

# **Results from the Behavioral Risk Factor Surveillance System (BRFSS) Survey of State Employees Compared with Oregon Employed Adults, 2005 and 2007**

May 2009

Survey sponsored by the Health Promotion and Chronic Disease Prevention Section, Oregon Public Health Division and the Oregon Public Employees' Benefit Board

A small error, relating to the analysis of trying to maintain weight, was found and corrected in this report on July 1, 2009.

## HIGHLIGHTS

- ◆ Obesity increased significantly from 2005 to 2007 among State Agencies Employees, who are now significantly more obese than Oregon Employed Adults.
- ◆ The percentage of State Agencies Employees who met physical activity recommendations decreased significantly from 2005 to 2007.
- ◆ The percentage of current smokers did not change from 2005 to 2007 among the three employee groups.

## BACKGROUND

- ◆ This report compares data from four surveys: the 2005 and 2007 Behavioral Risk Factor Surveillance System (BRFSS) Survey of State Employees, and the 2005 and 2007 Oregon BRFSS statewide survey of adults in Oregon.
- ◆ Two groups of employees participated in the Survey of State Employees: those who worked for “**State Agencies**” such as the Department of Human Services, and those who worked in the “**Oregon University System.**”
- ◆ Results from the Oregon BRFSS are limited to employed adults. They are labeled “**Oregon Employed Adults.**”
- ◆ This report contains percentages, and in parentheses, corresponding 95% confidence intervals. A confidence interval is one way of measuring the precision, or the margin of error, of a percentage. Confidence intervals can tell us whether there exists a “statistically significant” difference between percentages.

## RESULTS

### Demographics

- ◆ Income – Between 2005 and 2007 the percentage of State Agencies Employees and Oregon University System Employees with household income >\$50,000 increased, but not significantly. The percentage of Oregon Employed Adults with household income >\$50,000 did increase significantly between 2005 and 2007. A higher proportion of Oregon University System Employees had incomes over \$50,000 as compared with Oregon Employed Adults in 2007.
- ◆ Education – Overall, Oregon University System Employees are the most highly educated among the study groups. The proportion of college graduates was significantly higher among State Agencies Employees and Oregon Employed Adults in 2007 compared with 2005. State Agencies Employees also had a significantly higher proportion of college graduates than Oregon Employed Adults in 2005 and 2007.

## **Tobacco**

- ◆ 70% of State Agencies and 72% of Oregon University System Employees who smoke say they are seriously considering quitting in the next six months.
- ◆ 70-80% of State Agencies and Oregon University System Employees who smoke know they can get help with quitting through State health insurance benefits.
- ◆ More than 90% of State Agencies and Oregon University System Employees think it is important for the State to establish tobacco-free buildings and grounds.
- ◆ There was no change in tobacco use from 2005 to 2007 for any of the three employee groups. However, Oregon University System Employees smoke the least (5%) compared with the other two groups.

## **Physical Activity, Nutrition, Weight Status**

- ◆ The prevalence of obesity increased among State Agencies Employees from 2005 to 2007. State Agencies Employees are twice as likely to be obese compared with Oregon University System Employees.
- ◆ There was a significant decrease from 2005 to 2007 in the percentage of State Agencies Employees who met CDC physical activity recommendations. In 2005 significantly fewer women employed in State Agencies met the CDC physical activity recommendations than men.
- ◆ The percentage of respondents reporting availability of a flex time policy for physical activity didn't change from 2005 to 2007 for State Agencies or Oregon University System Employees, but significantly more Oregon University System Employees reported having flex time policies at their worksites.
- ◆ The proportion for Oregon University System Employees eating five or more servings of fruits/vegetables every day was significantly higher than for State Agencies Employees in 2007.
- ◆ Availability of healthy foods at the worksite didn't change from 2005 to 2007, but Oregon University System Employees were more than twice as likely as State Agencies Employees to say healthy foods were available.
- ◆ Oregon University System Employees are significantly more confident than State Agencies Employees that they can be at a healthy weight. There was no difference in respondents' level of confidence that they could eat at least five servings of fruits/vegetables per day.

### **Recognition of the Signs and Symptoms of Heart Attack or Stroke**

- ◆ There was a significant increase from in the proportion of State Agencies and Oregon University System Employees who reported that they recognize the symptoms and know what to do when a person is having a heart attack or a stroke from 2005 to 2007.

### **Cancer Screening**

- ◆ Women age 40 or older among the 2007 State Agencies were significantly more likely than their 2006 counterparts among Oregon Employed Adults to have had a mammography.
- ◆ In 2007, Oregon University System and State Agencies Employees age 50 or older were more likely than 2006 Oregon Employed Adults of that age to report receiving recommended colorectal cancer screening with colonoscopy or sigmoidoscopy.
- ◆ In 2007, women employed by Oregon University System were significantly more likely to report receiving recommended cervical cancer screening (Pap test) than their counterparts among 2006 Oregon Employed Adults.

