

Tobacco Use

CIGARETTE SMOKING

Definition: Respondents who report having smoked at least 100 cigarettes in their lifetime and now smoke every day or smoke some days.

Prevalence of Current Cigarette Smoking

- South Dakota 17.5%
- Nationwide median 18.4%

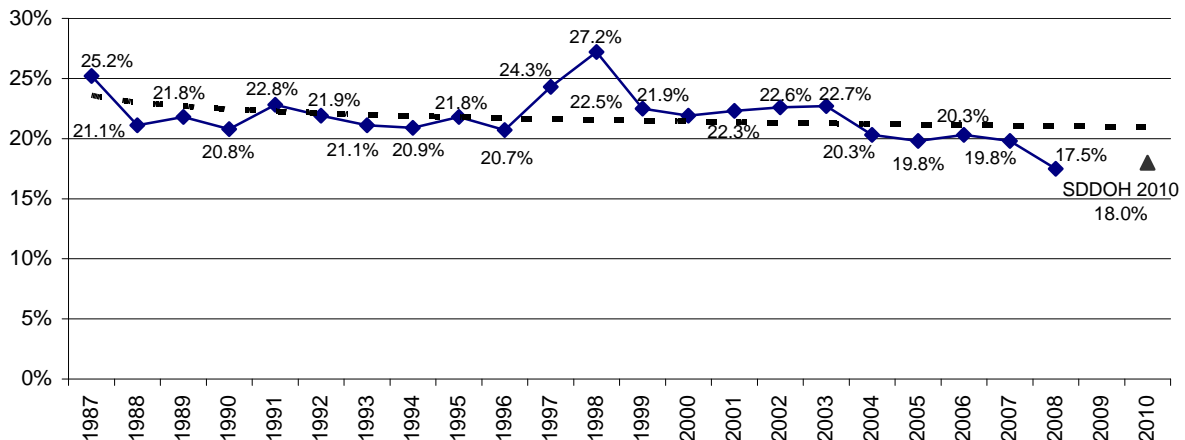
South Dakota Department of Health 2010 Initiative

Reduce the percent of adults who smoke cigarettes to 18 percent.

Trend Analysis

This question hit its peak in 1998 with 27.2 percent of respondents stating they currently smoke. In 2008, the percent of respondents who stated they currently smoke reached an all time low of 17.5 percent. As of 2008, South Dakota has met the *South Dakota Department of Health 2010 Initiative* goal of 18 percent.

Figure 7
Percent of Respondents Who Currently Smoke Cigarettes, 1987-2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-2008

Demographics

Gender There is no significant gender difference shown by the available data for cigarette smoking.

Age The prevalence of cigarette smoking generally decreases as age increases. This includes significant decreases when reaching 65-74, and 75 and older age groups.

Race American Indians demonstrate a significantly higher prevalence of cigarette smoking than whites.

Region The American Indian counties region exhibits a very high prevalence of cigarette smoking, while the southeast, northeast, and central regions show a very low prevalence.

Household Income Cigarette smoking decreases as household income increases. This association is more evident with females.

Education The prevalence of cigarette smoking generally decreases as education increases. This includes a significant decrease upon reaching the high school and college graduate levels. However, the eighth grade or less education level shows a very low prevalence of cigarette smoking.

Employment Status Those who are unemployed or unable to work exhibit a very high prevalence of cigarette smoking, while those who are self-employed, a homemaker, or retired show a very low prevalence.

Marital Status Those who are divorced or have never been married demonstrate a very high prevalence of cigarette smoking, while those who are married or widowed show a very low prevalence.

**Table 10
Respondents Who Currently Smoke Cigarettes, 2008**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	6,956	17.5	(16.2-19.0)	2,839	18.9	(16.8-21.3)	4,117	16.2	(14.6-17.8)
Age									
18-24	221	22.2	(16.3-29.6)	*	*	*	*	*	*
25-34	665	23.6	(19.9-27.7)	269	27.6	(21.7-34.3)	396	19.2	(15.3-23.9)
35-44	916	19.3	(16.4-22.5)	379	15.8	(12.0-20.6)	537	22.9	(18.9-27.4)
45-54	1,353	18.0	(15.7-20.6)	601	17.7	(14.4-21.5)	752	18.3	(15.2-21.9)
55-64	1,432	17.8	(15.5-20.4)	609	19.8	(16.2-23.9)	823	15.8	(13.1-19.0)
65-74	1,133	9.5	(7.8-11.6)	490	10.3	(7.7-13.5)	643	8.9	(6.6-11.8)
75+	1,186	4.3	(3.1-5.9)	384	4.9	(3.0-8.1)	802	3.9	(2.6-5.8)
Race									
White	6,117	15.9	(14.5-17.4)	2,496	17.5	(15.2-20.0)	3,621	14.3	(12.7-16.0)
American Indian	632	44.0	(38.0-50.2)	249	42.9	(33.8-52.5)	383	45.1	(37.3-53.1)
Region									
Southeast	1,492	14.2	(12.0-16.8)	593	16.6	(13.0-20.9)	899	12.1	(9.6-15.1)
Northeast	1,491	17.5	(14.7-20.7)	617	18.8	(14.5-24.1)	874	16.1	(13.1-19.8)
Central	1,489	14.4	(12.3-16.8)	634	15.0	(12.0-18.7)	855	13.8	(11.0-17.1)
West	1,539	20.7	(17.8-23.9)	607	21.3	(16.6-26.7)	932	20.1	(17.0-23.7)
American Indian Counties	945	37.6	(32.5-42.9)	388	36.5	(29.2-44.6)	557	38.5	(31.9-45.7)
Household Income									
Less than \$10,000	326	32.8	(25.6-40.9)	102	39.5	(26.1-54.7)	224	29.8	(21.5-39.7)
\$10,000-\$14,999	372	28.6	(22.8-35.2)	121	32.4	(22.3-44.4)	251	26.1	(19.4-34.1)
\$15,000-\$19,999	455	25.4	(19.7-32.1)	153	21.7	(14.3-31.5)	302	27.5	(20.1-36.5)
\$20,000-\$24,999	549	24.0	(18.7-30.2)	202	22.7	(14.8-33.1)	347	25.1	(18.4-33.2)
\$25,000-\$34,999	900	20.9	(16.9-25.6)	378	23.0	(16.7-30.8)	522	18.6	(14.3-23.9)
\$35,000-\$49,999	1,113	16.9	(14.0-20.3)	512	19.2	(14.8-24.7)	601	14.3	(11.1-18.3)
\$50,000-\$74,999	1,088	15.1	(12.4-18.4)	500	15.9	(11.8-21.0)	588	14.3	(10.9-18.4)
\$75,000+	1,258	12.5	(9.9-15.6)	614	12.5	(9.0-17.2)	644	12.4	(9.1-16.8)
Education									
8th Grade or Less	276	13.0	(8.8-18.6)	145	16.3	(10.3-24.8)	131	7.5	(3.9-14.0)
Some High School	329	37.7	(28.4-47.9)	139	41.8	(27.9-57.1)	190	32.8	(22.9-44.5)
High School or G.E.D.	2,338	22.2	(19.7-24.9)	953	24.2	(20.3-28.7)	1,385	20.2	(17.3-23.5)
Some Post-High School	1,973	19.1	(16.5-22.0)	722	21.2	(16.9-26.2)	1,251	17.2	(14.4-20.4)
College Graduate	2,034	8.7	(7.2-10.6)	878	8.0	(5.9-10.8)	1,156	9.5	(7.4-12.0)

