in restaurants decreased by 12 percentage points.
- Bars
  - The percentage of those who preferred completely smokefree bars increased by 14 percentage points.
  - The percentage of those who preferred smoking in all areas of bars decreased by 11 percentage points.
- Private Clubs

- No significant changes took place over time regarding preferences for private clubs.

### 6.3.2. Variables related to health vs. rights

- Expected effect of the ordinance on the city's health
  - The percentage of those who thought it would have a positive effect increased by 13 points.
  - The percentage of those who thought it would have little or no effect decreased by 13 points.
- Feelings toward the statement, "A smokefree ordinance takes away too much personal freedom."
  - The percentage of those who agreed with the statement decreased by 11 points.
  - The percentage of those who disagreed with the statement increased by 9 points.
- Importance of an individual's right to smokefree air vs. business owners' right to decide policy
  - The percentage of those who believed that an individual's right to smokefree air is more important increased by 13 points.
  - The percentage of those who believed that the business owners' rights are more important decreased by 13 points.
- No significant change occurred regarding opinions on the statement, "Breathing smoke from other people's cigarettes is harmful to one's health."
- No significant change took place on the general issue of a smokefree ordinance as a question of health vs. rights.

### 6.3.3. Variables related to economic impacts

- Expected economic impact on bars
  - The percentage of those who anticipated no effect increased by 7 points.
- No significant change occurred regarding the expected economic impact on restaurants.
- No significant change occurred in the actual frequency of bar visits or in the number of bars visited.
- No significant change occurred in the actual frequency of restaurants visits or number of restaurants visited.

### 6.3.2. Overall happiness with a smokefree ordinance

- The percentage of those who were happy with the ordinance increased by 13 points.
- The percentage of those who were unhappy with the ordinance decreased by 15 points.
- The proportion of people who were neutral with the ordinance did not change significantly.

In summary, results from the surveys conducted in Laramie show that for *every* key variable over time, support for the ordinance either improved or showed no significant change. No variable exhibited a change that showed less support over time.

## 7. Conclusions

After analyzing data from three Wyoming cities, WYSAC developed a model to accurately assess individuals' likelihood to be happy with a smokefree law based on their responses to seven key variables and their smoking status (i.e., daily smoker, occasional smoker, non-smoker). This model

accurately identifies individuals as being happy, neutral, or unhappy with a smokefree law three fourths of the time. Those who are happy or unhappy with the law are easy to identify, whereas those who are neutral about the law are more difficult to identify.

The eight variables (i.e., seven opinion variables and one demographic variable) fell into three key categories for understanding an individual's happiness with a smokefree law. The first category was health vs. rights. People who saw a smokefree ordinance as a health issue or who believed that an individual has a right to smokefree air strongly favored a smokefree law. People who felt that business owners have the right to determine smoking policies or who thought that a smokefree law takes away too much personal freedom strongly opposed a smokefree law. In addition, those who felt that a smokefree law would improve their city's health or who strongly agreed that breathing secondhand smoke is harmful were more likely to be happy with a smokefree law.

The second key category was a person's smoking status. Both daily and occasional smokers strongly opposed a smokefree law, whereas non-smokers strongly favored a smokefree law.

The third and final category dealt with an individual's preferred smoking policies for bars and restaurants. If a respondent had a preference, either for or against completely smokefree bars and restaurants, he or she also tended to have a strong and similar opinion about a smokefree law. Individuals who were neutral about the law itself often took the middle ground, preferring designated smoking areas in bars and restaurants. This is true even though many of these same individuals believed that secondhand smoke is harmful and that a smokefree law would have a positive effect on the city's health.

In addition to determining which variables were most influential, researchers analyzed differences in the eight variables to compare Sheridan and Evanston to Laramie in February 2005 (before Laramie implemented the ordinance). This analysis showed that in comparison to Laramie in February 2005, residents of Evanston had more support on three variables, less support on two variables, and similar support on three variables. This information suggests that Evanston has even more support for a smokefree law than Laramie did in February 2005. When asked directly about their feelings, 44% of the Evanston respondents said that they would be happy, 32% said that they would be neutral, and 24% said that they would be unhappy about a smokefree law. The percentage of those who were happy was similar to that in Laramie in February 2005. Unlike in Laramie, though, 13% more Evanston residents were neutral and 13% fewer were unhappy about a law. These results are consistent with data from the 2006 ATS, in which 76% of those surveyed in Evanston responded that they would vote for a local smokefree law.

A comparison of Sheridan's responses to Laramie's in February 2005 showed that Sheridan had a more positive attitude toward a smokefree law than did Laramie. Sheridan had more support than Laramie on four variables and similar support to Laramie on four variables. None of the eight key variables indicated less support for a local smokefree law in Sheridan. This observation suggests greater support among Sheridan residents for a smokefree law than Laramie had in February 2005. When asked directly about their feelings, 50% of the Sheridan respondents said that they would be happy, 29% said that they would be neutral, and 21% said that they would be unhappy about a smokefree law. These results are consistent with data from the 2006 ATS, in which 74% of those surveyed in Sheridan responded that they would vote for a local smokefree law.

These results for Sheridan and Evanston are especially noteworthy because WYSAC collected the February 2005 Laramie data *after* the election and *after* Laramie's exposure to an extensive media campaign that included many pro-ordinance and anti-ordinance messages. We cannot know with certainty the true impact of these messages on voting behavior. Thus, the reader should consider any predictions concerning the actual voting behavior following such messages as extrapolations.

WYSAC also evaluated how the opinions of Laramie residents changed toward the smokefree ordinance with the passage of time. Between February 2005 and February 2006, more individuals preferred smokefree restaurants (+14%), and more individuals preferred smokefree bars (+14%); however, opinions concerning private clubs did not significantly change.

With regard to the debate between health and rights, more respondents believed in an individual's right to smokefree air (+13%), more respondents felt that the ordinance would have a positive effect on the health of the city (+13%), and fewer residents felt that the ordinance took away too much personal freedom (-11%).

Concerning the expected economic impact on local businesses, more people felt that the ordinance would have little or no impact on bars (+7%). However, opinions did not significantly change in terms of respondents' assessment of the economic impact on restaurants. When asked about a change in their *actual* behavior, Laramie residents thought they would continue to frequent restaurants as often as they did before the ordinance went into effect. Furthermore, they did not believe that the ordinance had affected the number of bars or restaurants they frequented. These findings are consistent with WYSAC's findings (2006d), which showed that Laramie's smokefree ordinance had no significant impact on the local economy with regard to bar or restaurant revenues.

The most important change for Laramie concerned the city's overall feeling toward the smokefree ordinance. The percentage of people who were happy with Ordinance 1650 increased by 13%, whereas the percentage of those who were unhappy decreased by 15%. Thus, results from Laramie consistently show significant changes over time: *more* residents were happy with the smokefree ordinance in February 2006 than in February 2005.

Based on the results from these studies, we recommend that advertisements focus on the following ideas when trying to shift people's overall feelings from unhappiness to neutrality to happiness regarding a smokefree law:

- An individual's right to smokefree air
- A smokefree law's positive effect on the city's public health
- The harmful effects of secondhand smoke
- The Laramie smokefree ordinance's lack of significant impact on local bar and restaurant revenue
- The increased proportion of Laramie residents who have expressed happiness with the ordinance since its enactment

## 8. References and Bibliography

- Adult Tobacco Survey (ATS): 2006 [Data File]. Laramie, WY: Wyoming Survey & Analysis Center, University of Wyoming.
- WYSAC (2005a) *City of Laramie smoking ordinance I: February 2005 interviews*, by Anatchkova, B., Grandjean, B., & Homer, M. (WYSAC Technical Report Number CHES-503). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.
- WYSAC (2005b) *City of Laramie smoking ordinance II: July 2005 interviews*, by Homer, M., & Wilhelm, S. (WYSAC Technical Report Number CHES-518). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.
- WYSAC (2006a) *City of Laramie smokefree ordinance survey III: February 2006 survey results and comparisons to February 2005 and July 2005 surveys*, by Wilhelm, S., & Feldman, L. (WYSAC Technical Report Number CHES-610). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.
- WYSAC (2006b) *Smokefree communities in Wyoming: Evanston survey*, by McLean, M., & Feldman, L. (WYSAC Technical Report Number CHES-605). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.
- WYSAC (2006c) *Smokefree communities in Wyoming: Sheridan survey*, by McLean, M., & Feldman, L. (WYSAC Technical Report Number CHES-604-Revised). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.
- WYSAC (2006d) *The economic impact of Laramie's smokefree ordinance: Third quarterly report 2005–2006*, by McNulty, M., Feldman, L., & McLean, M. (Technical Report Number CHES-527-03). Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.

## 9. Appendices

### Appendix A. Frequencies

This section contains the raw frequency counts and the percentage distributions of responses to all items on the questionnaire. Survey questions appear in the same order and with the same wording as in the original survey. In the event that the surveys use the exact same wording, the question is annotated as being asked for multiple iterations (rather than repeated) using the following abbreviations.

- L1 Laramie – 1<sup>st</sup> iteration – February 2005
- L2 Laramie – 2<sup>nd</sup> iteration – July 2005
- L3 Laramie – 3<sup>rd</sup> iteration – February 2006
- E Evanston – November 2005
- S Sheridan – November 2005

We excluded missing data such as “refused/no answer” or “don’t know/not sure” from the percentage calculations; however, we represented them in the “Missing” column. Percentages may total more or less than exactly 100% due to rounding to one decimal point. Percentages may also total more than 100% on “check all that apply” items.