### **Health Status and Chronic Diseases**

- ◆ State Agencies Employees in 2007 were less likely to report excellent or very good health status than Oregon University System Employees and Oregon Employed Adults.
- ◆ There were no significant changes from 2005 to 2007 in the prevalence of chronic diseases in any of the employee groups.
- ◆ Oregon University System Employees are significantly less likely than State Agencies Employees to have diagnosed high blood pressure, diabetes, and arthritis.
- ◆ Oregon State Agencies Employees were more likely to have their cholesterol checked than Oregon Employed Adults in 2007. Of those diagnosed with high cholesterol, 55% of State Agencies and 48% of Oregon University System Employees said it was still high at their last clinical visit.
- ◆ Among those with arthritis, there was no significant difference in reporting of activity limitations among the groups.
- ◆ 70-80% of all State Employees diagnosed with chronic diseases reported confidence in managing their conditions, that they can manage emotional stress, and that they can judge when they need to visit a doctor.

## **Absenteeism**

- ◆ In 2007, there was no significant difference between State Agencies Employees and Oregon University System Employees in reporting missing at least one day of work in the last 30 days due to poor physical or emotional health.

## **Summary/Conclusions**

- ◆ Changes from 2005-2007:
  - ▶ More obesity and less physical activity reported by State Agencies Employees.
- ◆ 2007 State Agencies Employees versus Oregon University System Employees:
  - ▶ Higher tobacco use; more obesity; less likely to report flex time policies for physical activity or healthy foods at worksites; less confident about achieving healthy weight; less likely to report excellent or very good health status; more likely to have high blood pressure, diabetes, or arthritis.
- ◆ 2007 State Agencies Employees versus Oregon Employed Adults:
  - ▶ More obesity among both women and men; women less physically active; more likely to have cholesterol checked.
- ◆ Additional notes:
  - ▶ State Agencies Employees think it is important for the State to establish tobacco-free building and grounds, and most of those who smoke know about insurance benefits to help with tobacco cessation.

## **METHODS USED**

### **BRFSS Survey of State Employees**

- ◆ A random selection of state employees was interviewed by phone. Contact was made by using work phone number, interviews were arranged at another time if employee preferred. In 2007, the response rate was 57%.
- ◆ This survey is based on the Oregon BRFSS to allow the comparisons between employees who work in public workplaces with access to a phone and employed adults statewide.
- ◆ In 2005, 1,500 State Agencies Employees from outside the Oregon University System (OUS) were interviewed, as were 500 employees from OUS. In 2007, the same number of OUS employees (500) was interviewed, but more State Agencies Employees were included (1,653). The higher number is the result of stratifying to get an adequate sample of employees from worksites involved in the Healthy Worksite Initiative pilot and from the Department of Human Services (DHS).
- ◆ In the 2007 BRFSS Survey of State Employees, the survey data did not identify specific agencies other than DHS, so a comprehensive weighting by agency was not possible, nor was it possible to identify agency-specific results. However, the proportion of male and female respondents to the survey did not match the known proportions of males and females employed in the State Agencies and the Oregon University System. Thus the data were weighted to adjust for the disproportionate number of female respondents. Information for weighting was derived from PEBB data collected on 10/15/2008.

### **Oregon BRFSS**

- ◆ BRFSS is sponsored by the Centers for Disease Control and Prevention (CDC) and tracks health conditions and risk behaviors in the US. All states participate. In Oregon 6,000-10,000 phone surveys are completed each year.

Note: The sample sizes reported in following tables reflect the overall sample size. Due to skip patterns related to certain responses, and missing values, the actual number of respondents to each question is not always the same as overall sample size.

## Demographics

|  | State Agencies Employees   |                                    | Oregon University System Employees |                                    | Oregon Employed Adults     |                                    |
|--|----------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------------|------------------------------------|
| Year<br>Sample Size  | 2005<br>N = 1,500          | <b>2007<br/>N = 1,653</b>          | 2005<br>N = 500                    | <b>2007<br/>N = 500</b>            | 2005<br>N = 6,344          | <b>2007<br/>N = 3,983</b>          |
| Age:<br>Median (age range)   | 47 yrs old<br>(18-81)      | <b>49 yrs old<br/>(19 – 73)</b>    | 47 yrs old<br>(22 – 70)            | <b>47 yrs old<br/>(21 – 68)</b>    | 40 yrs old<br>(18 – 87)    | <b>40 yrs old<br/>(18 – 88)</b>    |
| Gender<br>Male<br>Female   | 41% (38-43)<br>59% (57-62) | <b>45% (42-48)<br/>55% (52-58)</b> | 44% (40-49)<br>56% (51-60)         | <b>46% (41-50)<br/>54% (50-59)</b> | 56% (54-57)<br>44% (43-46) | <b>54% (52-56)<br/>46% (44-48)</b> |
| Income:<br>Annual household income equal or<br>greater than \$50,000 | 54% (51-56)                | <b>58% (55-61)</b>                 | 56% (51-60)                        | <b>65% (60-69)</b>                 | 45% (44-47)                | <b>55% (53-56)</b>                 |
| College graduate   | 49% (46-52)                | <b>57% (54-60)</b>                 | 80% (77-84)                        | <b>83% (80-86)</b>                 | 36% (35-37)                | <b>40% (37-42)</b>                 |

Note: All data are age-adjusted, except for Age. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses, except for Age.