Table 10 (continued)
Respondents Who Currently Smoke Cigarettes, 2008

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Employment Status									
Employed for Wages	3,191	19.5	(17.6-21.6)	1,270	20.5	(17.4-23.9)	1,921	18.6	(16.4-21.0)
Self-employed	920	11.3	(9.0-14.1)	610	11.0	(8.3-14.5)	310	12.0	(8.2-17.3)
Unemployed	193	46.3	(35.0-58.1)	*	*	*	*	*	*
Homemaker	461	13.6	(9.0-20.0)	*	*	*	*	*	*
Retired	1,797	7.7	(6.4-9.3)	701	8.9	(6.8-11.7)	1,096	6.7	(5.1-8.7)
Unable to Work	306	34.6	(26.4-43.8)	138	37.1	(26.1-49.7)	168	32.0	(20.9-45.6)
Marital Status									
Married/Unmarried Couple	4,234	14.4	(13.0-15.9)	1,869	14.5	(12.6-16.8)	2,365	14.3	(12.5-16.3)
Divorced/Separated	909	33.2	(28.5-38.3)	366	33.8	(25.7-43.0)	543	32.7	(27.7-38.2)
Widowed	1,063	11.1	(8.9-13.7)	186	19.0	(12.5-27.8)	877	9.1	(7.2-11.6)
Never Married	740	24.8	(20.1-30.3)	413	27.5	(20.9-35.2)	327	20.3	(14.9-27.1)

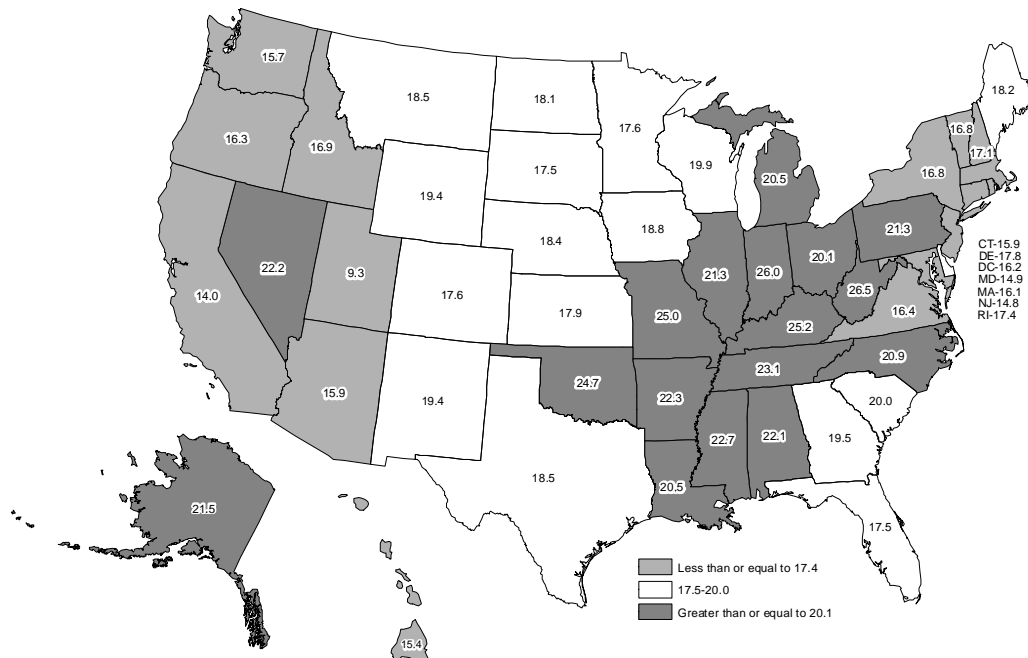
Note: *Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2008

National Statistics

The national median for respondents who currently smoke cigarettes was 18.4 percent. South Dakota had 17.5 percent of respondents who currently smoke cigarettes. Utah had the lowest percent of respondents who currently smoke cigarettes with 9.3 percent, while West Virginia had the highest with 26.5 percent.

Figure 8
Nationally, Respondents Who Currently Smoke Cigarettes, 2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2008

Further Analysis

The following data show the percent of those who currently smoke cigarettes for various health behaviors and conditions. For example, 43.0 percent of respondents who are heavy drinkers currently smoke cigarettes, while 16.0 percent of respondents who are not heavy drinkers currently smoke cigarettes.

