State of Wyoming



Department of Health

Wyoming Adult Health Indicators by Race/Ethnicity Behavioral Risk Factor Surveillance System Combined Data 2003-2007

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For more information about the Behavioral Risk Factor Surveillance System (BRFSS), visit the Wyoming BRFSS website at www.health.wyo.gov/PHSD/brfss/index.html or the CDC BRFSS website at www.cdc.gov/brfss.

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Executive Summary

Wyoming Behavioral Risk Factor Surveillance System (BRFSS) data from 2003 through 2007 were combined for the purpose of identifying health disparities among five Wyoming race/ethnicity groups. A total of 53 health indicators were included in the analysis although some indicators for blacks and Asian/Pacific Islanders did not meet the minimum sample size of 50 to generate estimates. During this period, 24,335 BRFSS telephone interviews were collected. The race/ethnicity groups examined included whites (non-Hispanic), which comprised 91.9% of the sample, followed by Hispanics of any race with 5.3%, American Indians at 1.9%, blacks with 0.5%, and Asians/Pacific Islanders with 0.4%. Disparity was defined as non-overlapping 95% confidence intervals for the point estimate of a minority population compared to the point estimate for non-Hispanic whites. Comparisons were also made with 2006 and 2007 national BRFSS race/ethnicity data and with Healthy People 2010 objectives.

Key findings:

- Despite small sample sizes for Asian/Pacific Islanders and blacks, some disparities were identified for all Wyoming minority groups.
- Hispanics were found to have the most disparities (18), followed by American Indians (16) and blacks (11). A relatively few disparities (3) were identified for Asian/Pacific Islanders.
- All four minority populations showed a disparity for insufficient social or emotional support.
- Indicators where disparities were found for three of the four minority groups include: no leisure time physical activity, cigarette smoking, exposure to secondhand smoke at work, no personal doctor, unable to afford needed medical care, no recent cholesterol check, and fair or poor general health.
- Indicators where disparities were found for two minority populations include: obesity, very obese, extreme drinking, diabetes, and uninsured.
- While Asian/Pacific Islanders in Wyoming compared well with non-Hispanic whites in the state, they compared less favorably with Asian/Pacific Islanders in the U.S.
- Seventeen of the 53 indicators had related Healthy People 2010 objectives. No race/ethnicity group in Wyoming, including non-Hispanic whites, met more than two of the 17 Healthy People 2010 objectives that were measured, and blacks did not meet any.
- Some major demographic differences exist between Wyoming non-Hispanic whites and the four minority race/ethnicity groups which may be affecting the results. To account for some of these differences, logistic regression was performed for 23 of the 53 indicators with age, gender, and education as independent variables.
- Controlling simultaneously for age, gender and education modified some of the results. Some chronic disease conditions changed from not showing a disparity initially to showing one after adjustment. Disparities initially identified for some risk factors, health

- care access indicators, and preventive health services disappeared for some groups after adjustment.
- When doing analysis by race/ethnicity in Wyoming, the common practice of lumping blacks, Asian/Pacific Islanders, and American Indians together into an "other" group can mask important differences between these groups.
- Demographic differences among race/ethnicity groups can be quite significant and are important to understanding their relative health. Aggressive public health programs can help minority groups improve their health despite their demographic disadvantages.

I. Introduction

The elimination of health disparities is one of the two overarching goals of Healthy People 2010. Health disparities occur in a number of dimensions such as gender, income, education, geographic location, population density, and sexual orientation. Race/ethnicity, however, is probably the most commonly thought of dimension of health disparities. Before disparities by race/ethnicity can be eliminated, they first have to be identified. In Wyoming, this has been difficult because of the small state population overall and the small numbers for most race and ethnic minorities within the overall population. Data with which to identify disparities by race/ethnicity often do not exist. When they do, they often are reported in only two (white, other) or three (white, Hispanic, other) categories. This report attempts to use BRFSS data combined over five years to identify health disparities among five race/ethnicity groups in Wyoming.

Since 1994, the Behavioral Risk Factor Surveillance System (BRFSS) has been providing statewide data for Wyoming adults on risk factors and conditions related to the leading causes of death. Annual BRFSS data are inadequate for providing estimates for the smaller race/ethnicity groups in Wyoming due to small numbers of respondents from these groups. In order to provide useful information for five race/ethnicity groups, data are regularly combined over a five year period to provide a "moving average" of the results. This current report includes data aggregated from the 2003-2007 BRFSS.

The report is separated into several parts. First is a table of demographics because many of the health measures included in this report are related to demographic measures, such as age, income, education, employment, and gender. This demographic information can help put the findings of this report into context. In section III.B., the results for each measure are presented by the five race/ethnicity groups in both table and graph form. A total of 53 indicators were examined in this report and are divided into six content areas: risk factors (21 measures), chronic disease conditions (9 measures), lack of health care access (3 measures), nonuse of preventive health services (9 measures), oral health (4 measures), and general health (7 measures). The graph below each table indicates which groups are significantly higher (darker) or lower (lighter) than non-Hispanic whites.

Section III.C. shows profiles for each of the five major race/ethnicity groups for 41 of the 53 measures. Included in each profile are the prevalence rate and confidence interval for each measure for that group in Wyoming, the estimated number of Wyoming adults at risk, the most recent single year rate for all Wyoming adults, the total U.S. rate for that race/ethnicity group, and the Healthy People 2010 Objective for all races (if available). Highlighting indicates measures for which the Wyoming group is worse than non-Hispanic whites in Wyoming or worse compared with the corresponding U.S. race/ethnicity group.

The results of the various comparisons of prevalence rates are summarized in section IV. Because many of the identified disparities appeared to be related to demographic differences among the race/ethnicity groups, selected results were further analyzed by logistic regression to control for age, gender, and education to determine their impact on disparity findings. These findings are also presented in section IV.

II. Methods

The Wyoming BRFSS (Behavioral Risk Factor Surveillance System) collects data from noninstitutionalized adults age 18 and older through monthly random digit dial telephone surveys. The BRFSS is coordinated and partially funded by the Centers for Disease Control and Prevention (CDC) and is conducted in all 50 states. In order to produce estimates for five race/ethnicity groups for 53 major health indicators, Wyoming BRFSS data were combined over the five year period 2003 through 2007. A total of 24,335 interviews were conducted during this period, of which 202 had missing values for race. The variable for "preferred race" was used to assign persons of mixed or "other" race to their preferred group. Whites (non-Hispanics) comprised the vast majority, with 22,404 interviews or 91.9% of the total, followed by Hispanics of any race with 1,056 interviews or 5.3%, American Indians (348 interviews or 1.9%), blacks (102 interviews or 0.5%) and Asians/Pacific Islanders (92 interviews or 0.4%). Because of the small sample sizes for blacks and Asians, these two groups were included with the 131 that remained in the "other" category after using preferred race for assignment, to create a separate entry in the tables for "other" (N=325). This "other" category can be helpful for measures where the sample size for blacks or Asians was less than 50 and an estimate for that group was not generated. The 202 interviews with refusals for race/ethnicity were excluded from analysis. BRFSS indicators selected for analysis had to be included in the survey in at least three of the five years or have a total sample size of at least 9,000. Each year's data was weighted by CDC to account for different probabilities of selection and to be representative of the total adult Wyoming population by gender and age group. These weights were further adjusted to account for the different statewide sample sizes for the 5 year period 2003-2007, which ranged from 4,004 in 2003 to 6,160 in 2007. Thus, each year contributed equally to final estimates regardless of which years were included. Respondents with missing values were excluded from the analysis of that variable unless otherwise noted.

In Section III.B., results for each race and ethnicity group were compared with all Wyoming adults for the most recent year data were available, usually 2007. The median value for all adults for the 50 states and the District of Columbia is also included in those tables for comparison. Slightly different U.S. comparison data were included in section III.C. where the profiles for each of the 5 major race/ethnicity groups are presented. In those tables, the percentages for the *total* of *each of the race/ethnicity groups* for all 50 states and the District of Columbia combined were used. The total was used instead of the median value for all states because the sample size for some race/ethnicity groups in many states was less than 50. Most measures used data from 2007 while a few that were not measured that year used 2006 data. The total sample size for 2007 when the 50 states and D.C. were combined was 341,894 whites, 32,302 blacks, 27,031 Hispanics, 8,185 Asian/Pacific Islanders, and 6,710 American Indians. Sample sizes in 2006 were similar but slightly smaller, with 5,445 American Indians as the smallest group.

To determine the impact of demographic differences among race/ethnicity groups on disparity findings, 23 of the original 53 measures were selected for further analysis. Selected measures were those that tended to vary by sociodemographic factors, were not already restricted by age, had a reasonable sample size, and might serve as an indicator for other measures. For example, one measure of overweight, one for physical activity, and one for oral health were chosen.

Logistic regression analysis was conducted on each of the 23 measures, controlling for age, gender, and education, and odds ratios are reported.

As with all survey data, several limitations of these results should be taken into consideration. The data are self-reported and in many cases the validity of the measure on the BRFSS has not been measured. Households without telephones (or only cell phones) were not included. In Wyoming, the rate of phone coverage is generally high, but this may vary for some race/ethnicity populations. More and more people are using cell phones only and have no landline telephone. These people were also excluded from the survey during this time period. Phone coverage may be an issue for deriving accurate estimates among lower income persons, certain demographic groups, or when the item of interest is likely to be much higher among those with no phones (such as lack of health insurance). The sample frame for BRFSS also excludes adults living permanently or temporarily in institutions or group homes, including prisons, nursing homes, and dormitories among others. Declining response rates for telephone surveys are another concern. Median BRFSS response rates nationally have declined from about 70% ten years ago to less than 50% in recent years. Wyoming CASRO response rates were 60% for 2003 and 54% for 2007. Potential error (or bias) results if the adults not surveyed differ appreciably from those that do participate. However, the BRFSS data have been shown to be comparable to other surveys with higher response rates. While many types of errors cannot easily be measured for a particular survey, the sampling error, which results because only a fraction of the target population answers the questions, can be estimated. The confidence interval estimates the sampling error and provides an indication of the precision of the survey results.

Inquiries. Further information on this analysis or about BRFSS can be obtained by contacting Menlo Futa, BRFSS Coordinator, Wyoming Department of Health, Qwest Building Suite 510, 6101 Yellowstone Road, Cheyenne, WY 82002 (307-777-6012), menlo.futa@health.wyo.gov.

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¹ Nelson DE, Holtzman D, Bolen J, Stanwyck C. Reliability and Validity of Measures from the Behavioral Risk Factor Surveillance System (BRFSS). Int J Public Health 2001;46: 1-42).

III. Results

A. Demographics

Many BRFSS indicators vary greatly by gender, age group, income group, educational level, employment status, and other demographic characteristics. To better understand the results of this analysis, it is important to consider the demographic differences among the five race/ethnicity groups. The demographic characteristics of the five race/ethnicity groups as obtained from the 2003-2007 BRFSS are presented in Table 1. All of the minority groups in Wyoming are much younger than non-Hispanic whites. Education and income levels are much higher for Asians and whites compared to other groups. Unemployment rates are high among American Indians, blacks, and Hispanics. Blacks are much more likely to be male and live in the two most densely populated counties of Laramie and Natrona (data not shown).

Table 1: Demographics of Sample, Wyoming 2003-2007 BRFSS

Demographic Characteristic	White (non- Hispanic)	Black	Hispanic	Asian	American Indian	Total
Total N	22,404	102	1,056	92	348	24,002
Percent	91.9	0.5	5.3	0.4	1.9	100
	Weighted	d percentage	e for each race l	by demograp	hic characte	eristic
Gender	J	_		•		
Male	49.7	62.8	51.1	45.4	51.9	49.9
Female	50.3	37.2	48.9	54.6	48.1	50.1
P value						0.284
Age						
18-39	36.4	51.9	56.1	62.8	54.8	38.0
40-54	31.2	27.7	25.8	20.8	27.8	30.8
55+	32.4	20.4	18.0	16.4	17.3	31.3
P value						< 0.0001
Education						
< High school	6.2	14.9	19.5	9.8	19.3	7.2
High school	32.9	31.9	40.9	20.4	39.4	33.3
Some college	31.8	38.6	26.5	32.5	31.8	31.6
College grad	29.2	14.7	13.2	37.3	9.5	27.9
P value						< 0.0001
Income						
<\$25,000	21.0	40.9	38.9	40.0	53.6	22.8
\$25-50,000	33.0	33.5	33.5	23.5	28.2	32.9
>\$50,000	46.0	25.6	27.6	36.6	18.2	44.4
P value						< 0.0001
Employment						
Employed	67.0	65.5	65.1	74.0	61.8	66.8
Out of work	5.7	14.8	12.7	4.3	21.4	6.4
Retired	15.5	14.1	7.9	6.6	4.6	14.9
Other	11.8	5.6	14.3	15.1	12.2	11.9
P value						< 0.0001

B. Race/Ethnicity Estimates by Health Indicator

Table description and use. The major purpose of this analysis is to identify disparities by race/ethnicity for important health indicators measured by BRFSS. Each table in this section presents the prevalence (percentage) of a BRFSS indicator for each of the five race/ethnicity groups, the 95% confidence intervals for the prevalence estimates, the number of surveyed respondents with the risk factor, and the total sample size on which the prevalence estimate is based. The 95% confidence interval defines the margin of error for the prevalence estimate and is largely based on sample size. Because the sample sizes for Asians, blacks, and American Indians are small, the margins of error are large for these groups and appropriate care should be taken when interpreting results for these groups. P values are included below the prevalence estimates for the five race/ethnicity groups. The P value is from a Chi square statistical test of association measuring the likelihood that the prevalence estimates for the five race/ethnicity groups could have come about if there was no difference between the groups for a particular indicator. A P value of 0.05 or less indicates that a statistically significant difference exists between at least two of the five groups. The tables also include results for the combined group of Asians, blacks, and others (termed "other"); the total of all groups for all years combined; the most recent Wyoming one year estimate; the most recent U.S. median; and the national Healthy People 2010 objective for that indicator if one exists. The symbol "---" indicates that no data are available or the sample was too small to calculate a percentage or confidence interval. Highlighting indicates groups that have significantly worse rates when compared with whites based on having a P value <0.05 and non-overlapping confidence intervals. The chart below each table presents the same information. Dark bars identify groups with significantly worse rates than whites. Light bars identify groups with significantly better rates than whites.