**HELLO, my name is            (first name) . I’m calling from the University of Wyoming, and I’m not soliciting anything. Your phone number was randomly drawn for a public opinion poll about some issues affecting your community. The survey only takes about 10 minutes. Would you be able to help me out with this tonight?**

**[If Yes] First, I need to confirm. Is this a private residence in Wyoming?**

**[If Yes] That’s great! The University will keep your answers completely confidential. Also, I need to ask if I am speaking with someone 18 or older.**

**[If Yes] Survey begins.**

Frequency Distributions

**1. Q5**

L1, L2, L3      How long have you lived in Laramie?  
 S                How long have you lived in Sheridan?  
 E                How long have you lived in Evanston?  
 (Collapsed variable)

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q5	<b>Less than 1 year</b>	Count	23	21	35	16	16
		% within Iteration	<b>4.5%</b>	<b>4.2%</b>	<b>6.8%</b>	<b>3.3%</b>	<b>3.1%</b>
	<b>1-5</b>	Count	128	119	121	87	88
		% within Iteration	<b>25.1%</b>	<b>23.6%</b>	<b>23.4%</b>	<b>18.2%</b>	<b>17.1%</b>
	<b>6-10</b>	Count	46	71	66	67	69
		% within Iteration	<b>9.0%</b>	<b>14.1%</b>	<b>12.8%</b>	<b>14.0%</b>	<b>13.4%</b>
	<b>11-20</b>	Count	85	75	78	108	92
		% within Iteration	<b>16.7%</b>	<b>14.9%</b>	<b>15.1%</b>	<b>22.6%</b>	<b>17.9%</b>
	<b>21-30</b>	Count	93	85	75	103	98
		% within Iteration	<b>18.3%</b>	<b>16.9%</b>	<b>14.5%</b>	<b>21.5%</b>	<b>19.1%</b>
	<b>More than 30 years</b>	Count	134	133	141	97	151
		% within Iteration	<b>26.3%</b>	<b>26.4%</b>	<b>27.3%</b>	<b>20.3%</b>	<b>29.4%</b>
Total		Count	509	504	516	478	514
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**2. Q10**

L1, L2, L3, S, E      And how long have you lived in Wyoming?  
 (Collapsed variable)

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q10	<b>Less than 1 year</b>	Count	17	15	27	12	8
		% within Iteration	<b>3.4%</b>	<b>3.0%</b>	<b>5.2%</b>	<b>2.5%</b>	<b>1.6%</b>
	<b>1-5</b>	Count	65	74	67	52	42
		% within Iteration	<b>12.8%</b>	<b>14.8%</b>	<b>13.0%</b>	<b>10.9%</b>	<b>8.2%</b>
	<b>6-10</b>	Count	29	40	51	49	45
		% within Iteration	<b>5.7%</b>	<b>8.0%</b>	<b>9.9%</b>	<b>10.3%</b>	<b>8.8%</b>
	<b>11-20</b>	Count	69	79	70	92	74
		% within Iteration	<b>13.6%</b>	<b>15.8%</b>	<b>13.6%</b>	<b>19.3%</b>	<b>14.5%</b>
	<b>21-30</b>	Count	132	97	99	117	112
		% within Iteration	<b>26.1%</b>	<b>19.4%</b>	<b>19.2%</b>	<b>24.5%</b>	<b>21.9%</b>
	<b>More than 30 years</b>	Count	194	196	201	155	231
		% within Iteration	<b>38.3%</b>	<b>39.1%</b>	<b>39.0%</b>	<b>32.5%</b>	<b>45.1%</b>
Total		Count	506	501	515	477	512
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**3. Q15**

**L1, L2, L3, S, E** In the past 12 months has anyone in your household seen a doctor, nurse, or other health professional to get any kind of care?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q15	<b>Yes</b>	Count	436	450	452	416	459
		% within Iteration	<b>85.5%</b>	<b>89.3%</b>	<b>87.3%</b>	<b>86.8%</b>	<b>89.1%</b>
	<b>No</b>	Count	74	54	66	63	56
		% within Iteration	<b>14.5%</b>	<b>10.7%</b>	<b>12.7%</b>	<b>13.2%</b>	<b>10.9%</b>
Total		Count	510	504	518	479	515
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**4. Q20**

**L1, L2, L3, S, E** In the past 3 months has anyone in your household seen a doctor, nurse or other health professional for a heart or lung problem?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q20	<b>Yes</b>	Count	76	54	56	58	71
		% within Iteration	<b>16.9%</b>	<b>12.0%</b>	<b>12.2%</b>	<b>14.0%</b>	<b>15.5%</b>
	<b>No</b>	Count	373	395	403	357	388
		% within Iteration	<b>83.1%</b>	<b>88.0%</b>	<b>87.8%</b>	<b>86.0%</b>	<b>84.5%</b>
Total		Count	449	449	459	415	459
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**5. Q25**

**L1, L2, L3** In the past week, since last (...), about how often has anyone in your household eaten a meal at a full-service, sit-down restaurant in the city of Laramie?

This question was not asked in the Sheridan/Evanston surveys.

			Iteration		
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06
Q25	<b>No meals in the past week</b>	Count	198	224	217
		% within Iteration	<b>38.9%</b>	<b>44.4%</b>	<b>42.1%</b>
	<b>1-2 meals</b>	Count	248	216	253
		% within Iteration	<b>48.7%</b>	<b>42.9%</b>	<b>49.1%</b>
	<b>3-4 meals</b>	Count	53	47	33
		% within Iteration	<b>10.4%</b>	<b>9.3%</b>	<b>6.4%</b>
	<b>5-6 meals</b>	Count	6	9	6
		% within Iteration	<b>1.2%</b>	<b>1.8%</b>	<b>1.2%</b>
	<b>7 meals or more</b>	Count	4	8	6
		% within Iteration	<b>.8%</b>	<b>1.6%</b>	<b>1.2%</b>
Total		Count	509	504	515
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**6. Q30**

**L1, L2, L3, S, E** What about in the past month? In the past 30 days, about how often has anyone in your household eaten a meal in Laramie at a full-service, sit-down restaurant?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q30	<b>No meals in the past month</b>	Count	59	63	82	93	76
		% within Iteration	<b>11.6%</b>	<b>12.5%</b>	<b>15.9%</b>	<b>19.5%</b>	<b>14.8%</b>
	<b>1-4 meals</b>	Count	292	277	283	250	284
		% within Iteration	<b>57.5%</b>	<b>55.2%</b>	<b>54.8%</b>	<b>52.5%</b>	<b>55.4%</b>
	<b>5-9 meals</b>	Count	94	88	103	86	86
		% within Iteration	<b>18.5%</b>	<b>17.5%</b>	<b>20.0%</b>	<b>18.1%</b>	<b>16.8%</b>
	<b>10-14 meals</b>	Count	37	45	33	21	32
		% within Iteration	<b>7.3%</b>	<b>9.0%</b>	<b>6.4%</b>	<b>4.4%</b>	<b>6.2%</b>
	<b>15 meals or more</b>	Count	26	29	15	26	35
		% within Iteration	<b>5.1%</b>	<b>5.8%</b>	<b>2.9%</b>	<b>5.5%</b>	<b>6.8%</b>
Total		Count	508	502	516	476	513
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**7. Q35**

**L1, L2, L3** We also need to ask about places that mainly serve liquor, like bars or cocktail lounges. In the past week, since last (...), about how often has anyone in your household had something to drink at a bar or cocktail lounge in the city of Laramie?

This question was not asked in the Sheridan/Evanston surveys.

			Iteration		
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06
Q35	<b>Not at all this week</b>	Count	392	405	411
		% within Iteration	<b>76.9%</b>	<b>80.4%</b>	<b>79.3%</b>
	<b>1-2 times</b>	Count	91	76	84
		% within Iteration	<b>17.8%</b>	<b>15.1%</b>	<b>16.2%</b>
	<b>3-4 times</b>	Count	14	16	11
		% within Iteration	<b>2.7%</b>	<b>3.2%</b>	<b>2.1%</b>
	<b>5-6 times</b>	Count	8	4	5
		% within Iteration	<b>1.6%</b>	<b>.8%</b>	<b>1.0%</b>
	<b>7 meals or more</b>	Count	5	3	7
		% within Iteration	<b>1.0%</b>	<b>.6%</b>	<b>1.4%</b>
Total		Count	510	504	518
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**8. Q40**

**L1, L2, L3** What about in the past month? In the past 30 days, about how often has anyone in your household had something to drink at a bar or cocktail lounge in Laramie?

**S** We also need to ask about places that mainly serve liquor, like bars or cocktail lounges. In the past 30 days, about how often has anyone in your household had something to drink at a bar or cocktail lounge in Sheridan?

**E** We also need to ask about places that mainly serve liquor, like bars or cocktail lounges. In the past 30 days, about how often has anyone in your household had something to drink at a bar or cocktail lounge in Evanston?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q40	<b>Not at all in the past month</b>	Count	318	325	334	337	339
		% within Iteration	<b>62.4%</b>	<b>64.6%</b>	<b>64.6%</b>	<b>70.8%</b>	<b>66.0%</b>
	<b>1-4 times</b>	Count	135	127	137	96	131
		% within Iteration	<b>26.5%</b>	<b>25.2%</b>	<b>26.5%</b>	<b>20.2%</b>	<b>25.5%</b>
	<b>5-9 times</b>	Count	28	30	25	24	24
		% within Iteration	<b>5.5%</b>	<b>6.0%</b>	<b>4.8%</b>	<b>5.0%</b>	<b>4.7%</b>
	<b>10-14 times</b>	Count	12	10	10	9	11
		% within Iteration	<b>2.4%</b>	<b>2.0%</b>	<b>1.9%</b>	<b>1.9%</b>	<b>2.1%</b>
	<b>15 times or more</b>	Count	17	11	11	10	9
		% within Iteration	<b>3.3%</b>	<b>2.2%</b>	<b>2.1%</b>	<b>2.1%</b>	<b>1.8%</b>
Total		Count	510	503	517	476	514
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**9. Q45**

**L1, L2, L3** Laramie also has some private clubs where food is served, like the Elks Club, the Moose Club, and so on. In the past week, since last (...), about how often has anyone in your household eaten a meal at any of the private clubs in the city of Laramie?