Health Behavior or Condition	# Respondents	% Currently Smoke Cigarettes	95% CI
Obese (BMI = 30.0+)	1,995	18.8	16.1-21.8
Overweight (BMI = 25.0-29.9)	2,533	16.3	14.3-18.5
Recommended Weight (BMI = 18.5-24.9)	2,045	18.6	16.1-21.5
Underweight (BMI < 18.5)	101	23.5	13.5-37.7
No Leisure Time Physical Activity	2,083	21.4	18.8-24.3
Leisure Time Physical Activity	4,866	16.1	14.6-17.8
Smokeless Tobacco Use	283	23.9	16.5-33.4
No Smokeless Tobacco Use	6,546	16.9	15.6-18.4
Diabetes	723	15.0	11.7-19.0
No Diabetes	6,229	17.7	16.3-19.2
No Health Insurance (18-64)	370	34.3	27.3-42.1
Health Insurance (18-64)	4,091	18.4	16.7-20.1
Employer Based Health Insurance Coverage (18-64)	2,635	15.9	14.0-18.0
Private Health Insurance Plan (18-64)	618	12.0	8.2-17.2
Medicare (18-64)	140	41.0	30.1-52.9
Medicaid or Medical Assistance (18-64)	160	30.9	20.9-42.9
The Military, CHAMPUS, TriCare, or the VA (18-64)	200	16.8	11.0-24.7
The Indian Health Service (18-64)	277	60.4	51.5-68.7
No Mammogram within Past Two Years (40+)	811	21.8	18.1-26.0
Mammogram within Past Two Years (40+)	2,431	11.7	10.2-13.3
No Clinical Breast Exam within Past Two Years	960	21.6	17.6-26.2
Clinical Breast Exam within Past Two Years	3,050	14.5	12.9-16.3
No Pap Smear within the Past Three Years	579	17.0	13.1-21.7
Pap Smear within the Past Three Years	2,230	16.6	14.5-18.9
No PSA Test within the Past Two Years (40+)	820	20.1	16.9-23.8
PSA Test within the Past Two Years (40+)	1,336	11.4	9.5-13.5
No Digital Rectal Exam within the Past Two Years (40+)	971	19.4	16.4-22.7
Digital Rectal Exam within the Past Two Years (40+)	1,253	11.1	9.2-13.3
Prostate Cancer (40+)	145	10.6	6.3-17.2
No Prostate Cancer (40+)	2,119	15.2	13.4-17.2
No Blood Stool Test within the Past Two Years (50+)	3,378	13.5	12.1-15.0
Blood Stool Test within the Past Two Years (50+)	957	10.2	8.1-12.8
Never Had a Sigmoidoscopy or Colonoscopy (50+)	1,687	18.8	16.5-21.3
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	2,711	9.0	7.8-10.4
No Flu Shot (65+)	568	10.3	7.6-13.8
Flu Shot (65+)	1,738	5.7	4.6-7.0
No Pneumonia Shot (65+)	771	7.7	5.7-10.4
Pneumonia Shot (65+)	1,472	6.2	5.0-7.6
Haven't Been to the Dentist in the Past Year	2,090	24.6	21.8-27.7
Been to the Dentist in the Past Year	4,833	14.9	13.4-16.5
Doesn't Know Cervical Cancer - HPV Connection (Females)	822	12.3	9.8-15.4
Knows Cervical Cancer - HPV Connection (Females)	3,078	16.5	14.7-18.5
Drank Alcohol in Past 30 Days	3,608	19.9	18.0-22.0
No Alcohol in Past 30 Days	3,313	13.9	12.2-15.7
Binge Drinker	901	34.2	29.8-38.9
Not a Binge Drinker	5,946	13.6	12.4-15.0
Heavy Drinker	231	43.0	33.3-53.2
Not a Heavy Drinker	6,545	16.0	14.7-17.4

Table 11 (continued)
Currently Smoke Cigarettes for Selected Health Behaviors and Conditions, 2008

Health Behavior or Condition	# Respondents	% Currently Smoke Cigarettes	95% CI
Sometimes/Seldom/Never Wear Seat Belt	1,134	29.7	25.4-34.5
Always/Almost Always Wear Seat Belt	5,766	14.9	13.6-16.3
Previously Had a Heart Attack	487	14.7	11.2-19.0
Never Had a Heart Attack	6,422	17.7	16.3-19.2
Have Angina or Coronary Heart Disease	446	15.9	12.0-20.9
Do Not Have Angina or Coronary Heart Disease	6,418	17.6	16.2-19.1
Previously Had a Stroke	298	13.6	9.4-19.3
Never Had a Stroke	6,642	17.7	16.3-19.1
Current Asthma	531	23.0	18.1-28.9
Former Asthma	200	25.1	15.4-38.2
Never Had Asthma	6,178	16.8	15.4-18.3
Fair or Poor Health Status	1,170	25.0	21.3-29.0
Excellent, Very Good, or Good Health Status	5,776	16.5	15.1-18.0
Physical Health Not Good for 30 Days of the Past 30	543	21.9	17.2-27.4
Physical Health Not Good for 0-29 Days of the Past 30	6,281	17.3	15.8-18.8
Mental Health Not Good for 20-30 Days of the Past 30	374	37.2	28.9-46.4
Mental Health Not Good for 0-19 Days of the Past 30	6,498	16.3	15.0-17.7
Usual Activities Unattainable for 10-30 Days of the Past 30	523	28.4	22.8-34.7
Usual Activities Unattainable for 0-9 Days of the Past 30	6,373	16.8	15.4-18.3
Dissatisfied / Very Dissatisfied with Life	240	40.6	31.7-50.3
Satisfied / Very Satisfied with Life	6,568	16.5	15.1-18.0
Not Enough Sleep for 30 Days of the Past 30	665	29.4	23.9-35.4
Not Enough Sleep for 0-29 Days of the Past 30	6,160	16.2	14.8-17.6
Not at All Prepared for Large-Scale Disaster or Emergency	1,029	25.5	21.5-30.0
Somewhat Prepared for Large-Scale Disaster or Emergency	5,641	15.7	14.2-17.2
Physical, Mental, or Emotional Disability	1,710	23.7	20.3-27.4
No Physical, Mental, or Emotional Disability	5,225	16.1	14.7-17.6
Disability with Special Equipment Needed	682	15.8	11.8-20.9
No Disability with Special Equipment Needed	6,272	17.7	16.2-19.2
Not Heard of "Healthy South Dakota" Program	3,308	19.3	17.2-21.5
Heard of "Healthy South Dakota" Program	3,347	15.2	13.5-17.1
Injured in a Fall (45+)	260	17.3	12.7-23.2
Not Injured in a Fall (45+)	4,829	13.6	12.4-14.8
Never Been Tested for HIV (18-64)	3,366	17.1	15.3-19.2
Been Tested for HIV (18-64)	1,063	27.7	24.2-31.6
Military Veteran	1,021	18.5	15.4-22.2
Not a Military Veteran	5,931	17.4	15.9-19.0

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2008

The percentage of respondents who tried to stop smoking for one day or longer because they were trying to quit smoking hit its peak in 2007-2008 survey years with 57.5 percent. Overall, the percent of respondents who tried to stop smoking for one day or longer because they were trying to quit smoking has been increasing except from 2002 through 2005 when it decreased from 57.4 percent to 53.6 percent, respectively. Table 12, on the following page, displays this.