List of <u>Health Indicator Tables and Charts:</u>

Section A: Risk Factors

- 2. Overweight or Obese
- 3. Obesity
- 4. Very Obese (BMI ≥35)
- 5. No Leisure Time Physical Activity
- 6. Does Not Meet Physical Activity Recommendations
- 7. Inadequate Fruit and Vegetable Consumption
- 8. Any Alcohol in Past Month
- 9. Binge Drinking
- 10. Heavy Drinking
- 11. Extreme Drinking
- 12. Drinking and Driving
- 13. Current Cigarette Smoking
- 14. Current Smokeless Tobacco Use
- 15. Exposed to Secondhand Smoke at Work
- 16. No Worksite Policy Prohibiting Smoking
- 17. No Rule Prohibiting Smoking in the Home
- 18. Any of 6 CVD Risk Factors
- 19. 3+ CVD Risk Factors

- 20. Does Not Always Wear Seatbelts
- 21. Sunburn
- 22. Frequent Sunburn

Section B: Chronic Disease Conditions

- 23. Diabetes
- 24. No Awareness of Community Diabetes Activities
- 25. Current Asthma
- 26. Arthritis
- 27. High Blood Pressure
- 28. High Cholesterol
- 29. Cardiovascular Disease (CVD)
- 30. Heart Disease
- 31. Stroke

Section C: Lack of Health Care Access

- 32. No Health Care Coverage
- 33. No Personal Doctor
- 34. Unable to Get Needed Care

Section D: Nonuse of Preventive Health Services

- 35. No Mammogram in Past 2 Years (Women Age 40+)
- 36. No Pap Smear within 3 Years (Women w/ Intact Cervix)
- 37. No Cholesterol Check in Past 5 Years
- 38. No Flu Shot in Past 12 Months, Age 50+
- 39. Never Had Sigmoidoscopy/Colonoscopy, Age 50+
- 40. No Blood Stool Test in Past 2 Years, Age 50+
- 41. Never Tested for HIV, Age 18-64
- 42. No Recent Check-up
- 43. Not Up-to-date Age 50+

Section E: Oral Health

- 44. No Dental Visit in Past Year
- 45. Lost 6 or More Teeth, Age 45+
- 46. Lost Any Teeth
- 47. No Dental Cleaning in Past Year

Section F: General Health Measures

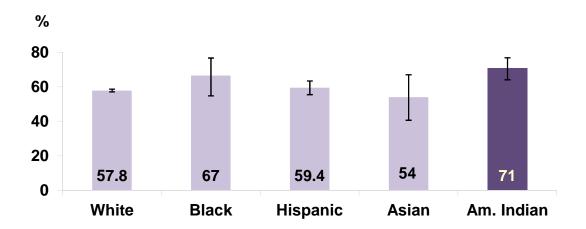
- 48. Fair or Poor Health Status
- 49. Frequent Mental Distress
- 50. Frequent Physical Distress
- 51. Frequent Activity Limitation
- 52. Disability (new definition)
- 53. Dissatisfaction with Life
- 54. Rarely Get Needed Social or Emotional Support

Section A: Risk Factors

Table /Chart 2: Overweight or Obese* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	57.8	57.0-58.6	12,528	21,577
Black	66.5	54.7-76.6	63	99
Hispanic	59.4	55.4-63.3	620	1,003
Asian/Pacific Islander	54.0	40.6-66.9	41	89
American Indian	70.7	64.0-76.7	230	335
P value	0.016			
"Other" (Bl, Asian, other)	56.0	46.0-65.5	179	315
5 year total, all races	58.1	57.3-58.9	13,557	23,230
WY 2007	62.2	60.4-63.9	3,790	5,945
US Median 2007	63.0			
HP 2010 Objective	≤40			

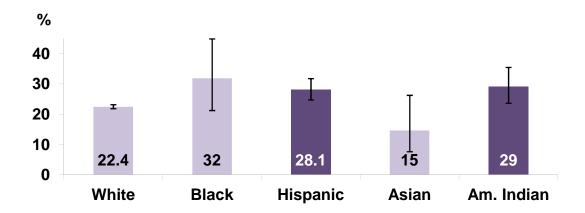
^{*} Wyoming adults with body mass index (weight in kg/height in meters squared) ≥ 25.0 .



Table/Chart 3: Obesity* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	22.4	21.8-23.1	4,913	21,577
Black	31.8	21.2-44.8	30	99
Hispanic	28.1	24.7-31.7	285	1,003
Asian/Pacific Islander	14.6	7.6-26.2	12	89
American Indian	29.1	23.6-35.4	112	335
P value	0.0003			
"Other" (Bl, Asian, other)	24.4	18.1-32.0	76	315
5 year total, all races	22.9	22.2-23.5	5,386	23,230
WY 2007	24.5	23.1-25.9	1,501	5,945
US Median 2007	26.3			
HP 2010 Objective	≤15			

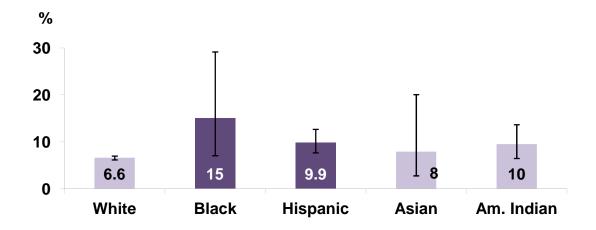
^{*} Wyoming adults with body mass index (weight in kg/height in meters squared) ≥ 30.0 .



Table/Chart 4: Very Obese (BMI≥ 35)* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	6.6	6.2-7.0	1,504	21,577
Black	15.1	7.1-29.2	11	99
Hispanic	9.9	7.7-12.7	93	1,003
Asian/Pacific Islander	7.9	2.8-20.1	5	89
American Indian	9.5	6.5-13.7	33	335
P value	0.002			
"Other" (Bl, Asian, other)	11.5	6.9-18.7	27	315
5 year total, all races	6.9	6.5-7.3	1,657	23,230
Wyoming 2007	8.0	7.2-8.9	486	5,945
US Median 2007	9.4			
HP 2010 Objective				

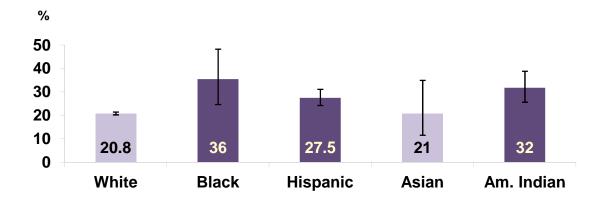
^{*} Wyoming adults with body mass index (weight in kg/height in meters squared) ≥ 35.0



Table/Chart 5: No Leisure Time Physical Activity* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	20.8	20.2-21.4	5,019	22,370
Black	35.5	24.6-48.2	36	102
Hispanic	27.5	24.2-31.1	301	1,056
Asian/Pacific Islander	20.9	11.5-34.9	18	92
American Indian	31.8	25.6-38.8	110	347
P value	< 0.0001			
"Other" (Bl, Asian, other)	23.3	17.5-30.3	85	325
5 year total, all races	21.4	20.8-22.0	5,515	24,098
Wyoming 2007	21.7	20.4-23.1	1,420	6,149
US Median 2007	22.6			
HP 2010 Objective	≤20			

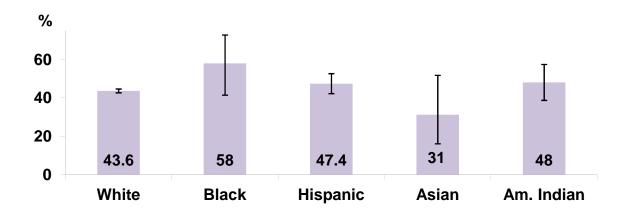
^{*} Wyoming adults reporting not participating in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise other than their regular job during the past month.



Table/Chart 6: Does Not Meet Physical Activity Recommendations* by Race/Ethnicity, 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	43.6	42.6-44.6	6,046	13,114
Black	57.9	41.4-72.7	34	58
Hispanic	47.4	42.2-52.6	283	581
Asian/Pacific Islander			17	48
American Indian	48.0	38.7-57.4	93	202
P value	0.143			
"Other" (Bl, Asian, other)	38.4	27.6-50.5	84	180
3 year total, all races	43.8	42.8-44.8	6,506	14,077
Wyoming 2007	43.3	41.6-45.0	2,608	5,709
US Median 2007	50.5			
HP 2010 Objective	≤50			

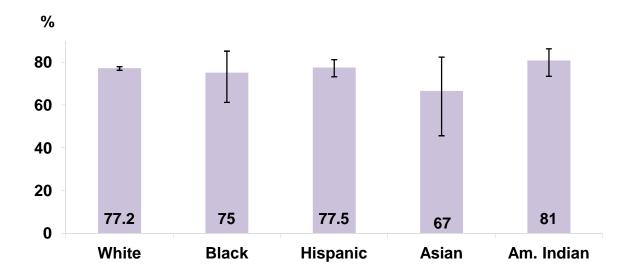
^{*} Wyoming adults not meeting either the recommendation to engage in moderate activities for 30 minutes a day at least five times a week, or to engage in vigorous activities for 20 minutes a day at least three times a week.



Table/Chart 7: Inadequate Fruit and Vegetable Consumption* by Race/Ethnicity, Wyoming 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	77.2	76.3-78.0	10,475	13,846
Black	75.1	61.3-85.3	46	64
Hispanic	77.5	73.3-81.3	470	617
Asian/Pacific Islander	66.6	45.7-82.5	34	49
American Indian	80.8	73.5-86.4	167	217
P value	0.521			
"Other" (Bl, Asian, other)	62.5	46.8-75.9	132	191
3 year total, all races	77.0	76.2-77.9	11,244	14,871
Wyoming 2007	75.6	74.0-77.1	4,482	6,031
US Median 2007	75.6			
HP 2010 Objective	≤50			

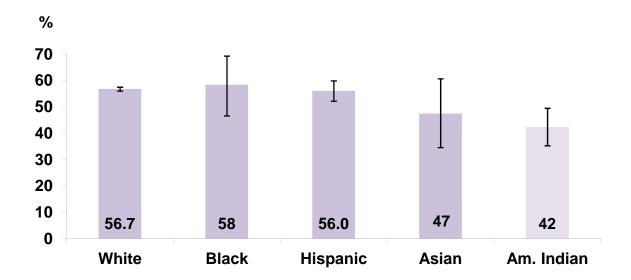
^{*} Wyoming adults reporting consuming fruits and vegetables less than 5 times per day.



Table/Chart 8: Any Alcohol in Past Month* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	56.7	55.9-57.4	12,205	22,339
Black	58.3	46.5-69.2	52	102
Hispanic	56.0	52.1-59.8	550	1,051
Asian/Pacific Islander	47.4	34.5-60.6	42	91
American Indian	42.2	35.2-49.4	148	347
P value	0.0004			
"Other" (Bl, Asian, other)	53.8	44.3-63.0	170	324
5 year total, all races	56.3	55.5-57.1	13,073	24,061
Wyoming 2007	55.4	53.7-57.0	3,257	6,143
US Median 2007	54.8			
HP 2010 Objective				

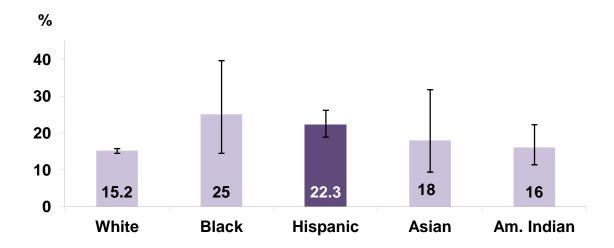
^{*} Wyoming adults reporting having had at least one alcoholic drink in the past 30 days.



Table/Chart 9: Binge Drinking* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	15.2	14.5-15.8	2,688	22,095
Black	25.1	14.5-39.7	17	101
Hispanic	22.3	18.9-26.2	171	1,036
Asian/Pacific Islander	18.0	9.4-31.8	11	89
American Indian	16.1	11.4-22.3	49	339
P value	0.0002			
"Other" (Bl, Asian, other)	20.5	14.5-28.1	49	320
5 year total, all races	15.6	15.0-16.3	2,957	23,790
Wyoming 2007	15.2	13.9-16.6	691	6,033
US Median 2007	13.7			
HP 2010 Objective	≤13.4			

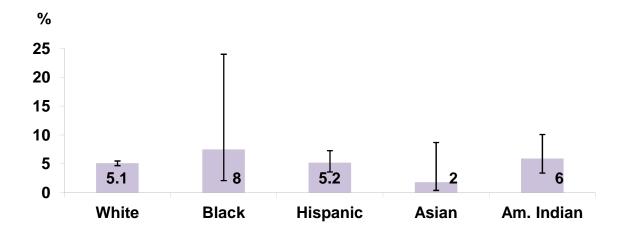
^{*} Wyoming adults reporting having 5 or more drinks on an occasion at least one time in the past month. Note that in order to measure this consistently, the "old" definition of binge drinking is used for all years, rather than the one instituted in 2006 that defines binge drinking for women as having 4 or more drinks on an occasion.



Table/Chart 10: Heavy Drinking* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	5.1	4.7-5.5	1,069	22,034
Black	7.5	2.1-24.0	4	101
Hispanic	5.2	3.6-7.3	44	1,039
Asian/Pacific Islander	1.8	0.4-8.7	2	88
American Indian	5.9	3.4-10.1	21	337
P value	0.736			
"Other" (Bl, Asian, other)	4.7	2.2-9.6	12	319
5 year total, all races	5.1	4.8-5.5	1,146	23,729
Wyoming 2007	4.9	4.2-5.8	269	6,036
US Median 2007	5.2			
HP 2010 Objective				

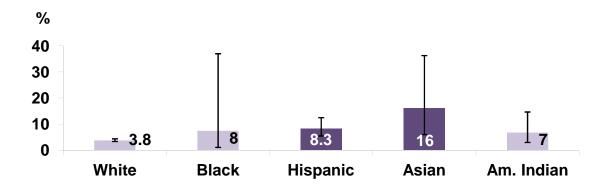
^{*} Wyoming men reporting drinking more than 60 drinks of alcohol in the past 30 days, or women reporting drinking more than 30 drinks of alcohol in the past 30 days.



Table/Chart 11: Extreme Drinking* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	3.8	3.4-4.4	345	14,495
Black	7.5	1.1-37.0	1	69
Hispanic	8.3	5.5-12.5	30	672
Asian/Pacific Islander	16.1	6.0-36.3	4	56
American Indian	6.8	3.0-14.7	12	222
P value	0.0008			
"Other" (Bl, Asian, other)	9.0	4.3-18.1	8	195
3 year total, all races	4.2	3.7-4.8	395	15,584
Wyoming 2007	4.5	3.7-5.5	154	5,966
US Median 2007	3.7			
HP 2010 Objective				

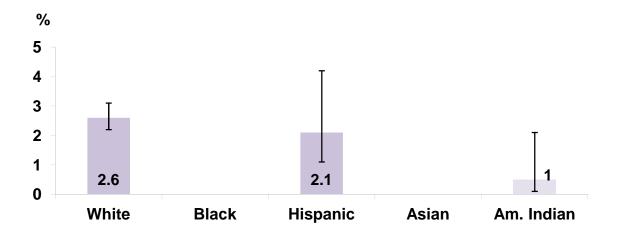
^{*} Wyoming adults reporting that the largest number of alcoholic drinks they had on any occasion in the past 30 days was 10 or more.



Table/Chart 12: Drinking and Driving* by Race/Ethnicity, 2004 and 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	2.6	2.2-3.1	192	8,340
Black			3	38
Hispanic	2.1	1.1-4.2	11	421
Asian/Pacific Islander			1	42
American Indian	0.5	0.1-2.1	2	125
P value	0.0018			
"Other" (Bl, Asian, other)	7.1	2.3-19.7	6	132
2 year total, all races	2.6	2.2-3.1	211	9,018
Wyoming 2006	2.6	2.0-3.2	117	4,945
US Median 2006	2.6			
HP 2010 Objective				

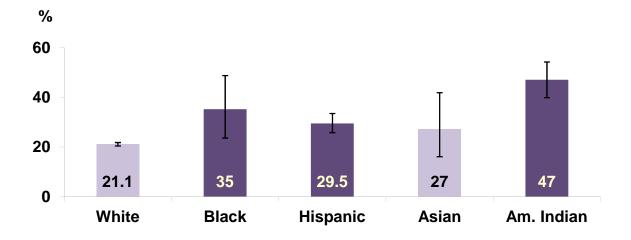
^{*} Wyoming adults reporting driving when they have had perhaps too much to drink.



Table/Chart 13: Current Cigarette Smoking* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	21.1	20.4-21.8	4,508	22,344
Black	35.2	23.6-48.8	28	99
Hispanic	29.5	25.8-33.5	269	1,047
Asian/Pacific Islander	27.1	16.1-41.9	20	92
American Indian	47.1	39.9-54.3	161	346
P value	< 0.0001			
"Other" (Bl, Asian, other)	31.3	24.0-39.6	89	322
5 year total, all races	22.2	21.5-22.9	5,027	24,059
Wyoming 2007	22.1	20.7-23.6	1,233	6,139
US Median 2007	19.8			
HP 2010 Objective	≤12			

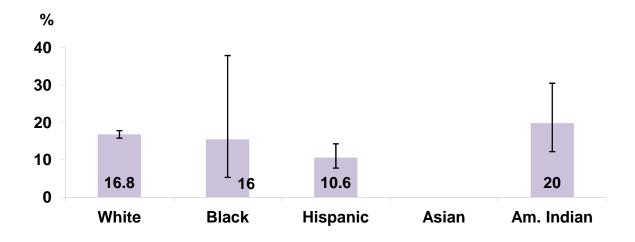
^{*} Wyoming adults reporting having smoked at least 100 cigarettes in their lifetime and are currently smoking everyday or some days.