## Tobacco Use and Attitudes Toward Tobacco

|  | State Agencies Employees                  |  | Oregon University System Employees     |   | Oregon Employed Adults                    |  |
|--|---|--|--|---|---|--|
| Year<br>Sample Size  | 2005<br>N = 1,500                         | 2007<br>N = 1,653  | 2005<br>N = 500                        | 2007<br>N = 500   | 2005<br>N = 6,344                         | 2007<br>N = 3,983  |
| Smoking Status:<br>Never Smoker<br>Former Smoker<br>Current Smoker   | 58% (56-61)<br>29% (26-31)<br>13% (11-15) | <b>59% (56-62)</b><br><b>30% (27-32)</b><br><b>11% (10-13)</b> | 74% (70-78)<br>22% (18-25)<br>4% (2-6) | <b>73% (69-77)</b><br><b>21% (18-25)</b><br><b>5% (3-7)</b> | 55% (54-57)<br>26% (25-28)<br>18% (17-20) | <b>57% (55-58)</b><br><b>27% (25-29)</b><br><b>17% (15-18)</b> |
| Among males, those currently using any smokeless tobacco such as chewing tobacco or snuff                              | ---                                       | <b>7% (5-10)</b>   | ---                                    | <b>1% (0-3)</b>   | 7% (6-8)                                  | <b>9% (7-11)</b>   |
| Current Smoker:<br>During the past 12 months, have stopped smoking for one or more days because trying to quit smoking | ---                                       | <b>53% (44-61)</b>   | ---                                    | <b>49% (26-71)</b>  | 49% (41-53)                               | <b>54% (50-59)</b>   |
| Current Smoker:<br>Seriously considering stopping smoking within the next 6 months                                     | ---                                       | <b>70% (62-77)</b>   | ---                                    | <b>72% (56-87)</b>  | 63% (55-70)                               | <b>64% (54-72)</b>   |
| Current Smoker:<br>Planning to stop smoking within the next 30 days  | ---                                       | <b>54% (44-65)</b>   | ---                                    | <b>47% (17-77)</b>  | 42% (32-52)                               | <b>53% (41-65)</b>   |
| Current Smoker:<br>Those who know they can get help quitting smoking through state health insurance benefit            | ---                                       | <b>81% (74-87)</b>   | ---                                    | <b>71% (50-92)</b>  |   |  |
| Those who think it is important for the State of Oregon to establish tobacco-free buildings and grounds                | ---                                       | <b>92% (90-93)</b>   | ---                                    | <b>93% (91-96)</b>  | ---                                       | ---  |
| Those who say they're bothered by smoking in the area outside their worksite   | ---                                       | <b>42% (39-45)</b>   | ---                                    | <b>47% (42-51)</b>  | ---                                       | ---  |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Tobacco Use and Attitudes Toward Tobacco – Continued

|   | State Agencies Employees<br>(DHS Employees Only) |   | Oregon University System<br>Employees |                 | Oregon Employed Adults |                    |
|---|--|---|---------------------------------------|-----------------|------------------------|--------------------|
|   | 2005<br>N = 1,500                                | 2007<br>N = 1,256   | 2005<br>N = 500                       | 2007<br>N = 500 | 2005<br>N = 6,344      | 2007<br>N = 3,983  |
| Year<br>Sample Size   |  |   |                                       |                 |                        |                    |
| People are following the rules about cigarette smoking at worksite (YES)  | ---  | <b>79% (77-82)</b>  | ---                                   | ---             | ---                    | ---                |
| Based on what you know, which of the following best describes the rules about cigarette smoking at your worksite?<br>Smoking is allowed anywhere inside or outside<br>Smoking is allowed anywhere outside<br>Smoking is allowed anywhere outside except building entrances<br>Smoking is allowed in designated smoking areas<br>Smoking is allowed outside in parking lots<br>Smoking is not allowed anywhere inside or outside | ---  | <b>0%<br/>14% (12-17)<br/>27% (24-29)<br/>53% (50-56)<br/>3% (2-5)<br/>3% (2-4)</b> | ---                                   | ---             | ---                    | ---                |
| Have seen people smoking near the entrances to worksite, or on the grounds of worksite, in the past year (YES)  | ---  | <b>74% (71-77)</b>  | ---                                   | ---             | ---                    | ---                |
| Secondhand smoke is smoke from someone else's cigarette, cigar, or pipe that you breathe. Those who say that breathing secondhand smoke is very harmful to one's health   | ---  | <b>77% (74-79)</b>  | ---                                   | ---             | ---                    | <b>71% (68-74)</b> |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Policies and Behaviors Related to Physical Activity, Nutrition, and Weight Status