Survey Year	# of Respondents	Percent
2007-2008	2,476	57.5
2006-2007	2,542	56.9
2005-2006	2,564	55.0
2004-2005	2,531	53.6
2003-2004	2,356	55.7
2002-2003	2,109	57.4
2001-2002	2,049	56.4
2000-2001	1,918	52.2

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2008

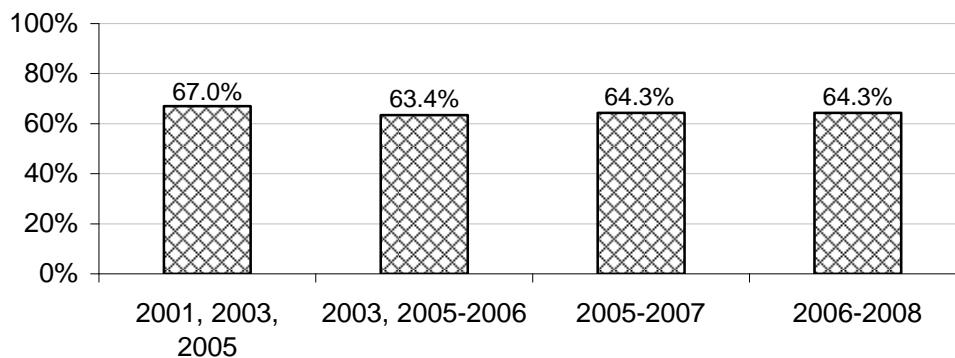
Table 13 shows the percent of current cigarette smokers for the last nine years by type of health insurance they have. The Indian Health Service again had the highest percent of current smokers from 2004-2008 with 54.5 percent. Medicaid or medical assistance with 47.4 percent and none with 40.8 percent rounded out the top three.

Type of Health Insurance	2004-2008	2003-2007	2002-2006	2001-2005	2000-2004
The Indian Health Service	54.5%	53.8%	51.6%	52.2%	52.5%
Medicaid or Medical Assistance	47.4%	50.6%	50.5%	49.0%	51.2%
None	40.8%	43.3%	43.5%	43.6%	43.9%
Medicare	39.6%	38.8%	40.7%	38.7%	37.6%
The Military, CHAMPUS, TriCare, or the VA	23.8%	26.1%	28.4%	28.1%	28.1%
Employer Based Coverage	17.7%	19.1%	20.0%	20.8%	21.9%
Private Health Insurance Plan	12.5%	13.1%	14.2%	15.6%	15.4%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2008

Figure 9 shows the percent of respondents who have been advised to quit smoking in the past 12 months by a health professional. Overall, the percent of respondents who have been advised to quit smoking has remained steady since 2001.

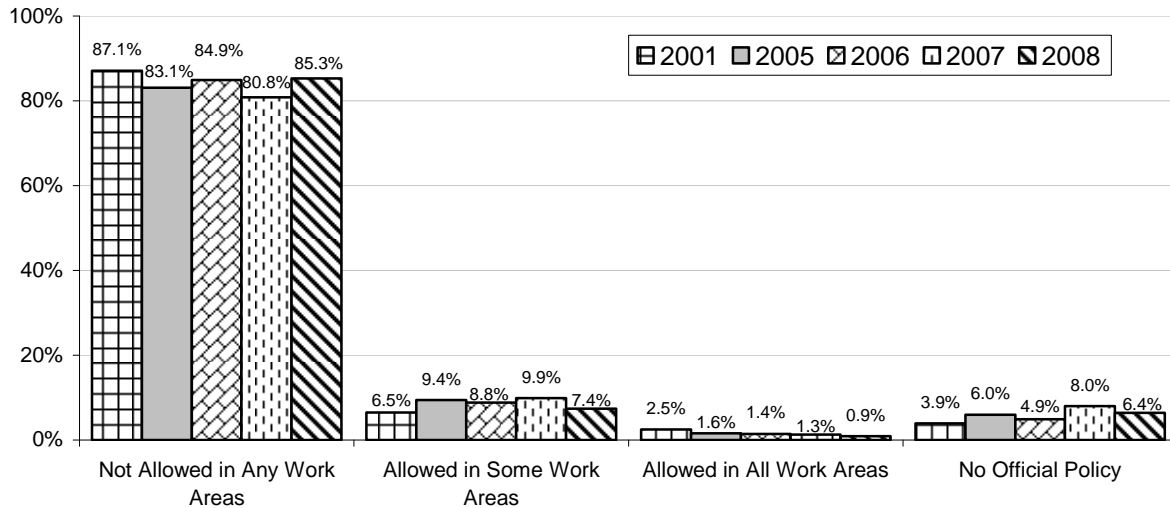
**Figure 9
Percent of Respondents Who Have Been Advised by a Doctor, Nurse, or Other Health Professional to Quit Smoking in the Past 12 Months, 2001, 2003, and 2005-2008**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001, 2003, and 2005-2008

Figure 10 shows the respondents' place of work official smoking policy for work areas. For each year the majority of respondents stated that smoking was not allowed in any work areas.