This question was not asked in the Sheridan/Evanston surveys.

			Iteration		
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06
Q45	<b>No meals in the past week</b>	Count	479	478	476
		% within Iteration	<b>94.3%</b>	<b>94.8%</b>	<b>92.6%</b>
	<b>1-2 meals</b>	Count	25	22	31
		% within Iteration	<b>4.9%</b>	<b>4.4%</b>	<b>6.0%</b>
	<b>3-4 meals</b>	Count	3	3	1
		% within Iteration	<b>.6%</b>	<b>.6%</b>	<b>.2%</b>
	<b>5-6 meals</b>	Count	0	0	2
		% within Iteration	<b>.0%</b>	<b>.0%</b>	<b>.4%</b>
	<b>7 meals or more</b>	Count	1	1	4
		% within Iteration	<b>.2%</b>	<b>.2%</b>	<b>.8%</b>
Total		Count	508	504	514
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**10. Q50**

**L1, L2, L3** And in the past 30 days, about how often has anyone in your household eaten a meal in Laramie at a private club?

**S** In the past 30 days, about how often has anyone in your household eaten a meal at a private club in Sheridan?

**E** In the past 30 days, about how often has anyone in your household eaten a meal at a private club in Evanston?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q50	<b>No meals in the past month</b>	Count	456	461	465	434	459
		% within Iteration	<b>89.6%</b>	<b>91.5%</b>	<b>89.9%</b>	<b>91.6%</b>	<b>89.8%</b>
	<b>1-4 meals</b>	Count	44	34	47	38	43
		% within Iteration	<b>8.6%</b>	<b>6.7%</b>	<b>9.1%</b>	<b>8.0%</b>	<b>8.4%</b>
	<b>5-9 meals</b>	Count	6	7	2	0	5
		% within Iteration	<b>1.2%</b>	<b>1.4%</b>	<b>.4%</b>	<b>.0%</b>	<b>1.0%</b>
	<b>10-14 meals</b>	Count	0	2	1	2	1
		% within Iteration	<b>.0%</b>	<b>.4%</b>	<b>.2%</b>	<b>.4%</b>	<b>.2%</b>
	<b>15 meals or more</b>	Count	3	0	2	0	3
		% within Iteration	<b>.6%</b>	<b>.0%</b>	<b>.4%</b>	<b>.0%</b>	<b>.6%</b>
Total		Count	509	504	517	474	511
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**11. Q55**

**L1, L2, L3** Does any member of your household work in Laramie at a full-service, sit-down restaurant, a bar or cocktail lounge, or a private club that serves food?

**E, S** Does any member of your household work in a full-service, sit-down restaurant, a bar or cocktail lounge, or a private club that serves food?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q55	<b>Yes</b>	Count	24	28	27	19	27
		% within Iteration	<b>4.7%</b>	<b>5.5%</b>	<b>5.2%</b>	<b>4.0%</b>	<b>5.2%</b>
	<b>No</b>	Count	486	477	492	460	489
		% within Iteration	<b>95.3%</b>	<b>94.5%</b>	<b>94.8%</b>	<b>96.0%</b>	<b>94.8%</b>
Total		Count	510	505	519	479	516
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**12. Q60**

**L1, L2, L3, E, S** For the next question, I'd like you to imagine that you have traveled by yourself to a nearby community, and now it's time to pick a restaurant for your dinner. You have three almost identical restaurants to choose from, except one allows smoking anywhere, the second allows smoking only in a designated smoking area, and the third does not allow smoking at all. Which one of those three restaurants would you be most likely to pick?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q60	<b>The one that allows smoking anywhere.</b>	Count	21	20	11	34	24
		% within Iteration	<b>4.4%</b>	<b>4.1%</b>	<b>2.3%</b>	<b>7.5%</b>	<b>4.8%</b>
	<b>The one that allows smoking in a designated area.</b>	Count	147	125	102	127	111
		% within Iteration	<b>30.8%</b>	<b>25.6%</b>	<b>21.1%</b>	<b>28.2%</b>	<b>22.1%</b>
	<b>The one that does not allow smoking at all.</b>	Count	310	344	370	290	368
		% within Iteration	<b>64.9%</b>	<b>70.3%</b>	<b>76.6%</b>	<b>64.3%</b>	<b>73.2%</b>
Total		Count	478	489	483	451	503
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**13. Q65**

**L1, L2, L3** There has been quite a bit of talk in Laramie lately about smoking in restaurants. Which of the following statements best describes your own opinion about smoking in the indoor dining areas of sit-down restaurants?

**E, S** There has been quite a bit of talk lately about smoking in restaurants. Which of the following statements best describes your own opinion about smoking in the indoor dining areas of sit-down restaurants?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q65	<b>Smoking should be allowed in all areas.</b>	Count % within Iteration	15 3.0%	9 1.8%	7 1.4%	9 1.9%	8 1.6%
	<b>Smoking should be allowed only in designated areas.</b>	Count % within Iteration	231 45.9%	183 37.1%	172 33.8%	209 44.2%	194 38.3%
	<b>Smoking should not be allowed in any areas.</b>	Count % within Iteration	257 51.1%	301 61.1%	330 64.8%	255 53.9%	305 60.2%
Total	Count	503	493	509	473	507	
	% within Iteration	100.0%	100.0%	100.0%	100.0%	100.0%	

**14. Q70**

**L1, L2, L3, E, S** What about in bars and cocktail lounges? Which of the following best describes your opinion on that?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q70	<b>Smoking should be allowed in all areas.</b>	Count % within Iteration	129 27.8%	103 22.6%	79 16.7%	143 34.6%	101 22.6%
	<b>Smoking should be allowed only in designated areas.</b>	Count % within Iteration	186 40.1%	174 38.2%	177 37.3%	163 39.5%	177 39.7%
	<b>Smoking should not be allowed in any areas.</b>	Count % within Iteration	149 32.1%	179 39.3%	218 46.0%	107 25.9%	168 37.7%
Total	Count	464	456	474	413	446	
	% within Iteration	100.0%	100.0%	100.0%	100.0%	100.0%	

**15. Q75**

**L1, L2, L3, E, S**      **And how about in private clubs where food is served?**

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q75	<b>Smoking should be allowed in all areas.</b>	Count	96	78	69	54	36
		% within Iteration	<b>22.2%</b>	<b>18.1%</b>	<b>16.0%</b>	<b>13.6%</b>	<b>8.4%</b>
	<b>Smoking should be allowed only in designated areas.</b>	Count	185	184	197	203	203
		% within Iteration	<b>42.7%</b>	<b>42.7%</b>	<b>45.7%</b>	<b>51.0%</b>	<b>47.5%</b>
	<b>Smoking should not be allowed in any areas.</b>	Count	152	169	165	141	188
		% within Iteration	<b>35.1%</b>	<b>39.2%</b>	<b>38.3%</b>	<b>35.4%</b>	<b>44.0%</b>
Total		Count	433	431	431	398	427
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**16. Q80**

**L1, L2, L3**      **With which of the following two statements do you agree more?**

1. Laramie citizens should have the right to have smokefree air in public businesses.
2. Laramie business owners should have the right to decide the smoking policy for their businesses.

**E, S**      **With which of the following two statements do you agree more?**

1. The citizens should have the right to have smokefree air in public businesses.
2. Business owners should have the right to decide the smoking policy for their businesses.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q80	<b>Right to smoke-free air</b>	Count	195	232	261	189	229
		% within Iteration	<b>39.2%</b>	<b>47.0%</b>	<b>52.6%</b>	<b>40.7%</b>	<b>45.0%</b>
	<b>Owners' right to decide</b>	Count	302	262	235	275	280
		% within Iteration	<b>60.8%</b>	<b>53.0%</b>	<b>47.4%</b>	<b>59.3%</b>	<b>55.0%</b>
Total		Count	497	494	496	464	509
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**17. Q85**

**L1, L2**

As you may recall, an ordinance was passed last fall in Laramie to eliminate smoking from restaurants, bars, clubs that serve food, and other public places. We'd like to know, in general, how you feel about the ordinance. Are you happy that it passed, unhappy that it passed, or are you neutral about it?

**L3**

As you may recall, an ordinance was passed a little over a year ago in Laramie to eliminate smoking from restaurants, bars, clubs that serve food, and other public places. We'd like to know, in general, how you feel about the ordinance. Are you happy that it passed, unhappy that it passed, or are you neutral about it?