|  | State Agencies Employees                              |  | Oregon University System Employees                    |  | Oregon Employed Adults                                |  |
|--|---|--|---|--|---|--|
|  | 2005<br>N = 1,500                                     | 2007<br>N = 1,653  | 2005<br>N = 500                                       | 2007<br>N = 500  | 2005<br>N = 6,344                                     | 2007<br>N = 3,983  |
| Respondents who meet CDC physical activity recommendations (moderate activity for ≥30 mins. on ≥5 days/wk OR vigorous activity for ≥20 mins. on ≥3 days/wk)* | 52% (49-55)<br>Men: 58% (54-63)<br>Women: 47% (43-51) | <b>44% (41-47)</b><br><b>Men: 47% (42-52)</b><br><b>Women: 41% (38-44)</b> | 52% (47-56)<br>Men: 56% (49-63)<br>Women: 47% (41-54) | <b>53% (48-58)</b><br><b>Men: 61% (54-68)</b><br><b>Women: 46% (40-52)</b> | 54% (53-56)<br>Men: 53% (51-55)<br>Women: 56% (54-58) | <b>56% (53-58)</b><br><b>Men: 56% (52-60)</b><br><b>Women: 55% (52-59)</b> |
| Worksite has a policy that allows employees to use flextime to include physical activity in their schedule (YES)   | 46% (43-50)   | <b>45% (42-48)</b>   | 59% (53-64)   | <b>61% (56-66)</b>   | ---   | ---  |
| Among worksites without flextime policy:<br>If worksite added flextime, would choose to use it to include physical activity (YES)                            | 87% (84-90)   | <b>87% (84-90)</b>   | 82% (76-89)   | <b>85% (79-91)</b>   | ---   | ---  |
| Among worksites with flextime policy:<br>Choose to use it to include physical activity (YES)   | 54% (50-59)   | <b>54% (49-58)</b>   | 68% (62-75)   | <b>63% (56-70)</b>   | ---   | ---  |
| Respondents who eat five or more servings of fruits and vegetables every day*  | 22% (19-24)   | <b>23% (21-25)</b>   | 27% (22-31)   | <b>31% (27-36)</b>   | 24% (23-25)   | <b>26% (23-28)</b>   |
| Worksite offers healthy foods from a cafeteria or vending machines (YES)   | 22% (20-25)   | <b>21% (19-23)</b>   | 51% (46-56)   | <b>54% (49-59)</b>   | ---   | ---  |
| Among worksites <b>not</b> offering healthy food options:<br>If worksite began to offer healthy foods, choose healthy foods (YES)                            | 78% (75-81)   | <b>79% (76-82)</b>   | 72% (65-78)   | <b>74% (68-80)</b>   | ---   | ---  |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

The calculation of meeting CDC physical activity recommendations was based on the U.S. Department of Health and Human Services and U.S. Department of Agriculture, Dietary Guidelines for Americans, 2005. 6th Edition, Washington, DC: U.S. Government Printing Office, January 2005.

\* Physical activity questions were different between the BRFSS Survey of State Employees and the statewide BRFSS surveys; comparisons between State Agencies Employees and Oregon Employed Adults should be made with caution. The differences are detailed in the Appendix.

## Policies and Behaviors Related to Physical Activity, Nutrition, and Weight Status – Continued

|  | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |                    |
|--|--------------------------|--------------------|------------------------------------|--------------------|------------------------|--------------------|
|  | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005<br>N = 6,344      | 2007<br>N = 3,983  |
| Among worksites offering healthy foods:<br>Choose the healthy food options (YES)                                 | 68% (62-74)              | <b>63% (57-69)</b> | 75% (69-82)                        | <b>76% (70-81)</b> | ---                    | ---                |
| Body Mass Index (BMI):   |                          |                    |                                    |                    |                        |                    |
| Healthy Weight   | 34% (31-37)              | <b>29% (27-32)</b> | 45% (40-49)                        | <b>48% (43-53)</b> | 36% (35-38)            | <b>35% (33-37)</b> |
| Overweight   | 36% (33-39)              | <b>35% (32-37)</b> | 37% (32-42)                        | <b>32% (28-37)</b> | 36% (35-38)            | <b>37% (35-39)</b> |
| Obese  | 28% (26-31)              | <b>35% (32-38)</b> | 18% (14-21)                        | <b>18% (15-22)</b> | 26% (25-27)            | <b>27% (25-28)</b> |
| Respondents who reported trying to lose weight   | 58% (55-61)              | <b>57% (54-60)</b> | 48% (44-53)                        | <b>47% (42-52)</b> | 50% (47-52)            | ---                |
| Respondents who reported trying to maintain their weight   | 30% (28-33)              | <b>32% (29-35)</b> | 37% (32-41)                        | <b>40% (36-45)</b> | ---                    | ---                |
| Respondents who exercised to lose weight or to keep from gaining weight  | 78% (75-81)              | <b>78% (76-81)</b> | 81% (77-85)                        | <b>80% (76-84)</b> | ---                    | ---                |
| Respondents who ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight | 79% (77-82)              | <b>82% (79-84)</b> | 75% (70-79)                        | <b>72% (68-77)</b> | ---                    | ---                |
| In the past 12 months, a doctor, nurse or other health professional advised respondent to lose weight            | 20% (18-22)              | <b>22% (20-24)</b> | 13% (10-16)                        | <b>12% (9-15)</b>  | 16% (14-18)            | ---                |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Policies and Behaviors Related to Physical Activity, Nutrition, and Weight Status – Continued