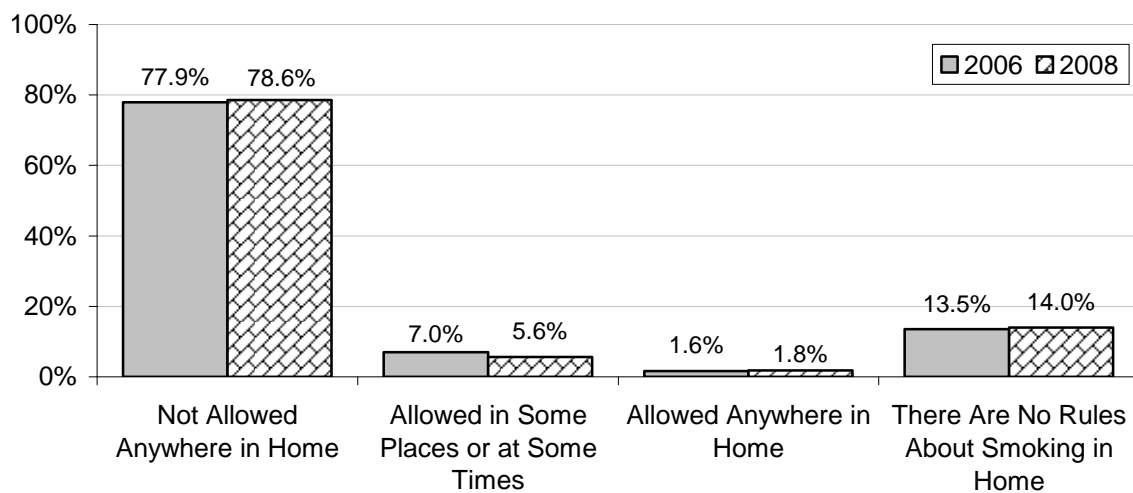
Figure 10
Respondents' Place of Work Official Smoking Policy for Work Areas, 2001, and 2005-2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2001, and 2005-2008

Figure 11 shows the respondents' rules about smoking inside their homes. The majority of respondents for both years stated that smoking was not allowed anywhere in their homes.

Figure 11
Respondents' Rules About Smoking Inside the Home, 2006 and 2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2006 and 2008

The series of Tables 14 through 14d, on the following pages, displays the opinion on the effects of second hand smoke from current smokers, former smokers, and respondents who have never smoked. Table 14 shows the respondents' opinions on whether second hand smoke causes lung cancer. The majority of respondents from all years answered yes to this question.

Table 14					
Opinion on Effects of Second Hand Smoke: Causes Lung Cancer, 2005-2008					
		# Respondents	Yes	No	Don't Know/Not Sure
Total	2007-2008	13,401	81.5%	9.1%	9.4%
	2006-2007	12,988	81.2%	9.8%	9.0%
	2005-2006	13,114	81.3%	8.8%	9.9%
Current Smoker	2007-2008	2,370	65.0%	19.7%	15.3%
	2006-2007	2,424	64.0%	22.6%	13.4%
	2005-2006	2,461	65.0%	20.7%	14.3%
Former Smoker	2007-2008	4,037	77.5%	10.8%	11.6%
	2006-2007	3,678	77.5%	11.2%	11.3%
	2005-2006	3,645	76.8%	10.1%	13.1%
Never Smoked	2007-2008	6,957	88.7%	4.9%	6.4%
	2006-2007	6,860	89.2%	4.4%	6.4%
	2005-2006	6,976	89.3%	3.9%	6.8%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008

Table 14a shows the respondents' opinions on whether second hand smoke causes heart disease. The majority of respondents for all four years answered yes to this question.

Table 14a					
Opinion on Effects of Second Hand Smoke: Causes Heart Disease, 2005-2008					
		# Respondents	Yes	No	Don't Know/Not Sure
Total	2007-2008	13,397	69.5%	14.0%	16.5%
	2006-2007	12,981	69.2%	14.9%	15.9%
	2005-2006	13,112	68.0%	13.5%	18.5%
Current Smoker	2007-2008	2,369	56.1%	24.5%	19.4%
	2006-2007	2,421	56.0%	26.6%	17.4%
	2005-2006	2,461	57.1%	24.7%	18.2%
Former Smoker	2007-2008	4,034	69.6%	13.6%	16.9%
	2006-2007	3,675	69.2%	14.3%	16.5%
	2005-2006	3,646	67.8%	13.1%	19.1%
Never Smoked	2007-2008	6,957	73.9%	10.7%	15.4%
	2006-2007	6,859	74.0%	10.9%	15.1%
	2005-2006	6,973	72.1%	9.7%	18.2%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008

Table 14b, on the next page, shows the respondents' opinions on whether second hand smoke causes colon cancer. In 2007-2008 survey years combined, only slightly more than a quarter of respondents, 25.3 percent, answered yes. The majority of respondents answered either no or they did not know.

Table 14b					
Opinion on Effects of Second Hand Smoke: Causes Colon Cancer, 2005-2008					
		# Respondents	Yes	No	Don't Know/Not Sure
Total	2007-2008	13,394	25.3%	37.3%	37.3%
	2006-2007	12,981	25.5%	37.1%	37.4%
	2005-2006	13,107	23.2%	34.7%	42.1%
Current Smoker	2007-2008	2,368	18.2%	49.0%	32.8%
	2006-2007	2,423	19.2%	50.4%	30.5%
	2005-2006	2,460	17.2%	48.4%	34.4%
Former Smoker	2007-2008	4,032	22.5%	37.8%	39.7%
	2006-2007	3,674	23.0%	37.4%	39.6%
	2005-2006	3,644	22.7%	32.7%	44.6%
Never Smoked	2007-2008	6,957	29.0%	33.3%	37.7%
	2006-2007	6,858	28.9%	32.2%	38.9%
	2005-2006	6,971	25.6%	30.6%	43.8%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008

Table 14c displays the respondents' opinion on whether second hand smoke causes health problems in children. A strong majority of respondents from all four years answered yes to this question.

Table 14c					
Opinion on Effects of Second Hand Smoke: Causes Health Problems in Children, 2005-2008					
		# Respondents	Yes	No	Don't Know/Not Sure
Total	2007-2008	13,393	90.9%	4.7%	4.4%
	2006-2007	12,977	90.6%	5.4%	3.9%
	2005-2006	13,107	91.5%	4.4%	4.2%
Current Smoker	2007-2008	2,368	84.5%	8.8%	6.7%
	2006-2007	2,422	84.5%	10.3%	5.2%
	2005-2006	2,458	85.8%	8.7%	5.5%
Former Smoker	2007-2008	4,032	89.6%	5.0%	5.5%
	2006-2007	3,673	89.1%	5.9%	5.0%
	2005-2006	3,646	89.9%	4.6%	5.5%
Never Smoked	2007-2008	6,956	93.6%	3.2%	3.2%
	2006-2007	6,856	93.6%	3.4%	3.0%
	2005-2006	6,971	94.3%	2.7%	3.0%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008

Table 14d, on the next page, displays the respondents' opinion on whether second hand smoke causes sudden infant death syndrome. The highest percent of respondents from the past three years answered yes to this question. In 2005-2006 the majority of respondents said they did not know or were unsure.

