

Assessing Changes in  
Healthcare in West Virginia  
from 2001 to 2007:  
The Non-Elderly Adult Report



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## I. Executive Summary

*Assessing Changes in Healthcare in West Virginia Between 2001-2007: The Non-Elderly Adult Report*, is the first report based on the *West Virginia Healthcare Survey, 2007* and includes the following findings:

- On any given day in 2007, 236,174 adults aged 19-64 (21.5%) had no health insurance. This represents an increase of 8.3 percent, or 18,241 people from 2001.
- The number of adults uninsured for part or all of 2007 increased 6.3 percent from 2001, representing 307,478 people, or approximately one out of every 3.6 West Virginia adults.
- 75% of uninsured adults in West Virginia have been without health insurance for a year or longer. The largest increase between 2001 and 2007 was seen in those without insurance between one and ten years.
- The high cost of premiums, co-pays and deductibles remains the biggest obstacle to obtaining health insurance, and has increased as the reason given for lack of coverage compared to the 2001 survey.
- Between 2001 and 2007, there has been a decline in the percent of adults who were self-insured, which may reflect increased costs of health insurance. The biggest percentage increases were for those with Medicaid, Medicare under age 65, and “other” forms of coverage.
- The risk of being uninsured is greatest for younger adults (aged 19-34), and this risk has been increasing for this age group over time. In contrast to the earlier survey, males now constitute the majority (50.3%) of uninsured adults.
- Regionally, the highest rates of uninsurance occur in the southern part of the state, and uninsurance rates have increased for all regions except the eastern panhandle..
- Uninsurance is strongly linked to socioeconomic conditions. Persons with less than a high school education, and who are unemployed or employed in low paying jobs, are at substantially greater risk of being uninsured. 75% of adults without insurance have a high school education or less. 65% of unemployed adults do not have health insurance.
- Almost 19% of working adults did not have health insurance. Working adults without health insurance, compared to those with insurance, report poorer health status and fewer visit a healthcare provider.
- Among those who are employed, health insurance is more likely to be offered by large firms and for full-time workers. Persons who enjoy comprehensive health insurance coverage constitute a smaller percentage of insured persons compared to the 2001 survey, while persons whose coverage is limited to catastrophic care have increased as a percent of insured persons.

- Compared to previous surveys, persons without insurance are becoming more likely to use community clinics or emergency rooms for care. Persons without insurance are less likely to have access to a physician's office and to a usual health care provider, compared to persons with insurance. Furthermore, almost 90% of uninsured adults have been unable to fill at least one prescription medicine because of cost.
- A higher percentage of uninsured persons report their health to be poor or very poor in 2007 compared to earlier surveys. Uninsured persons report worse health status than insured persons.
- Limitations of the survey include that information is based on self-report and so may not exactly reflect characteristics of the population. For example, people may over-report use of physician offices when they receive care at a community health center. Results are also dependent on who within the household was available to answer the survey. In addition, the survey was conducted in 2007 but the state population estimates are based on the 2005 American Community Survey, the most recent survey report available at the time.
- The overall profile of a typical person without insurance is a male, aged 19-34, who is unemployed and has a high school education.

## II. Introduction

In 2001, the *West Virginia Healthcare Survey* of 16,493 households was undertaken to learn about West Virginians who did not have health insurance – who they were, what the circumstances of their lives were, and what relationship the lack of insurance had to their health status and their access to healthcare services. As a result, state health programs and agencies, as well as other stakeholders, had information related to health insurance coverage by age, economic and social conditions, region, and county. When the survey was updated in 2003, the sample was much smaller (1,600 households). The survey was repeated a third time in 2007 on a sample of 1,750 households. The 2003 and 2007 surveys provide valuable statewide measures of change, but are not large enough to provide county-level estimates.

*Assessing Changes in Healthcare in West Virginia Between 2001-2007: The Non-Elderly Adult Report* is the first in a series of reports based on the 2007 survey. It assesses changes among adults aged 19 to 64 from 2001 to 2007. The Institute's next report will be on the state's population of children ages 0 to 18. A third report on West Virginia's adult population over 65 years old will follow. All reports will be available to the public on the Institute's website: <http://www.hsc.wvu.edu/wvhealthpolicy/>

The 2007 figures in this report are estimates based on the third West Virginia Healthcare Survey, a telephone survey conducted in August 2007. Approximately 425 households in each of West Virginia's four regions were chosen randomly to be surveyed, representing 1,750 households (see Appendix for counties in each region). One adult in each household was interviewed. He or she identified him or herself as the most knowledgeable about the health insurance status of all household members.

After data collection, the data were balanced by region, and adjusted for the probabilities of selection for number of adults and the number of telephone lines in the household. Households with telephone service disruptions were adjusted to account for households without telephone service. The data were then weighted to match the age, gender, and education distributions of the U. S. Census Bureau's American Community Survey, 2005. The 95% confidence interval for state-level estimates in the report is less than +/- 2 percentage points. For the uninsured rate, the confidence interval is +/-1.5 percentage point. Unless otherwise specified, population estimates are obtained by applying the survey percentage, not including missing values, to the West Virginia population, 19 to 64 years old, from the 2005 U. S. Census Bureau's American Community Survey. The American Community Survey is designed to give communities information about their demographic, socioeconomic, and housing characteristics on an annual basis. For more information, visit [www.census.gov/acs/www](http://www.census.gov/acs/www). Certain discrepancies within the report are due to rounding. Some figures are calculated using all response options, including don't know/refused; however, not all of these responses are necessarily shown in every illustration. A more detailed discussion of the study design and data collection can be found in the Appendix.

**Note: Throughout the remainder of this report the “non-elderly adult” will be referred to as “adult”.**

### III. What Changes Have Taken Place in West Virginia?

This section of the report will include the following:

- West Virginia’s population
- West Virginia’s population of adults, ages 19 to 64
- The number of employed adults

The 2000 U. S. Census reports a total population of 1,808,344 for West Virginia. This is the number upon which the *West Virginia Healthcare Survey, 2001* was based. For the 2007 survey, the estimated population of West Virginia based on the US Census estimate was 1,812,035 (see Figure 1).

**Figure 1**  
**West Virginia’s Population**

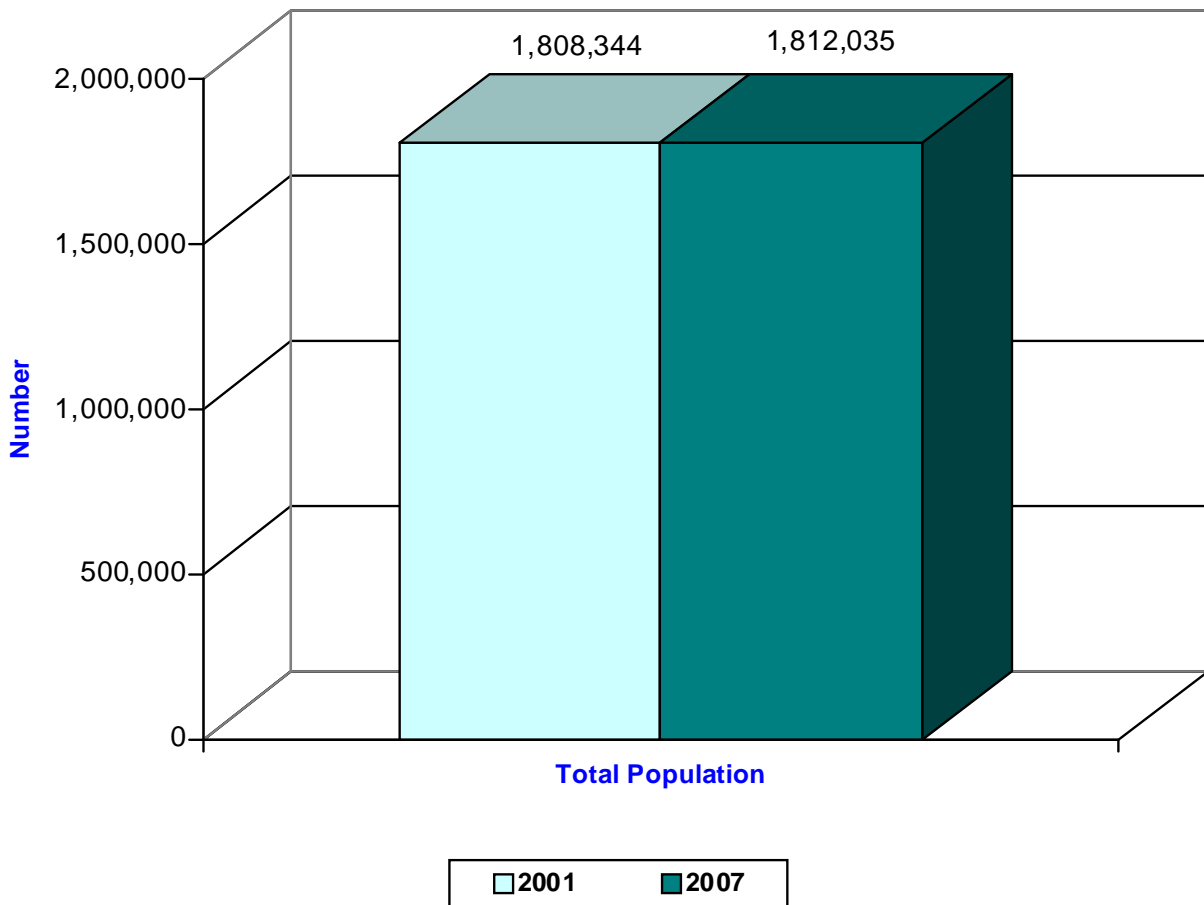




Figure 2 shows that in 2001, there were 1,103,570 adults ages 19-64 in West Virginia. In 2007, this number dropped to 1,098,893, a decrease of 4,677 adults or 0.4 percent.

**Figure 2**  
**West Virginia's Adult Population**

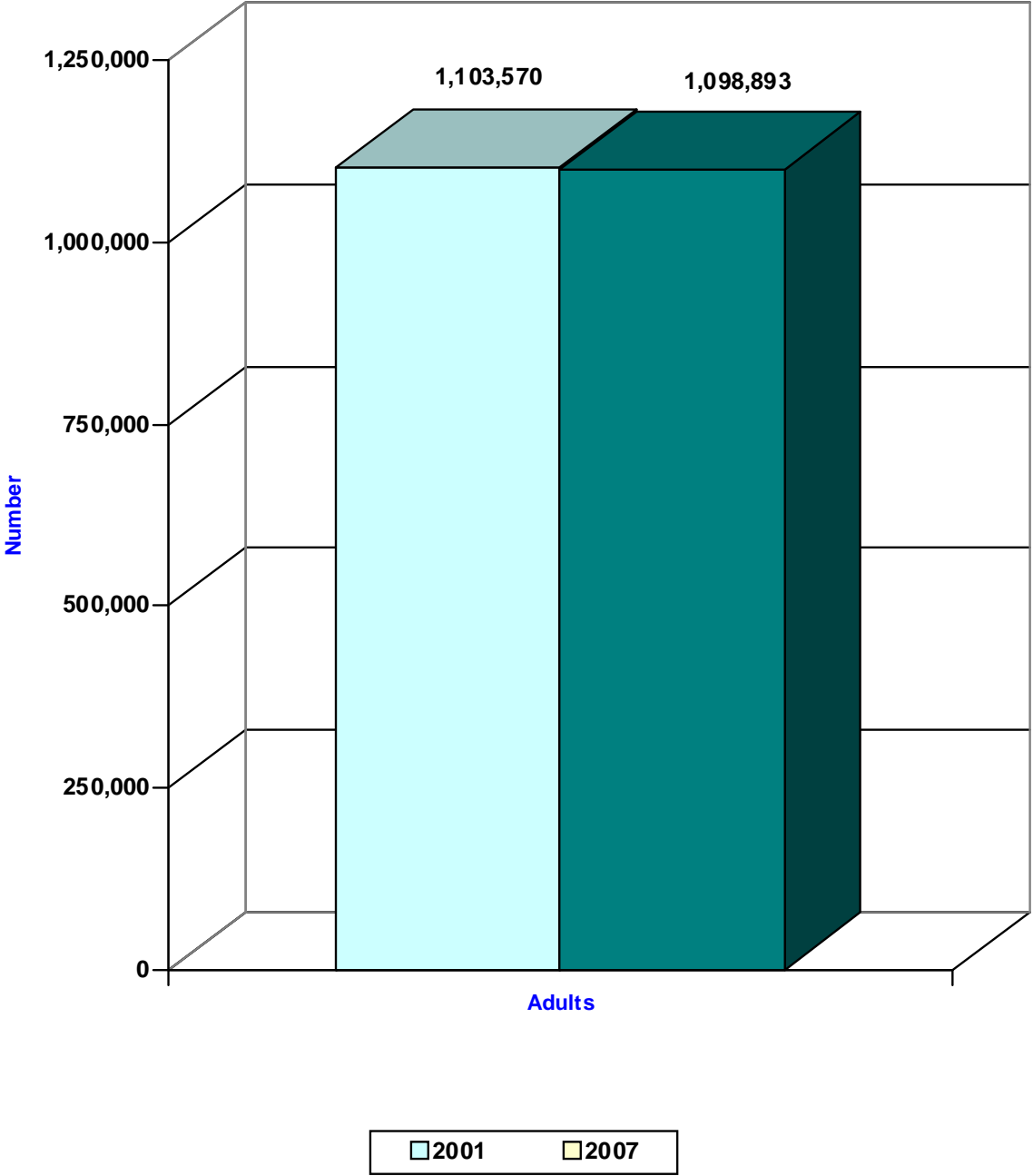
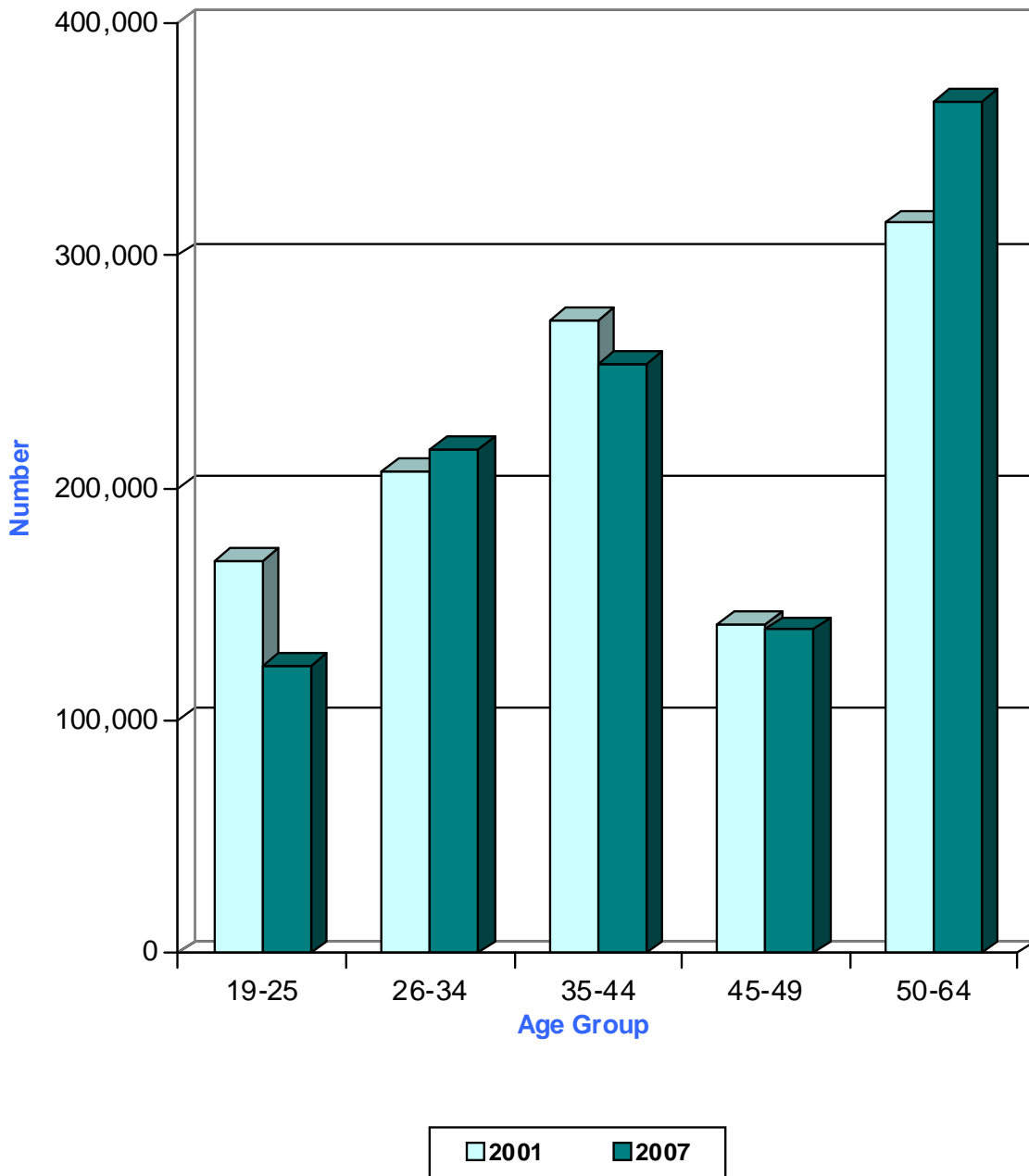


