## CHAPTER 9: CARDIOVASCULAR DISEASE

## Heart Attack, Angina, and Stroke in 2006

## Definition

Prevalence Heart Attack

## Gender

Age, Education, \& Household Income

WV: $\quad 7.5 \%$ ( $95 \%$ CI: 6.8-8.3) in 2006.
US: $\quad 4.4 \%$ ( $95 \%$ CI: 4.3-4.6) in 2006.
West Virginia ranked ${ }^{\text {st }}$ highest among 50 US States and DC in 2006.

## Angina

WV: $\quad \mathbf{8 . 3 \%}$ (95\% CI: 7.4-9.2) in 2006.
US: $\quad 4.6 \%$ ( $95 \%$ CI: 4.5-4.7) in 2006.
West Virginia ranked $1^{\text {st }}$ highest among 50 US States and DC in 2006.

## Stroke

WV: $\quad 4.2 \%$ ( $95 \%$ CI: $3.5-4.8$ ) in 2006.
US: $\quad \mathbf{2 . 7 \%}$ ( $95 \%$ CI: 2.6-2.8) in 2006.
West Virginia ranked 2 ${ }^{\text {nd }}$ highest among 50 US States and DC in 2006.
In 2006, responding "Yes" to the following:"Has a doctor, nurse, or other health professional ever told you that you had any of the following? For each, tell me 'yes,' 'no,' or you're 'not sure'." The follow-up questions were ". . . ever told you had a heart attack, also called a myocardial infarction?" ". . . ever told you had angina or coronary heart disease?" ". . . ever told you had a stroke?" (In 2004 and earlier years, the questions were similar but not identical.)

## Heart attack differences by gender

Men: $9.2 \%$ ( $95 \%$ CI: $7.8-10.6$ ) in 2006.
Women: $5.9 \%$ ( $95 \%$ CI: 4.9-6.9) in 2006.
Men had a significantly higher incidence of heart attack than women.

## Angina differences by gender

Men: $8.8 \%$ ( $95 \%$ CI: 7.4-10.2) in 2006.
Women: 7.9\% (95\% CI: 6.8-9.0) in 2006.
There were no significant differences in angina rates between men and women.

## Stroke differences by gender

Men: 3.9\% (95\% CI: 2.9-4.8) in 2006.
Women: $4.5 \%$ ( $95 \%$ CI: $3.6-5.4$ ) in 2006.
Women experienced stroke slightly more often than men.
Those aged 65 and older experienced heart attack, angina, and stroke significantly more often than those in younger age groups. Adults with less than a high school education carried a significantly higher risk of heart attack, angina, and stroke than those with more education. Heart attack and angina or other coronary heart disease were significantly more common among those in the less than $\$ 35,000$ annually income groups than among those with household incomes of $\$ 35,000$ or more per year.

Table 9.1 Heart attack, angina, or stroke by demographic characteristics: WVBRFSS, 2006

| Characteristic | Heart Attack or Myocardial Infarction |  |  | Angina or Coronary Heart Disease |  |  | Stroke |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI | \# Resp. | \% | 95\% CI |
| TOTAL | 3,782 | 7.5 | 6.6-8.3 | 3,768 | 8.3 | 7.4-9.2 | 3,784 | 4.2 | 3.5-4.8 |
| Sex |  |  |  |  |  |  |  |  |  |
| Males | 1,489 | 9.2 | 7.8-10.6 | 1,485 | 8.8 | 7.4-10.2 | 1,491 | 3.9 | 2.9-4.8 |
| Females | 2,293 | 5.9 | 4.9-6.9 | 2,283 | 7.9 | 6.8-9.0 | 2,293 | 4.5 | 3.6-5.4 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-44 | na | na | na | na | na | na | na | na | na |
| 45-54 | 757 | 5.6 | 3.9-7.3 | 757 | 6.3 | 4.5-8.0 | 760 | 3.1 | 1.9-4.3 |
| 55-64 | 832 | 12.3 | 9.8-14.8 | 830 | 15.0 | 12.4-17.6 | 831 | 5.2 | 3.6-6.8 |
| 65+ | 1,016 | 19.2 | 16.5-21.9 | 1,006 | 20.7 | 17.9-23.5 | 1,016 | 12.0 | 9.7-14.3 |
| Education |  |  |  |  |  |  |  |  |  |
| Less than H.S. | 615 | 17.7 | 14.6-20.7 | 607 | 15.6 | 12.7-18.5 | 616 | 10.4 | 7.9-12.9 |
| H.S. or G.E.D. | 1,488 | 6.8 | 5.5-8.2 | 1,485 | 8.4 | 7.0-9.8 | 1,490 | 4.0 | 3.0-5.1 |
| Some Post-H.S. | 822 | 5.4 | 3.9-6.9 | 821 | 6.6 | 4.9-8.2 | 821 | 2.8 | 1.7-3.9 |
| College Graduate | 850 | 3.3 | 2.0-4.6 | 848 | 4.9 | 3.4-6.4 | 850 | 1.1 | 0.5-1.8 |
| Income |  |  |  |  |  |  |  |  |  |
| Less than \$15,000 | 578 | 13.8 | 10.9-16.8 | 578 | 15.6 | 12.5-18.7 | 580 | 10.3 | 7.7-13.0 |
| \$15,000-24,999 | 727 | 10.8 | 8.5-13.2 | 724 | 12.0 | 9.5-14.5 | 728 | 6.3 | 4.5-8.1 |
| \$25,000-34,999 | 494 | 9.2 | 6.5-11.8 | 493 | 10.6 | 7.8-13.4 | 495 | 3.9 | 2.1-5.7 |
| \$35,000-49,999 | 524 | 3.9 | 2.2-5.7 | 524 | 5.4 | 3.4-7.4 | 524 | ${ }^{*} 1.3$ | 0.4-2.3 |
| \$50,000-74,999 | 498 | 2.7 | 1.2-4.2 | 497 | 5.1 | 3.2-6.9 | 497 | * 1.9 | 0.7-3.0 |
| \$75,000+ | 509 | 2.5 | 1.3-3.8 | 509 | 3.6 | 2.1-5.2 | 509 | * 0.9 | 0.2-1.7 |

* Use caution when interpreting and reporting this specific estimate. See the detailed discussion of estimates in the Methodology section.

Figure 9.1 Adults diagnosed with heart attack, angina, or stroke by county: WVBRFSS, 2002-2006