**E, S**

Some communities in Wyoming are considering laws to eliminate smoking from restaurants, bars, clubs that serve food, and other public places. If a law like that was passed in how would you feel about it? Would you be happy, unhappy, or would you be neutral about it?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q85	<b>Happy</b>	Count	233	264	302	209	255
		% within Iteration	<b>46.0%</b>	<b>53.1%</b>	<b>58.9%</b>	<b>43.9%</b>	<b>49.8%</b>
	<b>Neutral</b>	Count	97	84	109	152	150
		% within Iteration	<b>19.1%</b>	<b>16.9%</b>	<b>21.2%</b>	<b>31.9%</b>	<b>29.3%</b>
	<b>Unhappy</b>	Count	177	149	102	115	107
		% within Iteration	<b>34.9%</b>	<b>30.0%</b>	<b>19.9%</b>	<b>24.2%</b>	<b>20.9%</b>
Total	Count	507	497	513	476	512	
	% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

**18. Q90**

**L1, L2, L3** Which of the following statements **BEST** describes your opinion of the effect that this ordinance will have on the health of Laramie citizens?

1. It will have a positive effect on the health of Laramie citizens.
2. It will have little or no effect on the health of Laramie citizens.
3. It will have a negative effect on the health of Laramie citizens.

**E** Which of the following statements **BEST** describes your opinion of the effect that such a law would have on the health of Evanston?

1. It would have a positive effect on the health of the citizens.
2. It would have little or no effect on the health of the citizens.
3. It would have a negative effect on the health of the citizens.

**S** Which of the following statements **BEST** describes your opinion of the effect that such a law would have on the health of Sheridan?

1. It would have a positive effect on the health of the citizens.
2. It would have little or no effect on the health of the citizens.
3. It would have a negative effect on the health of the citizens.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q90	<b>Positive effect</b>	Count	286	295	357	289	342
		% within Iteration	<b>57.7%</b>	<b>60.3%</b>	<b>71.0%</b>	<b>63.5%</b>	<b>68.3%</b>
	<b>Little or no effect</b>	Count	202	182	138	141	137
		% within Iteration	<b>40.7%</b>	<b>37.2%</b>	<b>27.4%</b>	<b>31.0%</b>	<b>27.3%</b>
	<b>Negative effect</b>	Count	8	12	8	25	22
		% within Iteration	<b>1.6%</b>	<b>2.5%</b>	<b>1.6%</b>	<b>5.5%</b>	<b>4.4%</b>
Total	Count	496	489	503	455	501	
	% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

19. Q95

L1

Of the following statements, which one BEST describes what effect you think the ordinance will have on those restaurants that previously allowed smoking?

1. The number of customers at those restaurants will go down over a long period of time.
2. The number of customers at those restaurants will go down, but only for a while.
3. The ordinance will have no effect on the number of customers at those restaurants.
4. The number of customers at those restaurants will go up, but only for a while.
5. The number of customers at those restaurants will go up over a long period of time.

L2, L3

Of the following statements, which one BEST describes what effect you think the ordinance is having on those restaurants that previously allowed smoking?

1. The number of customers at those restaurants has gone down and will stay down for a long period of time.
2. The number of customers at those restaurants has gone down, but this will only last for a while.
3. The ordinance is having no effect on the number of customers at those restaurants.
4. The number of customers at those restaurants has gone up, but this will only last for a while.
5. The number of customers at those restaurants has gone up and will stay up for a long period of time.

E, S

Of the following statements, which one BEST describes what effect you think such a law would have on those restaurants that previously allowed smoking?

1. The number of customers at those restaurants would go down over a long period of time.
2. The number of customers at those restaurants would go down, but only for a while.
3. Such a law would have no effect on the number of customers at those restaurants.
4. The number of customers at those restaurants would go up, but only for a while.
5. The number of customers at those restaurants would go up over a long period of time.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q95	<b>Down over a long time</b>	Count	94	86	61	70	76
		% within Iteration	<b>19.1%</b>	<b>19.8%</b>	<b>13.4%</b>	<b>15.4%</b>	<b>15.4%</b>
	<b>Down for a while</b>	Count	125	146	135	179	191
		% within Iteration	<b>25.4%</b>	<b>33.6%</b>	<b>29.7%</b>	<b>39.3%</b>	<b>38.7%</b>
	<b>No effect</b>	Count	187	156	195	129	115
		% within Iteration	<b>37.9%</b>	<b>35.9%</b>	<b>42.9%</b>	<b>28.3%</b>	<b>23.3%</b>
	<b>Up for a while</b>	Count	16	6	10	12	15
		% within Iteration	<b>3.2%</b>	<b>1.4%</b>	<b>2.2%</b>	<b>2.6%</b>	<b>3.0%</b>
	<b>Up over a long time</b>	Count	71	41	54	66	97
		% within Iteration	<b>14.4%</b>	<b>9.4%</b>	<b>11.9%</b>	<b>14.5%</b>	<b>19.6%</b>
Total	Count	493	435	455	456	494	
	% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

**20. Q100**

L1

What about bars and cocktail lounges? I will read the same statements. Please tell me which ONE in your opinion BEST describes the effect that this ordinance will have on BARS in the city of Laramie.

1. The number of customers at bars will go down over a long period of time.
2. The number of customers at bars will go down, but only for a while.
3. The ordinance will have no effect on the number of customers at bars.
4. The number of customers at bars will go up, but only for a while.
5. The number of customers at bars will go up over a long period of time.

L2, L3

What about bars and cocktail lounges? I will read the same statements. Please tell me which ONE in your opinion BEST describes the effect that this ordinance is having on BARS in the city of Laramie.

- (1) The number of customers at bars has gone down and will stay down for a long period of time.
- (2) The number of customers at bars has gone down, but this will only last for a while.
- (3) The ordinance is having no effect on the number of customers at bars.
- (4) The number of customers at bars has gone up, but this will only last for a while.
- (5) The number of customers at bars has gone up and will stay up for a long period of time.

**E** What about bars and cocktail lounges? I will read the same statements. Please tell me which **ONE** in your opinion **BEST** describes the effect that such law would have on **BARS** in the city of Evanston.

1. The number of customers at bars would go down over a long period of time.
2. The number of customers at bars would go down, but only for a while.
3. Such law would have no effect on the number of customers at bars.
4. The number of customers at bars would go up, but only for a while.
5. The number of customers at bars would go up over a long period of time.

**S** What about bars and cocktail lounges? I will read the same statements. Please tell me which **ONE** in your opinion **BEST** describes the effect that such law would have on **BARS** in the city of Sheridan.

1. The number of customers at bars would go down over a long period of time.
2. The number of customers at bars would go down, but only for a while.
3. Such law would have no effect on the number of customers at bars.
4. The number of customers at bars would go up, but only for a while.
5. The number of customers at bars would go up over a long period of time.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q100	<b>Down over a long time</b>	Count	138	137	101	158	152
		% within Iteration	<b>29.1%</b>	<b>32.4%</b>	<b>24.0%</b>	<b>36.4%</b>	<b>32.6%</b>
	<b>Down for a while</b>	Count	161	165	151	154	177
		% within Iteration	<b>34.0%</b>	<b>39.0%</b>	<b>36.0%</b>	<b>35.5%</b>	<b>38.0%</b>
	<b>No effect</b>	Count	119	93	133	93	78
		% within Iteration	<b>25.1%</b>	<b>22.0%</b>	<b>31.7%</b>	<b>21.4%</b>	<b>16.7%</b>
	<b>Up for a while</b>	Count	11	6	6	6	9
		% within Iteration	<b>2.3%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.9%</b>
	<b>Up over a long time</b>	Count	45	22	29	23	50
		% within Iteration	<b>9.5%</b>	<b>5.2%</b>	<b>6.9%</b>	<b>5.3%</b>	<b>10.7%</b>
Total	Count	474	423	420	434	466	
	% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

**21. Q105**

**L1**

Next we'd like to know if you think the smoking ordinance will affect how often your own household goes to sit-down restaurants in Laramie for meals.

Would you say ...

1. There will be no change in restaurant use by this household.
2. This household will go to restaurants less often.
3. This household will go to restaurants more often.
4. This household will go just as often, but will not go to as many different restaurants.
5. This household will go just as often, but will go to more different restaurants.

**L2, L3**

Next we'd like to know if you think the smoking ordinance is affecting how often your own household goes to sit-down restaurants in Laramie for meals.

Would you say...

1. There has been no change in restaurant use by this household.
2. This household goes to restaurants less often now.
3. This household goes to restaurants more often now.
4. This household goes just as often, but not to as many different restaurants.
5. This household goes just as often, but to more different restaurants.

**E**

Next we'd like to know if you think a non smoking law would affect how often your own household goes to sit-down restaurants in Evanston. for meals. Would you say ...

1. There would be no change in restaurant use by this household.
2. This household would go to restaurants less often.
3. This household would go to restaurants more often.
4. This household would go just as often, but would not go to as many different restaurants.
5. This household would go just as often, but would go to more different restaurants.

**S**

Next we'd like to know if you think a non smoking law would affect how often your own household goes to sit-down restaurants in Sheridan. for meals. Would you say ...

1. There would be no change in restaurant use by this household.
2. This household would go to restaurants less often.
3. This household would go to restaurants more often.
4. This household would go just as often, but would not go to as many different restaurants.
5. This household would go just as often, but would go to more different restaurants.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q105	<b>Less often</b>	Count	30	34	30	43	33
		% within Iteration	<b>5.9%</b>	<b>6.8%</b>	<b>5.9%</b>	<b>9.1%</b>	<b>6.5%</b>
	<b>No Change</b>	Count	344	344	351	302	318
		% within Iteration	<b>68.1%</b>	<b>68.4%</b>	<b>68.8%</b>	<b>63.6%</b>	<b>63.1%</b>
	<b>More Often</b>	Count	32	56	49	42	42
		% within Iteration	<b>6.3%</b>	<b>11.1%</b>	<b>9.6%</b>	<b>8.8%</b>	<b>8.3%</b>
	<b>Not as Many</b>	Count	10	4	5	13	14
		% within Iteration	<b>2.0%</b>	<b>.8%</b>	<b>1.0%</b>	<b>2.7%</b>	<b>2.8%</b>
	<b>More different ones</b>	Count	89	65	75	75	97
		% within Iteration	<b>17.6%</b>	<b>12.9%</b>	<b>14.7%</b>	<b>15.8%</b>	<b>19.2%</b>
Total		Count	505	503	510	475	504
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**22. Q120**

**L1**

We also want to know if you think the ordinance will affect how often your household goes to bars or cocktail lounges in Laramie. Would you say ...