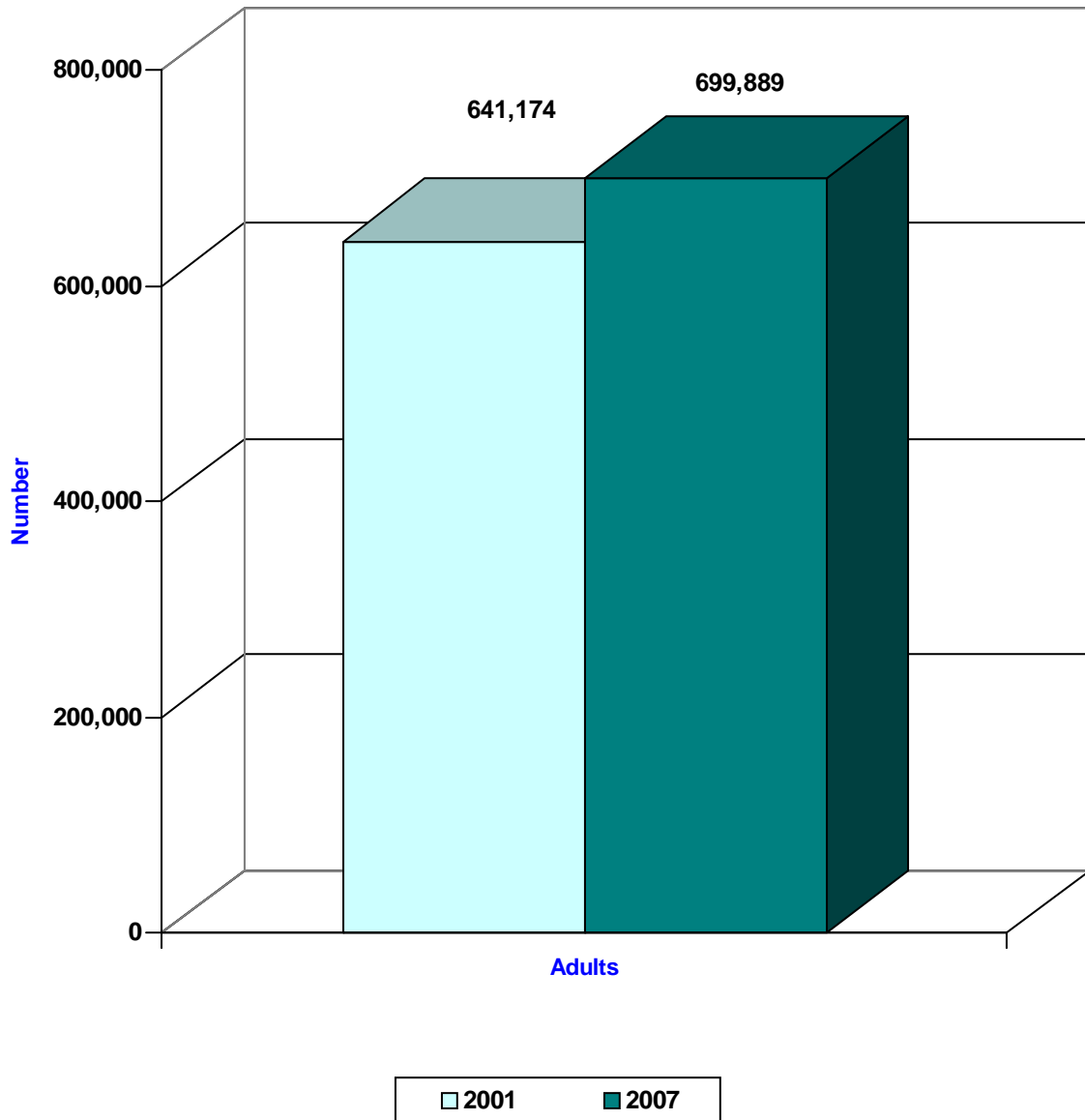
Figure 3 shows the state population change by age group, for those aged 19-64. The percent of the state population falling into the near-elderly age range (age 50-64) has increased between the 2001 and 2007 surveys, reflective of the aging of the state's population.

**Figure 3**  
**West Virginia's Population by Age**



Another change taking place in West Virginia during this time was in the number of employed adults. As a percent of all adults aged 19-64, employed adults increased from 58.1% to 63.7% between 2001 and 2007 (Figure 4.)

**Figure 4**  
**Employed Adults in West Virginia**



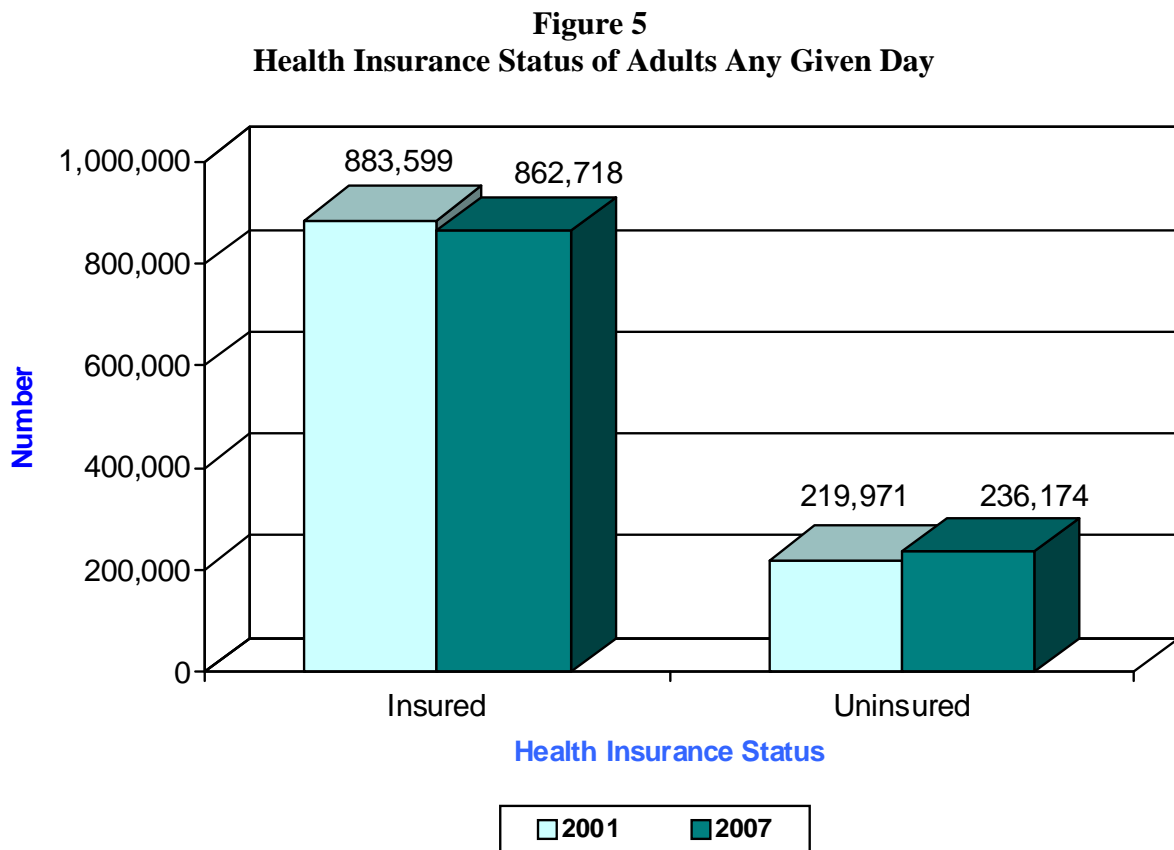
## IV. Has the Health Insurance Status of Adults in West Virginia Changed?

This section will report the following:

- How many adults were uninsured during the past year
- Which region had the highest percentage of uninsured adults
- How many adults were uninsured for some part or all of the past year
- How long uninsured adults were without healthcare coverage
- What type of health insurance did insured adults have

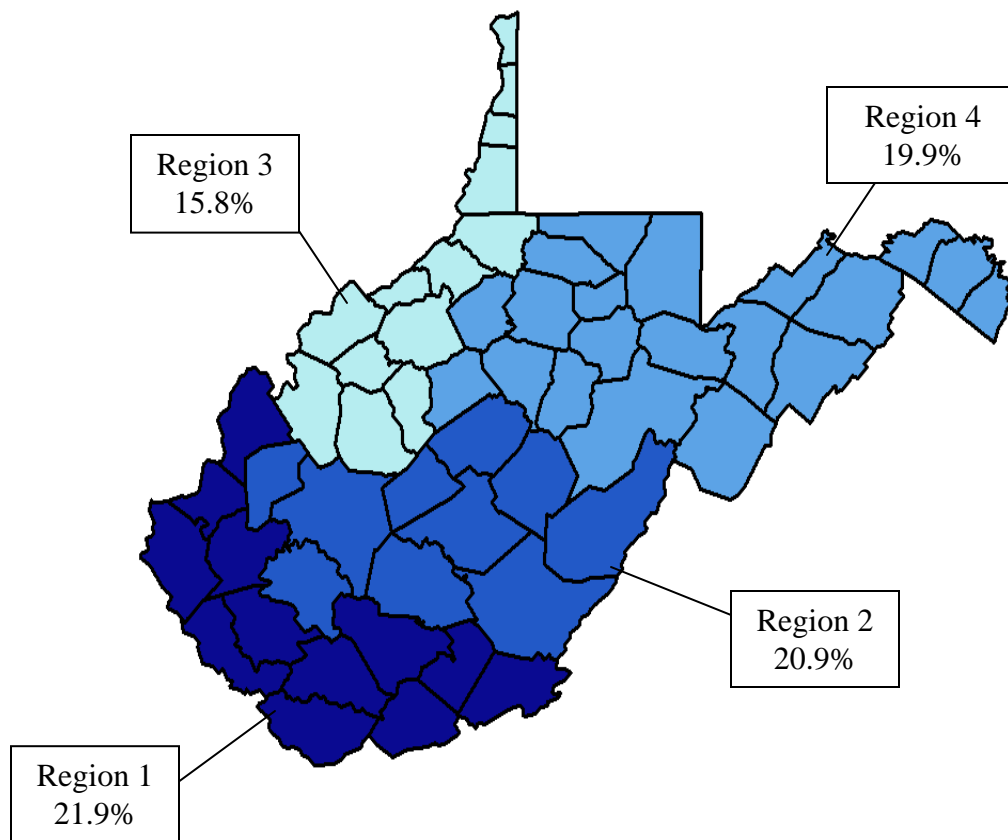
In 2001, the number of uninsured adults (ages 18-64) in the United States stood at about 34.8 million, or 19.5 percent of the adult population. By 2006 this figure increased to 36.5 million or 19.8 percent of the adult population.

*In West Virginia, 19.9 percent (219,971) of West Virginia's adults (ages 19-64) were without health insurance at the time of survey interviews in 2001. By 2007 the percent increased to 21.5 percent or 236,174 West Virginians. The increase between 2001 and 2007 represents 16,203 more adults without insurance, a 7.4% increase over those years. This result is shown in Figure 5.*



Map 1 shows that in 2001, Region 1, the southern part of the state, had the highest percent of uninsured adults, at 21.9 percent. Region 3, the northern panhandle and northwestern part of the state, had the lowest percent of uninsured adults, at 15.8 percent.