Table/Chart 14: Current Smokeless Tobacco Use among Males* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	16.8	15.8-17.8	1,281	8,727
Black	15.5	5.3-37.9	4	51
Hispanic	10.6	7.8-14.3	49	399
Asian/Pacific Islander			3	30
American Indian	19.8	12.2-30.5	24	150
P value	0.167			
"Other" (Bl, Asian, other)	13.3	7.5-22.6	16	150
5 year total, all races	16.5	15.6-17.5	1,370	9,426
Wyoming 2007	17.6	15.5-19.9	328	2,342
US Median 2004	7.8**			
HP 2010 Objective	≤0.4			

^{*} Wyoming men reporting currently using smokeless tobacco everyday or some days.

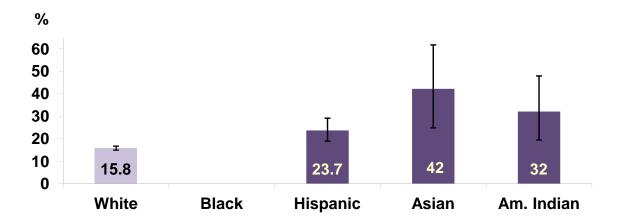


^{**} Based on 13 states asking other tobacco products optional module in 2004.

Table/Chart 15: Exposed to Secondhand Smoke at Work* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	15.8	15.0-16.8	1,400	9,670
Black			13	46
Hispanic	23.7	19.0-29.2	91	448
Asian/Pacific Islander	42.2	24.9-61.8	14	50
American Indian	32.1	19.5-48.0	29	117
P value	< 0.0001			
"Other" (Bl, Asian, other)	30.1	21.1-40.9	37	155
5 year total, all races	16.7	15.8-17.6	1,557	10,390
Wyoming 2007	15.7	13.8-17.8	331	2,534
US Median				
HP 2010 Objective				

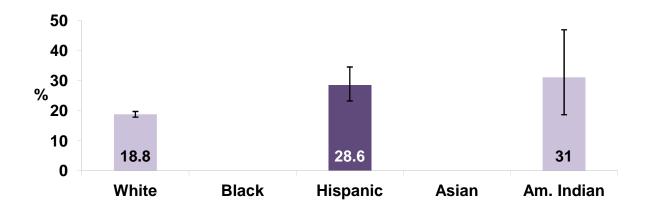
^{*} Wyoming adults who work primarily indoors reporting they are exposed to secondhand smoke sometimes or frequently (from choices of never, seldom, sometimes, and frequently).



Table/Chart 16: No Worksite Policy Prohibiting Smoking* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	18.8	17.9-19.8	1,609	9,694
Black			9	46
Hispanic	28.6	23.3-34.6	103	442
Asian/Pacific Islander			14	46
American Indian	31.1	18.7-47.0	30	119
P value	0.0003			
"Other" (Bl, Asian, other)	28.7	20.0-39.4	36	151
5 year total, all races	19.6	18.7-20.6	1,778	10,406
Wyoming 2007	18.4	16.3-20.8	376	2,540
US Median 2006	15.2**			
HP 2010 Objective	0			

^{*} Wyoming adults who work primarily indoors reporting that their place of work's official smoking policy for work areas allows smoking in some work areas, in all work areas, or there is no official policy for work areas.

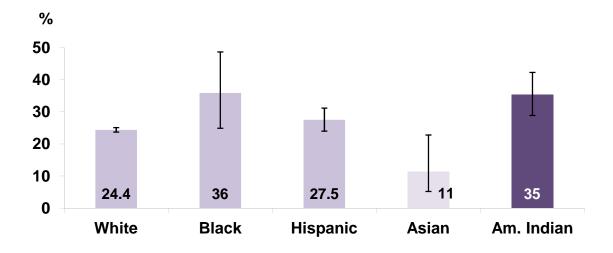


^{**} Based on 19 states asking tobacco indicators optional module.

Table/Chart 17: No Rule Prohibiting Smoking in the Home* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	24.4	23.7-25.1	5,666	21,638
Black	35.9	24.9-48.7	35	99
Hispanic	27.5	24.0-31.2	270	989
Asian/Pacific Islander	11.3	5.2-22.8	12	84
American Indian	35.3	28.9-42.3	124	326
P value	0.0001			
"Other" (Bl, Asian, other)	27.1	20.4-35.0	92	310
5 year total, all races	24.8	24.1-25.5	6,152	23,263
Wyoming 2007	21.8	20.5-23.2	1,381	5,802
US Median 2006	25.0**			
HP 2010 Objective				

^{*} Wyoming adults reporting that smoking is allowed inside the home in some places or at some times, is allowed anywhere inside the home, or they have no rules about smoking inside the home.

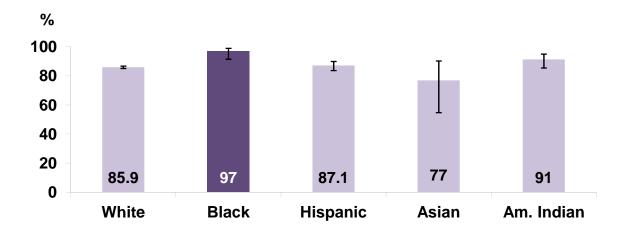


^{**} Based on 19 states asking tobacco indicators optional module.

Table/Chart 18: Any of 6 CVD Risk Factors* by Race/Ethnicity, 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	85.9	85.1-86.7	12,319	14,022
Black	96.9	91.4-98.9	60	64
Hispanic	87.1	83.6-89.9	549	628
Asian/Pacific Islander	76.9	54.7-90.2	41	49
American Indian	91.3	85.4-95.0	203	221
P value	0.048			
"Other" (Bl, Asian, other)	81.5	58.6-93.2	172	191
3 year total, all races	86.0	85.2-86.8	13,243	15,062
Wyoming 2007	86.1	84.6-87.4	5,465	6,160
US Median 2007	87.0			
HP 2010 Objective				

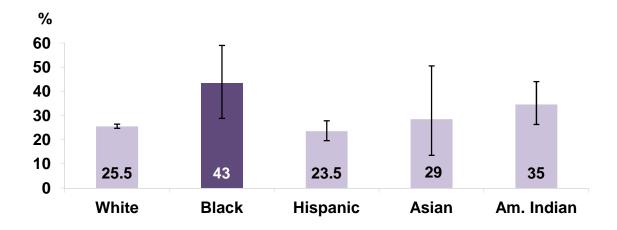
^{*} Wyoming adults reporting any of the 6 major modifiable risk factors for cardiovascular disease: smoking, overweight, high blood pressure, high cholesterol, diabetes, or not meeting recommendations for physical activity.



Table/Chart 19: 3+ CVD Risk Factors* by Race/Ethnicity, 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	25.5	24.7-26.4	4,084	14,022
Black	43.3	28.8-59.0	26	64
Hispanic	23.5	19.6-27.8	173	628
Asian/Pacific Islander	28.5	13.5-50.5	12	49
American Indian**	34.6	26.3-44.0	86	221
P value	0.025			
"Other" (Bl, Asian, other)	29.6	20.6-40.5	64	191
3 year total, all races	25.7	24.9-26.5	4,407	15,062
Wyoming 2007	28.4	27.1-29.8	2,050	6,160
US Median 2007	29.7			
HP 2010 Objective			-	

^{*} Wyoming adults reporting 3 or more of the 6 major modifiable risk factors for cardiovascular disease: smoking, overweight, high blood pressure, high cholesterol, diabetes, or not meeting recommendations for physical activity.

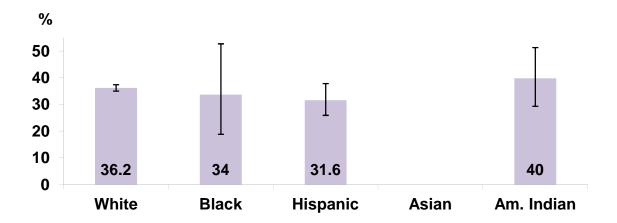


^{**} Although CI overlaps slightly with CI for whites, possible significance is noted.

Table/Chart 20: Does Not Always Wear Seatbelts* by Race/Ethnicity, 2006-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	36.2	35.0-37.4	3,330	9,917
Black	33.7	18.8-52.7	17	52
Hispanic	31.6	25.9-37.8	127	439
Asian/Pacific Islander			8	39
American Indian	39.8	29.3-51.3	52	157
P value	0.602			
"Other" (Bl, Asian, other)	41.0	24.6-59.6	40	139
2 year total, all races	36.1	34.9-37.3	3,549	10,652
Wyoming 2007	35.4	33.7-37.2	1,892	5,809
US Median 2006	20.1			
HP 2010 Objective	≤8			

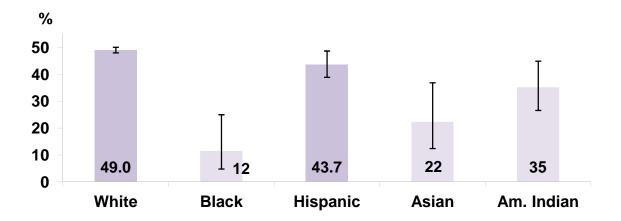
^{*} Wyoming adults who ever ride in a car reporting not always wearing a seatbelt. Asked as state added question in Wyoming in 2007.



Table/Chart 21: Sunburn* by Race/Ethnicity, 2003, 2004, 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	49.0	48.0-50.1	5,113	11,852
Black	11.5	4.8-25.0	6	57
Hispanic	43.7	38.9-48.7	219	583
Asian/Pacific Islander	22.3	12.4-36.9	12	51
American Indian	35.2	26.6-44.9	56	180
P value	< 0.0001			
"Other" (Bl, Asian, other)	23.2	17.3-30.5	46	193
3 year total, all races	48.1	47.1-49.1	5,434	12,808
Wyoming 2006	48.4	46.7-50.1	1,955	4,794
US Median 2004	36.0			
HP 2010 Objective				

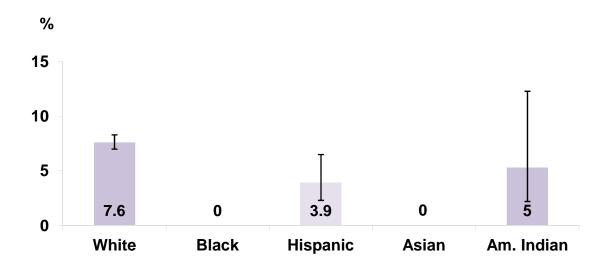
^{*} Wyoming adults reporting a sunburn in the past 12 months. State added question in 2006.



Table/Chart 22: Frequent Sunburn* by Race/Ethnicity, 2003, 2004, 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	7.6	7.0-8.3	700	11,749
Black	0		0	57
Hispanic	3.9	2.3-6.5	19	578
Asian/Pacific Islander	0		0	51
American Indian	5.3	2.2-12.3	8	180
P value	0.013			
"Other" (Bl, Asian, other)	2.2	0.9-5.2	5	192
3 year total, all races	7.3	6.7-7.9	732	12,699
Wyoming 2006	7.5	6.5-8.7	260	4,740
US Median 2004	3.6			
HP 2010 Objective				

^{*} Wyoming adults reporting 6 or more sunburns in the past 12 months. State added question in 2006.

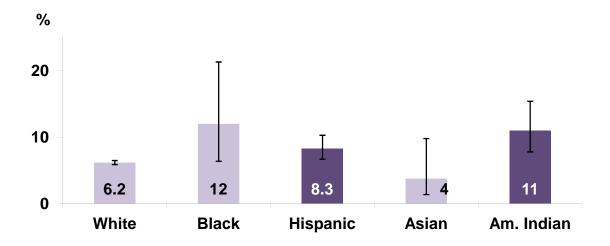


Section B: Chronic Disease Conditions

Table/Chart 23: Diabetes* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	6.2	5.9-6.5	1,681	22,392
Black	12.0	6.4-21.3	13	102
Hispanic	8.3	6.7-10.3	113	1,056
Asian/Pacific Islander	3.8	1.4-9.8	6	91
American Indian	11.0	7.8-15.4	48	346
P value	0.0001			
"Other" (Bl, Asian, other)	7.9	5.2-11.9	32	324
5 year total, all races	6.4	6.1-6.7	1,874	24,118
Wyoming 2007	7.0	6.3-7.7	560	6,156
US Median 2007	8.0			
HP 2010 Objective	≤2.5			

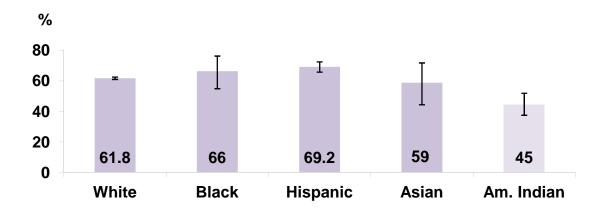
^{*} Wyoming adults who report they were told by a doctor they have diabetes; women who were only told during pregnancy are counted as not having diabetes.



Table/Chart 24: No Awareness of Community Diabetes Activities* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	61.8	61.0-62.5	12,450	21,585
Black	66.4	54.9-76.3	63	100
Hispanic	69.2	65.8-72.5	637	989
Asian/Pacific Islander	58.8	44.4-71.8	48	83
American Indian	44.6	37.5-51.9	162	324
P value	< 0.0001			
"Other" (Bl, Asian, other)	69.1	61.3-75.9	195	310
5 year total, all races	62.0	61.2-62.7	13,444	23,208
Wyoming 2007	59.7	58.1-61.3	3,191	5,814
US Median				
HP 2010 Objective				

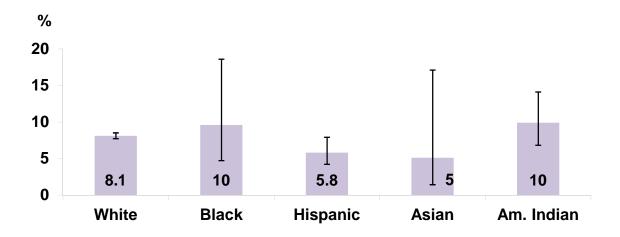
^{*} Wyoming adults reporting not hearing about any activities to address the problem of diabetes in their community, includes those responding "don't know."



Table/Chart 25: Current Asthma* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	8.1	7.7-8.5	1,831	22,279
Black	9.6	4.7-18.6	10	102
Hispanic	5.8	4.2-7.9	66	1,050
Asian/Pacific Islander	5.1	1.4-17.1	5	91
American Indian	9.9	6.8-14.1	43	346
P value	0.164			
"Other" (Bl, Asian, other)	7.4	4.5-12.0	25	323
5 year total, all races	8.0	7.6-8.4	1,965	23,998
Wyoming 2007	8.1	7.2-9.1	497	6,127
US Median 2007	8.4			
HP 2010 Objective				

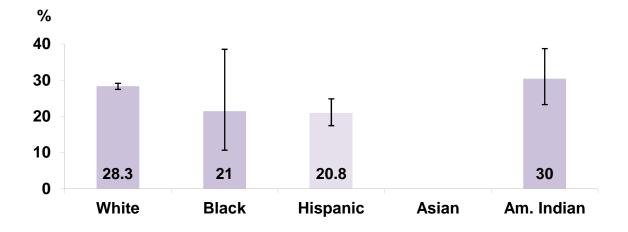
^{*} Wyoming adults reporting having ever been told by a doctor they have asthma and report they still have asthma.