1. There will be no change for this household.
2. This household will go to bars less often.
3. This household will go to bars more often.
4. This household will go just as often, but will not go to as many different bars.
5. This household will go just as often, but will go to more different bars.

**L2, L3**

We also want to know if you think the ordinance is affecting how often your household goes to bars or cocktail lounges in Laramie. Would you say ...

1. There has been no change for this household.
2. This household goes to bars less often now.
3. This household goes to bars more often now.
4. This household goes just as often, but not to as many different bars.
5. This household goes just as often, but to more different bars.

**E**

We also want to know if you think such a law would affect how often your household goes to bars or cocktail lounges in Evanston.

1. There would be no change for this household.
2. This household would go to bars less often.
3. This household would go to bars more often.
4. This household would go just as often, but would not go to as many different bars.
5. This household would go just as often, but would go to more different bars.

**S**

We also want to know if you think such a law would affect how often your household goes to bars or cocktail loungers in Sheridan.

1. There would be no change for this household.

2. This household would go to bars less often.
3. This household would go to bars more often.
4. This household would go just as often, but would not go to as many different bars.
5. This household would go just as often, but would go to more different bars.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q120	<b>Less often</b>	Count	33	40	34	50	33
		% within Iteration	<b>6.7%</b>	<b>8.1%</b>	<b>6.7%</b>	<b>10.7%</b>	<b>6.7%</b>
	<b>No Change</b>	Count	383	398	406	380	374
		% within Iteration	<b>77.7%</b>	<b>80.6%</b>	<b>80.4%</b>	<b>81.5%</b>	<b>75.7%</b>
	<b>More Often</b>	Count	56	48	47	21	53
		% within Iteration	<b>11.4%</b>	<b>9.7%</b>	<b>9.3%</b>	<b>4.5%</b>	<b>10.7%</b>
	<b>Not as Many</b>	Count	2	1	3	6	7
		% within Iteration	<b>.4%</b>	<b>.2%</b>	<b>.6%</b>	<b>1.3%</b>	<b>1.4%</b>
	<b>More different ones</b>	Count	19	7	15	9	27
		% within Iteration	<b>3.9%</b>	<b>1.4%</b>	<b>3.0%</b>	<b>1.9%</b>	<b>5.5%</b>
Total		Count	493	494	505	466	494
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**23. Q125**

**L1** Can you think of any other ways that your household's entertainment choices will be affected by the ordinance?

**L2, L3** Can you think of any other ways that your household's entertainment choices have been affected by the ordinance?

**E, S** Can you think of any other ways that your household's entertainment choices would be affected by such a law?

→ See **Appendix B** in each individual report for the complete text listings.

*City of Laramie Smoking Ordinance I: February 2005 Interviews (Tech. Rep. No. CHES-503)*

*City of Laramie Smoking Ordinance II: July 2005 Interviews (Tech. Rep. No. CHES-518)*

*City of Laramie Smokefree Ordinance Survey III: February 2006 Survey Results and Comparisons to February 2005 and July 2005 Surveys (Tech. Rep. No. CHES-610)*

*Smokefree Communities in Wyoming: Sheridan Survey (Tech. Rep. No. CHES-604-Revised)*

*Smokefree Communities in Wyoming: Evanston Survey (Tech. Rep. No. CHES-605)*

**24. Q130**

**L1, L2, L3** In deciding whether you favor or oppose that ordinance, for you personally, would you say ...

1. It comes down to a question of health -- what effect the ordinance will or will not have on people's health.
2. It comes to a question of rights -- the right to breathe smokefree air versus the right to smoke or the right to decide how to run a business.

**E, S** In deciding whether you favor or oppose such a law, for you personally, would you say ...

1. It comes down to a question of health -- what effect such a law would or would not have on people's health.
2. It comes to a question of rights -- the right to breathe smokefree air versus the right to smoke or the right to decide how to run a business.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q130	<b>It comes down to a question of health</b>	Count	175	165	199	173	189
		% within Iteration	<b>36.6%</b>	<b>34.9%</b>	<b>41.0%</b>	<b>38.3%</b>	<b>38.7%</b>
	<b>It comes to a question of rights</b>	Count	303	308	286	279	299
		% within Iteration	<b>63.4%</b>	<b>65.1%</b>	<b>59.0%</b>	<b>61.7%</b>	<b>61.3%</b>
Total		Count	478	473	485	452	488
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**25. Q135**

**L1, L2, L3, E, S** Which of the following statements best describes the smoking policy in your own home?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q135	<b>Smoking is allowed everywhere in the home</b>	Count	58	52	50	53	47
		% within Iteration	<b>11.6%</b>	<b>10.4%</b>	<b>9.8%</b>	<b>11.1%</b>	<b>9.2%</b>
	<b>Smoking is allowed only in some areas or at some times</b>	Count	68	64	47	72	61
		% within Iteration	<b>13.6%</b>	<b>12.8%</b>	<b>9.2%</b>	<b>15.1%</b>	<b>11.9%</b>
	<b>Smoking is not allowed anywhere in the home</b>	Count	374	385	412	352	405
		% within Iteration	<b>74.8%</b>	<b>76.8%</b>	<b>80.9%</b>	<b>73.8%</b>	<b>78.9%</b>
Total		Count	500	501	509	477	513
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**26. Q140**

L1, L2, L3, E, S

Now I am going to read two statements. I would like you tell me to what extent you agree or disagree with each of them.

The first statement is: "Breathing smoke from other people's cigarettes is harmful to one's health." Do you strongly agree, agree, feel neutral, disagree or strongly disagree with this statement?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q140	<b>Strongly agree</b>	Count	295	281	298	274	309
		% within Iteration	<b>58.4%</b>	<b>56.0%</b>	<b>58.0%</b>	<b>57.8%</b>	<b>60.1%</b>
	<b>Agree</b>	Count	127	147	149	145	146
		% within Iteration	<b>25.1%</b>	<b>29.3%</b>	<b>29.0%</b>	<b>30.6%</b>	<b>28.4%</b>
	<b>Feel neutral</b>	Count	47	33	38	30	39
		% within Iteration	<b>9.3%</b>	<b>6.6%</b>	<b>7.4%</b>	<b>6.3%</b>	<b>7.6%</b>
	<b>Disagree</b>	Count	23	26	22	16	17
		% within Iteration	<b>4.6%</b>	<b>5.2%</b>	<b>4.3%</b>	<b>3.4%</b>	<b>3.3%</b>
	<b>Strongly disagree</b>	Count	13	15	7	9	3
		% within Iteration	<b>2.6%</b>	<b>3.0%</b>	<b>1.4%</b>	<b>1.9%</b>	<b>.6%</b>
Total		Count	505	502	514	474	514
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**27. Q145**

L1, L2, L3, E, S

And here's the second statement: "A law against smoking in restaurants and bars takes away too much personal freedom from individuals." Do you ...

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q145	<b>Strongly agree</b>	Count	121	93	70	90	73
		% within Iteration	<b>24.1%</b>	<b>18.8%</b>	<b>13.7%</b>	<b>19.3%</b>	<b>14.5%</b>
	<b>Agree</b>	Count	118	114	122	101	126
		% within Iteration	<b>23.5%</b>	<b>23.0%</b>	<b>23.9%</b>	<b>21.7%</b>	<b>25.0%</b>
	<b>Feel neutral</b>	Count	44	51	51	82	73
		% within Iteration	<b>8.7%</b>	<b>10.3%</b>	<b>10.0%</b>	<b>17.6%</b>	<b>14.5%</b>
	<b>Disagree</b>	Count	123	142	153	112	138
		% within Iteration	<b>24.5%</b>	<b>28.6%</b>	<b>29.9%</b>	<b>24.0%</b>	<b>27.3%</b>
	<b>Strongly disagree</b>	Count	97	96	115	81	95
		% within Iteration	<b>19.3%</b>	<b>19.4%</b>	<b>22.5%</b>	<b>17.4%</b>	<b>18.8%</b>
Total		Count	503	496	511	466	505
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**28. Q146**

L2, L3

I'd like you to imagine that there are two candidates running for election to the City Council in Laramie. One of them wants to get rid of the ordinance against smoking in public places like restaurants and bars. The other one wants to keep the ordinance. How much difference would that one issue make to you personally in deciding which candidate you would vote for? Do you think it would affect your vote ...

This question was not asked in the Sheridan/Evanston survey or the Laramie - 1<sup>st</sup> iteration, February 2005 survey.

			Iteration	
			Laramie - Jul 05	Laramie - Feb 06
Q146	<b>Very much</b>	Count	212	214
		% within Iteration	<b>42.8%</b>	<b>42.0%</b>
	<b>Somewhat</b>	Count	141	151
		% within Iteration	<b>28.5%</b>	<b>29.7%</b>
	<b>A little</b>	Count	71	74
		% within Iteration	<b>14.3%</b>	<b>14.5%</b>
	<b>Not at all</b>	Count	64	68
		% within Iteration	<b>12.9%</b>	<b>13.4%</b>
	<b>(Won't vote)</b>	Count	7	2
		% within Iteration	<b>1.4%</b>	<b>.4%</b>
Total		Count	495	509
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>

**29. Q147**

L2, L3

If those two candidates were pretty much the same in all other ways, would you be more likely to vote for ...

