

# Immunization

## NO FLU SHOT

**Definition:** Respondents ages 65 and older who have not had an influenza vaccination within the past 12 months.

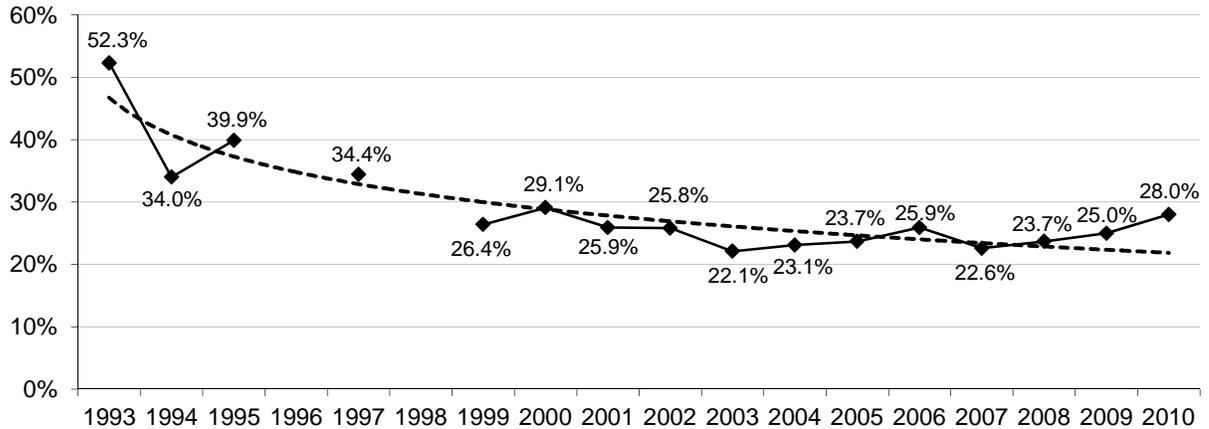
### Prevalence of No Flu Shot

- South Dakota 34%
- Nationwide median 40%

### Healthy People 2020 Objective

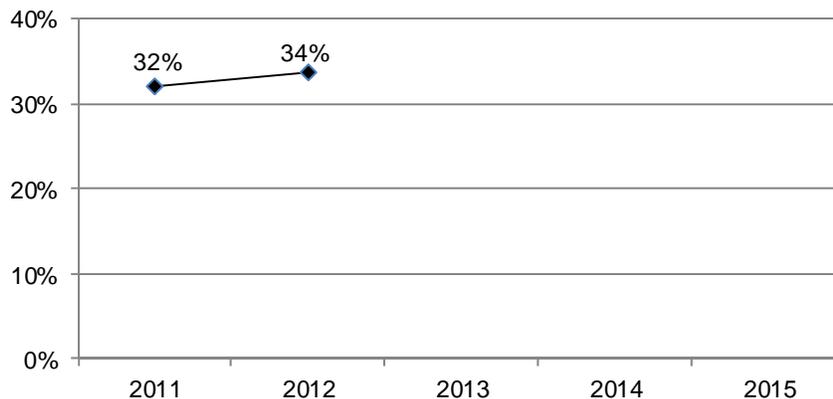
*Increase the proportion of noninstitutionalized adults age 65 years and older who are vaccinated yearly against influenza to 90 percent.*

**Figure 66**  
**Percent of Respondents, Ages 65 and Older, Who Have Not Had a Flu Shot Within the Past 12 Months, 1993-1995, 1997, and 1999-2010**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1993-1995, 1997, and 1999-2010

**Figure 67**  
**Percent of Respondents, Ages 65 and Older, Who Have Not Had a Flu Shot Within the Past 12 Months, 2011-2012**



Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

<b>Table 39</b>				
<b>Respondents, Ages 65 and Older, Who Have Not Had a Flu Shot Within the Past 12 Months, 2011-2012</b>				
		<b>2011-2012</b>	<b>2011</b>	<b>2012</b>
<b>Total</b>		<b>33%</b>	<b>32%</b>	<b>34%</b>
<b>Gender</b>	Male	36%	34%	39%
	Female	30%	30%	30%
<b>Age</b>	18-44	-	-	-
	45-64	-	-	-
	65+	33%	32%	34%
<b>Race</b>	White	32%	31%	34%
	American Indian	26%	*	*
<b>Ethnicity</b>	Hispanic	*	*	*
	Non-Hispanic	32%	31%	34%
<b>Household Income</b>	Less than \$25,000	32%	31%	33%
	\$25,000-\$49,999	33%	*	*
	\$50,000+	33%	*	*
<b>Education</b>	High School, G.E.D., or Less	34%	34%	33%
	Some Post-High School	30%	*	*
	College Graduate	32%	*	*
<b>Employment Status</b>	Employed for Wages	29%	*	*
	Self-employed	53%	*	*
	Unemployed	*	*	*
	Homemaker	33%	*	*
	Student	*	*	*
	Retired	31%	27%	35%
<b>Marital Status</b>	Unable to Work	24%	*	*
	Married/Unmarried Couple	31%	30%	31%
	Divorced/Separated	42%	*	*
	Widowed	31%	*	*
<b>Home Ownership Status</b>	Never Married	50%	*	*
	Own Home	34%	33%	35%
<b>Children Status</b>	Rent Home	25%	25%	27%
	Children in Household (Ages 18-44)	-	-	-
<b>Phone Status</b>	No Children in Household (Ages 18-44)	-	-	-
	Landline	32%	31%	33%
<b>Pregnancy Status</b>	Cell Phone	40%	*	*
	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	-	-	-

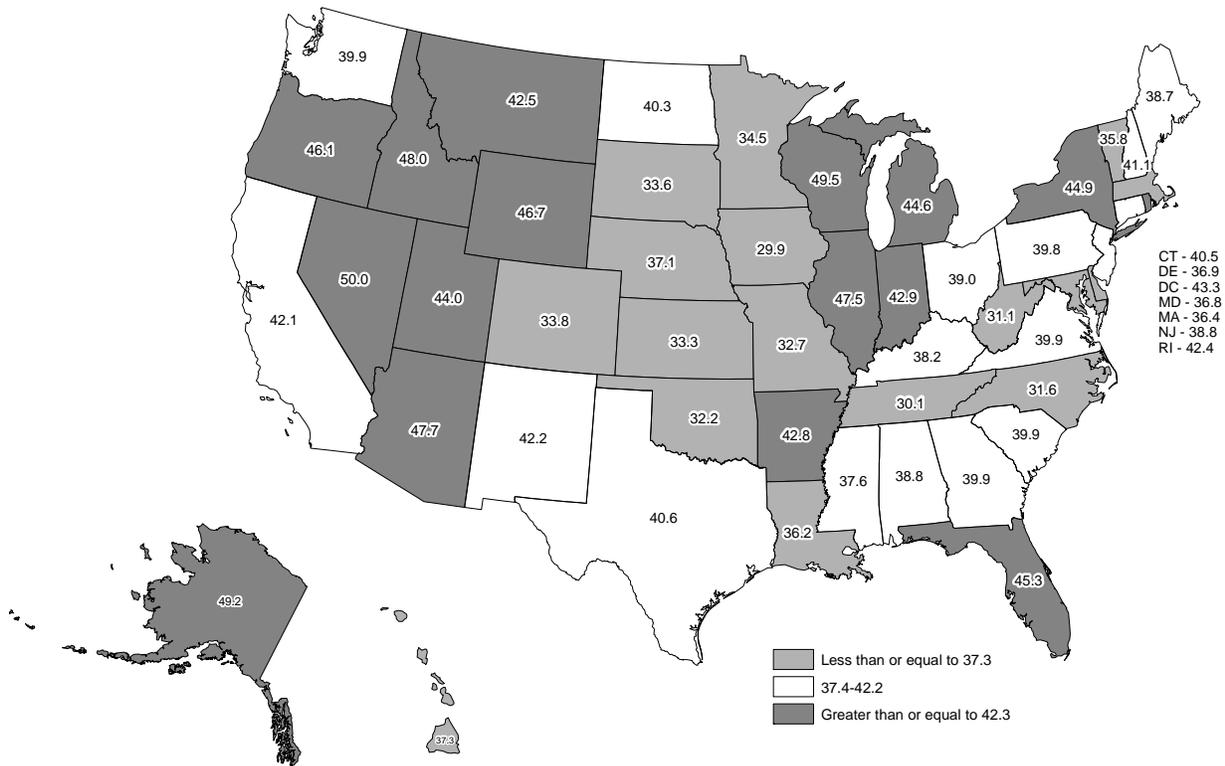
Note: \*Results based on small sample sizes have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