Table/Chart 26: Arthritis* by Race/Ethnicity, 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	28.3	27.4-29.1	4,645	13,839
Black	21.4	10.6-38.5	16	64
Hispanic	20.8	17.4-24.8	166	619
Asian/Pacific Islander			15	48
American Indian	30.4	23.2-38.7	80	218
P value	0.027			
"Other" (Bl, Asian, other)	21.8	14.7-31.0	53	190
3 year total, all races	27.8	27.0-28.7	4,944	14,866
Wyoming 2007	27.9	26.5-29.2	2,094	6,045
US Median 2007	27.5			
HP 2010 Objective				

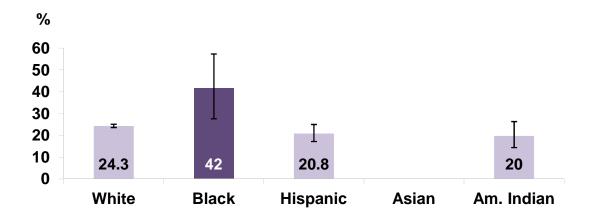
^{*} Wyoming adults reporting they have been told by a doctor that they have arthritis.



Table/Chart 27: High Blood Pressure* by Race/Ethnicity, Wyoming 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	24.3	23.6-25.1	4,043	14,008
Black	41.7	27.6-57.3	29	64
Hispanic	20.8	17.2-25.0	146	627
Asian/Pacific Islander			14	49
American Indian	19.7	14.4-26.3	59	221
P value	0.0223			
"Other" (Bl, Asian, other)	28.5	20.1-38.7	72	191
3 year total, all races	24.1	23.4-24.9	4,320	15,047
Wyoming 2007	25.1	23.9-26.4	1,918	6,151
US Median 2007	27.8			
HP 2010 Objective	≤16			

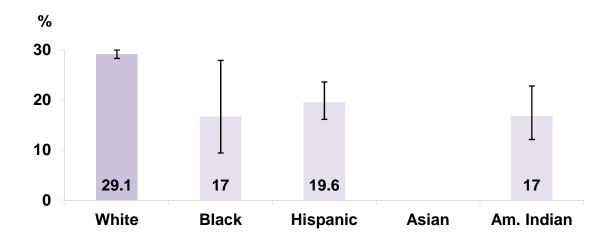
^{*} Wyoming adults reporting having ever been told by a doctor, nurse, or other health professional that they have high blood pressure. Women who were only told this during pregnancy are counted as not having high blood pressure.



Table/Chart 28: High Cholesterol* by Race/Ethnicity, Wyoming 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	29.1	28.3-30.0	4,647	13,716
Black	16.7	9.4-27.9	15	64
Hispanic	19.6	16.1-23.6	145	615
Asian/Pacific Islander			17	48
American Indian	16.8	12.1-22.8	54	214
P value	< 0.0001			
"Other" (Bl, Asian, other)	17.5	11.8-25.2	50	188
3 year total, all races	28.2	27.4-29.0	4,896	14,733
Wyoming 2007	29.4	28.0-30.7	2,179	6,035
US Median 2007	29.4			
HP 2010 Objective				

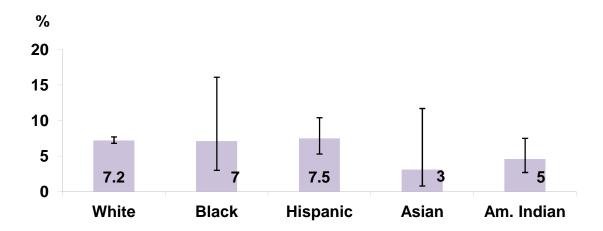
^{*} Wyoming adults reporting having ever been told by a doctor, nurse, or other health professional that their blood cholesterol is high. Denominator includes those who report not having their blood cholesterol checked.



Table/Chart 29: Cardiovascular Disease (CVD)* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	7.2	6.8-7.7	1,351	14,767
Black	7.1	3.0-16.1	6	71
Hispanic	7.5	5.3-10.4	59	690
Asian/Pacific Islander	3.1	0.8-11.7	3	61
American Indian	4.6	2.7-7.5	19	234
P value	0.383			
"Other" (Bl, Asian, other)	6.2	3.7-10.1	19	202
3 year total, all races	7.2	6.8-7.6	1,448	15,893
Wyoming 2007	7.0	6.4-7.7	567	6,105
US Median 2007	8.0			
HP 2010 Objective				

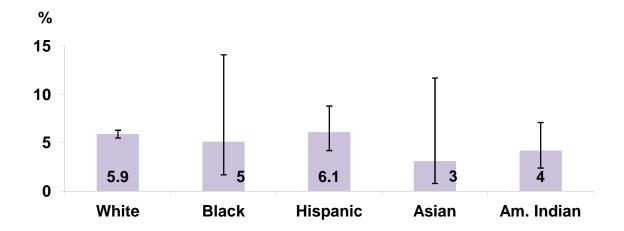
^{*} Wyoming adults reporting having coronary heart disease, angina, a heart attack, or stroke.



Table/Chart 30: Heart Disease* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	5.9	5.5-6.3	1,096	14,781
Black	5.1	1.7-14.1	4	71
Hispanic	6.1	4.2-8.8	50	689
Asian/Pacific Islander	3.1	0.8-11.7	3	61
American Indian	4.2	2.4-7.1	17	234
P value	0.681			
"Other" (Bl, Asian, other)	4.3	2.4-7.8	15	202
3 year total, all races	5.9	5.5-6.3	1,178	15,906
Wyoming 2007	5.7	5.1-6.3	453	6,105
US Median 2007	6.4			
HP 2010 Objective				

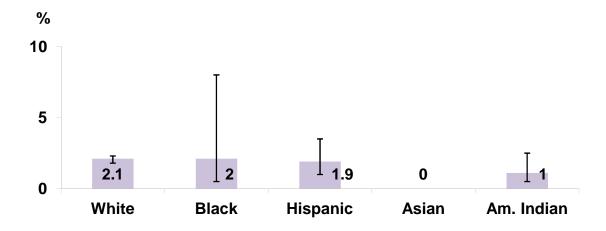
^{*} Wyoming adults reporting coronary heart disease, angina, or a heart attack



Table/Chart 31: Stroke* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	2.1	1.8-2.3	401	14,856
Black	2.1	0.5-8.0	2	69
Hispanic	1.9	1.0-3.5	15	695
Asian/Pacific Islander	0		0	61
American Indian	1.1	0.5-2.5	6	239
P value	0.624			
"Other" (Bl, Asian, other)	1.9	0.8-4.3	6	200
3 year total, all races	2.0	1.8-2.3	428	15,990
Wyoming 2007	2.0	1.7-2.3	177	6,143
US Median 2007	2.6			
HP 2010 Objective				

^{*} Wyoming adults reporting having had a stroke.

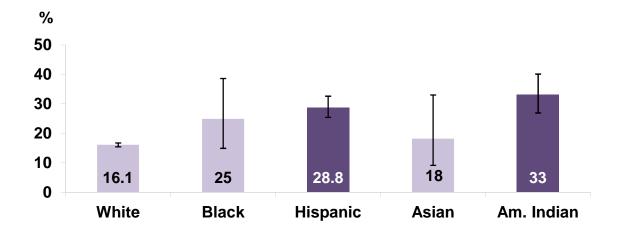


Section C: Lack of Health Care Access

Table/Chart 32: No Health Care Coverage* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	16.1	15.4-16.7	3,016	22,335
Black	24.9	14.9-38.6	19	101
Hispanic	28.8	25.4-32.6	258	1,051
Asian/Pacific Islander	18.2	9.1-33.0	15	90
American Indian	33.2	26.9-40.1	110	344
P value	< 0.0001			
"Other" (Bl, Asian, other)	23.7	17.0-32.1	61	321
5 year total, all races	17.2	16.5-17.8	3,445	24,051
Wyoming 2007	15.9	14.6-17.4	741	6,135
US Median 2007	14.2			
HP 2010 Objective	0			

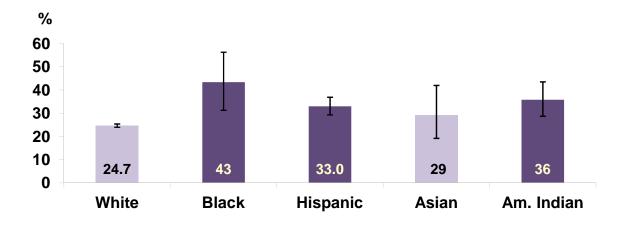
^{*} Wyoming adults who report they have no health care plan.



Table/Chart 33: No Personal Doctor* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	24.7	24.0-25.4	4,669	22,338
Black	43.4	31.3-56.3	32	102
Hispanic	33.0	29.3-36.9	294	1,049
Asian/Pacific Islander	29.3	19.2-42.0	25	91
American Indian	35.8	28.7-43.5	103	347
P value	< 0.0001			
"Other" (Bl, Asian, other)	40.7	31.2-51.1	97	324
5 year total, all races	25.6	24.9-26.3	5,163	24,058
Wyoming 2007	26.1	24.5-27.8	1,261	6,139
US Median 2007	18.4			
HP 2010 Objective	≤4			

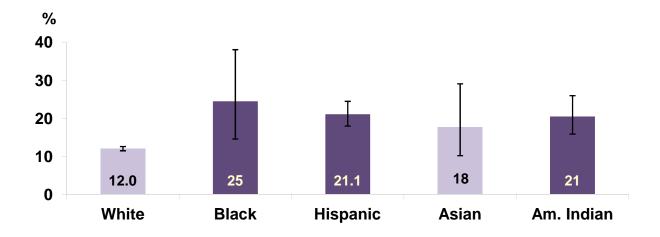
^{*} Wyoming adults who report they do not have one or more persons they think of as their personal doctor or health care provider.



Table/Chart 34: Unable to Get Needed Care* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	12.0	11.5-12.6	2,527	22,367
Black	24.5	14.6-38.1	19	102
Hispanic	21.1	18.0-24.5	206	1,054
Asian/Pacific Islander	17.7	10.2-29.1	18	92
American Indian	20.5	15.9-26.0	83	347
P value	< 0.0001			
"Other" (Bl, Asian, other)	27.2	17.7-39.4	62	325
5 year total, all races	12.9	12.4-13.5	2,878	24,093
Wyoming 2007	12.3	11.1-13.7	641	6,152
US Median 2007	12.3			
HP 2010 Objective				

^{*} Wyoming adults reporting they needed to see a doctor but couldn't because of the cost at least one time in the past 12 months.

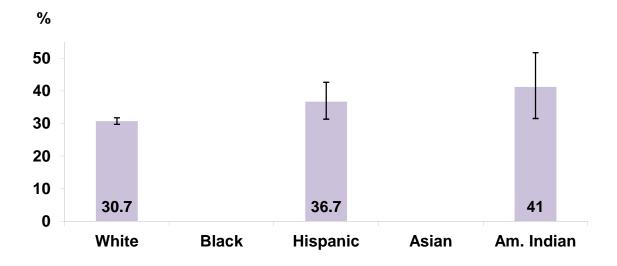


Section D: Nonuse of Preventive Health Services

Table/Chart 35: No Mammogram in Past 2 Years (Women Age 40+)* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	30.7	29.7-31.7	2,918	9,773
Black			7	24
Hispanic	36.7	31.3-42.6	128	347
Asian/Pacific Islander			11	34
American Indian	41.2	31.5-51.7	48	116
P value	0.0223			
"Other" (Bl, Asian, other)	35.8	26.0-46.9	34	97
5 year total, all races	31.1	30.1-32.1	3,128	10,333
Wyoming 2007	30.5	28.6-32.5	794	2,706
US Median 2006	23.5			
HP 2010 Objective	≤30			

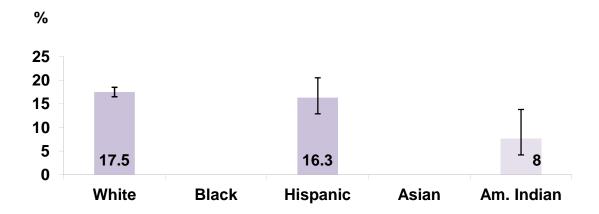
^{*} Women age 40 and older who report not having a mammogram within the past two years. Asked as an optional module by Wyoming in 2007.



Table/Chart 36: No Pap within 3 Years (Women w/ Intact Cervix)* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	17.5	16.5-18.5	1,614	8,635
Black			6	35
Hispanic	16.3	12.9-20.5	85	443
Asian/Pacific Islander			12	46
American Indian	7.7	4.2-13.8	13	125
P value	0.047			
"Other" (Bl, Asian, other)	39.5	19.6-63.7	28	118
5 year total, all races	17.6	16.6-18.7	1,740	9,321
Wyoming 2007	18.8	16.3-21.6	459	2,288
US Median 2006	16.0			
HP 2010 Objective	≤10			

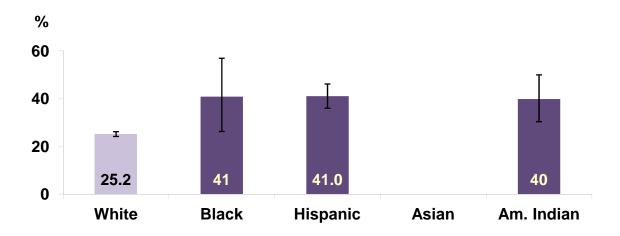
^{*} Women with intact cervix-uteri who report not having a pap smear within the past three years. Asked as an optional module by Wyoming in 2007.



Table/Chart 37: No Cholesterol Check in Past 5 Years* by Race/Ethnicity, Wyoming 2003, 2005, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	25.2	24.2-26.2	2,672	13,708
Black	40.8	26.3-57.0	22	64
Hispanic	41.0	36.0-46.2	204	614
Asian/Pacific Islander			17	48
American Indian	39.8	30.4-50.0	62	214
P value	< 0.0001			
"Other" (Bl, Asian, other)	46.2	32.9-60.1	52	188
3 year total, all races	26.6	25.6-27.6	2,990	14,724
Wyoming 2007	26.6	24.9-28.4	1,103	6,033
US Median 2007	25.2			
HP 2010 Objective	≤20			

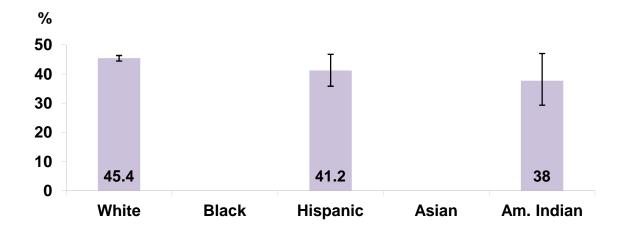
^{*} Wyoming adults reporting not having their blood cholesterol checked within the past 5 years.



Table/Chart 38: No Flu Shot in Past 12 Months, Age 50+* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	45.4	44.4-46.3	5,369	12,256
Black			21	39
Hispanic	41.2	35.8-46.7	167	395
Asian/Pacific Islander			14	33
American Indian	37.7	29.3-47.0	53	142
P value	0.163			
"Other" (Bl, Asian, other)	43.8	34.6-53.4	57	133
5 year total, all races	45.1	44.2-46.1	5,646	12,926
Wyoming 2007	42.4	40.7-44.2	1,475	3,643
US Median 2007	44.0			
HP 2010 Objective				

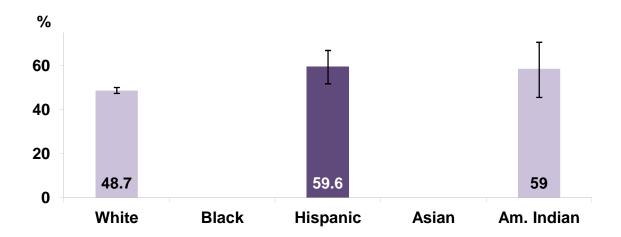
^{*} Wyoming adults age 50 and older reporting not having had a flu shot in the past 12 months. Excludes the small number of persons who had the flu spray.