Table 14d					
Opinion on Effects of Second Hand Smoke: Causes Sudden Infant Death Syndrome, 2005-2008					
		# Respondents	Yes	No	Don't Know/Not Sure
Total	2007-2008	13,390	43.2%	20.1%	36.7%
	2006-2007	12,973	43.6%	20.0%	36.3%
	2005-2006	13,100	39.4%	18.0%	42.6%
Current Smoker	2007-2008	2,367	37.9%	28.5%	33.6%
	2006-2007	2,421	38.3%	29.5%	32.1%
	2005-2006	2,454	34.2%	27.6%	38.2%
Former Smoker	2007-2008	4,031	36.4%	21.9%	41.7%
	2006-2007	3,671	37.3%	21.7%	41.0%
	2005-2006	3,644	34.2%	18.8%	47.1%
Never Smoked	2007-2008	6,955	48.1%	16.6%	35.3%
	2006-2007	6,855	48.4%	15.9%	35.7%
	2005-2006	6,970	43.8%	14.2%	42.1%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008

SMOKELESS TOBACCO

Definition: Respondents who report that they use chewing tobacco or snuff every day or some days.

Prevalence of Smokeless Tobacco

- South Dakota 5.3%
- There is no nationwide median for smokeless tobacco

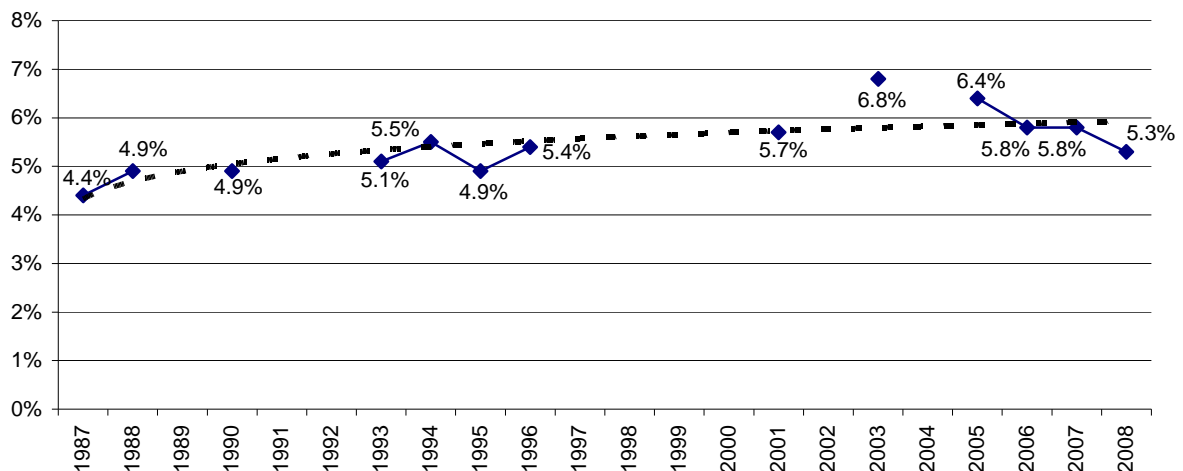
Healthy People 2010 Objective

There was no stated Healthy People 2010 Objective for smokeless tobacco use.

Trend Analysis

Overall, the percent of respondents who use smokeless tobacco has been increasing with a high of 6.8 percent in 2003 compared to a low of 4.4 percent in 1987. However, there was a decrease from 5.8 percent in 2007 to 5.3 percent in 2008.

Figure 12
Percent of Respondents Who Use Smokeless Tobacco,
1987-1988, 1990, 1993-1996, 2001, 2003, and 2005-2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-1988, 1990, 1993-1996, 2001, 2003, and 2005-2008

Demographics

Gender Males exhibit a significantly higher prevalence of smokeless tobacco use than females. This difference is evident throughout virtually every demographic group.

Age Smokeless tobacco use generally decreases as age increases. This is especially true for males.

Race American Indian females exhibit a significantly higher prevalence of smokeless tobacco use than white females.

Region The American Indian counties region demonstrates a very large percentage of smokeless tobacco users, while the southeast and northeast regions show a very low percentage.

Household Income Smokeless tobacco use for females is lower in the higher household income groups. Males do not exhibit this same association.

Education Overall, there seems to be no association with smokeless tobacco use and education levels.

Employment Status Those who are employed for wages, self-employed, unemployed, or unable to work show a very high prevalence of smokeless tobacco use, while those who are a homemaker or retired show a very low prevalence.

Marital Status Those who are widowed exhibit a significantly lower prevalence of smokeless tobacco users than all other marital status categories.