|   | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |      |
|---|--------------------------|--------------------|------------------------------------|--------------------|------------------------|------|
|   | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005                   | 2007 |
| Year<br>Sample Size   |                          |                    |                                    |                    |                        |      |
| Those who say the Public Employees' Benefit Board (PEBB) emphasizes promoting employee health and well-being (A lot of emphasis to some emphasis) | ---                      | <b>87% (84-89)</b> | ---                                | <b>88% (85-91)</b> | ---                    | ---  |
| Those who say their agency emphasizes promoting employee health and well-being (A lot of emphasis to some emphasis)                               | ---                      | <b>63% (60-66)</b> | ---                                | <b>80% (77-84)</b> | ---                    | ---  |
| Those who say all state agencies emphasize promoting employee health and well-being (A lot of emphasis to some emphasis)                          | ---                      | <b>72% (69-75)</b> | ---                                | <b>75% (70-80)</b> | ---                    | ---  |

## Level of Confidence: Health Promoting Activities

|   | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |      |
|---|--------------------------|--------------------|------------------------------------|--------------------|------------------------|------|
|   | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005                   | 2007 |
| Year<br>Sample Size   |                          |                    |                                    |                    |                        |      |
| Respondents confident they can get $\geq 30$ minutes of moderate physical activity five or more days a week | 72% (69-75)              | <b>73% (71-76)</b> | 79% (75-82)                        | <b>79% (76-83)</b> | ---                    | ---  |
| Respondents confident about staying at a healthy weight or losing excess weight                             | 62% (60-65)              | <b>60% (57-63)</b> | 66% (62-70)                        | <b>71% (66-75)</b> | ---                    | ---  |
| Those confident they can eat $\geq 5$ servings of fruits/vegetables a day                                   | 62% (59-65)              | <b>64% (61-66)</b> | 68% (64-73)                        | <b>68% (63-72)</b> | ---                    | ---  |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Awareness and Health Knowledge

| Year<br>Sample Size  | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |      |
|--|--------------------------|--------------------|------------------------------------|--------------------|------------------------|------|
|  | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005                   | 2007 |
| Are you aware that the Public Employees' Benefit Board (PEBB) either directly or through its health plans offers the following services (YES): |                          |                    |                                    |                    |                        |      |
| Health Risk Assessment   | 62% (59-64)              | <b>56% (53-58)</b> | 39% (35-44)                        | <b>51% (46-56)</b> |                        |      |
| Health screening at your worksite  | 46% (43-49)              | <b>58% (55-60)</b> | 24% (20-28)                        | <b>50% (45-54)</b> |                        |      |
| Flu shots at your worksite   | ---                      | <b>80% (78-83)</b> | ---                                | <b>85% (81-88)</b> | ---                    | ---  |
| Disease Management Programs  | 34% (31-37)              | <b>23% (21-25)</b> | 21% (17-25)                        | <b>21% (17-25)</b> |                        |      |
| Free & Clear Tobacco Cessation Program   | 56%(53-59)               | <b>49% (46-52)</b> | 32% (27-37)                        | <b>31% (27-36)</b> |                        |      |
| Employee Assistance Program (EAP)  | ---                      | <b>87% (85-89)</b> | ---                                | <b>63% (58-67)</b> |                        |      |
| Wellness Materials at the State Library  | 48%(45-51)               | <b>49% (47-52)</b> | 24% (20-28)                        | <b>34% (29-38)</b> |                        |      |
| Recognize the symptoms and know what to do when a person is having a heart attack (YES)  | 67% (65-70)              | <b>80% (77-82)</b> | 65% (61-70)                        | <b>79% (75-83)</b> | ---                    | ---  |
| Recognize the symptoms and know what to do when a person is having a stroke (YES)  | 45% (43-48)              | <b>62% (59-65)</b> | 40% (35-45)                        | <b>58% (54-63)</b> | ---                    | ---  |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Cancer Screening