## **National Statistics**

The national median for respondents age 65 and older who have not had a flu shot within the past year was 39.9 percent, as shown in Figure 68 on the next page. South Dakota had 33.6 percent of respondents who have not had a flu shot within the past 12 months. Iowa had the lowest percent of respondents who have not had a flu shot within the past 12 months with 29.9 percent, while Nevada had the highest with 50.0 percent.

**Figure 68**  
**Nationally, Respondents Ages 65 and Older, Who Have Not Had a Flu Shot**  
**Within the Past 12 Months, 2012**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012

**Further Analysis**

The following data show the percent of those, ages 65 and older, who have not had a flu shot for various health behaviors and conditions. For example, 57 percent of respondents who have not had a pneumonia shot have also not had a flu shot, while 20 percent of respondents who have had a pneumonia shot have not had a flu shot.

<b>Health Behavior or Condition</b>	<b>% No Flu Shot</b>
Underweight (BMI < 18.5)	*
Recommended (BMI = 18.5-24.9)	36%
Overweight (BMI = 25.0-29.9)	31%
Obese - Class I (BMI = 30.0-34.9)	29%
Obese - Classes II & III (BMI = 35.0+)	30%
Leisure Time Exercise	30%
No Leisure Time Exercise	37%
Current Smoker	39%
Former Smoker	30%
Never Smoked	34%
Smokeless Tobacco	*
No Smokeless Tobacco	32%
Diabetes	24%
No Diabetes	35%
High Blood Pressure	29%
No High Blood Pressure	38%

**Table 40 (continued)**  
**No Flu Shot, Ages 65 and Older, Within the Past 12 Months for**  
**Selected Health Behaviors and Conditions, 2011-2012**

<b>Health Behavior or Condition</b>	<b>% No Flu Shot</b>
Breast Exam Within Past Two Years	28%
No Breast Exam Within Past Two Years	35%
Mammogram Within Past Two Years (40+)	26%
No Mammogram Within Past Two Years (40+)	41%
Pap Smear Within Past Three Years	35%
No Pap Smear Within Past Three Years	33%
Blood Stool Test Within Past Two Years (50+)	21%
No Blood Stool Test Within Past Two Years (50+)	36%
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	28%
Never Had a Sigmoidoscopy or Colonoscopy (50+)	50%
PSA Test Within the Past Two Years (40+)	28%
No PSA Test Within the Past Two Years (40+)	60%
Pneumonia Shot (65+)	20%
No Pneumonia Shot (65+)	57%
Previously Had Heart Attack	24%
Never Had Heart Attack	34%
Have Angina or Coronary Heart Disease	26%
Do Not Have Angina or Coronary Heart Disease	34%
Previously Had a Stroke	24%
Never Had a Stroke	33%
Cancer	29%
No Cancer	35%
Skin Cancer	27%
No Skin Cancer	34%
Current Asthma	18%
Former Asthma	40%
Never Had Asthma	34%
Arthritis	28%
No Arthritis	37%
COPD	20%
No COPD	34%
Depression	31%
No Depression	33%
Kidney Disease	19%
No Kidney Disease	33%
Vision Impairment	31%
No Vision Impairment	34%
Been to the Dentist in the Past Year	30%
Haven't Been to the Dentist in the Past Year	40%
Always/Almost Always Wear Seat Belt	31%
Sometimes/Seldom/Never Wear Seat Belt	41%
Drank Alcohol in Past 30 Days	34%
Did Not Drink Alcohol in Past 30 Days	32%
Binge Drinker	41%
Not a Binge Drinker	32%
Heavy Drinker	56%
Not a Heavy Drinker	32%
< 3 Sweetened Beverages per Day	32%
3+ Sweetened Beverages per Day	*
Good/Very Good/Excellent Health Status	35%
Fair/Poor Health Status	26%
Physical Health Not Good for 0-29 Days of the Past 30	34%
Physical Health Not Good for 30 Days of the Past 30	24%
Mental Health Not Good for 0-19 Days of the Past 30	33%
Mental Health Not Good for 20-30 Days of the Past 30	28%