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	6,854	5.3	(4.5-6.3)	2,787	10.5	(8.9-12.3)	4,067	0.3	(0.2-0.6)
Age									
18-24	217	6.5	(3.4-11.9)	*	*	*	*	*	*
25-34	653	10.2	(7.7-13.4)	262	19.1	(14.3-25.0)	391	0.7	(0.2-1.7)
35-44	890	7.8	(5.9-10.3)	363	15.1	(11.4-19.9)	527	0.5	(0.2-1.2)
45-54	1,333	4.2	(3.1-5.7)	590	8.0	(5.8-10.9)	743	0.4	(0.1-1.2)
55-64	1,417	2.5	(1.7-3.7)	603	4.9	(3.3-7.2)	814	0.0	-
65-74	1,119	2.1	(1.3-3.4)	483	4.3	(2.7-7.0)	636	0.1	(0.0-0.7)
75+	1,176	1.4	(0.8-2.4)	379	3.3	(1.8-5.9)	797	0.1	(0.0-0.9)
Race									
White	6,034	5.3	(4.4-6.3)	2,450	10.5	(8.8-12.5)	3,584	0.2	(0.1-0.4)
American Indian	611	7.2	(4.8-10.7)	241	11.4	(7.0-17.9)	370	3.3	(1.7-6.5)
Region									
Southeast	1,474	4.1	(2.8-5.9)	584	8.6	(5.9-12.4)	890	0.0	-
Northeast	1,461	4.4	(3.1-6.4)	605	8.6	(6.0-12.2)	856	0.0	-
Central	1,478	6.5	(4.9-8.6)	624	12.7	(9.6-16.6)	854	0.3	(0.1-1.0)
West	1,519	6.9	(5.1-9.3)	597	13.1	(9.6-17.6)	922	0.7	(0.3-1.6)
American Indian Counties	922	10.6	(7.7-14.4)	377	18.2	(12.8-25.1)	545	3.5	(1.7-7.0)
Household Income									
Less than \$10,000	321	5.0	(2.7-9.3)	101	12.2	(5.7-24.2)	220	1.7	(0.6-5.2)
\$10,000-\$14,999	368	3.7	(2.0-7.0)	119	8.4	(4.1-16.3)	249	0.6	(0.1-2.3)
\$15,000-\$19,999	444	4.0	(2.3-6.9)	151	8.8	(4.6-16.1)	293	1.0	(0.3-3.3)
\$20,000-\$24,999	540	6.9	(3.7-12.7)	199	13.7	(7.0-25.0)	341	1.2	(0.3-4.3)
\$25,000-\$34,999	889	3.6	(2.3-5.5)	372	6.6	(4.1-10.4)	517	0.4	(0.1-1.2)
\$35,000-\$49,999	1,100	6.8	(4.7-9.7)	505	12.6	(8.7-17.8)	595	0.3	(0.1-1.6)
\$50,000-\$74,999	1,073	5.5	(4.0-7.5)	488	10.3	(7.5-14.1)	585	0.0	-
\$75,000+	1,243	5.3	(3.7-7.5)	605	9.7	(6.8-13.6)	638	0.1	(0.0-0.3)
Education									
8 th Grade or Less	268	4.1	(2.1-7.7)	141	6.1	(3.0-11.8)	127	0.8	(0.1-5.3)
Some High School	320	9.0	(3.8-19.9)	135	15.6	(6.4-33.2)	185	1.0	(0.2-5.2)
High School or G.E.D.	2,303	5.6	(4.3-7.2)	934	11.0	(8.4-14.1)	1,369	0.3	(0.1-0.8)
Some Post-High School	1,945	6.2	(4.6-8.2)	706	12.3	(9.1-16.5)	1,239	0.6	(0.3-1.3)
College Graduate	2,013	3.9	(2.8-5.4)	869	8.0	(5.8-10.9)	1,144	0.0	(0.0-0.2)
Employment Status									
Employed for Wages	3,128	6.4	(5.2-7.8)	1,242	12.3	(10.0-15.1)	1,886	0.2	(0.1-0.5)
Self-employed	905	8.4	(6.2-11.2)	598	11.4	(8.4-15.4)	307	1.1	(0.3-3.9)
Unemployed	187	9.5	(3.2-25.1)	*	*	*	*	*	*
Homemaker	460	0.4	(0.1-1.1)	*	*	*	*	*	*
Retired	1,784	1.5	(1.0-2.3)	695	3.3	(2.2-4.9)	1,089	0.1	(0.0-0.4)
Unable to work	304	4.3	(2.1-8.6)	138	7.8	(3.6-16.0)	166	0.6	(0.1-2.3)

**Table 15 (continued)
Respondents Who Use Smokeless Tobacco, 2008**

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Marital Status									
Married/Unmarried Couple	4,175	4.8	(4.0-5.7)	1,837	9.4	(7.8-11.3)	2,338	0.4	(0.2-0.7)
Divorced/Separated	890	6.4	(3.9-10.3)	361	13.5	(8.2-21.5)	529	0.3	(0.1-1.2)
Widowed	1,056	0.9	(0.4-1.9)	182	3.5	(1.5-8.1)	874	0.3	(0.1-1.0)
Never Married	723	8.6	(5.7-12.6)	403	13.4	(8.9-19.6)	320	0.3	(0.1-1.8)

Note: *Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2008

Further Analysis

The following data show the percent of those who currently use smokeless tobacco for various health behaviors and conditions. For example, 14.0 percent of respondents who are binge drinkers use smokeless tobacco, while 3.3 percent of respondents who are not binge drinkers use smokeless tobacco.

**Table 16
Smokeless Tobacco Use for Selected Health Behaviors and Conditions, 2008**

Health Behavior or Condition	# Respondents	% Use Smokeless Tobacco	95% CI
Obese (BMI = 30.0+)	1,966	5.8	4.4-7.7
Overweight (BMI = 25.0-29.9)	2,502	6.4	5.1-8.1
Recommended Weight (BMI = 18.5-24.9)	2,011	4.5	3.1-6.5
Underweight (BMI < 18.5)	100	0.0	-
No Leisure Time Physical Activity	2,049	7.1	5.3-9.6
Leisure Time Physical Activity	4,798	4.7	3.8-5.7
Current Smoker	1,150	7.2	4.8-10.8
Former Smoker	2,135	6.0	4.6-7.8
Never Smoked	3,544	4.3	3.4-5.4
Diabetes	709	2.0	1.1-3.5
No Diabetes	6,141	5.6	4.7-6.6
No Health Insurance (18-64)	370	9.6	5.5-16.3
Health Insurance (18-64)	4,102	6.0	5.0-7.1
Employer Based Health Insurance Coverage (18-64)	2,640	5.6	4.4-7.0
Private Health Insurance Plan (18-64)	621	7.4	4.8-11.4
Medicare (18-64)	142	5.8	2.2-14.3
Medicaid or Medical Assistance (18-64)	160	5.7	2.7-11.8
The Military, CHAMPUS, TriCare, or the VA (18-64)	199	6.6	2.8-14.5
The Indian Health Service (18-64)	279	10.1	5.8-16.9
No Mammogram within Past Two Years (40+)	804	0.2	0.1-0.5
Mammogram within Past Two Years (40+)	2,422	0.2	0.1-0.5
No Clinical Breast Exam within Past Two Years	957	0.3	0.1-1.0
Clinical Breast Exam within Past Two Years	3,037	0.4	0.2-0.6
No Pap Smear within the Past Three Years	574	0.5	0.1-1.6
Pap Smear within the Past Three Years	2,220	0.3	0.2-0.7
No PSA Test within the Past Two Years (40+)	814	10.8	8.3-13.9
PSA Test within the Past Two Years (40+)	1,332	4.4	3.3-5.8
No Digital Rectal Exam within the Past Two Years (40+)	967	9.7	7.5-12.5
Digital Rectal Exam within the Past Two Years (40+)	1,248	4.6	3.5-6.1
Prostate Cancer (40+)	145	1.7	0.6-4.8
No Prostate Cancer (40+)	2,111	7.2	5.9-8.7
No Blood Stool Test within the Past Two Years (50+)	3,369	2.5	1.9-3.3
Blood Stool Test within the Past Two Years (50+)	956	1.8	1.1-3.0
Never Had a Sigmoidoscopy or Colonoscopy (50+)	1,677	3.4	2.4-4.8
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	2,714	1.8	1.3-2.5
No Flu Shot (65+)	562	2.3	1.2-4.5
Flu Shot (65+)	1,728	1.5	1.0-2.4
No Pneumonia Shot (65+)	766	2.7	1.6-4.4
Pneumonia Shot (65+)	1,464	1.3	0.8-2.2