This question was not asked in the Sheridan/Evanston survey or the Laramie -1<sup>st</sup> iteration, February 2005 survey.

			Iteration	
			Laramie - Jul 05	Laramie - Feb 06
Q147	<b>The one who wants to get rid of the no-smoking ordinance</b>	Count	142	125
		% within Iteration	<b>34.4%</b>	<b>29.6%</b>
	<b>The one who wants to keep the no-smoking ordinance</b>	Count	271	297
		% within Iteration	<b>65.6%</b>	<b>70.4%</b>
Total		Count	413	422
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>

**30. Q150**

L1, L2, L3, E, S

Finally, just for research purposes we have a few questions about you and your household. How many children age 17 or younger live in your household?

(Collapsed variable)

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q150	0	Count	367	332	351	241	324
		% within Iteration	<b>72.2%</b>	<b>65.9%</b>	<b>67.8%</b>	<b>50.6%</b>	<b>63.0%</b>
	1	Count	60	74	68	81	68
		% within Iteration	<b>11.8%</b>	<b>14.7%</b>	<b>13.1%</b>	<b>17.0%</b>	<b>13.2%</b>
	2	Count	53	66	74	82	78
		% within Iteration	<b>10.4%</b>	<b>13.1%</b>	<b>14.3%</b>	<b>17.2%</b>	<b>15.2%</b>
	3	Count	25	22	19	39	30
		% within Iteration	<b>4.9%</b>	<b>4.4%</b>	<b>3.7%</b>	<b>8.2%</b>	<b>5.8%</b>
	4	Count	1	7	4	24	12
		% within Iteration	<b>.2%</b>	<b>1.4%</b>	<b>.8%</b>	<b>5.0%</b>	<b>2.3%</b>
	5	Count	1	2	1	3	2
		% within Iteration	<b>.2%</b>	<b>.4%</b>	<b>.2%</b>	<b>.6%</b>	<b>.4%</b>
	6 or more	Count	1	1	1	6	0
		% within Iteration	<b>.2%</b>	<b>.2%</b>	<b>.2%</b>	<b>1.3%</b>	<b>.0%</b>
Total		Count	508	504	518	476	514
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**31. Q155**

L1, L2, L3, E, S

INCLUDING yourself, how many people age 18 or older live in your household?

(Collapsed variable)

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q155	1	Count	126	142	128	117	115
		% within Iteration	<b>25.0%</b>	<b>28.3%</b>	<b>24.9%</b>	<b>24.6%</b>	<b>22.4%</b>
	2	Count	312	290	325	295	326
		% within Iteration	<b>61.8%</b>	<b>57.9%</b>	<b>63.2%</b>	<b>62.1%</b>	<b>63.5%</b>
	3	Count	51	47	45	44	55
		% within Iteration	<b>10.1%</b>	<b>9.4%</b>	<b>8.8%</b>	<b>9.3%</b>	<b>10.7%</b>
	4	Count	12	14	13	15	17
		% within Iteration	<b>2.4%</b>	<b>2.8%</b>	<b>2.5%</b>	<b>3.2%</b>	<b>3.3%</b>
	5	Count	2	7	2	3	0
		% within Iteration	<b>.4%</b>	<b>1.4%</b>	<b>.4%</b>	<b>.6%</b>	<b>.0%</b>
	6 or more	Count	2	1	1	1	0
		% within Iteration	<b>.4%</b>	<b>.2%</b>	<b>.2%</b>	<b>.2%</b>	<b>.0%</b>
Total		Count	505	501	514	475	513
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**32. Q160**

L1, L2, L3, E, S

I need to ask how many different phone numbers ring into this residence that can be answered by a person. Please do not count cell phones, numbers used only for a business, or fax or computer lines that cannot receive voice calls. **INCLUDING** the one we're talking on right now, how many different phone numbers ring into this residence that can be answered by a person?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q160. <b>Just this one</b>	Count		482	462	477	441	461
	% within Iteration		<b>95.3%</b>	<b>92.0%</b>	<b>92.3%</b>	<b>92.8%</b>	<b>90.6%</b>
<b>Two</b>	Count		20	31	31	21	39
	% within Iteration		<b>4.0%</b>	<b>6.2%</b>	<b>6.0%</b>	<b>4.4%</b>	<b>7.7%</b>
<b>Three</b>	Count		2	8	8	10	5
	% within Iteration		<b>.4%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>2.1%</b>	<b>1.0%</b>
<b>Four</b>	Count		2	1	1	3	2
	% within Iteration		<b>.4%</b>	<b>.2%</b>	<b>.2%</b>	<b>.6%</b>	<b>.4%</b>
<b>Five or more</b>	Count		0	0	0	0	2
	% within Iteration		<b>.0%</b>	<b>.0%</b>	<b>.0%</b>	<b>.0%</b>	<b>.4%</b>
Total	Count		506	502	517	475	509
	% within Iteration		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**33. Q165**

L1, L2, L3, E, S

What is the highest level of school you have completed or the highest degree you received?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q165 <b>Less than Grade 12</b>	Count		11	6	7	22	21
	% within Iteration		<b>2.2%</b>	<b>1.2%</b>	<b>1.4%</b>	<b>4.6%</b>	<b>4.1%</b>
<b>High school diploma or GED</b>	Count		96	76	70	164	121
	% within Iteration		<b>18.9%</b>	<b>15.0%</b>	<b>13.6%</b>	<b>34.5%</b>	<b>23.7%</b>
<b>Some college, no degree</b>	Count		94	92	98	96	119
	% within Iteration		<b>18.5%</b>	<b>18.2%</b>	<b>19.1%</b>	<b>20.2%</b>	<b>23.3%</b>
<b>Community college graduate (2-year AA, technical)</b>	Count		42	42	26	68	61
	% within Iteration		<b>8.3%</b>	<b>8.3%</b>	<b>5.1%</b>	<b>14.3%</b>	<b>11.9%</b>
<b>College graduate (4-year BA or BS)</b>	Count		121	141	152	86	113
	% within Iteration		<b>23.8%</b>	<b>27.9%</b>	<b>29.6%</b>	<b>18.1%</b>	<b>22.1%</b>
<b>Some graduate or professional school</b>	Count		26	30	34	10	14
	% within Iteration		<b>5.1%</b>	<b>5.9%</b>	<b>6.6%</b>	<b>2.1%</b>	<b>2.7%</b>
<b>Graduate or professional degree</b>	Count		118	118	127	30	62
	% within Iteration		<b>23.2%</b>	<b>23.4%</b>	<b>24.7%</b>	<b>6.3%</b>	<b>12.1%</b>
Total	Count		508	505	514	476	511
	% within Iteration		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**34. Q170**

L1, L2, L3, E, S

We hear a lot these days about different political labels, like conservative, liberal, middle of the road, libertarian, and so on. Which one of those four labels comes closest to your own political views, most of the time?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q170	<b>Conservative</b>	Count	160	138	151	170	208
		% within Iteration	<b>37.1%</b>	<b>31.6%</b>	<b>33.6%</b>	<b>44.3%</b>	<b>48.4%</b>
	<b>Middle of the road</b>	Count	140	152	146	116	130
		% within Iteration	<b>32.5%</b>	<b>34.8%</b>	<b>32.4%</b>	<b>30.2%</b>	<b>30.2%</b>
	<b>Liberal</b>	Count	122	135	141	84	86
		% within Iteration	<b>28.3%</b>	<b>30.9%</b>	<b>31.3%</b>	<b>21.9%</b>	<b>20.0%</b>
	<b>Libertarian</b>	Count	9	12	12	14	6
		% within Iteration	<b>2.1%</b>	<b>2.7%</b>	<b>2.7%</b>	<b>3.6%</b>	<b>1.4%</b>
Total		Count	431	437	450	384	430
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**35. Q175**

L1, L2, L3, E, S

Which of the following BEST describes your current employment status?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q175	<b>Full time employed</b>	Count	270	273	280	284	278
		% within Iteration	<b>53.3%</b>	<b>54.2%</b>	<b>54.3%</b>	<b>59.7%</b>	<b>54.2%</b>
	<b>Part time employed</b>	Count	39	40	45	33	33
		% within Iteration	<b>7.7%</b>	<b>7.9%</b>	<b>8.7%</b>	<b>6.9%</b>	<b>6.4%</b>
	<b>Student, and also employed</b>	Count	46	38	40	19	16
		% within Iteration	<b>9.1%</b>	<b>7.5%</b>	<b>7.8%</b>	<b>4.0%</b>	<b>3.1%</b>
	<b>Student, and not employed</b>	Count	33	15	26	8	3
		% within Iteration	<b>6.5%</b>	<b>3.0%</b>	<b>5.0%</b>	<b>1.7%</b>	<b>.6%</b>
	<b>Homemaker</b>	Count	18	29	14	33	29
		% within Iteration	<b>3.6%</b>	<b>5.8%</b>	<b>2.7%</b>	<b>6.9%</b>	<b>5.7%</b>
	<b>Retired or disabled</b>	Count	95	103	106	88	145
		% within Iteration	<b>18.7%</b>	<b>20.4%</b>	<b>20.5%</b>	<b>18.5%</b>	<b>28.3%</b>
	<b>Not currently employed and not in school</b>	Count	6	6	5	11	9
		% within Iteration	<b>1.2%</b>	<b>1.2%</b>	<b>1.0%</b>	<b>2.3%</b>	<b>1.8%</b>
Total		Count	507	504	516	476	513
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**36. Q180**