**Map 1**  
**Percent of Uninsured Adults By Region, 2001**



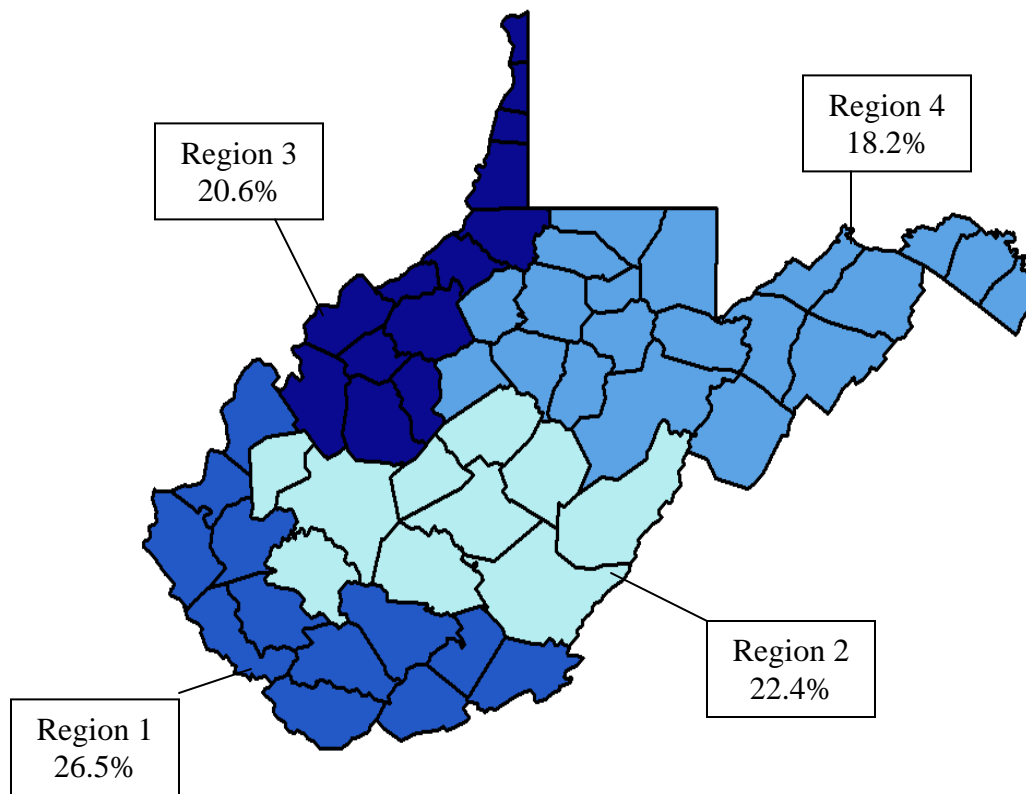
Region 1: Cabell, Lincoln, Logan, Mason, Mercer, Mingo, McDowell, Monroe, Raleigh, Summers, Wayne, and Wyoming

Region 2: Boone, Braxton, Clay, Fayette, Greenbrier, Kanawha, Nicholas, Pocahontas, Putnam, and Webster

Region 3: Brooke, Calhoun, Hancock, Jackson, Marshall, Ohio, Pleasants, Ritchie, Roane, Tyler, Wetzell, Wirt, and Wood

Region 4: Barbour, Berkeley, Doddridge, Gilmer, Grant, Hampshire, Hardy, Harrison, Jefferson, Lewis, Marion, Mineral, Monongalia, Morgan, Pendleton, Preston, Randolph, Taylor, Tucker, and Upshur

**Map 2**  
Percent of Uninsured Adults By Region, 2007



Region 1: Cabell, Lincoln, Logan, Mason, Mercer, Mingo, McDowell, Monroe, Raleigh, Summers, Wayne, and Wyoming

Region 2: Boone, Braxton, Clay, Fayette, Greenbrier, Kanawha, Nicholas, Pocahontas, Putnam, and Webster

Region 3: Brooke, Calhoun, Hancock, Jackson, Marshall, Ohio, Pleasants, Ritchie, Roane, Tyler, Wetzel, Wirt, and Wood

Region 4: Barbour, Berkeley, Doddridge, Gilmer, Grant, Hampshire, Hardy, Harrison, Jefferson, Lewis, Marion, Mineral, Monongalia, Morgan, Pendleton, Preston, Randolph, Taylor, Tucker, and Upshur

By 2007, the uninsurance rate declined for Region 4 but increased for all other regions. Region 4 has shown the greatest population influx due to the influence of the greater Washington DC area. Region 1 continues to have the highest uninsurance rate.

The results shown earlier in Figure 5 show a “snapshot” of who was uninsured at the time of the survey. But additional individuals may be without insurance for other parts of the year. There was an increase in the number of adults who were uninsured for part of the year (112,036 to 130,302) (see Figure 6). As a percent of the adult population, the percent of adults insured for the entire year was 73.2% in 2001 and 72.0% in 2007. Another way to think of this is to understand that the uninsurance rate “snapshot”, the 21.5% uninsurance rate for 2007, under-represents the total percent of people who are uninsured at some time in the year – the percent uninsured at some time during the year for 2007 was 28%.

**Figure 6**  
**Health Insurance Status of Adults**  
**All Year vs. Part of Year**

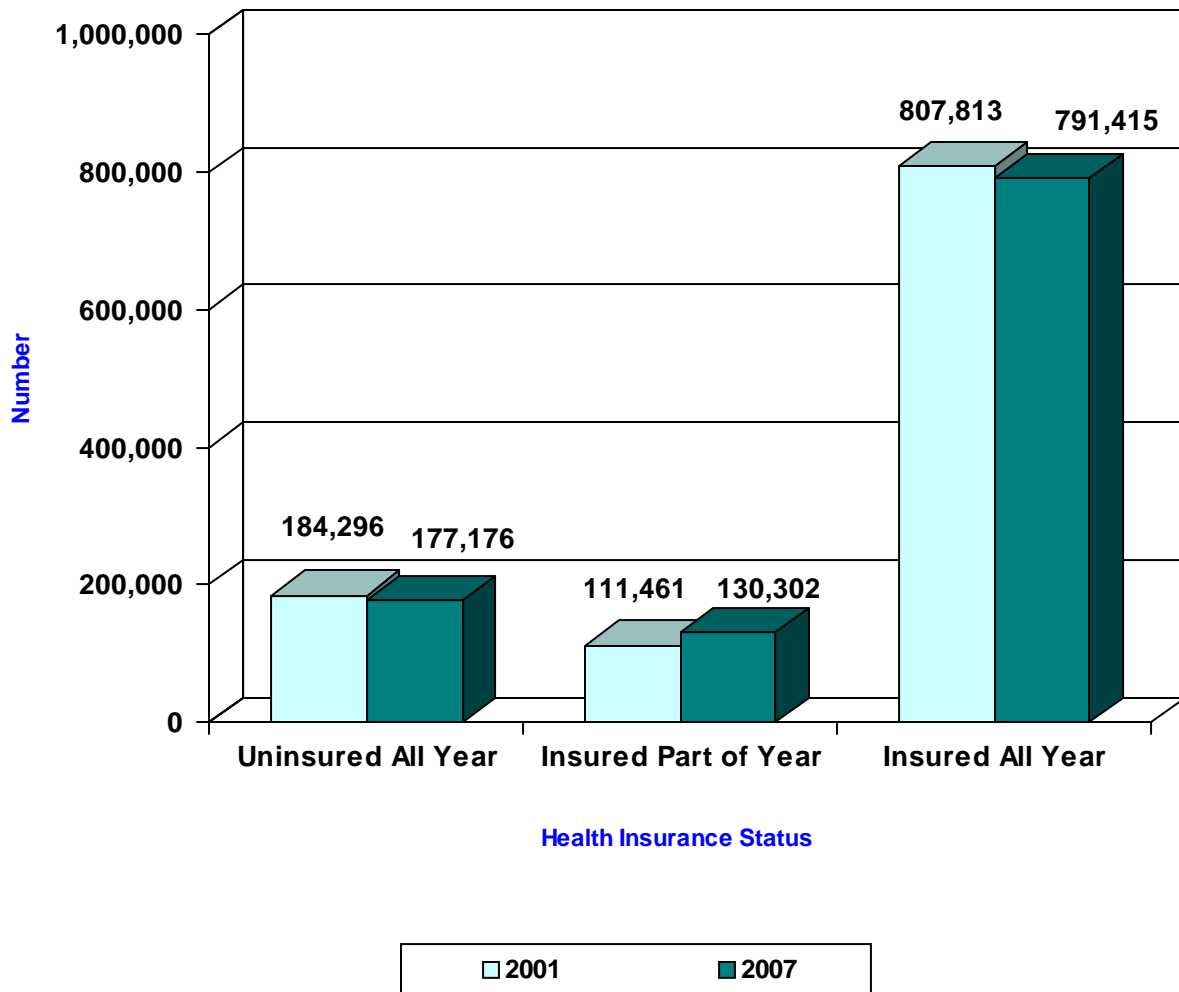


Table 1 shows the change from 2001 to 2007 in the number of uninsured adults and the length of time they were without health insurance coverage. The number of adults without health insurance for less than one year increased, as did the number without insurance for 5 to 15 years, while the numbers declined among those reporting uninsurance for 1-5 years or reporting never having had insurance. The large changes in some categories may reflect sampling error, as the samples were not drawn to attempt to represent length of time uninsured. Changes may also represent historical events – for example, the large plant closings in the northern panhandle prior to 2003 may explain the increase between 2001 and 2007 in the number of adults uninsured for 1-5 years or 5-10 years.

<b>Table 1</b>		
<b>Length of Time Adults <a href="#">Ages 19-64</a> Have Been Uninsured</b>		
<b>Length of Time Uninsured</b>	<b>Estimated Number of Adults, 2001</b>	<b>Estimated Number of Adults, 2007</b>
Less than 1 Year	34,756	43,512
1 – 5 Years	79,629	85,615
5 – 10 Years	36,955	45,766
10 – 15 Years	15,838	11,423
More than 15 Years	25,737	34,372
Never had health insurance	19,797	11,781
Do not know	7,259	3,705
Total	219,971	236,174



Table 2 shows the reasons adults gave for being uninsured. The high cost of premiums, co-pays and deductibles remains the biggest obstacle to obtaining health insurance, and has increased as the reason given compared to the 2001 survey. Given figures shown elsewhere in this report, that employer sponsored health insurance is on the decline, the relatively small percentage who cite employer-based problems might reflect the availability of other insurance products on the market, while reflecting the lack of affordability of those products.

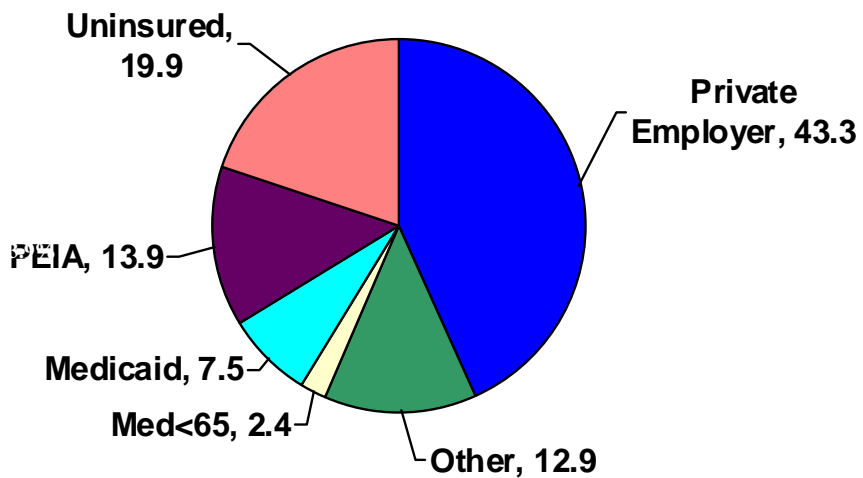
<p style="text-align: center;"><b>Table 2</b> <b>Reasons Given for Being Uninsured</b></p>		
Reason Given	Estimated Percentage of Uninsured Adults, 2001	Estimated Percentage of Uninsured Adults, 2007
High cost of premiums, co-payments, and deductibles	45.8	50.4
No family member has a job that offers insurance, or no employed family member is eligible for employment-based insurance	14.9	11.7
No family member has a job	8.4	13.3
Uninsurable due to health problem	2.2	1.7
Other	28.7	22.9
Total	100%	100%

There were changes in the number of insured adults covered by different types of health insurance. Between 2001 and 2007, notable changes include a continued drop in the percent of adults that were self-insured, which may reflect increased costs of health insurance. The biggest increases were for those with Medicaid, Medicare under 65, and “other”. The large decline in persons citing PEIA and the large increase in the “other” category is likely a reflection of a coding error in how survey responses were categorized. The increase in the Medicaid and Medicare < 65 categories may reflect increases in the number of people with disabilities. The decline in the UMWA/Railroad Retirement/Other Union category reflects the natural progression due to mortality and out-migration, as these programs are no longer enrolling new people. These figures are shown in Table 3 and Figure 7.

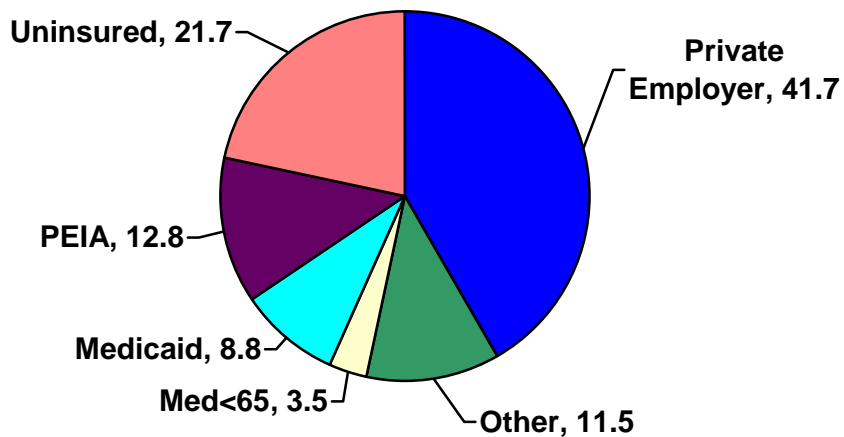
<b>Table 3</b>		
<b>Estimated Number of Adults with Different Types of Health Insurance</b>		
<b>Type of Insurance</b>	<b>Estimated Number of Adults, 2001*</b>	<b>Estimated Number of Adults, 2007*</b>
Private Employer	477,570	453,858
Public Employer		
PEIA	153,620	139,096
FEHB	51,564	41,324
VA/CHAMPUS	14,415	10,016
Medicaid	82,495	95,807
Self-Purchased Health Insurance	51,179	31,126
Medicare < 65 yrs	25,988	38,092
COBRA	12,516	12,621
UMWA/Railroad Retirement/Other Union	11,536	6,047
Other	2,718	23,347
Uninsured	219,971	236,174
Total	1,103,570	1,087,508