**Table 40 (continued)**  
**No Flu Shot, Ages 65 and Older, Within the Past 12 Months for**  
**Selected Health Behaviors and Conditions, 2011-2012**

<b>Health Behavior or Condition</b>	<b>% No Flu Shot</b>
Usual Activities Unattainable for 0-9 Days of the Past 30	33%
Usual Activities Unattainable for 10-30 Days of the Past 30	29%
Physical, Mental, or Emotional Problems	28%
No Physical, Mental, or Emotional Problems	36%
Disability with Special Equipment Needed	24%
No Disability with Special Equipment Needed	35%
Heard of "Healthy South Dakota" Program	29%
Not Heard of "Healthy South Dakota" Program	37%
Injured in a Fall in Past 12 Months (45+)	26%
Not Injured in a Fall in Past 12 Months (45+)	35%
Been Tested for HIV (18-64)	33%
Never Been Tested for HIV (18-64)	33%

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

## NO PNEUMONIA SHOT

**Definition:** Respondents ages 65 and older who have never had a pneumonia vaccination

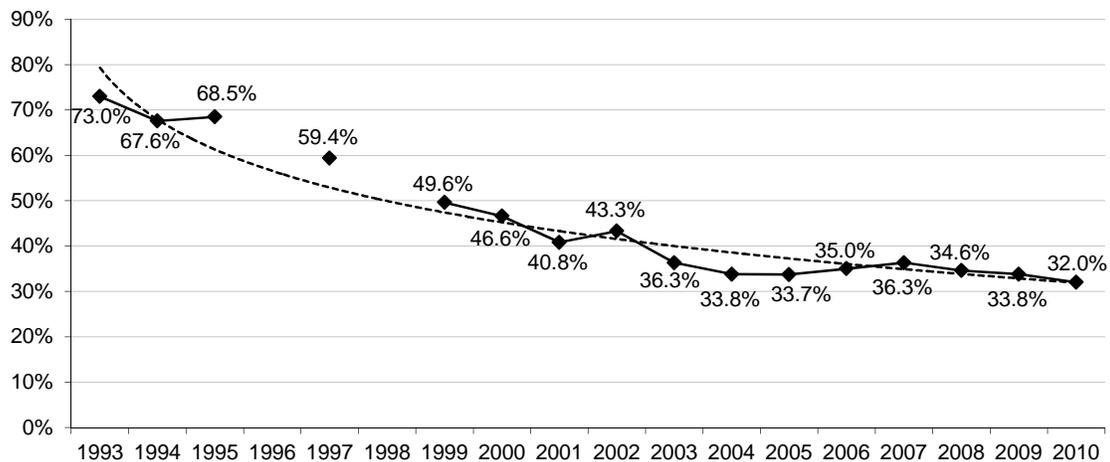
### Prevalence of No Pneumonia Shot

- South Dakota 36%
- Nationwide median 31%

### Healthy People 2020 Objective

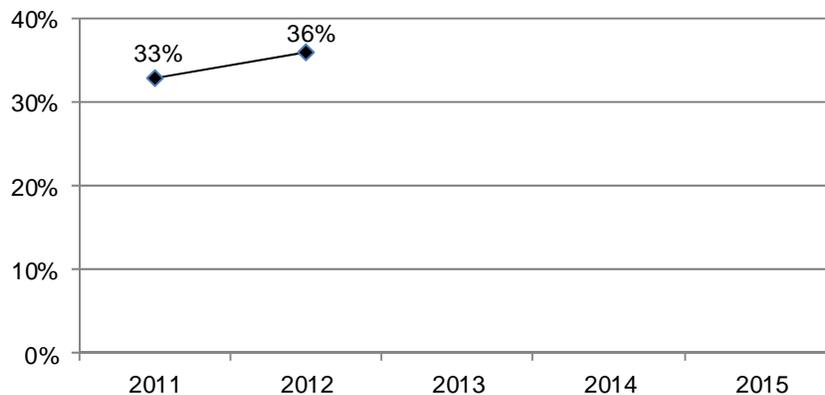
*Increase the proportion of noninstitutionalized adults age 65 years and older who are vaccinated against pneumonia to 90 percent.*