Table/Chart 39: Never Had Sigmoidoscopy/Colonoscopy, Age 50+* by Race/Ethnicity, 2003, 2004, 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	48.7	47.4-50.1	3,034	6,263
Black			11	21
Hispanic	59.6	51.8-66.9	116	197
Asian/Pacific Islander			8	16
American Indian	58.6	45.6-70.6	40	69
P value	0.035			
"Other" (Bl, Asian, other)	54.4	42.2-66.1	44	80
3 year total, all races	49.2	47.9-50.6	3,234	6,609
Wyoming 2006	47.4	45.3-49.4	1,280	2,739
US Median 2006	42.9			
HP 2010 Objective	≤50			

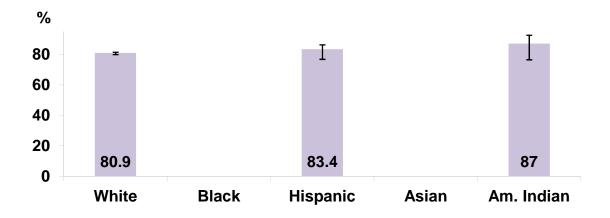
^{*} Wyoming adults age 50 and older reporting never having had a colonoscopy or sigmoidoscopy.



Table/Chart 40: No Blood Stool Test in Past 2 Years, Age 50+* by Race/Ethnicity, 2003, 2004, 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	80.9	79.8-82.0	5,063	6,229
Black			18	20
Hispanic	83.4	76.7-88.5	164	196
Asian/Pacific Islander			13	16
American Indian	87.0	76.4-93.2	60	69
P value	0.515			
"Other" (Bl, Asian, other)	84.4	72.6-91.7	68	79
3 year total, all races	81.1	80.0-82.1	5,355	6,573
Wyoming 2006	81.8	80.1-83.4	2,226	2,713
US Median 2006	75.8			
HP 2010 Objective	<67			

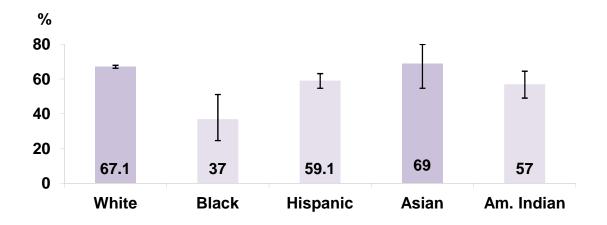
^{*} Wyoming adults ages 50 and older who reported not having a blood stool test using a home kit within the past 2 years.



Table/Chart 41: Never Tested for HIV, Age 18-64* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	67.1	66.3-68.0	11,063	16,246
Black	36.9	24.6-51.2	29	81
Hispanic	59.1	54.8-63.2	518	849
Asian/Pacific Islander	68.8	54.8-80.0	48	76
American Indian	57.0	49.1-64.6	169	289
P value	< 0.0001			
"Other" (Bl, Asian, other)	61.2	51.5-70.1	129	244
5 year total, all races	66.4	65.5-67.2	11,879	17,628
Wyoming 2007	68.8	66.9-70.6	3,004	4,302
US Median 2007	62.2			
HP 2010 Objective				

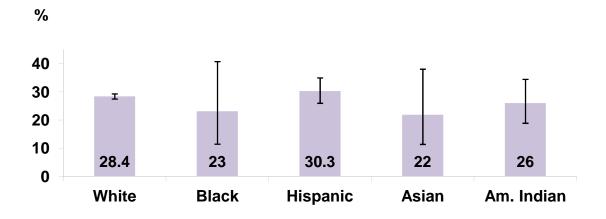
^{*} Wyoming adults age 18-64 reporting never having been tested for HIV, not counting tests as part of a blood donation.



Table/Chart 42: No Recent Checkup* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	28.4	27.5-29.3	3,803	14,764
Black	23.1	11.5-40.8	12	71
Hispanic	30.3	26.0-35.0	200	690
Asian/Pacific Islander	21.9	11.4-38.1	12	60
American Indian	26.0	18.9-34.5	57	238
P value	0.697			
"Other" (Bl, Asian, other)	24.5	16.5-34.8	46	200
3 year total, all races	28.4	27.5-29.3	4,106	15,892
Wyoming 2007	27.5	26.0-29.1	1,495	6,102
US Median 2007	19.2			
HP 2010 Objective				

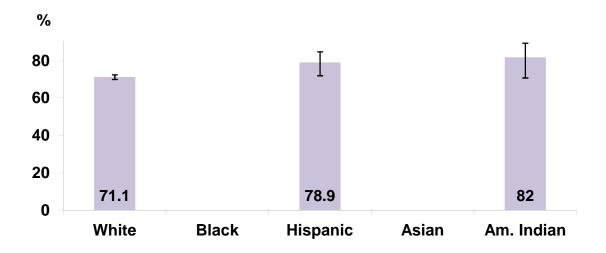
^{*} Wyoming adults reporting they did not have a routine check-up in the past 2 years.



Table/Chart 43: Not Up-to-date, Age 50+* by Race/Ethnicity, 2003, 2004, 2006 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	71.1	69.8-72.3	4,329	6,082
Black			14	19
Hispanic	78.9	71.8-84.6	146	187
Asian/Pacific Islander			11	16
American Indian	81.6	70.6-89.2	54	69
P value	0.054			
"Other" (Bl, Asian, other)	73.9	62.3-83.0	55	77
3 year total, all races	71.5	70.3-72.7	4,584	6,415
Wyoming 2006	71.5	69.6-73.3	1,878	2,650
US Median 2006	69.9			
HP 2010 Objective				

^{*} Wyoming adults age 50 and older who were not up to date according to the Task Force Recommendations for their age and gender: a flu shot in last year, either sigmoidoscopy or colonoscopy in 10 years, for women, a Pap test in 3 years (or they had a hysterectomy) and a mammogram in 2 years, and for all age 65+, a pneumonia vaccination ever.

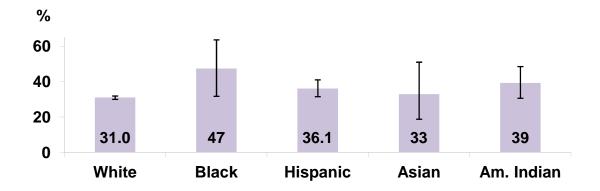


Section E: Oral Health

Table/Chart 44: No Dental Visit in Past Year*, by Race/Ethnicity, 2004, 2006, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	31.0	30.0-31.9	4,262	13,774
Black	47.4	31.7-63.6	24	64
Hispanic	36.1	31.5-41.0	240	632
Asian/Pacific Islander	32.9	18.8-51.0	15	62
American Indian	39.2	30.6-48.5	95	208
P value	0.026			
"Other" (Bl, Asian, other)	36.3	26.1-47.9	66	202
3 year total, all races	31.5	30.6-32.4	4,663	14,816
Wyoming 2007	31.1	29.6-32.7	1,763	5,804
US Median 2006	29.7			
HP 2010 Objective				

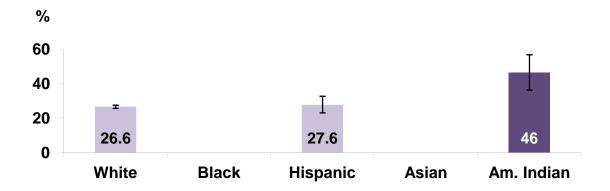
^{*} Wyoming adults reporting not having visited a dentist or dental clinic in the past year. Asked as state added question in Wyoming in 2007.



Table/Chart 45: Lost 6 or More Teeth, Age 45+* by Race/Ethnicity, 2004, 2006, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	26.6	25.7-27.5	3,160	11,124
Black			13	36
Hispanic	27.6	23.1-32.7	115	397
Asian/Pacific Islander			13	29
American Indian	46.4	36.3-56.8	56	123
P value	< 0.0001			
"Other" (Bl, Asian, other)	40.4	30.8-50.8	46	114
3 year total, all races	27.0	26.2-27.9	3,377	11,758
Wyoming 2007	25.2	23.8-26.7	1,099	4,029
US Median 2006	27.6			
HP 2010 Objective				

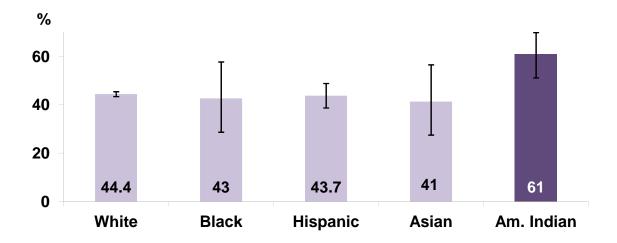
^{*} Wyoming adults age 45+ reporting having lost 6 or more permanent teeth due to gum disease or tooth decay. Asked as state added question in Wyoming in 2007.



Table/Chart 46: Lost Any Teeth* by Race/Ethnicity, 2004, 2006, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	44.4	43.4-45.4	6,986	13,664
Black	42.6	28.7-57.7	35	64
Hispanic	43.7	38.7-48.8	330	626
Asian/Pacific Islander	41.3	27.5-56.5	33	62
American Indian	60.8	51.1-69.8	134	206
P value	0.005			
"Other" (Bl, Asian, other)	52.0	39.6-64.2	105	198
3 year total, all races	44.8	43.8-45.8	7,555	14,694
Wyoming 2007	46.4	44.7-48.1	3,120	5,759
US Median 2006	43.9			
HP 2010 Objective				

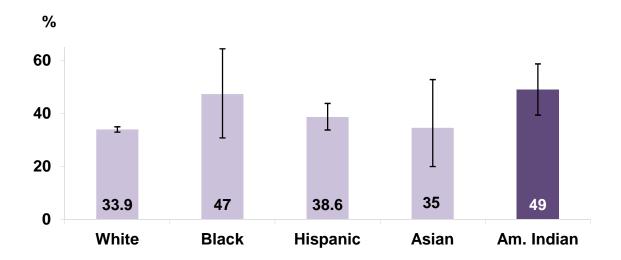
^{*} Wyoming adults reporting having lost one or more permanent teeth due to gum disease or decay. Asked as state added question in Wyoming in 2007.



Table/Chart 47: No Dental Cleaning in Past Year* by Race/Ethnicity, 2004, 2006, 2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	33.9	32.9-34.9	4,106	12,551
Black	47.2	30.7-64.3	21	58
Hispanic	38.6	33.7-43.7	237	591
Asian/Pacific Islander	34.5	19.9-52.7	16	60
American Indian	48.9	39.3-58.6	101	184
P value	0.004			
"Other" (Bl, Asian, other)	47.9	34.9-61.3	64	189
3 year total, all races	34.7	33.7-35.7	4,508	13,515
Wyoming 2007	34.1	32.3-35.8	1,683	5,288
US Median 2006	33.0			
HP 2010 Objective				

^{*} Wyoming adults with at least some natural teeth reporting not having had teeth cleaned in past year. Asked as state added question in Wyoming in 2007.

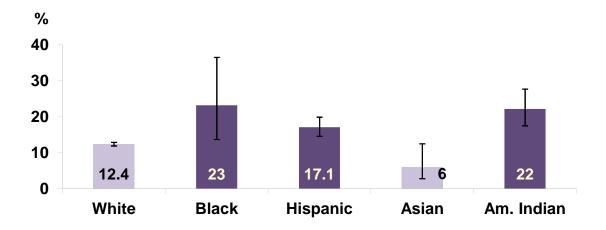


Section F: General Health Measures

Table/Chart 48: Fair or Poor Health Status* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	12.4	11.9-12.9	3,192	22,366
Black	23.2	13.7-36.5	20	102
Hispanic	17.1	14.6-19.9	220	1,050
Asian/Pacific Islander	6.0	2.8-12.5	8	91
American Indian	22.2	17.5-27.7	98	347
P value	< 0.0001			
"Other" (Bl, Asian, other)	13.6	9.5-19.1	53	324
5 year total, all races	12.9	12.4-13.4	3,563	24,087
Wyoming 2007	12.7	11.7-13.8	920	6,150
US Median 2007	14.9			
HP 2010 Objective				

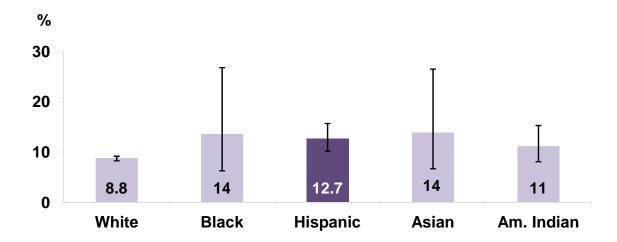
^{*} Wyoming adults who report that their health in general is fair or poor (from choices of excellent, very good, good, fair, or poor).



Table/Chart 49: Frequent Mental Distress (FMD)* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	8.8	8.3-9.2	1,969	22,056
Black	13.6	6.3-26.8	14	100
Hispanic	12.7	10.2-15.7	130	1,029
Asian/Pacific Islander	13.9	6.7-26.5	11	90
American Indian	11.2	8.1-15.3	49	340
P value	0.005			
"Other" (Bl, Asian, other)	12.9	8.6-19.0	41	319
5 year total, all races	9.1	8.6-9.5	2,189	23,744
Wyoming 2007	9.0	8.1-10.1	544	6,066
US Median 2007	9.7			
HP 2010 Objective				

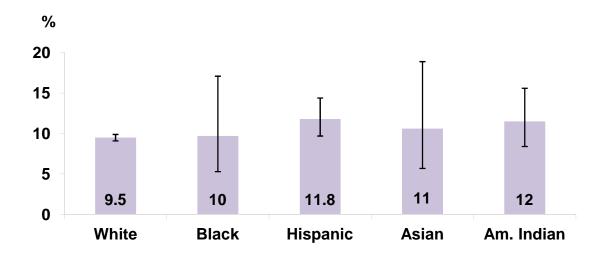
^{*} Wyoming adults reporting their mental health, which includes stress, depression, and problems with emotions was not good for 14 or more of the past 30 days.



Table/Chart 50: Frequent Physical Distress* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	9.5	9.1-9.9	2,376	22,017
Black	9.7	5.3-17.1	13	98
Hispanic	11.8	9.7-14.4	138	1,036
Asian/Pacific Islander	10.6	5.7-18.9	12	88
American Indian	11.5	8.4-15.6	54	337
P value	0.135			
"Other" (Bl, Asian, other)	11.0	7.7-15.5	46	315
5 year total, all races	9.7	9.3-10.1	2,614	23,705
Wyoming 2007	9.6	8.8-10.5	699	6,053
US Median 2007	10.8			
HP 2010 Objective				

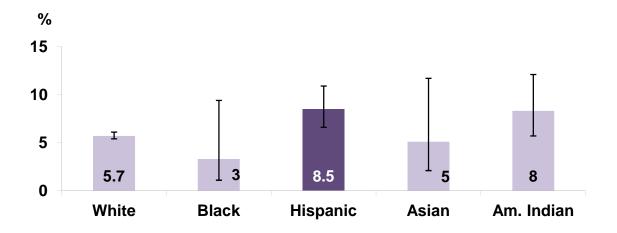
^{*} Wyoming adults reporting their physical health, which includes physical illness and injury, was not good for 14 or more of the past 30 days



Table/Chart 51: Frequent Activity Limitation* by Race/Ethnicity, 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	5.7	5.4-6.1	1,418	22,249
Black	3.3	1.1-9.4	4	100
Hispanic	8.5	6.6-10.9	95	1,047
Asian/Pacific Islander	5.1	2.1-11.7	6	92
American Indian	8.3	5.7-12.1	38	342
P value	0.003			
"Other" (Bl, Asian, other)	11.5	3.9-29.4	21	320
5 year total, all races	6.0	5.6-6.4	1,572	23,958
Wyoming 2007	6.7	5.7-7.8	439	6,117
US Median 2007	6.8			
HP 2010 Objective				

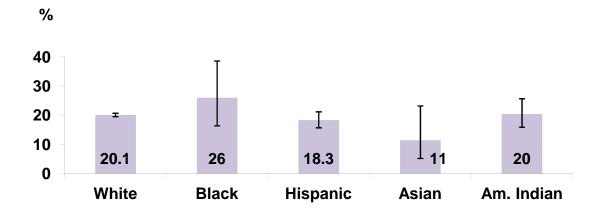
^{*} Wyoming adults reporting that poor physical or mental health kept them from doing their usual activities, such as self-care, work, or recreation, for 14 or more of the past 30 days.