**Figure 7**  
**Major Types of Health Insurance Coverage Among Adults**

**2001**



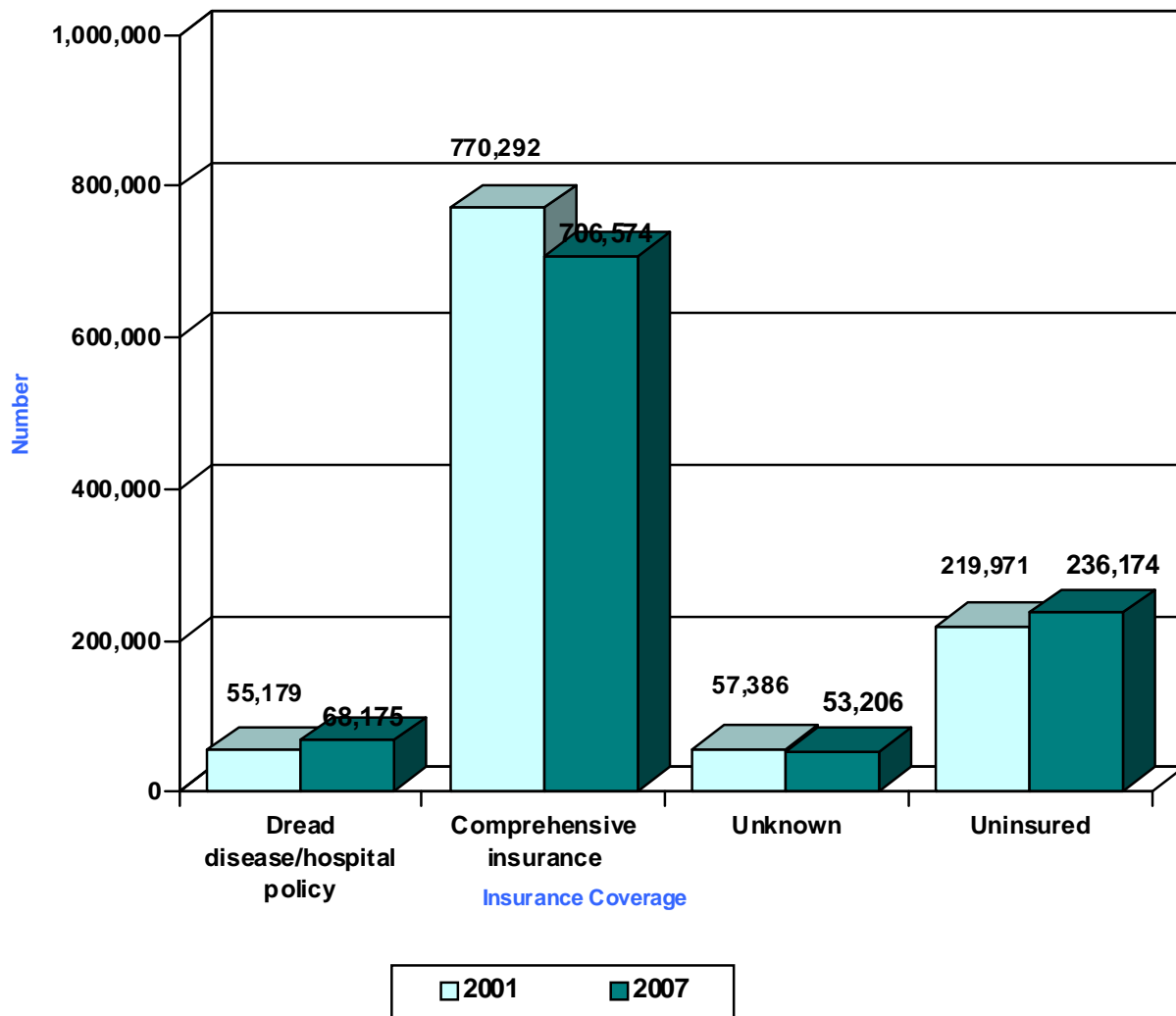
**2007**



Note that the size of the uninsured population is more than twice the size of the Medicaid population.

For this study, inadequate health insurance plans are defined as plans that cover only certain illnesses or dread diseases, such as cancer or major accidents, or only provide extra cash for hospitalizations. Adults covered by PEIA, FEHB, Medicaid, Medicare, a UMWA policy, or military insurance were assumed to have comprehensive health insurance coverage. Adults with other types of plans were asked if their plan was comprehensive. Figure 8 shows that between 2001 and 2007, numbers of adults with comprehensive policies declined.

**Figure 8**  
**Comprehensiveness of Insurance Coverage**



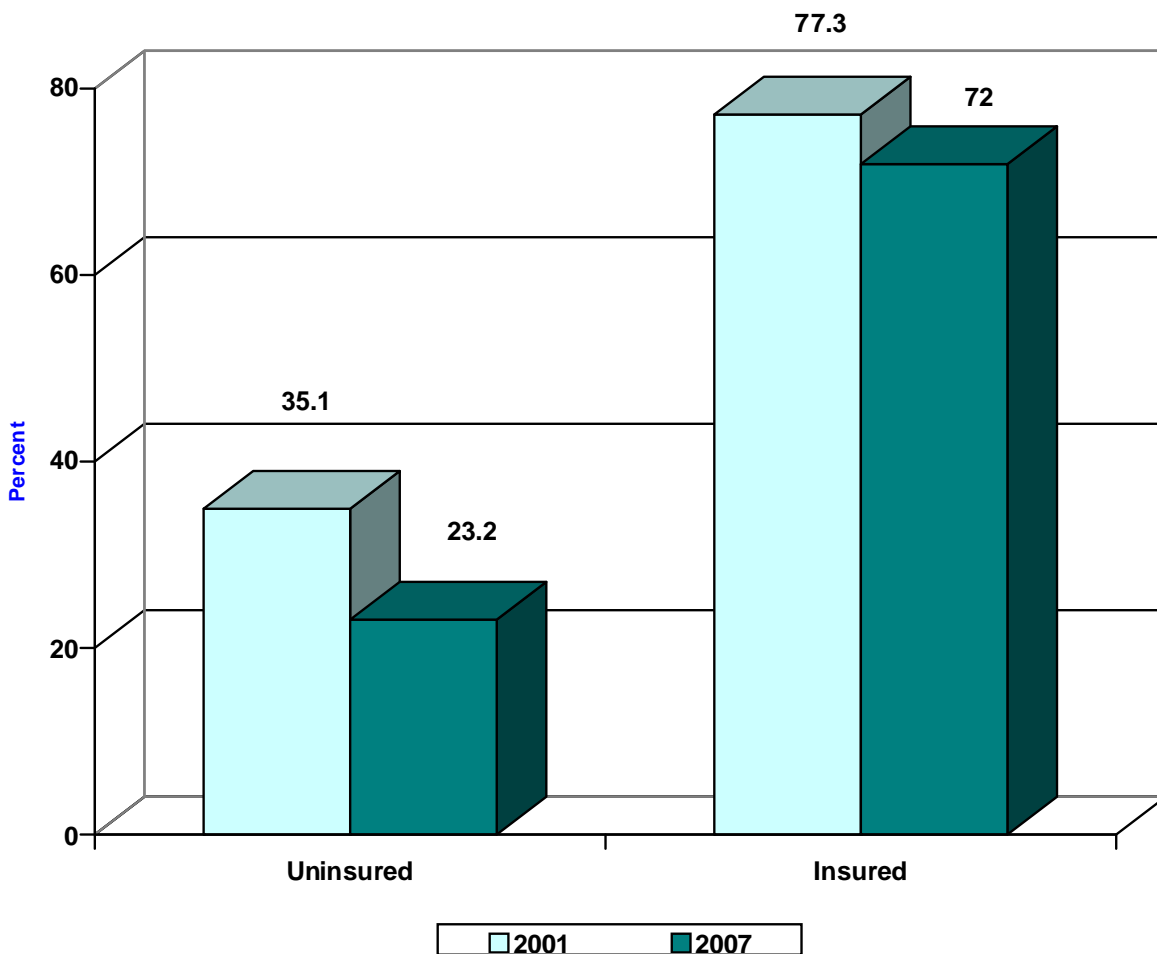
## V. Perceived Cost Burden of Health Insurance

In this section of the report, we will discuss:

- The burden of paying for healthcare costs that are not covered by health insurance

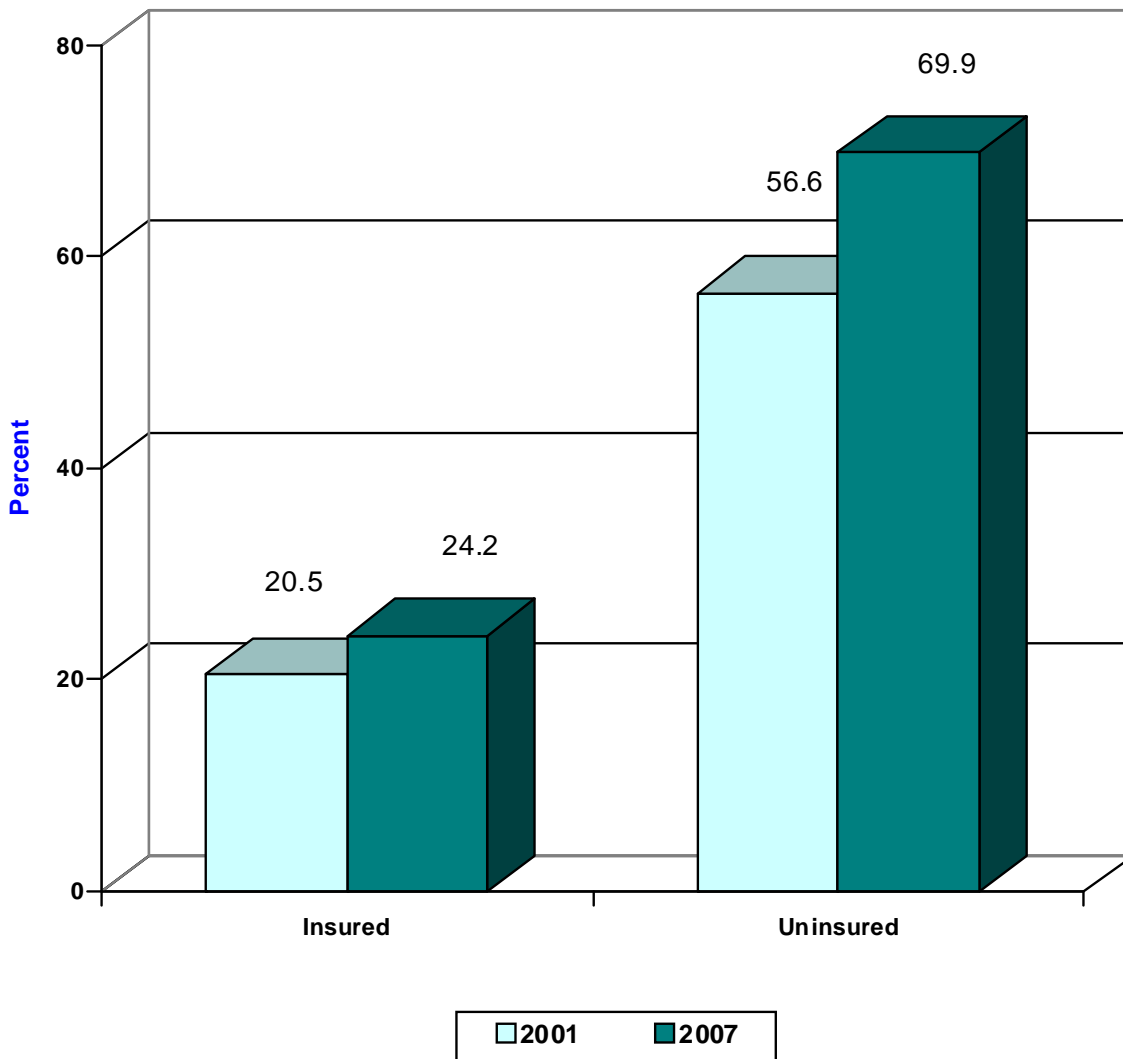
Figure 9 shows that between 2001 and 2007 there was a decline in the percent of adults who are confident they could pay all of medical expenses, regardless of insurance status. However, as expected, insured adults were much more confident than uninsured adults on this question.

**Figure 9**  
**Percent of Adults' Who Felt "Somewhat to Very Confident" that They Could Pay Healthcare Expenses**



People were asked to report how much of a burden it was to meet health care costs. Between 2001 and 2007, the reported burden of meeting healthcare costs increased for uninsured adults. As expected, persons with insurance report less severe financial burdens in meeting health care costs. But even here, a minority of persons, 19.2%, report no burdens, and about 25% report heavy burdens. (See Figure 10).

**Figure 10**  
**Burden of Healthcare Costs for Insured and Uninsured Adults**



## VI. Which Non-Elderly Adults Are More Likely to Be Uninsured?

This section of the report will discuss the risk of being uninsured for adults defined by the following demographic characteristics:

- Age
- Gender
- Race
- Marital status
- Education
- Annual household income

The section will provide the demographic profile of uninsured adults; that is, the percentage of uninsured adults across each demographic. The demographic profile of the uninsured results from two factors: (1) the risk of being uninsured within each demographic category and (2) the size of that group. For example, an individual within a group may have a high risk of being uninsured, but if those individuals comprise a small percentage of the total adult population ages 19-64, they will make up a relatively small percentage of the demographic profile.

Therefore, for each demographic, there are 2 tables or figures: the total population figures, and the risk of being uninsured *within* each demographic category.

Beginning on the next page, Figure 11 shows the overall age changes in West Virginia's adult population between the 2001 and 2007 surveys. The biggest changes between 2001 and 2007 were decreases in the number of young adults ages 19-25, and increases in older adults 50-64. (This figure is a duplicate to Figure 3 but is presented here again for convenience.)

Figure 12 shows that the age group with the highest risk of being uninsured in 2007 was adults 19-25 years old at 36.2 percent – this figure has been increasing compared to earlier surveys. As in previous surveys, in 2007 adults with the lowest risk of being uninsured were 50-64 years old.