**Figure 69**  
**Percent of Respondents, Ages 65 and Older, Who Have Never Had a Pneumonia Shot, 1993-1995, 1997, and 1999-2010**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1993-1995, 1997, and 1999-2010

**Figure 70**  
**Percent of Respondents, Ages 65 and Older, Who Have Never Had a Pneumonia Shot, 2011-2012**



Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

<b>Table 41</b>				
<b>Respondents, Ages 65 and Older, Who Have Never Had a Pneumonia Shot, 2011-2012</b>				
		<b>2011-2012</b>	<b>2011</b>	<b>2012</b>
<b>Total</b>		<b>34%</b>	<b>33%</b>	<b>36%</b>
<b>Gender</b>	Male	39%	36%	42%
	Female	31%	31%	31%
<b>Age</b>	18-44	-	-	-
	45-64	-	-	-
	65+	34%	33%	36%
<b>Race</b>	White	35%	33%	37%
	American Indian	21%	*	*
<b>Ethnicity</b>	Hispanic	*	*	*
	Non-Hispanic	34%	32%	36%
<b>Household Income</b>	Less than \$25,000	34%	*	*
	\$25,000-\$49,999	31%	*	*
	\$50,000+	40%	*	*
<b>Education</b>	High School, G.E.D., or Less	33%	31%	35%
	Some Post-High School	35%	*	*
	College Graduate	38%	*	*
<b>Employment Status</b>	Employed for Wages	43%	*	*
	Self-employed	52%	*	*
	Unemployed	*	*	*
	Homemaker	34%	*	*
	Student	*	*	*
	Retired	31%	30%	33%
<b>Marital Status</b>	Unable to Work	28%	*	*
	Married/Unmarried Couple	36%	34%	37%
	Divorced/Separated	39%	*	*
	Widowed	29%	*	*
<b>Home Ownership Status</b>	Never Married	45%	*	*
	Own Home	36%	35%	37%
<b>Children Status</b>	Rent Home	27%	24%	32%
	Children in Household (Ages 18-44)	-	-	-
<b>Phone Status</b>	No Children in Household (Ages 18-44)	-	-	-
	Landline	35%	33%	37%
<b>Pregnancy Status</b>	Cell Phone	27%	*	*
	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	-	-	-