|  | State Agencies Employees |                           | Oregon University System Employees |                         | Oregon Employed Adults |                           |
|--|--------------------------|---------------------------|------------------------------------|-------------------------|------------------------|---------------------------|
|  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 543        | <b>2006<br/>N = 1,146</b> |
| Women 40+ years old:<br>Had a mammogram within 2 years                 | 84% (81-87)              | <b>84% (82-87)</b>        | 83% (78-88)                        | <b>84% (79-90)</b>      | 76% (71-80)            | <b>76% (73-79)</b>        |
| Women 40+ years old:<br>Had a clinical breast exam within 2 years      | 89% (87-92)              | <b>87% (85-90)</b>        | 88% (84-93)                        | <b>89% (85-94)</b>      | 82% (77-85)            | <b>84% (80-86)</b>        |
| Women 18+ years old:<br>Had a Pap test within 3 years                  | 94% (92-96)              | <b>91% (89-93)</b>        | 93% (90-97)                        | <b>95% (93-98)</b>      | 90% (86-92)            | <b>87% (84-89)</b>        |
| 50+ years old:<br>Had blood stool test within 1 year                   | 20% (17-23)              | <b>15% (12-17)</b>        | 20% (15-26)                        | <b>16% (11-21)</b>      | ---                    | <b>15% (13-18)</b>        |
| 50+ years old:<br>Had a sigmoidoscopy or colonoscopy<br>within 5 years | 49% (45-53)              | <b>55% (52-59)</b>        | 50% (43-57)                        | <b>65% (58-71)</b>      | ---                    | <b>46% (42-50)</b>        |

Note: Data about Pap test are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Health Status and Frequency of Chronic Diseases

|  | State Agencies Employees |                           | Oregon University System Employees |                         | Oregon Employed Adults |                           |
|--|--------------------------|---------------------------|------------------------------------|-------------------------|------------------------|---------------------------|
|  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 6,344      | <b>2007<br/>N = 3,983</b> |
| Year<br>Sample Size  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 6,344      | <b>2007<br/>N = 3,983</b> |
| Health Status (excellent or very good)   | 60% (57-63)              | <b>54% (51-57)</b>        | 74% (70-78)                        | <b>75% (71-79)</b>      | 60% (58-61)            | <b>62% (60-64)</b>        |
| Ever told by a doctor, nurse or other health professional that they had <b>high blood pressure</b> (Yes)                 | 24% (22-26)              | <b>24% (22-26)</b>        | 16% (12-19)                        | <b>15% (12-18)</b>      | 20% (19-22)            | <b>22% (20-24)</b>        |
| If Yes to HBP, then currently taking medicine for it (YES)   | 62% (56-69)              | <b>68% (60-76)</b>        | 58% (43-73)                        | <b>51% (44-58)</b>      | 54% (51-58)            | <b>55% (48-61)</b>        |
| If Yes to HBP, at last doctor, nurse or other health professional visit blood pressure was still in high range (YES)     | ---                      | <b>25% (17-32)</b>        | ---                                | <b>24% (12-35)</b>      | ---                    | <b>34% (23-48)</b>        |
| Had blood cholesterol checked within 5 years   | 81% (79-84)              | <b>82% (79-84)</b>        | 81% (78-85)                        | <b>78% (74-82)</b>      | 68% (67-70)            | <b>70% (68-72)</b>        |
| Ever told by a doctor, nurse or other health professional that they had <b>high blood cholesterol</b> (YES)              | 32% (29-34)              | <b>31% (28-34)</b>        | 28% (24-33)                        | <b>27% (23-32)</b>      | 30% (29-32)            | <b>31% (29-34)</b>        |
| If Yes to HBC, at last doctor, nurse or other health professional visit, blood cholesterol was still in high range (YES) | ---                      | <b>55% (48-62)</b>        | ---                                | <b>48% (35-62)</b>      | ---                    | <b>55% (44-65)</b>        |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Health Status and Frequency of Chronic Diseases – continued