AGE

Figure 11  
West Virginia Population Changes by Age

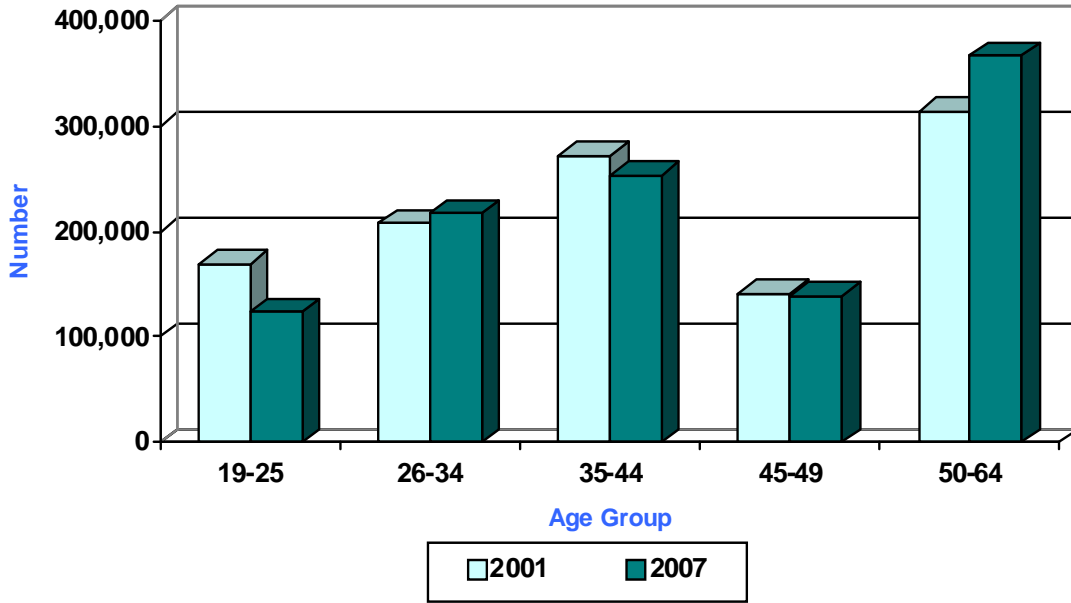
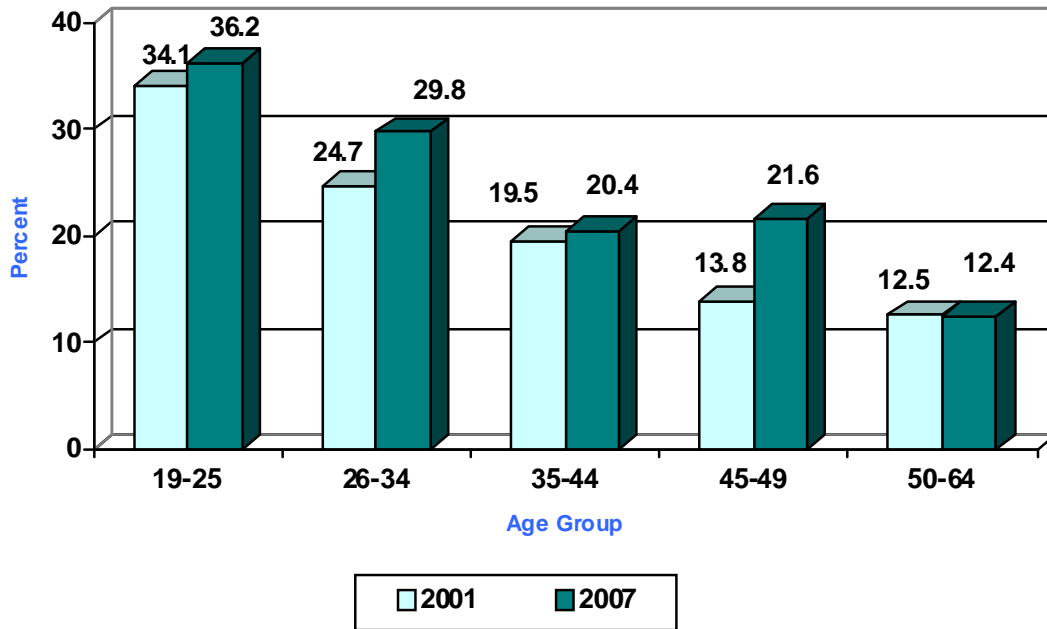


Figure 12  
Risk of Being Uninsured by Age





## GENDER

There were only slight changes in the overall male and female adult population in West Virginia (see Figure 13).

**Figure 13**  
**West Virginia Adult Population Changes by Gender**

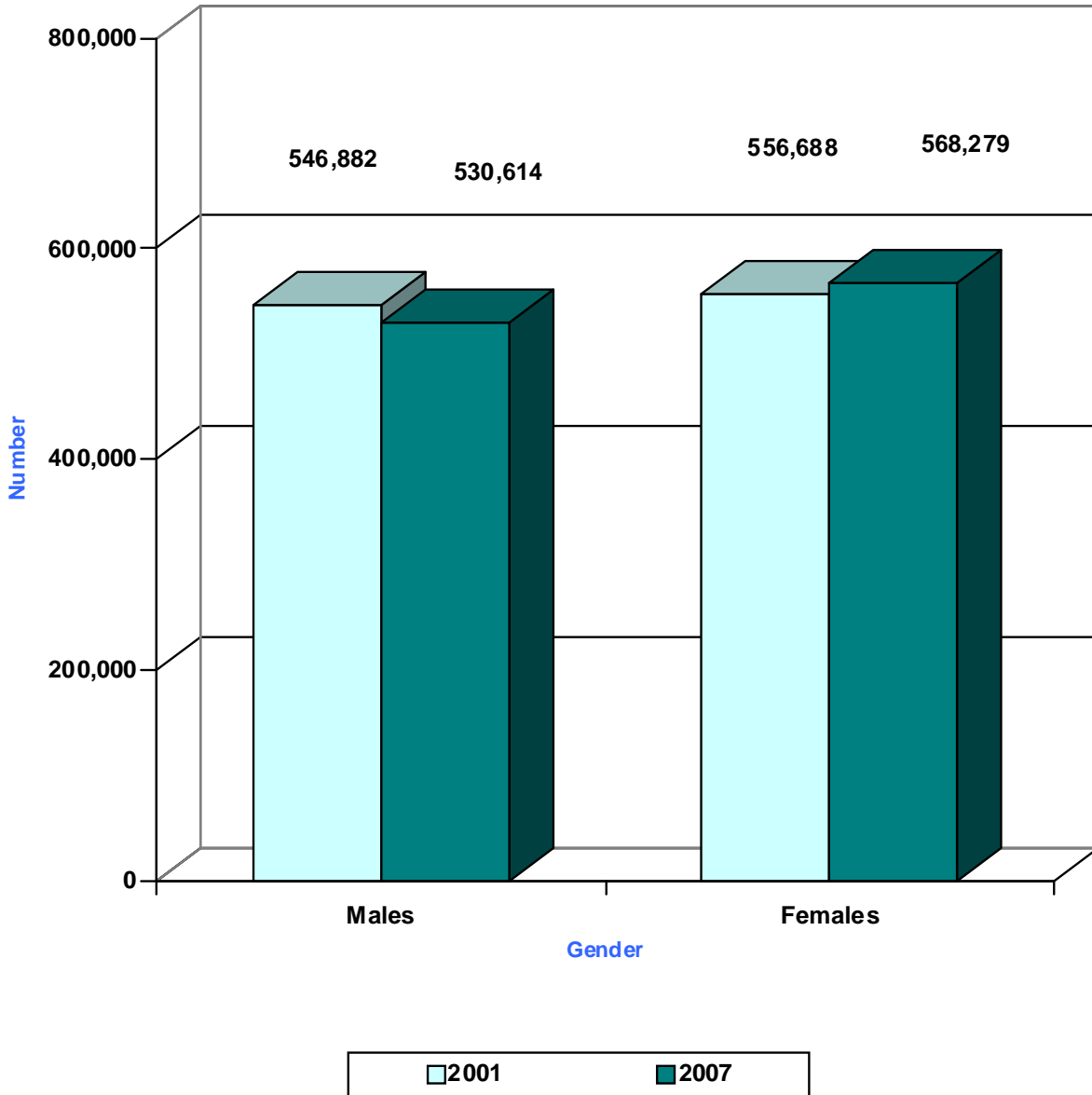
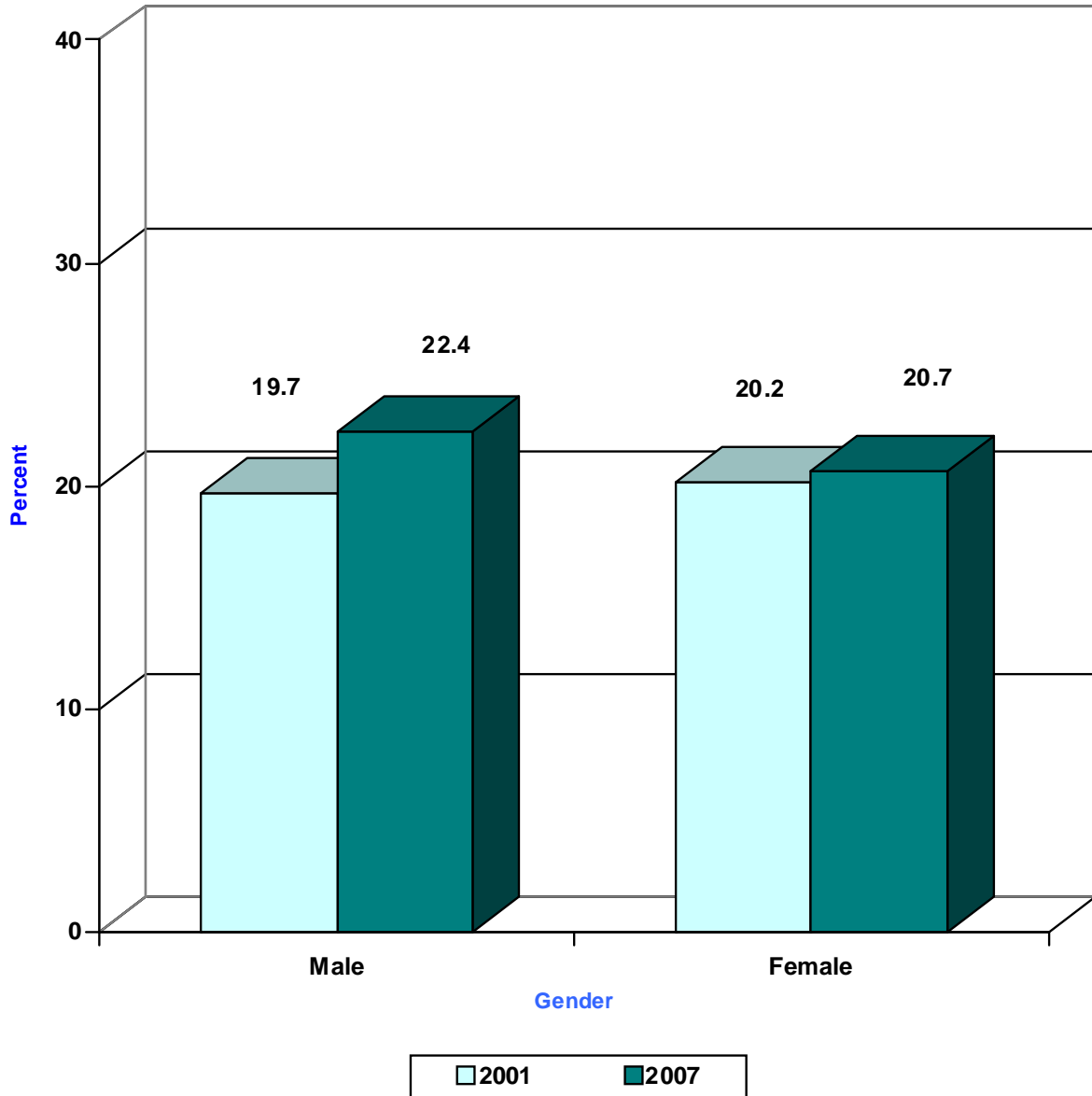


Figure 14 shows a 2007 reversal of previous trends. Earlier surveys showed females at a greater risk of being uninsured, but the risk in 2007 is now greater for males.

**Figure 14**  
**Risk of Being Uninsured by Gender**



## RACE/ETHNICITY

Between the 2000 Census and the 2007 survey, the number of non- white adults in West Virginia has increased slightly but continues to constitute a small percent of the total population (about 3% of total). Figure 15 shows only the non-white population figures.

**Figure 15**  
**West Virginia Population Changes by Race/Ethnicity**

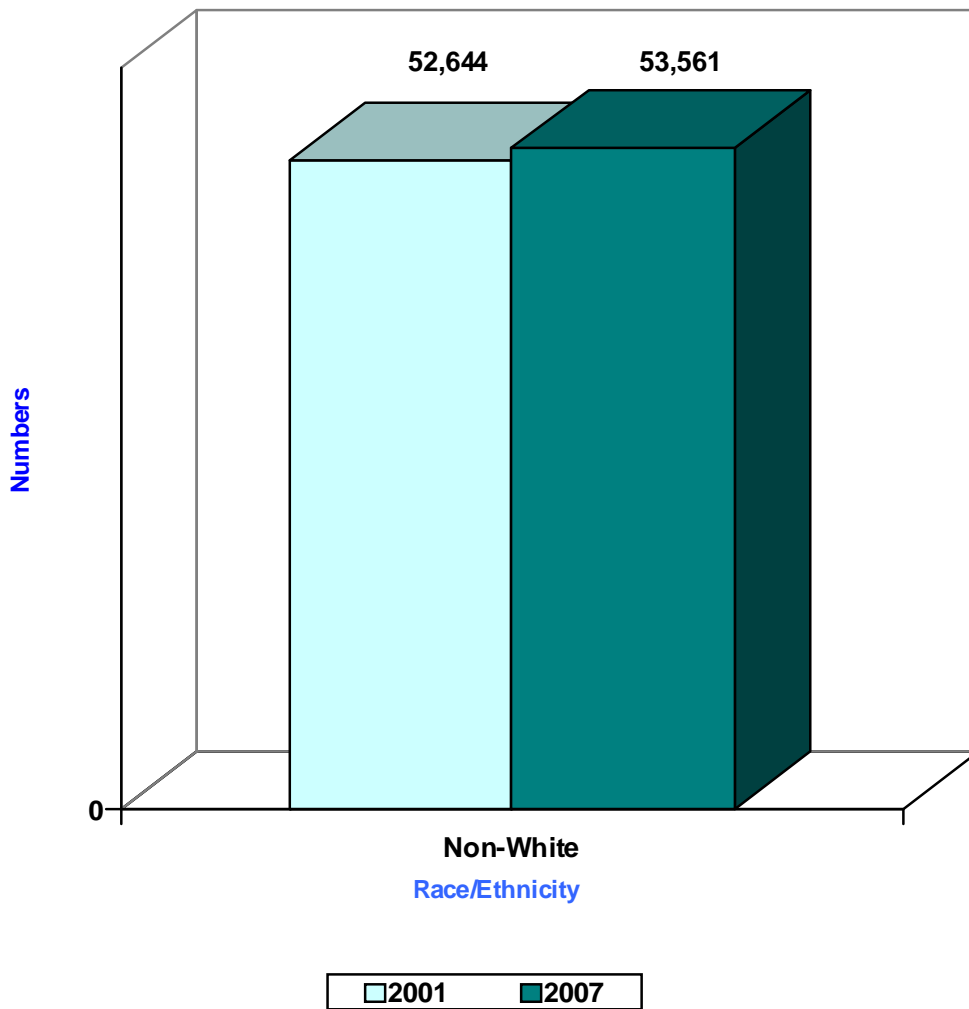
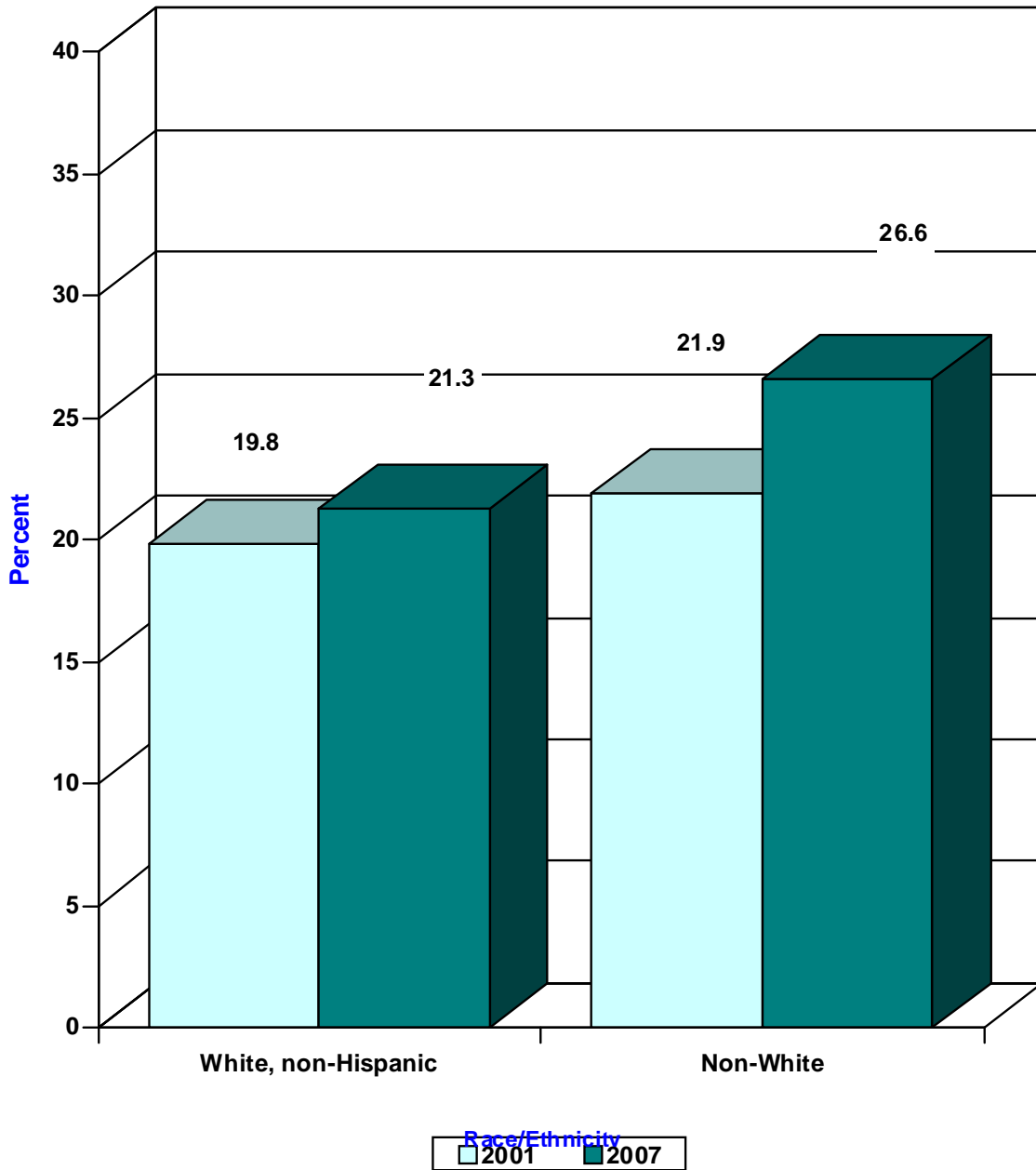