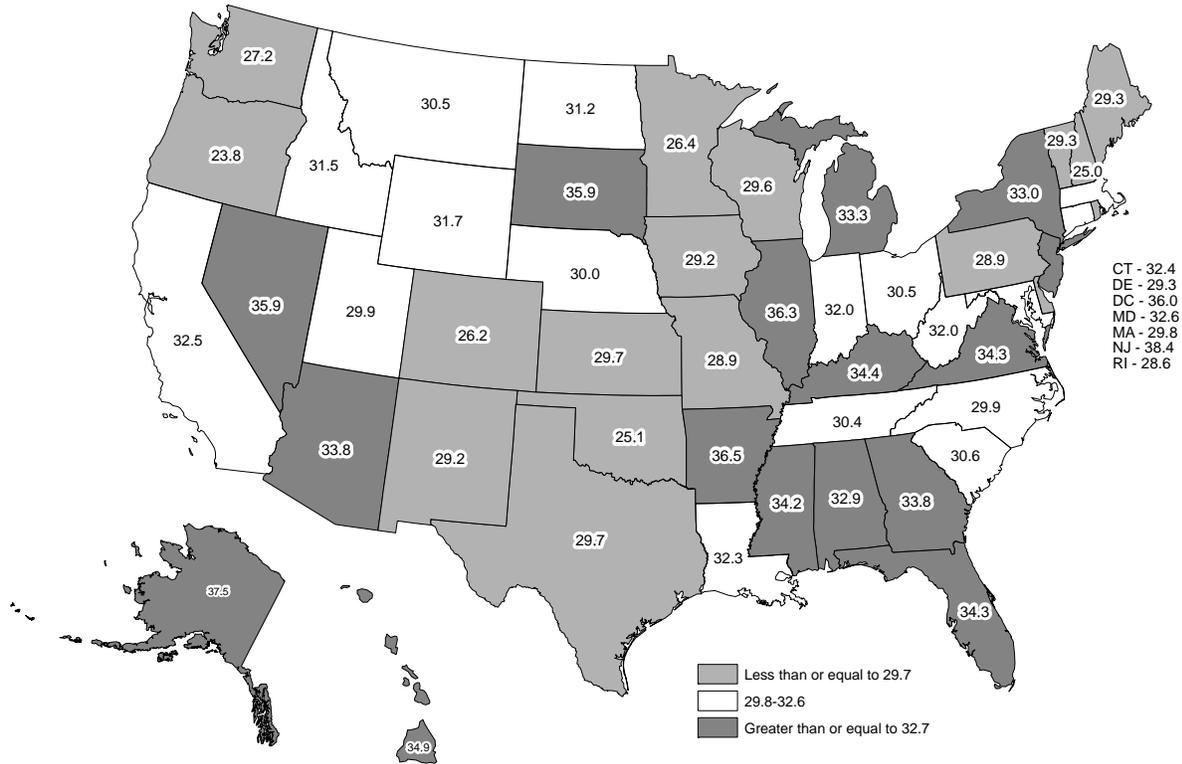
Note: \*Results based on small sample sizes have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

### **National Statistics**

The national median for respondents who have never had a pneumonia shot was 31.2 percent, as shown in Figure 71 on the next page. South Dakota had 35.9 percent of respondents who have never had a pneumonia shot. Oregon had the lowest percent of respondents who have never had a pneumonia shot with 23.8 percent, while New Jersey had the highest with 38.4 percent.

**Figure 71**  
**Nationally, Respondents Ages 65 and Older, Who Have Never Had a**  
**Pneumonia Shot, 2012**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012

**Further Analysis**

The following data show the percent of those, ages 65 and older, who have never had a pneumonia shot for various health behaviors and conditions. For example, 26 percent of respondents who have arthritis had no pneumonia shot, while 43 percent of respondents who do not have arthritis had no pneumonia shot.