L1, L2, L3, E, S

Which of the following statements best describes the smoking policy in the indoor work areas where you are employed?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q180	<b>Smoking is allowed in all indoor work areas.</b>	Count	16	8	8	18	12
		% within Iteration	4.5%	2.3%	2.2%	5.4%	3.7%
	<b>Smoking is allowed only in some of the indoor areas</b>	Count	36	11	18	68	24
		% within Iteration	10.2%	3.2%	5.0%	20.5%	7.5%
	<b>Smoking is not allowed in any indoor work areas.</b>	Count	288	310	322	222	245
		% within Iteration	81.6%	89.3%	89.2%	67.1%	76.3%
	<b>There are no indoor work areas where I am employed.</b>	Count	13	18	13	23	40
		% within Iteration	3.7%	5.2%	3.6%	6.9%	12.5%
Total		Count	353	347	361	331	321
		% within Iteration	100.0%	100.0%	100.0%	100.0%	100.0%

**37. Q185**

L1, L2, L3, E, S

Do you now smoke cigarettes every day, some days, or not at all?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q185	<b>Every day</b>	Count	55	55	43	106	63
		% within Iteration	10.8%	10.9%	8.3%	22.2%	12.3%
	<b>Some days</b>	Count	19	23	21	25	22
		% within Iteration	3.7%	4.6%	4.0%	5.2%	4.3%
	<b>Not at all</b>	Count	434	427	455	346	429
		% within Iteration	85.4%	84.6%	87.7%	72.5%	83.5%
Total		Count	508	505	519	477	514
		% within Iteration	100.0%	100.0%	100.0%	100.0%	100.0%

**38. Q190**

L1, L2, L3, E, S

During the past 6 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q190	<b>Yes</b>	Count	27	26	31	55	39
		% within Iteration	36.5%	34.7%	49.2%	42.0%	45.9%
	<b>No</b>	Count	47	49	32	76	46
		% within Iteration	63.5%	65.3%	50.8%	58.0%	54.1%
Total		Count	74	75	63	131	85
		% within Iteration	100.0%	100.0%	100.0%	100.0%	100.0%

**39. Q195**

L1, L2, L3, E, S      **Are you seriously considering stopping smoking within the next six months?**

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q195	<b>Yes</b>	Count	37	36	34	64	48
		% within Iteration	<b>51.4%</b>	<b>50.0%</b>	<b>54.8%</b>	<b>52.9%</b>	<b>60.0%</b>
	<b>No</b>	Count	35	36	28	57	32
		% within Iteration	<b>48.6%</b>	<b>50.0%</b>	<b>45.2%</b>	<b>47.1%</b>	<b>40.0%</b>
Total		Count	72	72	62	121	80
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**40. Q200**

L1, L2, L3, E, S      **What is your age?**  
(Collapsed variable)

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q200	<b>18-24 yrs</b>	Count	67	51	44	39	29
		% within Iteration	<b>13.5%</b>	<b>10.4%</b>	<b>8.7%</b>	<b>8.3%</b>	<b>5.8%</b>
	<b>25-34 yrs</b>	Count	87	74	81	91	59
		% within Iteration	<b>17.5%</b>	<b>15.0%</b>	<b>16.1%</b>	<b>19.3%</b>	<b>11.8%</b>
	<b>35-44 yrs</b>	Count	64	78	97	86	93
		% within Iteration	<b>12.9%</b>	<b>15.9%</b>	<b>19.2%</b>	<b>18.3%</b>	<b>18.5%</b>
	<b>45-54 yrs</b>	Count	107	114	118	129	113
		% within Iteration	<b>21.6%</b>	<b>23.2%</b>	<b>23.4%</b>	<b>27.4%</b>	<b>22.5%</b>
	<b>55-64 yrs</b>	Count	89	90	79	69	101
		% within Iteration	<b>17.9%</b>	<b>18.3%</b>	<b>15.7%</b>	<b>14.6%</b>	<b>20.1%</b>
	<b>65 yrs and older</b>	Count	82	85	85	57	107
		% within Iteration	<b>16.5%</b>	<b>17.3%</b>	<b>16.9%</b>	<b>12.1%</b>	<b>21.3%</b>
Total		Count	496	492	504	471	502
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**41. Q205**

L1, L2, L3, E, S

And which of the following would you say best describes your race or ethnic group?

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q205	<b>White, non-Hispanic</b>	Count	452	455	477	449	487
		% within Iteration	<b>90.2%</b>	<b>90.6%</b>	<b>93.0%</b>	<b>94.5%</b>	<b>96.6%</b>
	<b>Hispanic</b>	Count	25	23	20	13	4
		% within Iteration	<b>5.0%</b>	<b>4.6%</b>	<b>3.9%</b>	<b>2.7%</b>	<b>.8%</b>
	<b>Black or African American</b>	Count	1	5	3	1	0
		% within Iteration	<b>.2%</b>	<b>1.0%</b>	<b>.6%</b>	<b>.2%</b>	<b>.0%</b>
	<b>American Indian or Alaska Native</b>	Count	4	3	3	4	6
		% within Iteration	<b>.8%</b>	<b>.6%</b>	<b>.6%</b>	<b>.8%</b>	<b>1.2%</b>
	<b>Asian</b>	Count	6	5	3	0	2
		% within Iteration	<b>1.2%</b>	<b>1.0%</b>	<b>.6%</b>	<b>.0%</b>	<b>.4%</b>
	<b>Native Hawaiian or other Pacific islander</b>	Count	2	1	1	2	0
		% within Iteration	<b>.4%</b>	<b>.2%</b>	<b>.2%</b>	<b>.4%</b>	<b>.0%</b>
	<b>Other (to include 2 or more)</b>	Count	11	10	6	6	5
		% within Iteration	<b>2.2%</b>	<b>2.0%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.0%</b>
Total		Count	501	502	513	475	504
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**42. Q210**

L1, L2, L3, E, S

I am going to read a list of income ranges. Please stop me when you hear the one that best describes your household's total income, before taxes, for last year.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q210	<b>Less Than \$25,000</b>	Count	92	88	78	80	86
		% within Iteration	<b>20.4%</b>	<b>19.6%</b>	<b>17.0%</b>	<b>18.5%</b>	<b>19.2%</b>
	<b>\$25,000 to \$50,000</b>	Count	165	142	153	147	143
		% within Iteration	<b>36.5%</b>	<b>31.7%</b>	<b>33.3%</b>	<b>33.9%</b>	<b>31.9%</b>
	<b>\$50,000 to \$75,000</b>	Count	100	105	99	105	99
		% within Iteration	<b>22.1%</b>	<b>23.4%</b>	<b>21.6%</b>	<b>24.2%</b>	<b>22.1%</b>
	<b>\$75,000 to \$100,000</b>	Count	48	65	70	61	71
		% within Iteration	<b>10.6%</b>	<b>14.5%</b>	<b>15.3%</b>	<b>14.1%</b>	<b>15.8%</b>
	<b>Over \$100,000</b>	Count	47	48	59	40	49
		% within Iteration	<b>10.4%</b>	<b>10.7%</b>	<b>12.9%</b>	<b>9.2%</b>	<b>10.9%</b>
Total		Count	452	448	459	433	448
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**43. Q215**

**L1, E, S** This is the end of the survey. Do you have any comments that you would like to make at this time?

**L2, L3** This is the end of the survey. Do you have any comments that you would like me to take down at this time?

→ See Appendix B in each individual report for the complete text listings.

*City of Laramie Smoking Ordinance I: February 2005 Interviews (Tech. Rep. No. CHES-503)*

*City of Laramie Smoking Ordinance II: July 2005 Interviews (Tech. Rep. No. CHES-518)*

*City of Laramie Smokefree Ordinance Survey III: February 2006 Survey Results and Comparisons to February 2005 and July 2005 Surveys (Tech. Rep. No. CHES-610)*

*Smokefree Communities in Wyoming: Sheridan Survey (Tech. Rep. No. CHES-604-Revised)*

*Smokefree Communities in Wyoming: Evanston Survey (Tech. Rep. No. CHES-605)*

**44. Q220**

**L1, L2, L3, E, S** Respondent's Sex. Code without asking.

			Iteration				
			Laramie - Feb 05	Laramie - Jul 05	Laramie - Feb 06	Evanston	Sheridan
Q220	<b>Male</b>	Count	196	210	222	205	229
		% within Iteration	<b>38.4%</b>	<b>41.7%</b>	<b>42.8%</b>	<b>42.8%</b>	<b>44.4%</b>
	<b>Female</b>	Count	314	293	297	274	287
		% within Iteration	<b>61.6%</b>	<b>58.3%</b>	<b>57.2%</b>	<b>57.2%</b>	<b>55.6%</b>
Total		Count	510	503	519	479	516
		% within Iteration	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## Appendix B. Explanation of odds and probability

Often, we hear statements such as, “If an individual has characteristic A, then the odds of that person being happy are X times greater than they would be for a person who did not have characteristic A.” To explain statements such as the one above, a definition of both odds and probability might be helpful. Odds and probability are related, but they are not the same thing. Probabilities are numbers between 0 and 1 (or 0% to 100%), while odds can range from 0 to infinity.

A statement like “a person is twice as likely to have characteristic A,” implicitly demonstrates an odds interpretation. For example, if the *probability* of characteristic A is .70, this statement would leave us saying that the *probability* is doubled to 1.40. (e.g., a 140% chance of having characteristic A). However, probabilities cannot exceed 100%, so we reconstruct the concept using odds. Although odds can be doubled (and doubled into infinity), this doubling does affect the probability. The exact relationship between odds and probability is best expressed through an example.