Table/Chart 52: Disability (new definition)* by Race/Ethnicity, Wyoming 2003-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	20.1	19.5-20.7	5,128	22,188
Black	26.0	16.4-38.6	27	102
Hispanic	18.3	15.7-21.2	225	1,044
Asian/Pacific Islander	11.4	5.2-23.2	10	89
American Indian	20.4	15.9-25.7	95	345
P value	0.25			
"Other" (Bl, Asian, other)	21.2	15.8-27.8	78	320
5 year total, all races	20.0	19.4-20.6	5,526	23,897
Wyoming 2007	20.0	18.8-21.2	1,461	6,077
US Median 2007	20.2			
HP 2010 Objective				

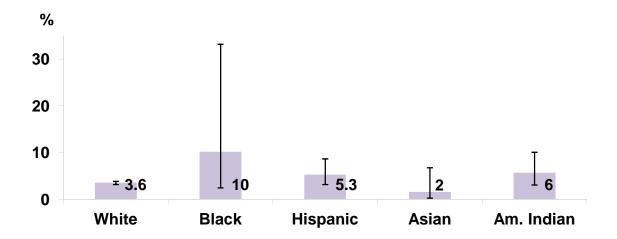
^{*} Wyoming adults reporting they are limited in any way in any activities because of physical, mental, or emotional problems or have a health problem that requires the use of special equipment such as a cane, wheelchair, a special bed, or a special telephone.



Table/Chart 53: Dissatisfaction with Life* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Interval	Number	Sample size
White (non-Hispanic)	3.6	3.2-3.9	604	14,448
Black	10.2	2.5-33.2	3	71
Hispanic	5.3	3.2-8.7	30	656
Asian/Pacific Islander	1.6	0.3-6.8	2	58
American Indian	5.7	3.1-10.1	18	224
P value	0.089			
"Other" (Bl, Asian, other)	5.7	2.5-12.5	13	198
3 year total, all races	3.7	3.4-4.1	665	15,526
Wyoming 2007	3.7	3.2-4.4	256	5,922
US Median 2007	5.5			
HP 2010 Objective				

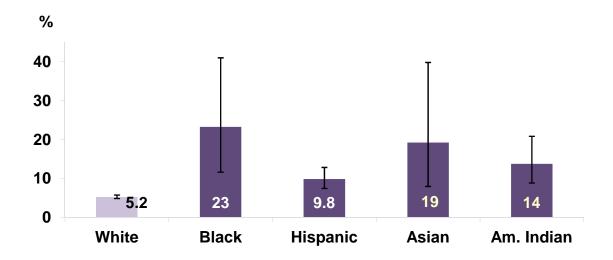
^{*} Wyoming adults reporting being dissatisfied or very dissatisfied with their life.



Table/Chart 54: Rarely Get Needed Social or Emotional Support* by Race/Ethnicity, 2005-2007 BRFSS

Race/Ethnicity	Percentage	Confidence Number Interval		Sample size
White (non-Hispanic)	5.2	4.8-5.7	860	14,350
Black	23.2	11.6-41.0	11	71
Hispanic	9.8	7.4-12.8	69	648
Asian/Pacific Islander	19.2	7.9-39.8	8	58
American Indian	13.7	8.8-20.8	34	223
P value	< 0.0001			
"Other" (Bl, Asian, other)	15.8	9.4-25.2	28	192
3 year total, all races	5.8	5.4-6.3	991	15,413
Wyoming 2007	5.8	5.1-6.5	383	5,865
US Median 2007	7.5			
HP 2010 Objective				

^{*} Wyoming adults reporting that they rarely or never get the social or emotional support they need.



C. Race/Ethnicity Group Profiles

Table description and use. The tables in this section present selected health indicators for each of the five major race/ethnicity groups in Wyoming. The tables show the prevalence of the health indicator, the estimated number of adults of that race/ethnicity group at risk for that indicator, comparisons of the prevalence rate to the most recent Wyoming and U.S. prevalence rates (total rather than median), and the Healthy People 2010 objective if available (all races). The 95% confidence interval is also provided for the Wyoming race/ethnicity group prevalence rate. The 95% confidence interval defines the margin of error for the prevalence estimate and is largely based on sample size. Because the sample sizes for some groups are small, the corresponding margins of error are large and appropriate care should be taken when interpreting results for these groups. Sample sizes for those indicators that apply to only a portion of the adult population may also be small and have large margins of error. If the sample size for that indicator and group was less than 50, results are not shown. The 2006 Wyoming population estimate for adults age 18 and older for that race/ethnicity group is shown in the upper right hand portion of the table.

Highlighting is used to note indicators where disparities were found based on the Wyoming race/ethnicity group having a significantly worse rate than Wyoming whites (P value of less than 0.05 and confidence intervals which do not overlap). Highlighting in the "U.S. total" column denotes instances where the U.S. rate for that racial group is lower than the lower end of the confidence interval for the same group in Wyoming, indicating that the Wyoming rate is worse.

<u>Trends.</u> Arrows (↓↑) are provided next to the race/ethnicity group prevalence rate to show significant trends from previous years. Estimates were previously produced for several indicators using combined data from 1999-2003 and again using 2001-2005 combined data. The criteria used for an upward or downward trend were non-overlapping 95% confidence intervals for the current 2003-2007 estimate compared to a previous estimate, or a difference in point estimates of 10 percentage points or more. Prevalence estimates that do not have a trend indicator can mean one of three things: 1) the indicator has been stable over time, 2) the indicator has not been measured prior to this 2003-2007 analysis, or 3) the indicator has gone up or down over time but not enough to meet the criteria cited above. Race/ethnicity group estimates for the 1999-2003 and the 2001-2005 analyses are available as pdf files from the reports section of the Wyoming BRFSS website.

<u>Indicator definitions</u>. Because the information for each race/ethnicity group is provided on one page, it was not possible to include the definitions of the indicators within the profile. Those are provided on the following pages.

Definitions for selected measures used in race/ethnicity group profiles

Overweight or obese: Wyoming adults with body mass index (weight in kg/height in meters squared) \geq 25.0.

Obesity: Wyoming adults with body mass index (weight in kg/height in meters squared) ≥ 30.0 .

Very Obese: Wyoming adults with body mass index (weight in kg/height in meters squared) ≥ 35.0 .

<u>No Leisure Time Physical Activity</u>: Wyoming adults reporting not participating in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise other than their regular job during the past month.

<u>Does Not Meet Physical Activity Recommendations</u>: Wyoming adults reporting not meeting either the recommendation to engage in moderate activities for 30 minutes a day at least five times a week, or to engage in vigorous activities for 20 minutes a day at least three times a week.

<u>Eats Fruits & Veggies Less Than 5 Times Per Day</u>: Wyoming adults reporting consuming fruits and vegetables less than 5 times per day.

<u>Binge Drinking in Past 30 Days (Pre-2006 Definition)</u>: Wyoming adults reporting having 5 or more drinks on an occasion at least once in the past 30 days. Note that in order to measure this consistently, the "old" definition of binge drinking is used for all years, rather than the one instituted in 2006 that defines binge drinking for women as having 4 or more drinks on an occasion.

<u>Heavy Drinking</u>: Wyoming men reporting drinking more than 60 drinks of alcohol in the past 30 days, or women reporting drinking more than 30 drinks of alcohol in the past 30 days.

Extreme Drinking: Wyoming adults reporting that the largest number of alcoholic drinks they had on any occasion in the past 30 days was 10 or more.

<u>Cigarette Smoking</u>: Wyoming adults reporting having smoked at least 100 cigarettes in their lifetime and are currently smoking everyday or some days.

<u>ETS at Work</u>: Wyoming adults who work primarily indoors reporting they are exposed to secondhand smoke at work sometimes or frequently (from choices of never, seldom, sometimes, and frequently).

<u>No Ban on Smoking At Work:</u> Wyoming adults who work primarily indoors reporting that their place of work's official smoking policy for work areas allows smoking in some work areas, in all work areas, or there is no official policy for work areas.

<u>No Ban on Smoking in the Home</u>: Wyoming adults reporting that smoking is allowed inside the home in some places or at some times, is allowed anywhere inside the home, or they have no rules about smoking inside the home.

<u>3+ CVD Risk Factors</u>: Wyoming adults reporting 3 or more of the 6 major modifiable risk factors for cardiovascular disease: smoking, overweight, high blood pressure, high cholesterol, diabetes, or not meeting recommendations for physical activity.

<u>Does Not Always Use Seatbelts</u>: Wyoming adults who ever ride in a car reporting not always wearing a seatbelt (from choices of always, nearly always, sometimes, seldom, and never).

<u>Diabetes</u>: Wyoming adults who report they were told by a doctor they have diabetes. Women who were only told during pregnancy are counted as not having diabetes.

<u>No Awareness of Community Diabetes Activities</u>: Wyoming adults reporting not hearing about any activities to address the problem of diabetes in their community; includes those responding "don't know". <u>Current Asthma</u>: Wyoming adults reporting having ever been told by a doctor they have asthma and report they still have asthma.

<u>Arthritis</u>: Wyoming adults reporting they have been told by a doctor that they have some form of arthritis.

<u>High Blood Pressure</u>: Wyoming adults reporting having ever been told by a doctor, nurse, or other health professional that they have high blood pressure. Women who were only told this during pregnancy are counted as not having high blood pressure.

<u>High Cholesterol</u>: Wyoming adults reporting having ever been told by a doctor, nurse, or other health professional that their blood cholesterol is high. Denominator includes those who report not having their blood cholesterol checked.

<u>Cardiovascular Disease</u>: Wyoming adults reporting having coronary heart disease, angina, a heart attack, or stroke.

<u>No Health Care Coverage</u>: Wyoming adults who report they have no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare.

<u>No Personal Doctor</u>: Wyoming adults who report they do not have one or more persons they think of as their personal doctor or health care provider.

<u>Unable to Get Needed Care</u>: Wyoming adults reporting they needed to see a doctor but couldn't because of the cost at least one time in the past 12 months.

<u>No Recent Mammogram (Women Age 40+)</u>: Wyoming women age 40 and older who report not having a mammogram within the past two years.

No Recent Pap Smear (Women w/Intact Cervix): Wyoming women with intact cervix-uteri who report not having a Pap smear within the past three years.

<u>Cholesterol Not Checked 5 Years</u>: Wyoming adults reporting not having their blood cholesterol checked within the past 5 years.

<u>No Flu Shot in Past 12 Months</u>, Age 50+: Wyoming adults age 50 and older reporting not having had a flu shot in the past 12 months.

<u>Never Had Sigmoidoscopy/Colonoscopy</u>, <u>Age 50+</u>: Wyoming adults age 50 and older reporting never having had a colonoscopy or sigmoidoscopy.

<u>Never Tested for HIV, Age 18-64</u>: Wyoming adults age 18-64 reporting never having been tested for HIV, not counting tests as part of a blood donation.

No Routine Checkup in Past 2 Years: Wyoming adults reporting they did not have a routine checkup in the past 2 years.

No Dental Visit in Past Year: Wyoming adults reporting not having visited a dentist or dental clinic in the past year.

<u>Lost Any Teeth Due to Decay:</u> Wyoming adults 18 and older reporting having any permanent teeth due to gum disease or tooth decay.

<u>Fair or Poor Health Status</u>: Wyoming adults who report that their health in general is fair or poor (from choices of excellent, very good, good, fair, or poor).

<u>Frequent Mental Distress</u>: Wyoming adults reporting their mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days.

<u>Disabled/Use Special Equipment</u>: Wyoming adults reporting they are limited in any way in any activities because of physical, mental, or emotional problems or have a health problem that requires the use of special equipment such as a cane, wheelchair, a special bed, or a special telephone.

<u>Dissatisfied with Life</u>: Wyoming adults reporting being dissatisfied or very dissatisfied with their life (from choices of very satisfied, satisfied, dissatisfied, or very dissatisfied).

<u>Rarely Gets Needed Social or Emotional Support</u>: Wyoming adults reporting that they rarely or never get the social or emotional support they need (from choices of always, usually, sometimes, rarely, or never).

Whites (non-Hispanic) Selected Measures for Wyoming Adults BRFSS Combined Data 2003-2007 Official 2006 WY

Official 2006 WY population age 18+ = 354,610

BRFSS Combined Data 2003-2007	Ra	ace/ethnicity gro	•	Comparisons		
Measure (Healthy People 2010 Leading Health Indicators represented in italics)	Whites	95% Confidence Interval	Pop. at Risk	WY (all races)	U.S. total (White) (%)	HP 2010 Objective (%)
Overweight or obese (BMI ≥25)	↑ <i>57.8</i>	57.0-58.6	200,000	62.2	61.7	≤40
Obesity (BMI≥30)	↑ 22.4	21.8-23.1	79,000	24.5	25.1	≤15
Very obese	↑ 6.6	6.2-7.0	23,000	8.0	8.8	
No leisure time physical activity	20.8	20.2-21.4	74,000	21.7	21.2	≤20
*Does not meet physical activity recommen.	43.6	42.6-44.6	150,000	43.3	49.1	≤50
*Eat fruits & veggies less than 5 times per day	77.2	76.3-78.0	270,000	75.6	75.4	≤50
Any alcohol in past month	56.7	55.9-57.4	200,000	55.4	56.9	
Binge drinking in past 30 days (pre-2006 def)	↓ 15.2	14.5-15.8	54,000	15.2	14.1	≤13.4
*Heavy drinking	5.1	4.7-5.5	18,000	4.9	5.8	
Extreme drinking (10+ at a time)	3.8	3.4-4.4	13,000	4.5	3.9	
Drinking & driving	2.6	2.2-3.1	9,200	2.6	2.7	
Cigarette smoking	↓ 21.1	20.4-21.8	75,000	22.1	19.8	≤12
ETS at work	↓ 15.8	15.0-16.8	25,000	15.7		
No ban on smoking at work	↓ 18.8	17.9-19.8	30,000	18.4	14.2	
No ban on smoking in the home	↓ 24.4	23.7-25.1	87,000	21.8	25.1	
3+ CVD risk factors	25.5	24.7-26.4	90,000	28.4	31.0	
*Does not always use seat belts	36.2	35.0-37.4	130,000	35.4	18.3	≤8
Diabetes	↑ 6.2	5.9-6.5	22,000	7.0	7.9	≤2.5
No awareness of diabetes activities	61.8	61.0-62.5	220,000	59.7		
*Current asthma	8.1	7.7-8.5	29,000	8.1	8.5	
Arthritis	↑ 28.3	27.4-29.1	100,000	27.9	30.0	
High blood pressure	24.3	23.6-25.1	86,000	25.1	28.4	≤14
High cholesterol	↑ 29.1	28.3-30.0	100,000	29.4	32.3	
*Cardiovascular disease	7.2	6.8-7.7	26,000	7.0	8.6	
No health care coverage	16.1	15.4-16.7	57,000	15.9	10.6	0
No personal doctor	24.7	24.0-25.4	88,000	26.1	15.5	≤4
Unable to get needed care	12.0	11.5-12.6	43,000	12.3	10.6	
No recent mammogram (women age 40+)	30.7	29.7-31.7	35,000	30.5	23.0	≤30
No recent Pap smear (women w/cervix)	17.5	16.5-18.5	22,000	18.8	15.6	≤10
Cholesterol not checked 5 yrs	↓ 25.2	24.2-26.2	89,000	26.6	20.5	≤20
*No flu shot in 12 mo, age 50+	45.4	44.4-46.3	70,000	42.4	43.3	
Never had sigmoidoscopy, age 50+	↓ 48.7	47.4-50.1	75,000	47.4	38.6	≤50
Never tested for HIV, age 18-64	↑ 67.1	66.3-68.0	200,000	68.8	63.2	
*No routine checkup in past 2 years	28.4	27.5-29.3	100,000	27.5	18.6	
No dental visit in past year	31.0	30.0-31.9	110,000	31.1	27.1	
Lost any teeth, all ages	44.4	43.4-45.4	160,000	25.2	43.9	
Fair/poor health status	12.4	11.9-12.9	44,000	12.7	13.9	
Frequent mental distress	8.8	8.3-9.2	31,000	9.0	9.7	
*Disabled/use special equipment	20.1	19.5-20.7	71,000	20.0	21.7	
*Dissatisfied with life	3.6	3.2-3.9	13,000	3.7	5.2	
Rarely get needed social/emotional support	5.2	4.8-5.7	18,000	5.8	6.0	

^{*}Measures that were not significantly different among Wyoming race/ethnic groups. ↑↓ indicate recent group trend compared to 1999-2003 and 2001-2005 analyses; see Table 1 Demographics for demographic profile of group. Shading indicates significant difference vs. US rate based on a US rate outside the CI for the Wyoming rate.