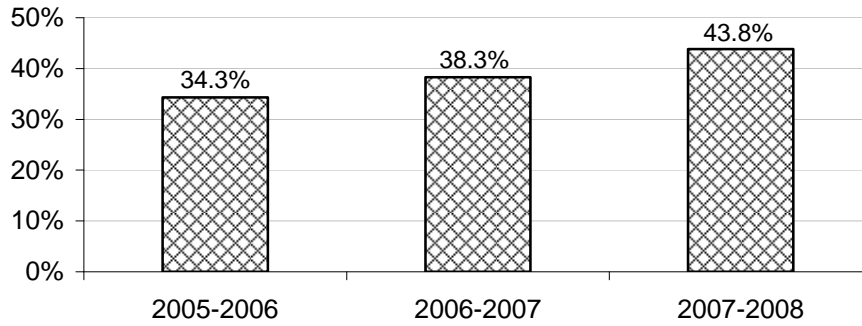
Table 16 (continued)
Smokeless Tobacco Use for Selected Health Behaviors and Conditions, 2008

Health Behavior or Condition	# Respondents	% Use Smokeless Tobacco	95% CI
Haven't Been to the Dentist in the Past Year	2,054	9.0	7.0-11.5
Been to the Dentist in the Past Year	4,769	4.0	3.2-5.0
Doesn't Know Cervical Cancer - HPV Connection (Females)	828	0.3	0.1-0.9
Knows Cervical Cancer - HPV Connection (Females)	3,085	0.4	0.2-0.6
Drank Alcohol in Past 30 Days	3,549	7.4	6.1-8.9
No Alcohol in Past 30 Days	3,281	2.6	1.9-3.5
Binge Drinker	879	14.0	10.7-18.0
Not a Binge Drinker	5,894	3.3	2.7-4.1
Heavy Drinker	223	12.3	6.9-21.2
Not a Heavy Drinker	6,481	4.7	3.9-5.6
Sometimes/Seldom/Never Wear Seat Belt	1,107	12.1	9.2-15.8
Always/Almost Always Wear Seat Belt	5,734	4.0	3.2-4.9
Previously Had a Heart Attack	480	2.2	1.2-4.1
Never Had a Heart Attack	6,327	5.5	4.6-6.5
Have Angina or Coronary Heart Disease	437	1.9	0.9-3.9
Do not have Angina or Coronary Heart Disease	6,324	5.5	4.7-6.6
Previously Had a Stroke	295	1.2	0.3-4.7
Never Had a Stroke	6,542	5.5	4.6-6.5
Current Asthma	524	4.0	2.2-7.1
Former Asthma	197	1.8	0.4-6.9
Never Had Asthma	6,087	5.6	4.7-6.7
Fair or Poor Health Status	1,154	2.5	1.7-3.7
Excellent, Very Good, or Good Health Status	5,690	5.7	4.8-6.8
Physical Health Not Good for 30 Days of the Past 30	535	4.1	2.0-7.9
Physical Health Not Good for 0-29 Days of the Past 30	6,189	5.5	4.6-6.5
Mental Health Not Good for 20-30 Days of the Past 30	365	6.5	2.5-16.2
Mental Health Not Good for 0-19 Days of the Past 30	6,407	5.2	4.4-6.1
Usual Activities Unattainable for 10-30 Days of the Past 30	519	3.5	2.0-6.1
Usual Activities Unattainable for 0-9 Days of the Past 30	6,277	5.5	4.6-6.5
Dissatisfied / Very Dissatisfied with Life	241	9.9	4.6-20.1
Satisfied / Very Satisfied with Life	6,569	5.2	4.4-6.2
Not Enough Sleep for 30 Days of the Past 30	654	9.9	6.2-15.6
Not Enough Sleep for 0-29 Days of the Past 30	6,076	4.8	4.1-5.7
Not at All Prepared for Large-Scale Disaster or Emergency	1,033	5.0	2.9-8.5
Somewhat Prepared for Large-Scale Disaster or Emergency	5,659	5.4	4.5-6.4
Physical, Mental, or Emotional Disability	1,691	3.3	2.3-4.7
No Physical, Mental, or Emotional Disability	5,143	5.8	4.9-7.0
Disability with Special Equipment Needed	679	2.3	1.3-4.2
No Disability with Special Equipment Needed	6,173	5.6	4.7-6.6
Not Heard of "Healthy South Dakota" Program	3,320	6.7	5.3-8.3
Heard of "Healthy South Dakota" Program	3,359	4.0	3.2-5.1
Injured in a Fall (45+)	258	2.7	1.1-6.6
Not Injured in a Fall (45+)	4,803	2.8	2.3-3.5
Never Been Tested for HIV (18-64)	3,357	6.8	5.5-8.3
Been Tested for HIV (18-64)	1,058	4.8	3.4-6.8
Military Veteran	1,008	5.9	4.1-8.6
Not a Military Veteran	5,842	5.3	4.4-6.3

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2008

Figure 13 shows the percent of respondents whose doctor, nurse, or other health professional advised them to stop using smokeless tobacco. The percent of respondents advised to quit using smokeless tobacco has increased from 34.3 percent in the combined years of 2005-2006 to 43.8 percent in the combined years of 2007-2008.

Figure 13
Percent of Respondents Advised to Quit Using Smokeless Tobacco by a Doctor, Nurse, or Other Health Professional, 2005-2008



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005-2008