<b>Table 42</b> <b>No Pneumonia Shot, Ages 65 and Older, for Selected Health Behaviors and Conditions, 2011-2012</b>	
<b>Health Behavior or Condition</b>	<b>% No Pneumonia Shot</b>
Underweight (BMI < 18.5)	*
Recommended (BMI = 18.5-24.9)	36%
Overweight (BMI = 25.0-29.9)	34%
Obese - Class I (BMI = 30.0-34.9)	29%
Obese - Classes II & III (BMI = 35.0+)	29%
Leisure Time Exercise	35%
No Leisure Time Exercise	33%
Current Smoker	40%
Former Smoker	31%
Never Smoked	36%
Smokeless Tobacco	*
No Smokeless Tobacco	34%

**Table 42 (continued)  
No Pneumonia Shot, Ages 65 and Older, for Selected Health  
Behaviors and Conditions, 2011-2012**

<b>Health Behavior or Condition</b>	<b>% No Pneumonia Shot</b>
Diabetes	21%
No Diabetes	37%
High Blood Pressure	28%
No High Blood Pressure	43%
Breast Exam Within Past Two Years	26%
No Breast Exam Within Past Two Years	37%
Mammogram Within Past Two Years (40+)	26%
No Mammogram Within Past Two Years (40+)	44%
Pap Smear Within Past Three Years	34%
No Pap Smear Within Past Three Years	41%
Blood Stool Test Within Past Two Years (50+)	25%
No Blood Stool Test Within Past Two Years (50+)	38%
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	30%
Never Had a Sigmoidoscopy or Colonoscopy (50+)	54%
PSA Test Within the Past Two Years (40+)	30%
No PSA Test Within the Past Two Years (40+)	59%
Flu Shot (65+)	22%
No Flu Shot (65+)	59%
Previously Had Heart Attack	22%
Never Had Heart Attack	36%
Have Angina or Coronary Heart Disease	24%
Do Not Have Angina or Coronary Heart Disease	36%
Previously Had a Stroke	24%
Never Had a Stroke	35%
Cancer	26%
No Cancer	38%
Skin Cancer	28%
No Skin Cancer	36%
Current Asthma	13%
Former Asthma	41%
Never Had Asthma	36%
Arthritis	26%
No Arthritis	43%
COPD	12%
No COPD	37%
Depression	26%
No Depression	36%
Kidney Disease	18%
No Kidney Disease	35%
Vision Impairment	27%
No Vision Impairment	37%
Been to the Dentist in the Past Year	31%
Haven't Been to the Dentist in the Past Year	43%
Always/Almost Always Wear Seat Belt	33%
Sometimes/Seldom/Never Wear Seat Belt	41%
Drank Alcohol in Past 30 Days	38%
Did Not Drink Alcohol in Past 30 Days	32%
Binge Drinker	48%
Not a Binge Drinker	34%
Heavy Drinker	53%
Not a Heavy Drinker	34%
< 3 Sweetened Beverages per Day	34%
3+ Sweetened Beverages per Day	*

**Table 42 (continued)  
No Pneumonia Shot, Ages 65 and Older, for Selected Health  
Behaviors and Conditions, 2011-2012**

<b>Health Behavior or Condition</b>	<b>% No Pneumonia Shot</b>
Good/Very Good/Excellent Health Status	38%
Fair/Poor Health Status	22%
Physical Health Not Good for 0-29 Days of the Past 30	36%
Physical Health Not Good for 30 Days of the Past 30	26%
Mental Health Not Good for 0-19 Days of the Past 30	34%
Mental Health Not Good for 20-30 Days of the Past 30	35%
Usual Activities Unattainable for 0-9 Days of the Past 30	35%
Usual Activities Unattainable for 10-30 Days of the Past 30	23%
Physical, Mental, or Emotional Problems	24%
No Physical, Mental, or Emotional Problems	40%
Disability with Special Equipment Needed	23%
No Disability with Special Equipment Needed	37%
Heard of "Healthy South Dakota" Program	33%
Not Heard of "Healthy South Dakota" Program	38%
Injured in a Fall in Past 12 Months (45+)	35%
Not Injured in a Fall in Past 12 Months (45+)	36%
Been Tested for HIV (18-64)	34%
Never Been Tested for HIV (18-64)	35%

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012