<u>Blacks,</u> Selected Measures for Wyoming Adults BRFSS Combined Data 2003-2007

Official 2006 WY population age 18+=3,461

BKFSS Combined Data 2003-2007	Ra	nce/ethnicity gro	oup	Comparisons		
Measure (Healthy People 2010 Leading Health Indicators represented in italics)	Blacks	95% Confidence Interval	Pop. at Risk	WY (all races)	U.S. total (Black) (%)	HP 2010 Objective (%)
Overweight or obese (BMI ≥25)	66.5	54.7-76.6	2,300	62.2	72.3	≤40
Obesity (BMI≥30)	↑ <i>31.8</i>	21.2-44.8	1,100	24.5	36.5	≤15
Very obese	15.1	7.1-29.2	520	8.0	15.4	
No leisure time physical activity	↑ 35.5	24.6-48.2	1,200	21.7	30.2	≤20
*Does not meet physical activity recommen.	57.9	41.4-72.7	2,000	43.3	58.7	≤50
*Eat fruits & veggies less than 5 times per day	75.1	61.3-85.3	2,600	75.6	76.8	≤50
Any alcohol in past month	58.3	46.5-69.2	2,000	55.4	42.2	
Binge drinking in past 30 days (pre-2006 def)	↑ 25.1	14.5-39.7	870	15.2	10.5	≤13.4
*Heavy drinking	7.5	2.1-24.0	260	4.9	3.1	
Extreme drinking (10+ at a time)	7.5	1.1-37.0	260	4.5	1.9	
Drinking & driving				2.6	1.7	
Cigarette smoking	35.2	23.6-48.8	1,200	22.1	21.7	≤12
ETS at work				15.7		
No ban on smoking at work	21.3	10.5-38.4	320	18.4	16.9	
No ban on smoking in the home	↓ 35.9	24.9-48.7	1,200	21.8	29.1	
3+ CVD risk factors	43.3	28.8-59.0	1,500	28.4	37.3	
*Does not always use seat belts	33.7	18.8-52.7	1,200	35.4	20.7	≤8
Diabetes	12.0	6.4-21.3	420	7.0	12.9	≤2.5
No awareness of diabetes activities	66.4	54.9-76.3	2,300	59.7		
*Current asthma	9.6	4.7-18.6	330	8.1	9.8	
Arthritis	↑ 21.4	10.6-38.5	740	27.9	26.6	
High blood pressure	↑ 41.7	27.6-57.3	1,400	25.1	36.4	≤14
High cholesterol	16.7	9.4-27.9	580	29.4	26.0	
*Cardiovascular disease	7.1	3.0-16.1	250	7.0	8.3	
No health care coverage	24.9	14.9-38.6	860	15.9	20.9	0
No personal doctor	43.4	31.1-56.3	1,500	26.1	22.1	≤4
Unable to get needed care	24.5	14.6-38.1	850	12.3	19.8	
No recent mammogram (women age 40+)				30.5	22.0	≤30
No recent Pap smear (women w/cervix)				18.8	12.9	≤10
Cholesterol not checked 5 yrs	40.8	26.3-57.0	1,400	26.6	23.8	≤20
*No flu shot in 12 mo, age 50+				42.4	57.5	
Never had sigmoidoscopy, age 50+				47.4	44.9	≤50
Never tested for HIV, age 18-64	↑ 36.9	24.6-51.2	1,200	68.8	40.1	
*No routine checkup in past 2 years	23.1	11.5-40.8	800	27.5	10.7	
No dental visit in past year	47.4	31.7-63.6	1,600	31.1	38.5	
Lost any teeth, all ages	42.6	28.7-57.7	1,500	25.2	58.4	
Fair/poor health status	23.2	13.7-36.5	800	12.7	21.1	
Frequent mental distress	13.6	6.3-26.8	470	9.0	11.9	
*Disabled/use special equipment	26.0	16.4-38.6	900	20.0	21.4	
*Dissatisfied with life	10.2	2.5-33.2	350	3.7	8.0	
Rarely get needed social/emotional support	23.2	11.6-41.0	800	5.8	12.1	

^{*}Measures not significantly different among Wyoming race/ethnic groups. ↑↓ indicate recent group trend compared to 1999-2003 and 2001-2005 analyses; see Table 1 Demographics for demographic profile of group. Shading indicates group was significantly worse than Wyoming whites or significantly worse than U.S. rate for that race or both.

<u>Hispanics,</u> Selected Measures for Wyoming Adults BRFSS Combined Data 2003-2007

Official 2006 WY population age 18+ =24,000

	Rad	ce/ethnicity gro	oup	Comparisons			
Measure (Healthy People 2010 Leading Health Indicators represented in italics)	Hispanics %	95% Confidence Interval	Pop. at Risk	WY (all races)	U.S. total (Hispanic) (%)	HP 2010 Objective (%)	
Overweight or obese (BMI ≥25)	59.4	55.4-63.3	14,000	62.2	67.6	≤40	
Obesity (BMI≥30)	28.1	24.7-31.7	6,700	24.5	29.3	≤15	
Very obese	9.9	7.7-12.7	2,400	8.0	10.0		
No leisure time physical activity	27.5	24.2-31.1	6,600	21.7	33.6	≤20	
*Does not meet physical activity recommen.	47.4	42.2-52.6	11,000	43.3	54.9	≤50	
*Eat fruits & veggies less than 5 times per day	77.5	73.3-81.3	19,000	75.6	75.2	≤50	
Any alcohol in past month	56.0	52.1-59.8	13,000	55.4	45.6		
Binge drinking in past 30 days (pre-2006 def)	22.3	18.9-26.2	5,400	15.2	15.6	≤13.4	
*Heavy drinking	5.2	3.6-7.3	1,200	4.9	4.2		
Extreme drinking (10+ at a time)	8.3	5.5-12.5	2,000	4.5	4.9		
Drinking & driving	2.1	1.1-4.2	500	2.6	2.7		
Cigarette smoking	29.5	25.8-33.5	7,100	22.1	16.6	≤12	
ETS at work	23.7	19.0-29.2	2,500	15.7			
No ban on smoking at work	28.6	23.3-34.6	3,000	18.4	25.1		
No ban on smoking in the home	27.5	24.0-31.2	6,600	21.8	16.5		
3+ CVD risk factors	23.5	19.6-27.8	5,600	28.4	24.2		
*Does not always use seat belts	31.6	25.9-37.8	7,600	35.4	13.6	≤8	
Diabetes	8.3	6.7-10.3	2,000	7.0	8.5	<u>≤</u> 2.5	
No awareness of diabetes activities	69.2	65.8-72.5	17,000	59.7			
*Current asthma	5.8	4.2-7.9	1,400	8.1	6.0		
Arthritis	20.8	17.4-24.8	5,000	27.9	15.4		
High blood pressure	20.8	17.2-25.0	5,000	25.1	19.6	≤14	
High cholesterol	19.6	16.1-23.6	4,700	29.4	20.7		
*Cardiovascular disease	7.5	5.3-10.4	1,800	7.0	6.1		
No health care coverage	28.8	25.4-32.6	6,900	15.9	35.8	0	
No personal doctor	33.0	29.3-36.9	7,900	26.1	39.3	≤4	
Unable to get needed care	21.1	18.0-24.5	5,100	12.3	23.6		
No recent mammogram (women age 40+)	36.7	31.3-42.6	1,900	30.5	25.6	≤30	
No recent Pap smear (women w/cervix)	16.3	12.9-20.5	1,500	18.8	17.5	≤10	
Cholesterol not checked 5 yrs	41.0	36.0-46.2	9,800	26.6	41.0	<u>≤</u> 20	
*No flu shot in 12 mo, age 50+	41.2	35.8-46.7	2,700	42.4	57.1		
Never had sigmoidoscopy, age 50+	59.6	51.8-66.9	3,800	47.4	56.7	≤50	
Never tested for HIV, age 18-64	59.1	54.8-63.2	13,000	68.8	54.6		
*No routine checkup in past 2 years	30.3	26.0-35.0	7,300	27.5	21.3		
No dental visit in past year	36.1	31.5-41.0	8,700	31.1	40.6		
Lost any teeth, all ages	43.7	38.7-48.8	10,000	25.2	45.4		
Fair/poor health status	17.1	14.6-19.9	4,100	12.7	27.2		
Frequent mental distress	12.7	10.2-15.7	3,000	9.0	10.8		
*Disabled/use special equipment	18.3	15.7-21.2	4,400	20.0	13.8		
*Dissatisfied with life	5.3	3.2-8.7	1,300	3.7	5.4		
Rarely get needed social/emotional support	9.8	7.4-12.8	2,400	5.8	16.1		

^{*}Measures not significantly different among Wyoming race/ethnic groups. ↑↓ indicate recent group trend compared to 1999-2003 and 2001-2005 analyses; see Table 1 Demographics for demographic profile of group. Shading indicates group was significantly worse than Wyoming whites or significantly worse than U.S. rate for that race or both.

Asian/Pacific Islanders, Selected Measures for Wyoming Adults BRFSS Combined Data 2003-2007 Official 200

Official 2006 WY population age 18+=3,145

	Race/ethnicity group Comparisons				ıs	
Measure (Healthy People 2010 Leading Health Indicators represented in italics)	Asian/PI %	95% Confidence Interval	Pop. at Risk	WY (all races)	U.S. total (Asian/PI) (%)	HP 2010 Objective (%)
Overweight or obese (BMI ≥25)	↑ 54.0	40.6-66.9	1,700	62.2	40.1	≤40
Obesity (BMI≥30)	14.6	7.6-26.2	460	24.5	9.0	≤15
Very obese	7.9	2.8-20.1	250	8.0	2.6	
No leisure time physical activity	20.9	11.5-34.9	660	21.7	22.1	≤20
*Does not meet physical activity recommen.				43.3	59.1	≤50
*Eat fruits & veggies less than 5 times per day	↓ 66.6	45.7-82.5	2,100	75.6	71.3	≤50
Any alcohol in past month	47.4	34.5-60.6	1,500	55.4	41.8	
Binge drinking in past 30 days (pre-2006 def)	18.0	9.4-31.8	570	15.2	10.2	≤13.4
*Heavy drinking	1.8	0.4-8.7	57	4.9	2.1	
Extreme drinking (10+ at a time)	16.1	6.0-36.3	510	4.5	1.5	
Drinking & driving				2.6	1.5	
Cigarette smoking	27.1	16.1-41.9	850	22.1	11.0	≤12
ETS at work	↑ 42.2	24.9-61.8	800	15.7		
No ban on smoking at work	↑ 37.4	20.1-58.7	710	18.4	10.0	
No ban on smoking in the home	↓ 11.3	5.2-22.8	360	21.8	12.0	
3+ CVD risk factors	28.5	13.5-50.5	900	28.4	18.1	
*Does not always use seat belts				35.4	9.3	≤8
Diabetes	3.8	1.4-9.8	120	7.0	6.7	≤2.5
No awareness of diabetes activities	↓ 58.8	44.4-71.8	1,800	59.7		
*Current asthma	5.1	1.1-17.1	160	8.1	4.3	
Arthritis				27.9	11.7	
High blood pressure				25.1	19.2	≤14
High cholesterol				29.4	25.6	
*Cardiovascular disease	3.1	0.8-11.7	96	7.0	3.4	
No health care coverage	18.2	9.1-33.0	570	15.9	12.4	0
No personal doctor	↓ 29.3	19.2-42.0	920	26.1	22.5	≤4
Unable to get needed care	17.7	10.2-29.1	560	12.3	9.8	
No recent mammogram (women age 40+)				30.5	26.0	≤30
No recent Pap smear (women w/cervix)				18.8	23.6	≤10
Cholesterol not checked 5 yrs				26.6	24.2	≤20
*No flu shot in 12 mo, age 50+				42.4	45.2	
Never had sigmoidoscopy, age 50+				47.4	47.2	≤50
Never tested for HIV, age 18-64	68.8	54.8-80.0	1,900	68.8	69.3	
*No routine checkup in past 2 years	21.9	11.4-38.1	690	27.5	17.8	
No dental visit in past year	32.9	18.8-51.0	1,000	31.1	26.4	
Lost any teeth, all ages	41.3	27.5-56.5	1,300	25.2	39.6	
Fair/poor health status	6.0	2.8-12.5	190	12.7	10.7	
Frequent mental distress	13.9	6.7-26.5	440	9.0	6.4	
*Disabled/use special equipment	11.4	5.2-23.2	360	20.0	8.9	
*Dissatisfied with life	1.6	0.3-6.8	50	3.7	3.8	
Rarely get needed social/emotional support	19.2	7.9-39.8	600	5.8	14.4	

^{*}Measures not significantly different among Wyoming race/ethnic groups. ↑↓ indicate recent group trend compared to 1999-2003 and 2001-2005 analyses; see Table 1 Demographics for demographic profile of group. Shading indicates group was significantly worse than Wyoming whites or significantly worse than U.S. rate for that race or both.

<u>American Indians,</u> Selected Measures for Wyoming Adults BRFSS Combined Data 2003-2007 Offi

Official 2006 WY population age 18+=7,994

BRFSS Combined Data 2003-2007	Ra	ace/ethnicity gro		2006 WY population age 18+ = 7,994 Comparisons			
Measure (Healthy People 2010 Leading Health Indicators represented in italics)	Am. Ind.	95% Confidence Interval	Pop. at Risk	WY (all races)	U.S. total (Amer Ind) (%)	HP 2010 Objective (%)	
Overweight or obese (BMI ≥25)	70.7	64.0-76.7	5,700	62.2	66.7	≤40	
Obesity (BMI≥30)	29.1	23.6-35.4	2,300	24.5	30.3	≤15	
Very obese	9.5	6.5-13.7	769	8.0	12.7		
No leisure time physical activity	↑ 31.8	25.6-38.8	2,500	21.7	27.8	≤20	
*Does not meet physical activity recommen.	48.0	38.7-57.4	3,800	43.3	48.4	≤50	
*Eat fruits & veggies less than 5 times per day	80.8	73.5-86.4	6,500	75.6	74.7	≤50	
Any alcohol in past month	42.2	35.2-49.4	3,400	55.4	46.2		
Binge drinking in past 30 days (pre-2006 def)	↓ 16.1	11.4-22.3	1,300	15.2	16.7	≤13.4	
*Heavy drinking	5.9	3.4-10.1	470	4.9	6.7		
Extreme drinking (10+ at a time)	6.8	3.0-14.7	540	4.5	8.2		
Drinking & driving	0.5	0.1-2.1	40	2.6	2.1		
Cigarette smoking	47.1	39.9-54.3	3,800	22.1	36.4	≤12	
ETS at work	32.1	19.5-48.0	870	15.7			
No ban on smoking at work	31.1	18.7-47.0	850	18.4	20.8		
No ban on smoking in the home	↓ 35.3	28.9-42.3	2,800	21.8	33.3		
3+ CVD risk factors	34.6	26.3-44.0	2,800	28.4	36.9		
*Does not always use seat belts	39.8	29.3-51.3	3,200	35.4	23.0	≤8	
Diabetes	11.0	7.8-15.4	880	7.0	12.5	≤2.5	
No awareness of diabetes activities	44.6	37.5-51.9	3,600	59.7			
*Current asthma	9.9	6.8-14.1	790	8.1	12.7		
Arthritis	30.4	23.2-38.7	2,400	27.9	32.6		
High blood pressure	19.7	14.4-26.3	1,600	25.1	29.3	≤14	
High cholesterol	16.8	12.1-22.8	1,300	29.4	27.1		
*Cardiovascular disease	4.6	2.7-7.5	370	7.0	13.3		
No health care coverage	33.2	26.9-40.1	2,700	15.9	24.1	0	
No personal doctor	35.8	28.7-43.5	2,900	26.1	26.0	≤4	
Unable to get needed care	20.5	15.9-26.0	1,600	12.3	22.6		
No recent mammogram (women age 40+)	41.2	31.5-51.7	820	30.5	33.2	≤30	
No recent Pap smear (women w/cervix)	7.7	4.2-13.8	250	18.8	19.7	≤10	
Cholesterol not checked 5 yrs	39.8	30.4-50.0	3,200	26.6	27.7	≤20	
*No flu shot in 12 mo, age 50+	37.7	29.3-47.0	860	42.4	51.6		
Never had sigmoidoscopy, age 50+	58.6	45.6-70.6	1,300	47.4	51.7	≤50	
Never tested for HIV, age 18-64	57.0	49.1-64.6	4,200	68.8	51.6		
*No routine checkup in past 2 years	26.0	18.9-34.5	2,100	27.5	21.6		
No dental visit in past year	39.2	30.6-48.5	3,100	31.1	39.4		
Lost any teeth, all ages	60.8	51.1-69.8	4,900	25.2	55.4		
Fair/poor health status	22.2	17.5-27.7	1,800	12.7	24.7		
Frequent mental distress	11.2	8.1-15.3	900	9.0	17.2		
*Disabled/use special equipment	20.4	15.9-25.7	1,600	20.0	30.8		
*Dissatisfied with life	5.7	3.1-10.1	460	3.7	8.8		
Rarely get needed social/emotional support	13.7	8.8-20.8	1,100	5.8	12.5		
Measures not significantly different among Wyo						1000 2002	

^{*}Measures not significantly different among Wyoming race/ethnic groups. ↑↓ indicate recent group trend compared to 1999-2003 and 2001-2005 analyses; see Table 1 Demographics for demographic profile of group. Shading indicates group was significantly worse than Wyoming whites or significantly worse than U.S. rate for that race or both.