Figure 16 shows that uninsurance rates are higher for non-white residents compared to white, non-Hispanic residents, and have increased since the previous survey.

**Figure 16**  
**Risk of Being Uninsured by Race/Ethnicity**



## MARITAL STATUS

Figure 17 displays changes in marital status of West Virginia's adult population. The vast majority of the adult population is married.

**Figure 17**  
**West Virginia Adult Population Changes by Marital Status**

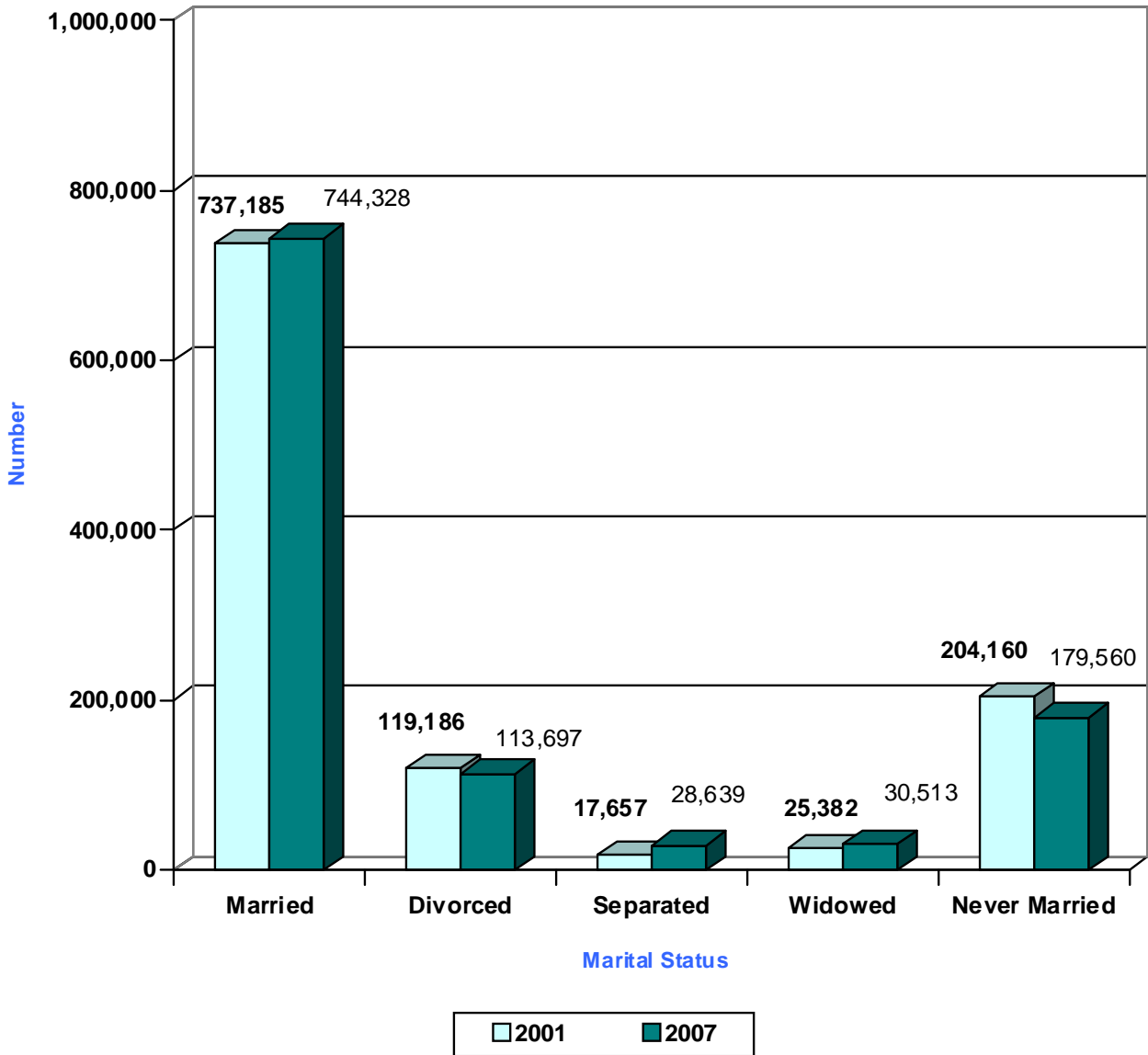
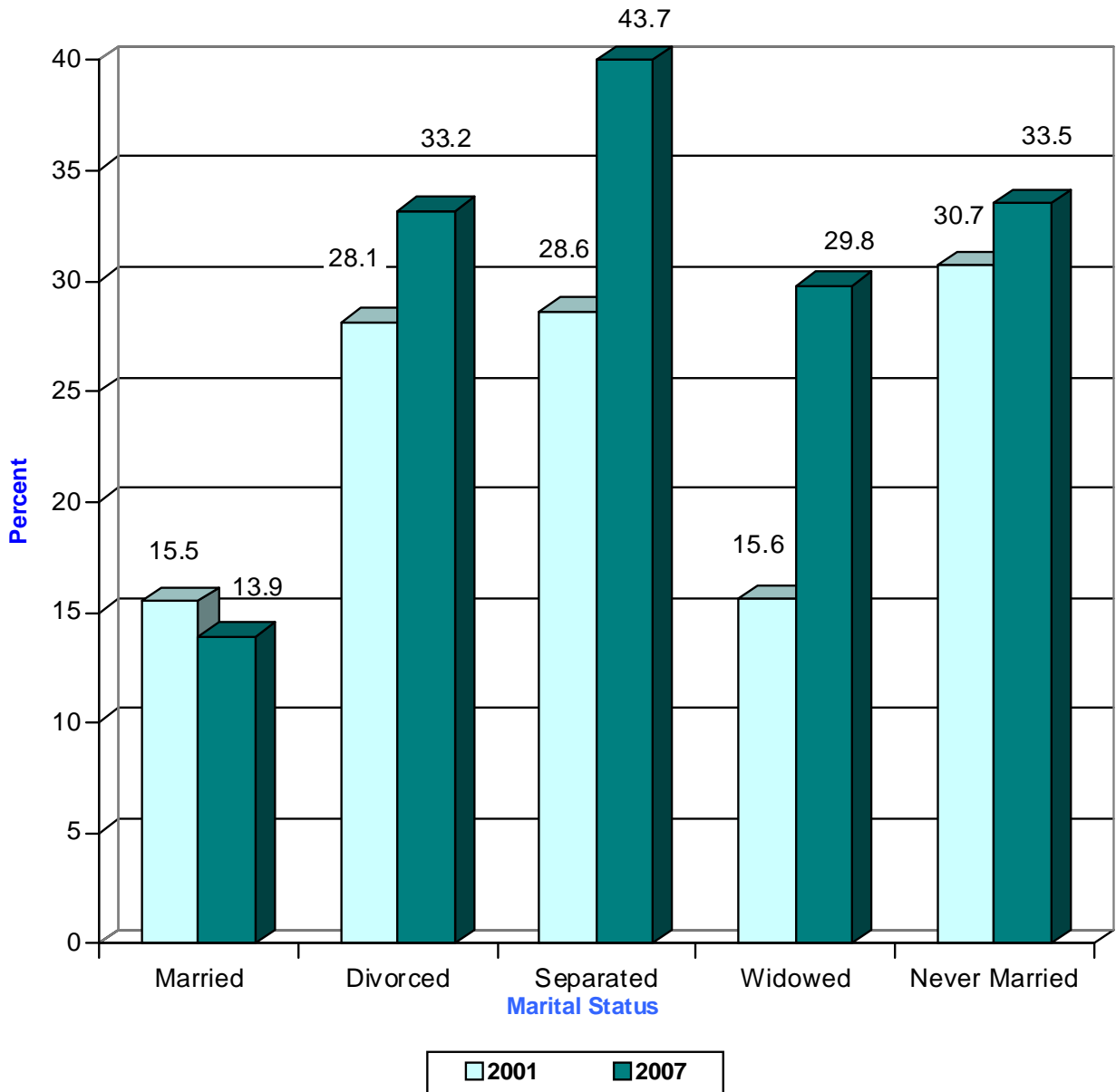


Figure 18 shows that uninsurance rates for married adults declined between 2001 and 2007, but increased for all other categories.

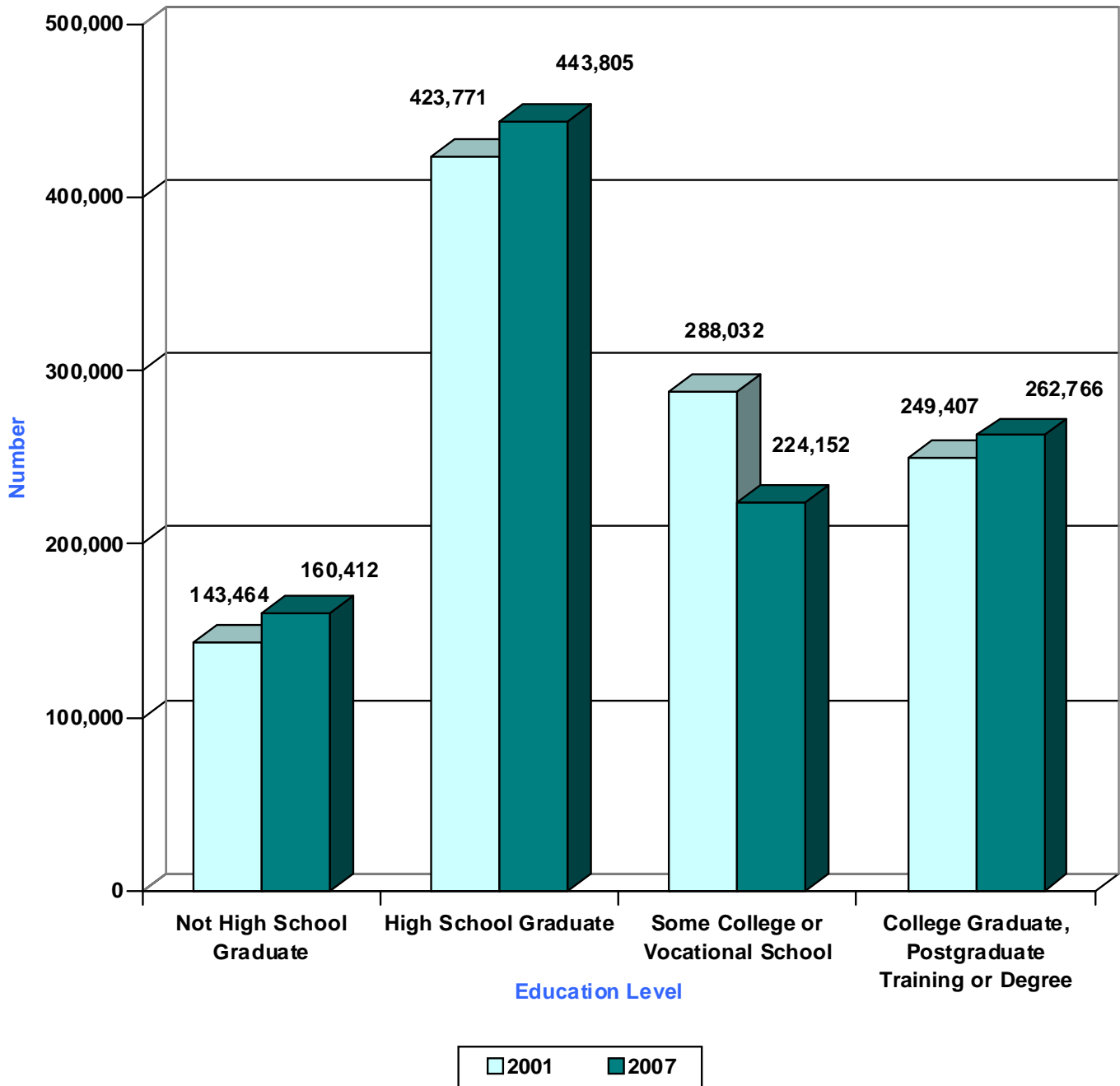
**Figure 18**  
**The Risk of Being Uninsured By Marital Status**



