## CHAPTER 12: CHOLESTEROL

## Cholesterol Screening: Have never had their blood cholesterol checked.

| State Prevalence | 20.4\% (95\% CI: 18.7-22.2); $37^{\text {th }}$ among 54 BRFSS participants. National average: 22.2\% (95\% CI: 21.9-22.5). |
| :---: | :---: |
| Time Trends | The prevalence of no cholesterol screening has significantly decreased from a high of $49.3 \%$ in 1988 to a low of $20.4 \%$ in 2003. The 2003 rate is also significantly lower than the 1997 prevalence of $29.5 \%$. |
| Gender | Men 23.1\% (95\% CI: 20.3-26.0); Women 17.9\% (95\% CI: 15.8-20.0). <br> The prevalence of no cholesterol screening was significantly higher among men than women. |
| Age | Cholesterol screening significantly increased at each higher age grouping until age 65. More than half of young adults aged 18 to 24 had never had their blood cholesterol checked, compared with $4.5 \%$ of elderly adults. |
| Education | The percentage of adults who had never had a cholesterol screening generally decreased as educational attainment increased. Adults with a high school diploma/GED were significantly more likely to have never been screened than those with a college degree ( $23.0 \%$ versus $14.6 \%$ ). |
| Household Income | The prevalence of no cholesterol screening also decreased with income. Adults with a household income between $\$ 15,000$ and $\$ 24,999$ (26.8\%) were significantly more likely to have never been screened than those in the three highest income categories ( $17.4 \%, 12.4 \%$, and $15.6 \%$, respectively). |
| Quick Stats | - Of those who had ever had their cholesterol checked, $78.3 \%$ had it checked within the past year. |

## West Virginia Healthy People 2010 Objectives

| Objective 12.4 | Increase to at least $75 \%$ the proportion of adults who have had their blood cholesterol checked <br> within the preceding five years. (Baseline: $67.2 \%$ in 1997; Current: $76.7 \%$ in 2003) |
| :--- | :--- |
| Objective 12.5 | Reduce the mean serum cholesterol level among adults to no more than $193 \mathrm{mg} / \mathrm{dl}$. (Baseline: <br> $202.56 \mathrm{mg} / \mathrm{dl} \mathrm{in} \mathrm{1999)}$ |

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Table 12.1: Never had their cholesterol checked: WVBRFSS, 2003

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI |
| TOTAL | 1,289 | 23.1 | (20.3-26.0) | 1,978 | 17.9 | (15.8-20.0) | 3,267 | 20.4 | (18.7-22.2) |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 88 | 54.8 | (43.3-66.2) | 105 | 53.7 | (43.0-64.5) | 193 | 54.3 | (46.4-62.2) |
| 25-34 | 180 | 40.8 | (33.0-48.6) | 261 | 29.7 | (23.7-35.6) | 441 | 35.2 | (30.2-40.1) |
| 35-44 | 228 | 25.9 | (19.6-32.1) | 315 | 20.6 | (15.7-25.5) | 543 | 23.2 | (19.2-27.1) |
| 45-54 | 279 | 15.0 | (10.4-19.5) | 382 | 10.0 | (6.5-13.4) | 661 | 12.5 | (9.6-15.3) |
| 55-64 | 246 | 5.2 | (2.6-7.8) | 391 | 7.1 | (4.2-9.9) | 637 | 6.1 | (4.2-8.1) |
| 65+ | 267 | 4.5 | (2.1-6.9) | 513 | 4.4 | (2.5-6.4) | 780 | 4.5 | (2.9-6.0) |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 236 | 28.6 | (20.9-36.3) | 376 | 17.0 | (12.4-21.5) | 612 | 22.7 | (18.1-27.3) |
| H.S. or G.E.D. | 514 | 26.9 | (22.4-31.4) | 773 | 19.4 | (16.0-22.8) | 1,287 | 23.0 | (20.2-25.8) |
| Some Post-H.S. | 260 | 19.8 | (13.9-25.7) | 465 | 17.6 | (13.2-22.1) | 725 | 18.6 | (15.0-22.2) |
| College Graduate | 276 | 13.4 | (8.3-18.6) | 363 | 15.8 | (10.7-20.9) | 639 | 14.6 | (11.0-18.2) |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 167 | 23.3 | (15.7-30.8) | 344 | 18.5 | (13.6-23.3) | 511 | 20.5 | (16.3-24.8) |
| \$15,000-24,999 | 252 | 31.4 | (24.5-38.2) | 454 | 23.4 | (18.6-28.1) | 706 | 26.8 | (22.8-30.8) |
| \$25,000-34,999 | 189 | 20.3 | (13.7-26.9) | 266 | 17.7 | (12.2-23.2) | 455 | 18.9 | (14.7-23.2) |
| \$35,000-49,999 | 206 | 19.9 | (13.3-26.4) | 259 | 14.6 | (9.4-19.8) | 465 | 17.4 | (13.1-21.7) |
| \$50,000-74,999 | 165 | 13.3 | (7.3-19.2) | 220 | 11.6 | (6.4-16.8) | 385 | 12.4 | (8.5-16.4) |
| \$75,000+ | 182 | 17.5 | (10.4-24.6) | 145 | 12.2 | (5.6-18.8) | 327 | 15.6 | (10.4-20.8) |