|  | State Agencies Employees |                           | Oregon University System Employees |                         | Oregon Employed Adults |                           |
|--|--------------------------|---------------------------|------------------------------------|-------------------------|------------------------|---------------------------|
|  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 6,344      | <b>2007<br/>N = 3,983</b> |
| Year<br>Sample Size  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 6,344      | <b>2007<br/>N = 3,983</b> |
| Ever been told by a doctor that they had <b>diabetes</b> (YES)   | 6% (5-7)                 | <b>7% (6-9)</b>           | 3% (2-5)                           | <b>2% (1-4)</b>         | 5% (4-6)               | <b>5% (4-6)</b>           |
| If Yes to diabetes: Check blood sugar at worksite (YES)  | 62% (55-69)              | <b>51% (39-64)</b>        | 60% (43-77)                        | ---*                    | ---                    | ---                       |
| If Yes to diabetes: At worksite, it is not at all difficult to test blood sugar  | 94% (88-100)             | <b>90% (78-100)</b>       | 93% (78-100)                       | ---*                    | ---                    | ---                       |
| If Yes to diabetes: Worksite offers a clean, private place to check blood sugar (YES)  | 44% (37-51)              | <b>65% (49-82)</b>        | 96% (88-100)                       | ---*                    | ---                    | ---                       |
| Told by a doctor, nurse, or other health professional that they currently have <b>asthma</b>   | 10% (8-12)               | <b>9% (8-11)</b>          | 9% (6-12)                          | <b>8% (5-10)</b>        | 9% (8-10)              | <b>9% (8-10)</b>          |
| <b>45 years or older:</b><br>Ever been told by a doctor, nurse, or other health professional that they had a <b>heart attack</b> (YES)                   | 2% (1-3)                 | <b>2% (1-3)</b>           | 1% (0-2)                           | <b>1% (0-3)</b>         | 3% (2-4)               | <b>2% (1-3)</b>           |
| <b>45 years or older:</b><br>Ever been told by a doctor, nurse, or other health professional that they had <b>angina or coronary heart disease</b> (YES) | 3% (2-4)                 | <b>2% (1-3)</b>           | 1% (0-3)                           | <b>2% (0-3)</b>         | 3% (2-4)               | <b>2% (1-3)</b>           |
| <b>45 years or older:</b><br>Ever been told by a doctor, nurse, or other health professional that they had a <b>stroke</b> (YES)                         | 2% (1-2)                 | <b>2% (1-3)</b>           | 0%                                 | <b>1% (0-2)</b>         | 2% (1-2)               | <b>1% (1-2)</b>           |

Note: Data are age-adjusted, except for heart attack, angina and stroke. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses. \*Numbers were suppressed because there were not enough cases to report.

## Health Status and Frequency of Chronic Diseases – continued

|  | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |                    |
|--|--------------------------|--------------------|------------------------------------|--------------------|------------------------|--------------------|
|  | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005<br>N = 6,344      | 2007<br>N = 3,983  |
| Year<br>Sample Size  | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005<br>N = 6,344      | 2007<br>N = 3,983  |
| Ever been told by a doctor, nurse, or other health professional that they had <b>arthritis</b> (YES)                   | 22% (20-24)              | <b>23% (21-25)</b> | 15% (12-18)                        | <b>14% (12-17)</b> | 22% (21-23)            | <b>20% (19-22)</b> |
| If Yes to arthritis, are limited in usual activity in any way due to arthritis (YES)                                   | 26%(20-32)               | <b>37% (29-45)</b> | 38% (19-56)                        | <b>36% (12-59)</b> | 25% (22-27)            | <b>29% (23-36)</b> |
| Not currently experiencing symptoms of <b>depression</b>   | ---                      | <b>93% (91-94)</b> | ---                                | <b>94% (92-96)</b> | 86% (84-88)            | <b>93% (90-95)</b> |
| In the last 12 months, told by a doctor or other health professional that they have <b>depression</b> (YES)            | 13% (11-14)              | <b>12% (11-14)</b> | 8% (6-11)                          | <b>8% (6-10)</b>   | 9% (8-11)              | <b>9% (6-12)</b>   |
| Ever received treatment for depression from a counselor, therapist, or doctor (YES)                                    | 27% (25-30)              | <b>34% (31-36)</b> | 23% (19-27)                        | <b>26% (22-30)</b> | 29% (27-31)            | ---                |
| Currently receiving counseling or therapy other than medication from a counselor, therapist, or doctor for depression. | 13% (10-17)              | <b>15% (11-18)</b> | 17% (9-25)                         | <b>14% (8-20)</b>  | ---                    | ---                |
| Currently receiving medication from a doctor or other health care provider for depression                              | 47% (41-53)              | <b>38% (34-43)</b> | 36% (27-46)                        | <b>37% (28-45)</b> | 34% (30-38)            | ---                |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

**Level of Confidence: Self-management Activities among Those Who Reported a Chronic Condition**  
 (arthritis, asthma, diabetes, high blood pressure, high cholesterol, heart disease, or stroke)

|   | State Agencies Employees |                    | Oregon University System Employees |                    | Oregon Employed Adults |      |
|---|--------------------------|--------------------|------------------------------------|--------------------|------------------------|------|
|   | 2005<br>N = 1,500        | 2007<br>N = 1,653  | 2005<br>N = 500                    | 2007<br>N = 500    | 2005                   | 2007 |
| Respondents confident they can do all the things necessary to manage their condition on a regular basis                                       | 73% (69-77)              | <b>72% (68-76)</b> | 82% (76-88)                        | <b>84% (79-89)</b> | ---                    | ---  |
| Respondents confident they can judge when changes in their illness mean they should visit a doctor  | 84% (81-88)              | <b>86% (83-89)</b> | 89% (84-94)                        | <b>86% (79-92)</b> | ---                    | ---  |
| Respondents confident they can do the different activities needed to manage their health condition so as to reduce their need to see a doctor | 76% (72-80)              | <b>79% (76-82)</b> | 80% (73-88)                        | <b>85% (79-91)</b> | ---                    | ---  |
| Respondents confident they can reduce emotional distress caused by their health condition so it does not affect their everyday life           | 67% (63-72)              | <b>73% (69-77)</b> | 78% (71-85)                        | <b>76% (69-83)</b> | ---                    | ---  |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Productivity and Absenteeism