IV. Summary and Discussion

<u>Summary by topic area.</u> The table below lists the disparities found for each race/ethnicity group in each of the six topic areas. The most disparities were found for Hispanics (18), followed by American Indians (16), and blacks (11). Only three disparities were found for the Asian/Pacific Islander group.

Topic Area	Black	Hispanic	Asian/PI	American Indian
Risk factors	very obese	obesity	ext. drink	overweight
(21 total)	no LT PA	very obese	ETS exp at work	obesity
	smoke	no LT PA		no LT PA
	any CVD RF	binge drink		smoke
	3+ CVD RF	ext. drink		ETS exp at work
		smoke		home rule
		ETS exp at work		
		work policy		
Subtotal	5	8	2	6
			<u> </u>	
Chronic conditions				
(9 total)	НВР	diabetes		diabetes
Subtotal	1	1	0	1
Access to care	no MD	uninsured		uninsured
(3 total)	Cost issue*	no MD		no MD
		Cost issue*		Cost issue*
Subtotal	2	3	0	3
		•		
Preventive health	cholest test	cholest test		cholest test
services (9 total)		sig/colonoscopy		
Subtotal	1	2	0	1
Oral health				lost 6+ teeth
(4 total)				lost any teeth
				not cleaned
Subtotal	0	0	0	3
			_	
General health	f/p health	f/p health	emot support	f/p health
(7 total)	emot support	FMD		emot support
		FAL		
		emot support		
Subtotal	2	4	1	2
Total (of 53)	11	18	3	16

^{*}Cost issue: unable to see doctor in past year when needed, due to cost. Includes only measures with non-overlapping CIs, and thus small sample sizes may affect results.

<u>Summary by indicator.</u> The following table lists the indicators for which more than one group showed a disparity. One indicator showed a disparity for all four minority populations. Seven indicators showed a disparity for three minority populations. Five indicators showed a disparity for two minority populations.

Indianta.	Disale	Hispania	Asian /DI	American
Indicator	Black	Hispanic	Asian/PI	Indian
Rarely/ever gets needed social/emotional support	X	X	X	X
No leisure time physical activity	X	X		X
Cigarette smoking	X	X		X
Exposed to secondhand smoke at work		X	X	X
No personal doctor	X	X		X
Unable to get needed care due to cost	X	X		X
No cholesterol check in past 5 years	X	X		X
Fair or poor self-reported health status	X	X		X
Obesity		X		X
Very obese	X	X		
Extreme drinking		X	X	
Diabetes		X		X
No health care coverage		X		X

Comparison with U.S. race/ethnicity totals. The tables in section III.C. allow for the comparison of Wyoming adult race/ethnicity groups with their counterparts nationally and provides a broader perspective from which to view disparities. Some Wyoming disparities mirror the disparities found nationally and can be viewed as part of a broader national problem. The disparities seen in Wyoming blacks for high blood pressure and in Wyoming Hispanics for all the health care access measures are examples where the rates are higher for the minority population for both Wyoming and the U.S. but the Wyoming minority and U.S. minority rates are similar.

Of special concern are those Wyoming disparities that don't necessarily follow U.S. patterns and are more unique to Wyoming. These are measures for which the Wyoming minority population not only compares unfavorably to Wyoming whites but also compares unfavorably to the national rate for that group. For blacks, these indicators include cigarette smoking, no personal doctor, and no recent cholesterol check. Hispanic indicators with this pattern include binge drinking, extreme drinking, and cigarette smoking. For the Asian/PI group, it includes extreme drinking and not having a work policy that prohibits smoking. And for American Indians it includes cigarette smoking, uninsured, no personal doctor, and no recent cholesterol check.

One other comparison pattern is highlighted in the section III.C. tables. Rates for some indicators for Wyoming minority groups did not show a disparity when compared to Wyoming whites, but were significantly worse than the U.S. rate for that group. This included 3 indicators for blacks (any alcohol, binge drinking, and no recent checkup), eight indicators for Hispanics (any alcohol past month, no home smoking ban, does not always use seatbelts, arthritis, no recent mammogram, never tested for HIV, no routine checkup, disabled), five indicators for the Asian/PI group, and one indicator for American Indians (does not always wear seatbelts). A comparison of rates for Wyoming whites with U.S. whites found 16 indicators where the rates for Wyoming whites were significantly worse, including all the health care access measures and most of the preventive health screenings. One additional observation -- while Asian/Pacific

Islanders in Wyoming compare well with Wyoming whites, they compare less favorably with Asian/Pacific Islanders in the U.S. Wyoming Asian/Pacific Islanders were more likely to be overweight, very obese, smoke, report frequent mental distress, and report being unable to get needed health care when compared with all U.S. Asian/Pacific Islanders. While these differences from U.S. rates were not disparities as defined in this report, they clearly are Wyoming health problems that need to be addressed.

Comparison with Healthy People 2010 Objectives: Of the 53 indicators in this report, 17 have Healthy People 2010 objectives associated with them. No Wyoming race/ethnicity group met more than two of the 17 objectives. Four of five groups met the objective for recommended physical activity (only blacks did not). Non-Hispanic whites also met the objective for colonoscopy screening. Asians met the objective for obesity for a total of two objectives met. American Indians also met two objectives, meeting the Pap testing objective in addition to recommended physical activity. Hispanics met only the objective for recommended physical activity. Blacks did not meet any of the 17 objectives, although three could not be measured adequately.

Logistic regression as an aid to summarizing results.

Up to this point, the results presented in the tables and figures are all based on unadjusted data which do not take into account demographic differences (e.g. age) that might affect the results. For example, as shown in Table 1, most minority groups in Wyoming tend to be younger and less educated than whites, factors that are also related to the prevalence of many of the health indicators. Smoking, binge drinking, and poor access to health care are more likely among younger adults while chronic disease, disability and tooth loss are more prevalent among older persons. In order to better summarize these results, some additional analyses were done on 23 selected measures to take age, gender, and education into account. These 23 indicators were selected based on their known association with sociodemographic factors, sample size, and their representativeness of other measures. The purpose of these additional analyses was to determine how age, gender, and education influenced the original disparity findings.

Logistic regression is a method of analysis which controls for factors that might be "confounding" or affecting results. Such factors might include age, race, gender, income, and education that are commonly associated with risk factors and other measures examined in this report. Only age, education and gender were included in this logistic regression model. Logistic regression results are reported as odds ratios (OR), which are the odds of an event (or health indicator) occurring in one group compared with the odds of it occurring in another (referent) group. An OR of 1.0 indicates that the odds of an event are equally likely in both groups. An OR greater than 1.0 means that the event is more likely in that group compared to the reference group. And an OR less than 1.0 indicates the event is less likely in that group compared with the referent. As an example, suppose that in Group A, 10 out of 100 persons have asthma while in group B, 20 out of 100 have it. The odds of having asthma in group A = 10/90 or 0.11, while the odds of having asthma in Group B = 20/80 or 0.25. Thus the odds ratio (OR) of B compared with A is 0.25/0.11 which equals 2.25. If one simply compared the prevalence rates in each group (10% in group A and 20% in Group B) then people in Group B are twice as likely to have asthma as those in group A, which is another way of reporting the results. Odds ratios obtained from logistic regression analysis are reported as adjusted odds ratios (OR).

Disparity Findings for 23 Selected Measures for Wyoming Adults by Race/Ethnicity with Prevalence Estimates and Adjusted Odds Ratios, BRFSS Combined Data 2003-2007

	White Black		Hispanic		Asian/PI		American Indian		
Measure	%	%	Adj OR vs. whites	%	Adj OR vs. whites	%	Adj OR vs. whites	%	Adj OR vs. whites
Obesity (BMI≥30)	22.4	31.8	1.58	28.1	1.35	14.6	0.64	29.1	1.40
No leisure time physical activity	20.8	35.5	2.16	27.5	1.36	20.9	1.31	31.8	1.70
Binge drinking in past 30 days (pre-2006 def)	15.2	25.1	1.34	22.3	1.20	18.0	0.98	16.1	0.77
Cigarette smoking	21.1	35.2	1.55	29.5	1.05	27.1	1.30	47.1	2.31
ETS at work	15.8	25.6	1.43	23.7	1.05	42.2	4.64	32.1	1.91
3+ CVD risk factors	25.5	43.3	3.86	23.5	1.23	28.5	2.52	34.6*	2.23
Does not always use seat belts	36.2	33.7	0.71	31.6	0.65		0.68	39.8	0.86
Diabetes	6.2	12.0	2.72	8.3	1.97	3.8	1.02	11.0	2.87
Arthritis	28.3	21.4	0.88	20.8	0.87		2.16	30.4	1.55
High blood pressure	24.3	41.7	3.55	20.8	1.15		1.64	19.7	1.06
High cholesterol	29.1	16.7	0.62	19.6	0.86		1.50	16.8	0.71
Cardiovascular disease	7.2	7.1	1.20	7.5	1.64	3.1	1.00	4.6	1.07
No health care coverage	16.1	24.9	0.83	28.8	0.76	18.2	1.02	33.2	0.61
No personal doctor	24.7	43.4	1.81	33.0	1.09	29.3	1.02	35.8	1.27
Unable to get needed care	12.0	24.5	1.97	21.1	1.40	17.7	1.33	20.5	1.32
No recent Pap smear (women w/cervix)	17.5		0.54	16.3	1.19		0.47	7.7	2.79
Cholesterol not checked 5 yrs	25.2	40.8	0.74	41.0	0.80	55.0	0.39	39.8	0.85
Lost any teeth, all ages	44.4	42.6	1.20	43.7	1.15	41.3	1.56	60.8	2.68
Fair/poor health status	12.4	23.2	2.43	17.1	1.51	6.0	0.62	22.2	2.19
Frequent mental distress	8.8	13.6	1.48	12.7	1.21	13.9	1.58	11.2	1.04
Disabled/use special equipment	20.1	26.0	1.69	18.3	1.07	11.4	0.70	20.4	1.25
Dissatisfied with life	3.6	10.2	2.84	5.3	1.32	1.6	0.43	5.7	1.44
Rarely get needed social/emotional support	5.2	23.2	5.28	9.8	1.76	19.2	5.85	13.7	2.67

Shading indicates either % for group was significantly worse than whites or Odds Ratio compared with whites was significantly different than 1.00. OR<1.0 indicates measure was reversed in logistic regression – i.e. *did* have health insurance or *did* have cholesterol checked.

^{*} Indicator that might be considered a disparity using less stringent criteria.

The table above highlights the disparities found through the comparison of prevalence rates using unadjusted data (% column) and the disparities found through logistic regression where the adjusted odds ratios (adj OR column) were significantly different from 1.0 with whites as the reference group and age, gender and education as control variables. The disparity findings using these two methods are dissimilar for many measures for some groups, indicating that some of the original disparity findings are due primarily to demographic differences from the white population. None of the disparity findings changed for the Asian/PI group, most likely because their demographics are the most similar to whites of the four minority populations. For blacks, two of the original disparities disappeared with logistic regression (smoking and no cholesterol check), and one new one appeared (diabetes). For American Indians, three of the original disparity findings disappeared with logistic regression (no personal doctor, unable to get care, and no recent cholesterol check) and two new ones were found (3+ CVD risk factors and arthritis). The biggest changes occurred with the Hispanic population where six of the original disparities disappeared (binge drinking, smoking, ETS exposure at work, no personal doctor, no recent cholesterol check, and frequent mental distress) and only one new one appeared (cardiovascular disease). These findings from logistic regression suggest that the some of the differences seen with the unadjusted results, while real, are due largely to the demographic differences from the white population. These findings also suggest that demographic differences, especially those related to age, may be hiding some potential chronic disease problems in minority populations.

Discussion

Relatively little is known about the health status of minority populations in Wyoming. Data by race/ethnicity is often not available or not collected in a standardized way. And even if standardized race/ethnicity data are available, analysis is often limited by the small sizes of these populations. To facilitate analysis, health data by race/ethnicity are commonly reported by only two groups (white, other) or at most three (white, Hispanic, other). These practices are not useful for the smaller minority populations in Wyoming, and may be detrimental by hiding important differences among them. The methods used in this report illustrate the difficulty of producing meaningful information for five race/ethnicity groups in Wyoming. BRFSS data had to be combined over a 5-year period for there to be enough minorities in the sample to produce these estimates. A total of 24,335 telephone interviews yielded only 348 American Indian interviews, 102 black interviews, and 92 Asian/PI interviews. At an average cost of \$29 per interview, the cost of data collection alone to make this report possible was more than \$700,000. Even at that cost, the sample sizes for Asians and blacks are on the margin of acceptability.

The purpose of this report was to investigate whether health disparities could be identified for Wyoming's four minority race/ethnicity populations using BRFSS data. Although the sample sizes for blacks and Asians are thin, and considering the many limitations of BRFSS as a public health surveillance tool, the authors of this report believe the answer to be yes. For the 53 indicators included in the analysis, some disparities were identified for all four minority populations. The fewest disparities were found for the Asian/PI population. This group appears to be relatively healthy. The data suggest that Wyoming Hispanics, American Indians, and blacks all have numerous health disparities that need to be addressed.

A concerted effort was made to relate the disparity findings in this report to the sociodemographic differences between the white and minority populations. The logistic regression analysis showed that age, gender, and education can help explain many of the disparities that were found and could help uncover some potential new disparities in chronic disease that are hidden because of the young age structure of Wyoming's minority populations. And the link is very clear that those minority populations that are disadvantaged in terms of education, income, and employment were also found to have the most health disparities. Although the elimination of health disparities would be greatly aided through reducing these socioeconomic gaps, this work is typically outside the scope of public health. It is important to remember that lower levels of education, income, and employment do not *necessarily* mean poor health although that is often the result. Aggressive public health programs can help minority populations improve their health status despite their socioeconomic disadvantages.