## EDUCATION

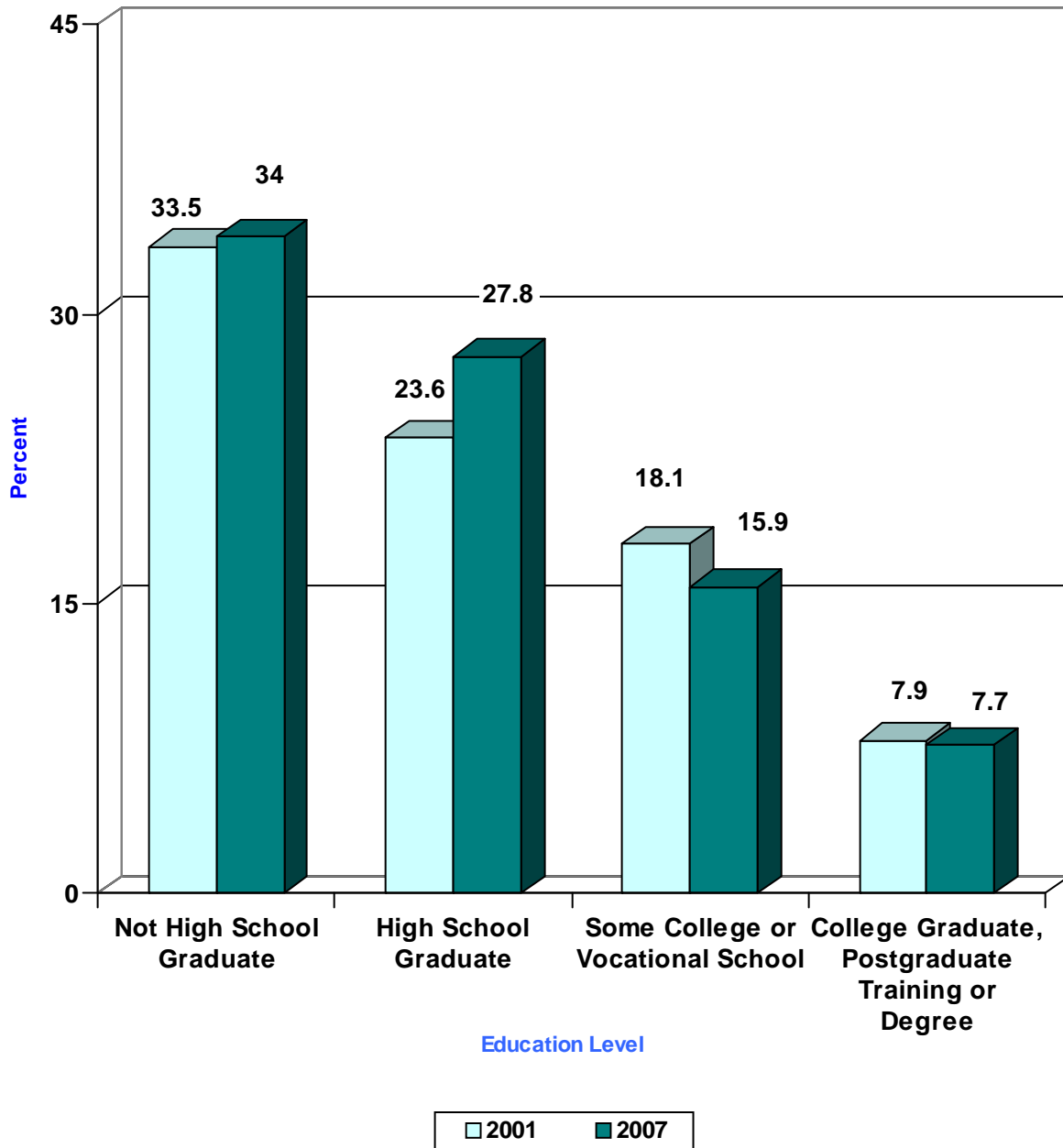
Figure 19 presents the changes in the education level of West Virginia's adult population between 2001 and 2007. High school graduates make up the largest group, followed by those with at least a college degree, then those with some college or vocational training.

**Figure 19**  
**West Virginia Population Changes by Education Level**



As many previous studies have shown, the risk of uninsurance is strongly related to education. Clearly, adults with less than a high school education are the most likely to be uninsured, although risk has increased among high school graduates (see Figure 20).

**Figure 20**  
**Risk of Being Uninsured By Education Level**





## INCOME

Between 2001 and 2007, the number of people with annual household incomes in all categories under \$50,000 declined. These figures are not adjusted for inflation (see Figure 21).

**Figure 21**  
**West Virginia Population Changes by Household Income Level**

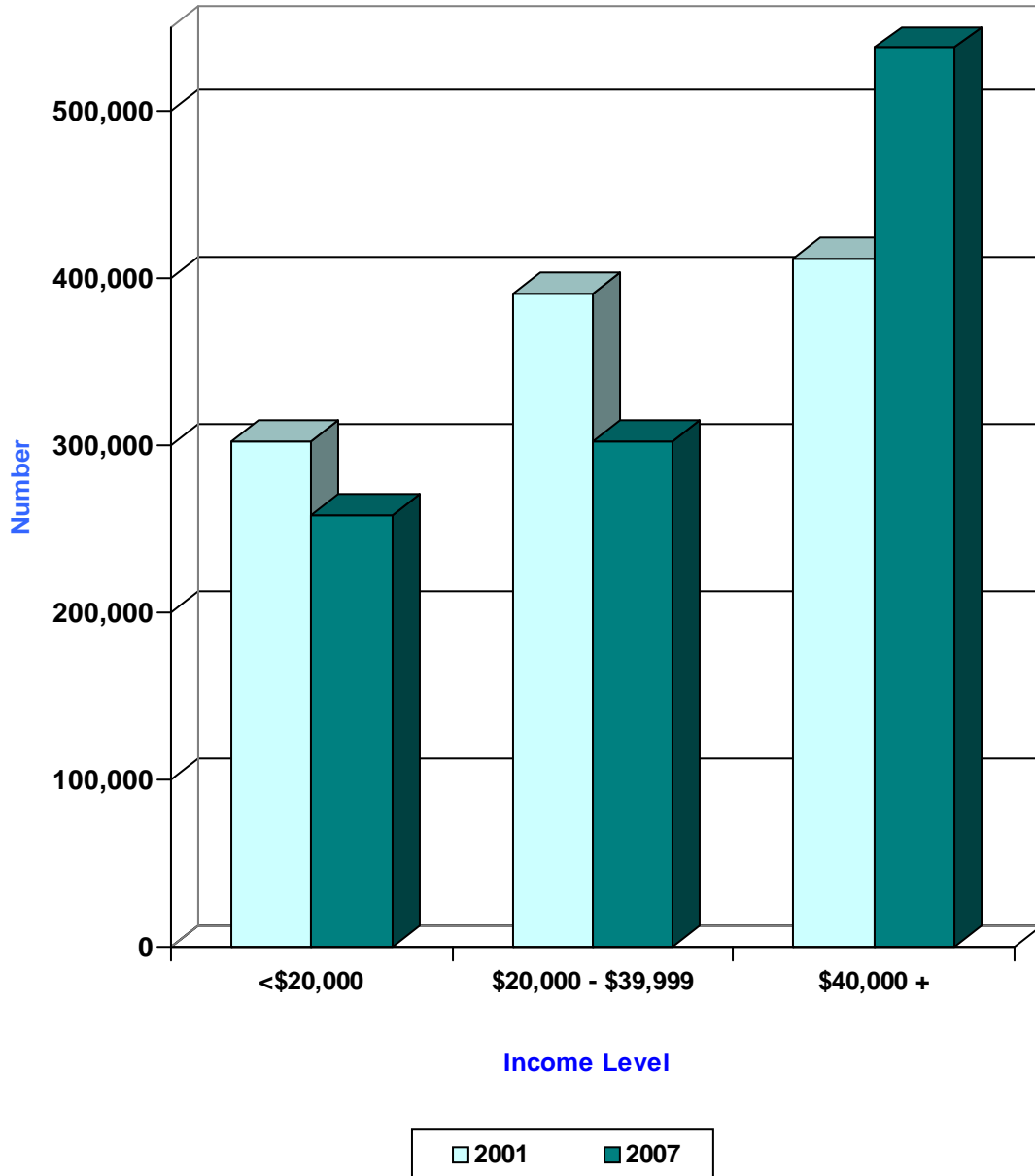
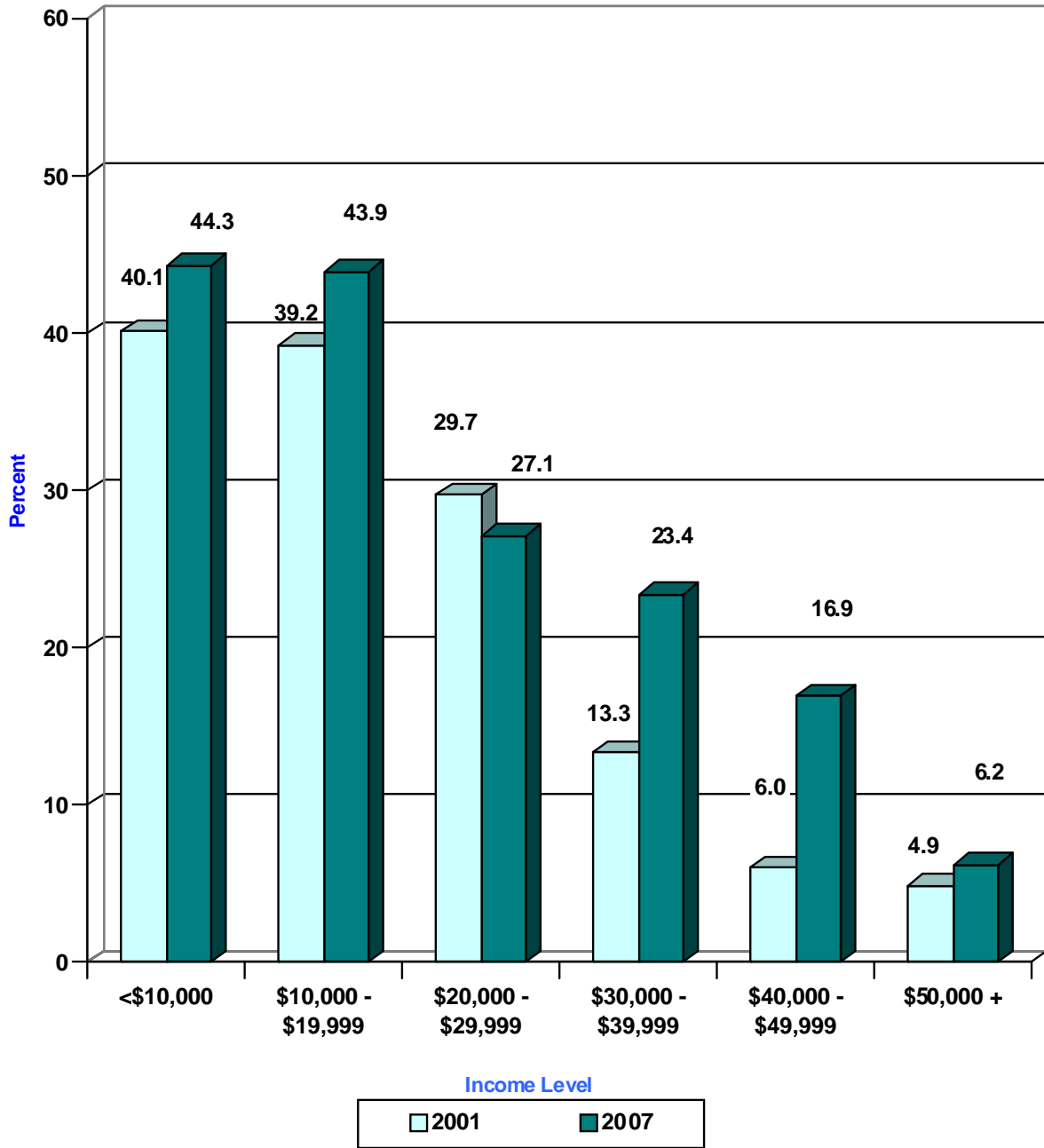


Figure 22 shows the risk of being uninsured by household income level. As with low education, lower income is clearly a major risk factor for no health insurance.

**Figure 22**  
**Risk of Being Uninsured by Household Income**  
**Level**



## VII. Uninsurance Findings for Employed and Unemployed Adults

This section of the report summarizes findings based on employment status of adults in West Virginia.

Figure 23 compares changes in the employment status of West Virginia's population between 2001 and 2007. A notable change was the increase in the number of unemployed adults between 2001 and 2007. Another change is the drop in the number of full-time students in the state who do not work.