Table 12.2: Prevalence of high blood cholesterol among those who have ever had their blood cholesterol checked: WVBRFSS, 2003

| Characteristic | Men |  |  | Women |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI |
| TOTAL | 1,033 | 33.8 | (30.7-36.9) | 1,682 | 41.7 | (39.1-44.4) | 2,715 | 38.1 | (36.0-40.1) |
| Age |  |  |  |  |  |  |  |  |  |
| 18-24 | 43 | $2.7{ }^{\text {a }}$ | (0.0-8.1) | 50 | 19.1 | (4.9-33.2) | 93 | 10.5 | (2.8-18.2) |
| 25-34 | 109 | 20.8 | (12.9-28.8) | 181 | 21.6 | (15.0-28.1) | 290 | 21.2 | (16.1-26.3) |
| 35-44 | 168 | 30.6 | (25.3-37.8) | 252 | 29.2 | (22.9-35.6) | 420 | 29.9 | (25.1-34.6) |
| 45-54 | 234 | 34.9 | (28.5-41.3) | 347 | 39.8 | (34.2-45.3) | 581 | 37.4 | (33.2-41.6) |
| 55-64 | 229 | 50.0 | (43.1-56.9) | 361 | 55.1 | (49.6-60.6) | 590 | 52.5 | (48.1-56.9) |
| 65+ | 249 | 40.2 | (33.7-46.7) | 482 | 58.6 | (53.9-63.3) | 731 | 51.1 | (47.1-55.0) |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 182 | 38.4 | (30.7-46.1) | 313 | 55.6 | (49.5-61.7) | 495 | 47.7 | (42.7-52.6) |
| H.S. or G.E.D. | 392 | 34.4 | (29.5-39.4) | 647 | 45.3 | (41.0-49.5) | 1,039 | 40.3 | (37.0-43.6) |
| Some Post-H.S. | 215 | 32.1 | (25.6-38.7) | 400 | 38.8 | (33.2-44.3) | 615 | 35.9 | (31.6-40.2) |
| College Graduate | 244 | 30.8 | (24.7-36.8) | 322 | 24.4 | (19.5-29.4) | 566 | 27.7 | (23.8-31.7) |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 128 | 43.5 | (33.6-53.5) | 282 | 53.8 | (47.0-60.5) | 410 | 49.5 | (43.7-55.3) |
| \$15,000-24,999 | 188 | 41.6 | (34.1-49.2) | 367 | 45.7 | (40.1-51.3) | 555 | 44.1 | (39.6-48.6) |
| \$25,000-34,999 | 153 | 38.4 | (30.2-46.7) | 228 | 45.6 | (38.5-52.6) | 381 | 42.3 | (36.9-47.7) |
| \$35,000-49,999 | 170 | 31.6 | (24.2-38.9) | 228 | 30.4 | (24.0-36.9) | 398 | 31.0 | (26.1-35.9) |
| \$50,000-74,999 | 143 | 26.9 | (19.5-34.2) | 200 | 34.7 | (27.6-41.8) | 343 | 30.8 | (25.7-36.0) |
| \$75,000+ | 159 | 30.0 | (22.6-37.4) | 132 | 22.3 | (14.9-29.7) | 291 | 27.2 | (21.8-32.6) |

[^0]High Blood Cholesterol: Have ever been told by a doctor or other health professional that their blood cholesterol is high. Expressed as a percentage of adults who have ever had their blood cholesterol checked.


#### Abstract

State Prevalence $\quad \mathbf{3 8 . 1} \%$ ( $95 \%$ CI: $36.0-40.1$ ); $2^{\text {nd }}$ among 54 BRFSS participants. National prevalence: 33.6\% (95\% CI: 33.2-33.9). Time Trends The prevalence of high blood cholesterol among those ever checked steadily increased from 1995 to 2002. The 2003 prevalence is slightly lower than the 2002 rate of $40.7 \%$ but is significantly higher than the 1995 and 1997 rates ( $30.4 \%$ and $32.2 \%$, respectively).

Gender Men 33.8\% (95\% CI: 30.7-36.9); Women 41.7\% (95\% CI: 39.1-44.4). Women had a significantly higher rate of high blood cholesterol than men. Between 2002 and 2003 the prevalence of high cholesterol significantly decreased among men (from 41.1\% to 33.8\%).

Age The prevalence of high cholesterol significantly increased with age. Adults aged 55 to 64 were five times as likely to have high cholesterol as those aged 18 to 24 ( $52.5 \%$ versus $10.5 \%$ ). At ages 65 and older, the prevalence of high cholesterol was significantly higher among women than men ( $58.6 \%$ versus $40.2 \%$ ).

Education There was a significant inverse relationship between high cholesterol and educational attainment. Adults with a high school diploma/GED (40.3\%) or less (47.7\%) had significantly higher rates of high cholesterol than college graduates (27.7\%). Men were significantly less likely than women to have high cholesterol at the two lowest levels of education.

Household Income The risk of high cholesterol significantly decreased when household income reached $\$ 35,000$. Nearly half of adults with an income less than $\$ 15,000$ had high cholesterol, compared with approximately $27 \%$ of those with an annual income of $\$ 75,000$ or more.


Figure 12.1: Prevalence of high blood cholesterol by year: WVBRFSS, 1993-2003 ${ }^{\text {a }}$



[^0]:    a. Use caution in interpreting percentages with $\mathrm{N}<50$.