|  | State Agencies Employees |                           | Oregon University System Employees |                         | Oregon Employed Adults |             |
|--|--------------------------|---------------------------|------------------------------------|-------------------------|------------------------|-------------|
|  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005                   | <b>2007</b> |
| Respondents who, in the past 30 days, experienced limitation in their ability to carry out usual activities at work, due to physical/emotional health issues | 29% (26-31)              | <b>27% (25-30)</b>        | 26% (22-30)                        | <b>26% (21-30)</b>      | ---                    | ---         |
| Respondents who missed part or all of at least one work day in the past 30 days, due to poor physical or emotional health                                    | 31% (28-33)              | <b>29% (27-32)</b>        | 26% (22-30)                        | <b>24% (20-28)</b>      | ---                    | ---         |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Health Care Experience

|  | State Agencies Employees |                           | Oregon University System Employees |                         | Oregon Employed Adults |                           |
|--|--------------------------|---------------------------|------------------------------------|-------------------------|------------------------|---------------------------|
|  | 2005<br>N = 1,500        | <b>2007<br/>N = 1,653</b> | 2005<br>N = 500                    | <b>2007<br/>N = 500</b> | 2005<br>N = 6,344      | <b>2007<br/>N = 3,983</b> |
| Year<br>Sample Size  |                          |                           |                                    |                         |                        |                           |
| Have at least one personal doctor or health care provider  | 86% (84-88)              | <b>86% (83-88)</b>        | 83% (80-87)                        | <b>82% (78-85)</b>      | 75% (74-76)            | <b>78% (77-80)</b>        |
| Quality of doctor's or health care provider's explanation of treatment choices (excellent to very good)  | 69% (66-71)              | <b>65% (62-68)</b>        | 73% (69-78)                        | <b>68% (63-72)</b>      | ---                    | ---                       |
| Ability of doctor or health care provider in including respondent in treatment decisions (excellent to very good)  | 71% (68-74)              | <b>70% (67-72)</b>        | 77% (73-82)                        | <b>70% (65-74)</b>      | ---                    | ---                       |
| Extent to which regular doctor seems informed and up-to-date about the care received from specialists that he/she sent respondent to (almost always to always) | 70% (67-73)              | <b>69% (66-72)</b>        | 68% (62-73)                        | <b>68% (63-74)</b>      | ---                    | ---                       |

Note: All data are age-adjusted. 2007 State Agencies Employees data have post-stratification weights applied. 95% confidence intervals are shown in parentheses.

## Appendix

|                                    | <b>2005 &amp; 2007 Statewide BRFSS – Employed Adults</b>  | <b>2005 &amp; 2007 BRFSS Survey of State Employees</b>   |
|------------------------------------|---|--|
| <b>Physical Activity Questions</b> | <p>1. Now, thinking about the moderate activities you do when not working in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate?</p> <p style="padding-left: 20px;">a) How many days per week do you do these moderate activities for at least 10 minutes at a time?</p> <p style="padding-left: 20px;">b) On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?</p> <p>2. Now, thinking about the vigorous activities you do when not working in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?</p> <p style="padding-left: 20px;">a) How many days per week do you do these vigorous activities for at least 10 minutes at a time?</p> <p style="padding-left: 20px;">b) On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?</p> | <p>1. In a usual week, how many days a week do you do moderate recreational activities for a period lasting AT LEAST 30 MINUTES. Examples would be bicycling, gardening, mowing or raking, walking briskly on a level surface, doubles tennis, golf without a cart, hunting, or other similar activities?</p> <p>2. In a USUAL WEEK, how many days a week do you do vigorous recreational activities for a period lasting AT LEAST 20 MINUTES. Examples would be climbing stairs or hills, brisk cycling up hills, jogging, hiking, swimming laps, singles tennis, water aerobic, downhill or cross-country skiing, or other similar activities?</p> |
| <b>Nutrition Questions</b>         | <p>1. How often do you drink fruit juices such as orange, grapefruit, or tomato?</p> <p>2. Not counting juice, how often do you eat fruit?</p> <p>3. How often do you eat green salad?</p> <p>4. How often do you eat potatoes not including French fries, fried potatoes, or potato chips?</p> <p>5. How often do you eat carrots?</p> <p>6. Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat?</p>   | <p>1. How many days last week did you eat five or more servings of fruits and vegetables?</p>  |