The odds of an individual having a certain characteristic are calculated as follows.

$$\text{Odds} = \frac{\text{Probability of having the characteristic}}{\text{Probability of not having the characteristic}}$$

For example, if the probability of being happy with the smokefree ordinance is .67, then the odds of being happy are:

$$\text{Odds} = \frac{\text{Probability of having the characteristic}}{\text{Probability of not having the characteristic}} = \frac{0.67}{0.33} = 2$$

Now, consider the effect of being a non-smoker on these odds. For example, if being a non-smoker tripled the odds of being happy, then the odds would now be:

$$\begin{aligned} \text{New Odds} &= \text{Old odds} \times \text{Effect from the new characteristic} \\ &= 2 \times 3 \\ &= 6 \end{aligned}$$

Thus, for this example, the odds that a non-smoker was happy would be 6:1. These odds can then be transformed back into a probability with the following formula:

$$\text{Probability of having the characteristic} = \frac{\text{Odds}}{\text{Odds} + 1}$$

In this case, the probability that a non-smoker would be happy would be:

$$\text{Probability of having the characteristic} = \frac{\text{Odds}}{\text{Odds} + 1} = \frac{6}{6 + 1} = \frac{6}{7} = 0.857$$

In addition, odds can be less than 1:1. This would mean that it is relatively *unlikely* for this characteristic to occur. The closer the odds are to zero, the more unlikely the event is to occur.

Frequently occurring odds are

<b>Odds</b>	<b>Likelihood of occurring (Probability)</b>
1:1	50% chance of occurring
2:1	67% chance of occurring
10:1	91% chance of occurring
20:1	95% chance of occurring
0.5 : 1	33% chance of occurring
0.1 : 1	9% chance of occurring
0.05 : 1	5% chance of occurring

Thus, if a variable has an effect such that the odds go up by a factor of 3, then the probability that an individual has that characteristic has changed in a very meaningful manner.

## Appendix C. Logistic regression results

This section contains more information concerning the analysis in Section 6.1 Key opinions that affect a person's happiness with a smokefree ordinance.

WYSAC analyzed the data with a multinomial logistic regression model using multiple predictor variables to determine which variables were most influential for predicting when individuals would be happy, neutral, or unhappy with a smokefree law. A multinomial logistic regression model is considered a generalization of the often-used binary logistic model. In the binary setting, the dependent variable is coded into two dichotomous categories: usually termed "success" and "failure." Interpretations are formed based on the calculated odds (or log odds) of a person being a "success" against a person being in the reference category of "failure." Multinomial logistic regression is similar in that comparisons are made against the reference category of "failure"; however, instead of having one category termed a "success," we now have multiple categories of "success." We treat these non-reference categories at the nominal level. Because of this coding system, instead of interpreting the odds ratios of being in category B vs. category A (in the binary setting), there will be *two* sets of odds ratios: one set of ratios comparing category B against the reference category A, and a second set of ratios comparing category C against category A. Thus, a multinomial logistic regression simultaneously analyzes two binary logistic regressions with the same reference category.

For the analysis of the data from the three cities, to use the binary coding system, the dependent variable (happiness level) would need to be coded as "happy" vs. "not happy." Thus, the original three-category coding of "not happy," "neutral," and "happy" would need to have been collapsed into a two-category coding system. In the multinomial setting, the reference category was "unhappy," and the "success" categories were "neutral" and "happy." While it may have been possible to perform an ordinal logistic regression, since the dependent variable was coded at the ordinal level, the assumption of consistent odds-ratios did not appear to be supported. As such, we chose to use the multinomial logistic regression procedure.

While WYSAC considered all 22 predictor variables, we retained a reduced set of eight statistically significant variables. Because of high correlations between some of the predictors, it was not necessary to include every variable. Formation of the final model utilized the stepwise variable selection procedure in SPSS, version 13.0. The final model included the following eight predictor variables that fell into three general categories. Coding labels are also included for reference. See Table 3 in the results section.

The overall model was statistically significant,  $\chi^2(16)=1129.932, p<.001$  with an overall Nagelkerke  $r^2=0.707$ . There was no significant lack of fit based on the deviance goodness-of-fit test,  $\chi^2(732)=643.057, p=.992$ . By using the respondents' answers on the predictor variables, correct classification into the appropriate group (happy, neutral, or unhappy) occurred 76.4% of the time. Thus, these eight variables were highly effective in understanding an individual's opinion concerning a smokefree law. For the classification table, see Table 4 in the results section.

The parameter estimates for each variable are below. Each compares with the reference category "unhappy." The odds ratio for each variable is listed under the column Exp(B). Note that the

researchers reversed the interpretations given for q80, q90, q130, and q140 in the results section to ease interpretations of the odds ratios.

Parameter Estimates

Q85: <sup>a</sup>		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Happy	Intercept	-1.0466	1.404	.556	1	.456			
	q65	1.2099	.283	18.315	1	.000	3.3532	1.927	5.836
	q70	.8999	.215	17.455	1	.000	2.4593	1.612	3.751
	q80	-1.7909	.338	28.085	1	.000	.1668	.086	.324
	q90	-1.1417	.251	20.771	1	.000	.3193	.195	.522
	q130	-1.8213	.412	19.520	1	.000	.1618	.072	.363
	q140	-.8445	.199	17.990	1	.000	.4298	.291	.635
	q145	.8851	.117	57.672	1	.000	2.4232	1.928	3.045
Neutral	q185_2cat	2.0034	.391	26.236	1	.000	7.4140	3.445	15.958
	Intercept	2.2103	1.134	3.798	1	.051			
	q65	.2702	.233	1.349	1	.245	1.3102	.830	2.067
	q70	-.0220	.177	.015	1	.901	.9782	.692	1.383
	q80	-.8985	.311	8.353	1	.004	.4072	.221	.749
	q90	-.5764	.182	10.081	1	.001	.5619	.394	.802
	q130	-1.2538	.392	10.215	1	.001	.2854	.132	.616
	q140	-.3767	.114	10.841	1	.001	.6861	.548	.859
q145	.5381	.097	30.914	1	.000	1.7127	1.417	2.070	
q185_2cat	1.0373	.217	22.889	1	.000	2.8215	1.845	4.316	

a. The reference category is: Unhappy.

Using the parameters from the model output above, we can express the equation for estimating the odds of being happy (relative to being unhappy) for an individual as follows:

$$\text{Odds of being happy} = (e)^{-1.0466} \cdot (3.3532)^{q65} \cdot (2.4593)^{q70} \cdot (0.1668)^{q80} \cdot (0.3193)^{q90} \cdot (0.1618)^{q130} \cdot (0.4298)^{q140} \cdot (2.4232)^{q145} \cdot (7.4140)^{q185}$$

For example, let there be a hypothetical individual with the following characteristics:

- Q65: Prefers designated smoking areas for restaurants (2)
- Q70: Prefers designated smoking areas for bars (2)
- Q80: Believes that a smokefree law is about an individual citizen’s right to smokefree air (1)
- Q90: Expects a neutral effect on the city’s public health from the law(2)
- Q130: Believes that a smokefree law is primarily an issue of health (1)
- Q140: Agrees with the statement, “Breathing smoke from other people’s cigarettes is harmful to one’s health.” (2)
- Q145: Is neutral on the statement, “A smokefree law takes away too much personal freedom.” (3)
- Q185: Is a non-smoker (2)

Then, the odds that this person will be happy with a smokefree law are:

$$\begin{aligned} \text{Odds of being happy} &= (e)^{-1.0466} \cdot (3.3532)^2 \cdot (2.4593)^2 \cdot (0.1668)^1 \cdot (0.3193)^2 \\ &\quad \cdot (0.1618)^1 \cdot (0.4298)^2 \cdot (2.4232)^3 \cdot (7.4140)^2 \\ &= 9.5 \end{aligned}$$

Thus, the odds are almost 10 to 1 that this person will be happy with a smokefree law (quite likely).

The probability that this person is happy with a smokefree law is:  $\text{Prob} = \frac{\text{odds}}{\text{odds} + 1} = \frac{9.5}{10.5} = 0.90$

Contrast the person above with a hypothetical individual #2 who has the following characteristics:

- Q65: Prefers designated areas for restaurants (2)
- Q70: Prefers designated areas in bars (2)
- Q80: Believes that a smokefree law is about the business owner's right to decide (2)
- Q90: Expects a neutral effect on the city's public health from the law(2)
- Q130: Believes that a smokefree law is primarily an issue of rights (2)
- Q140: Agrees with the statement, "Breathing smoke from other people's cigarettes is harmful to one's health." (2)
- Q145: Agrees with the statement, "A smokefree law takes away too much personal freedom." (2)
- Q185: Is a non-smoker (2)

Then, the odds that this person will be happy with a smokefree law (as opposed to unhappy) are:

$$\begin{aligned} \text{Odds of being happy} &= (e)^{-1.0466} \cdot (3.3532)^2 \cdot (2.4593)^2 \cdot (0.1668)^2 \cdot (0.3193)^2 \\ &\quad \cdot (0.1618)^2 \cdot (0.4298)^2 \cdot (2.4232)^2 \cdot (7.4140)^2 \\ &= 0.11 \\ &\text{(Approximately 1 to 9 that this person will be happy: not very likely)} \end{aligned}$$

The probability that this person is happy with a smokefree law is only:

$$\text{Probability} = \frac{\text{odds}}{\text{odds} + 1} = \frac{0.11}{1.11} = 0.10$$