**Figure 23**  
**West Virginia Population Changes by Employment Status**

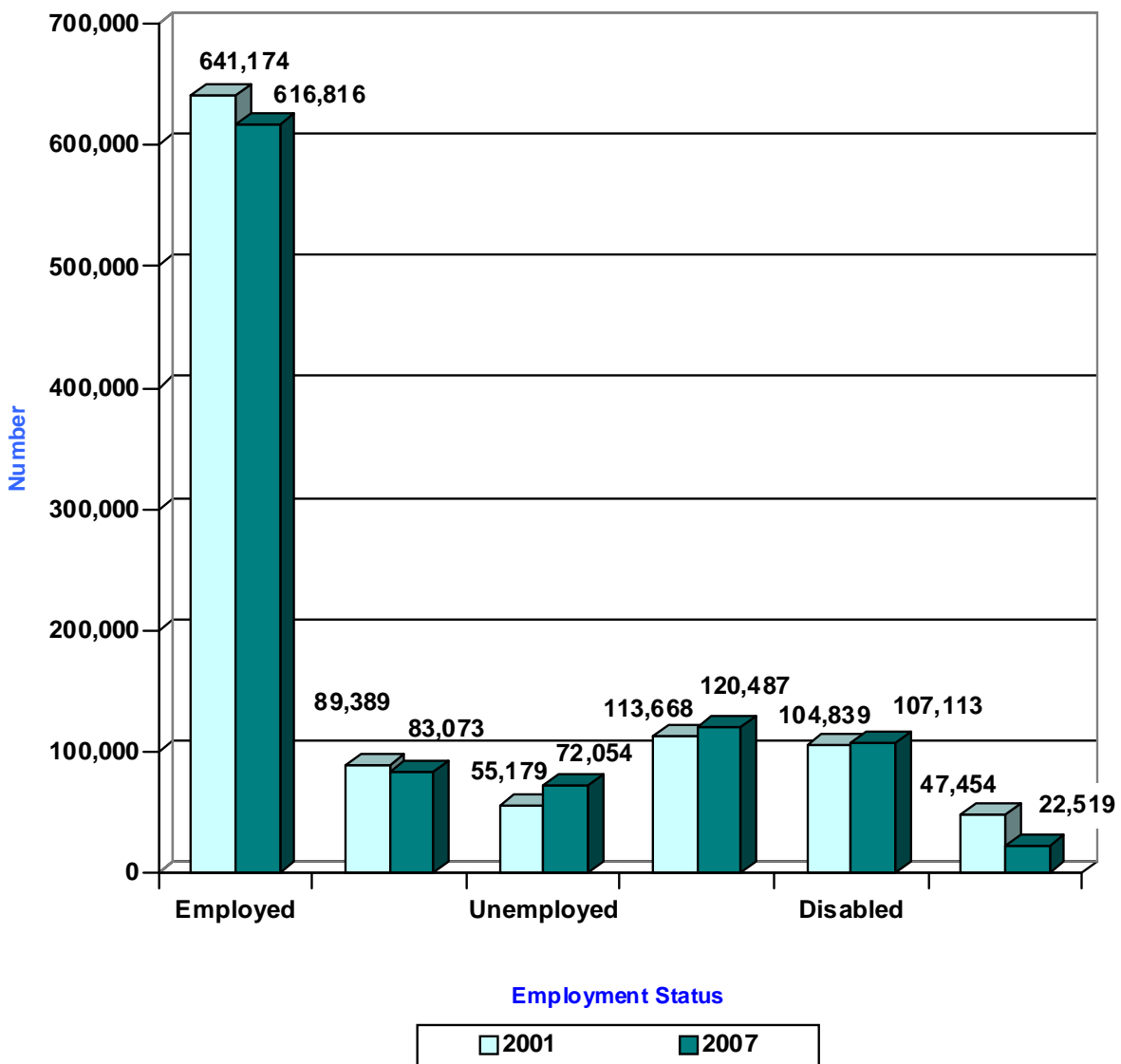
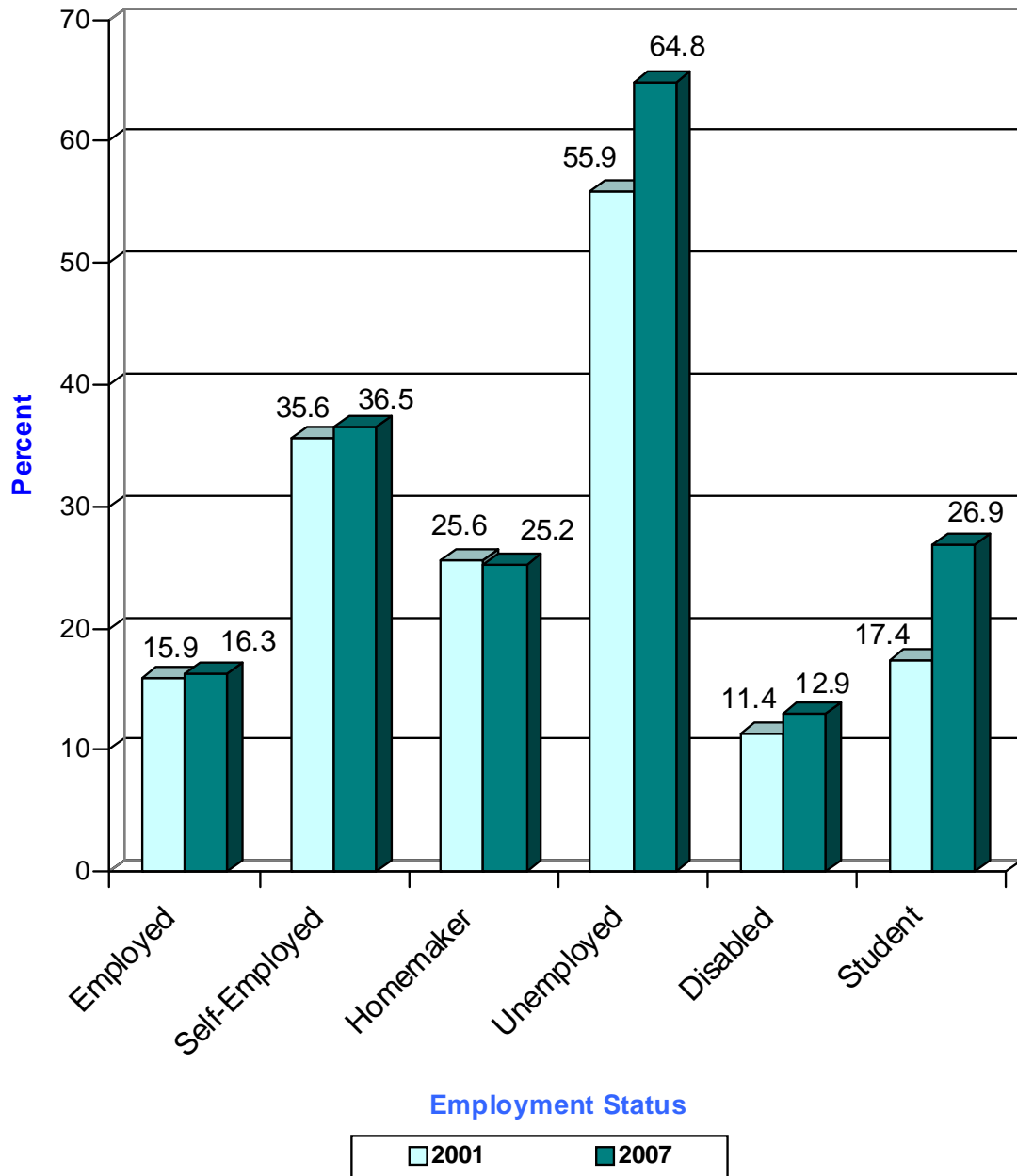


Figure 24 shows the risk of being uninsured by employment status between 2001 and 2007. Unemployment remains the biggest risk among the employment categories for lack of health insurance, and has increased as a percentage of the total over time.

**Figure 24**  
**Risk of Being Uninsured By Employment Status**



The next three figures show findings only from the 2007 survey. Figure 25 shows the uninsurance rate for working adults: 18.7% of working adults reported no health insurance. Working adults are those who reported that they were self-employed, owned their own business, or worked for an employer. Not working included all other categories including homemaker, student, unemployed and disabled. Part-time and full-time workers are included.

**Figure 25**  
**Percent Uninsured Adults by Employment Status**

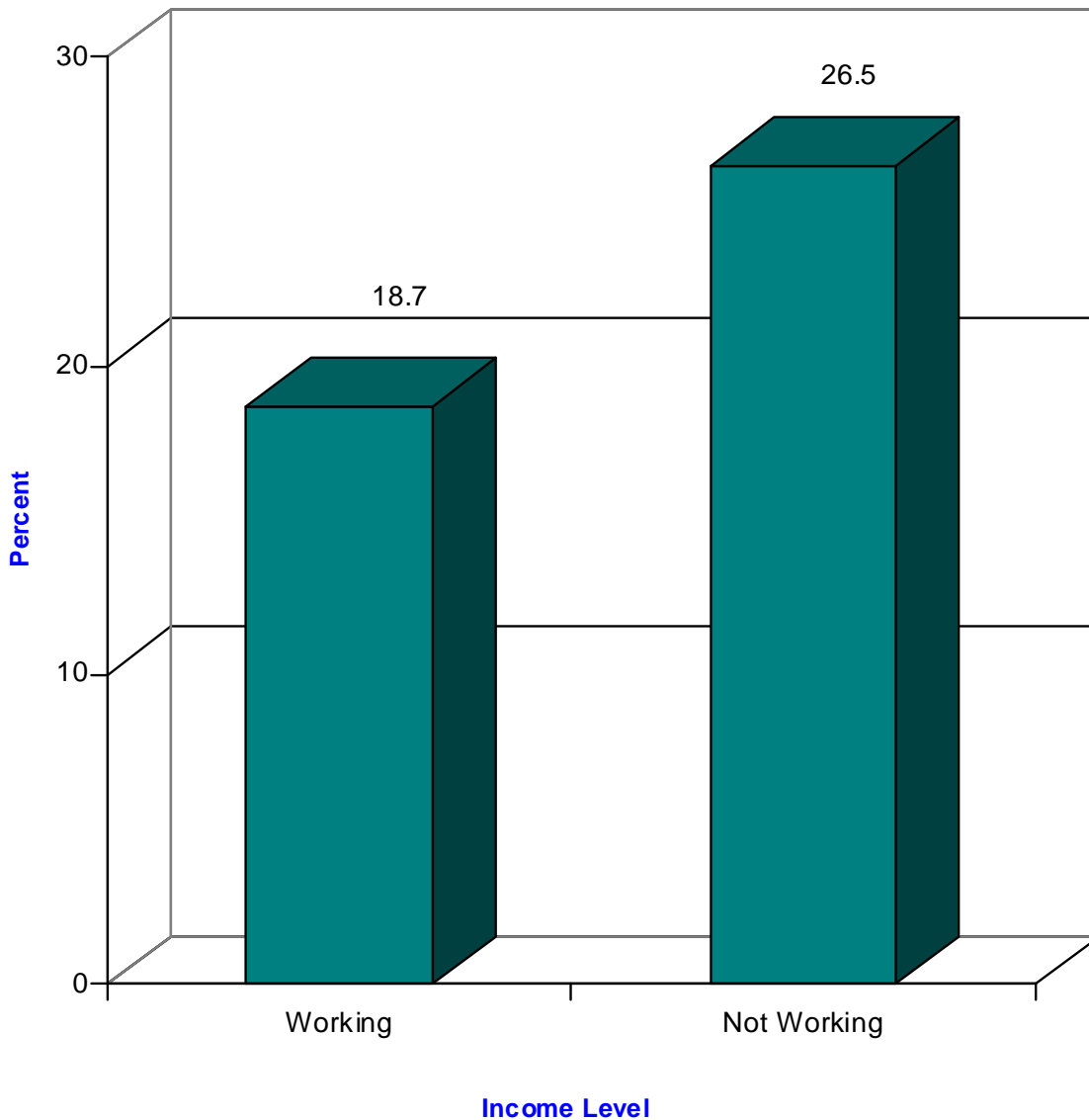


Figure 26 and 27 include only working adults. Lack of health insurance for working adults is related to both poorer health status and reduced chance of seeing a doctor. Figure 26 shows that fewer working adults report very good to excellent health when they lack health insurance.

**Figure 26**  
**Percent of Working Adults who Report Excellent or Very Good Health, by Insurance Status**

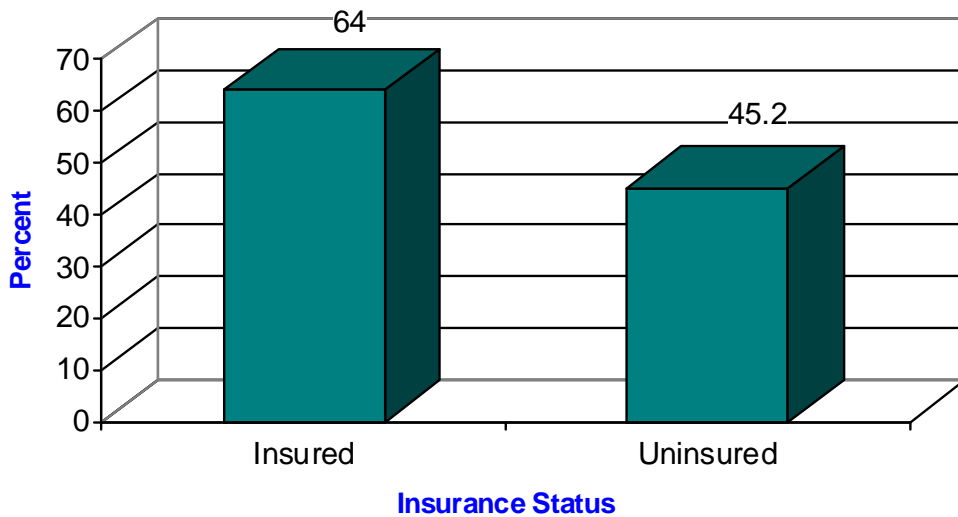
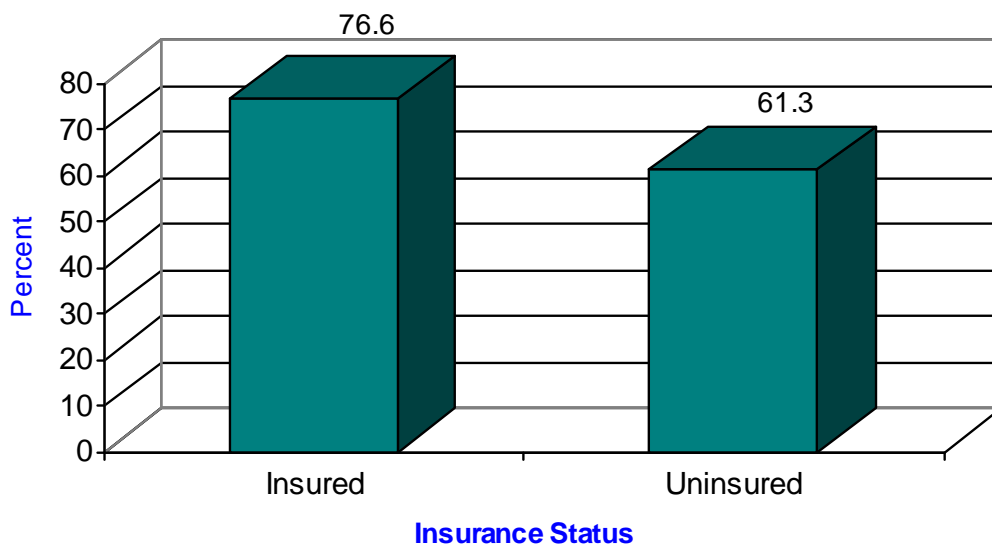


Figure 27 shows that fewer working adults visit a doctor or other healthcare provider when they lack health insurance.

**Figure 27**  
**Percent of Working Adults Who Report A Visit to a Doctor or Other Healthcare Provider in the Previous 6 Months**



Employed adults were asked whether their employers offered health insurance and whether they were eligible for that insurance. Figure 28 compares 2001 to 2007 estimates for all adults, employed adults, those offered employer-based health insurance coverage and those eligible for their employers' health insurance plan. Between 2001 and 2007, while there was an increase in the number of employed adults, fewer employees reported working for employers who offered health insurance, and fewer reported being eligible for employer-based insurance. An offer of health insurance is not necessarily the same as employee acceptance of the offer.

**Figure 28**  
**Change in Number of Adults and Eligibility for Employer Health Insurance**

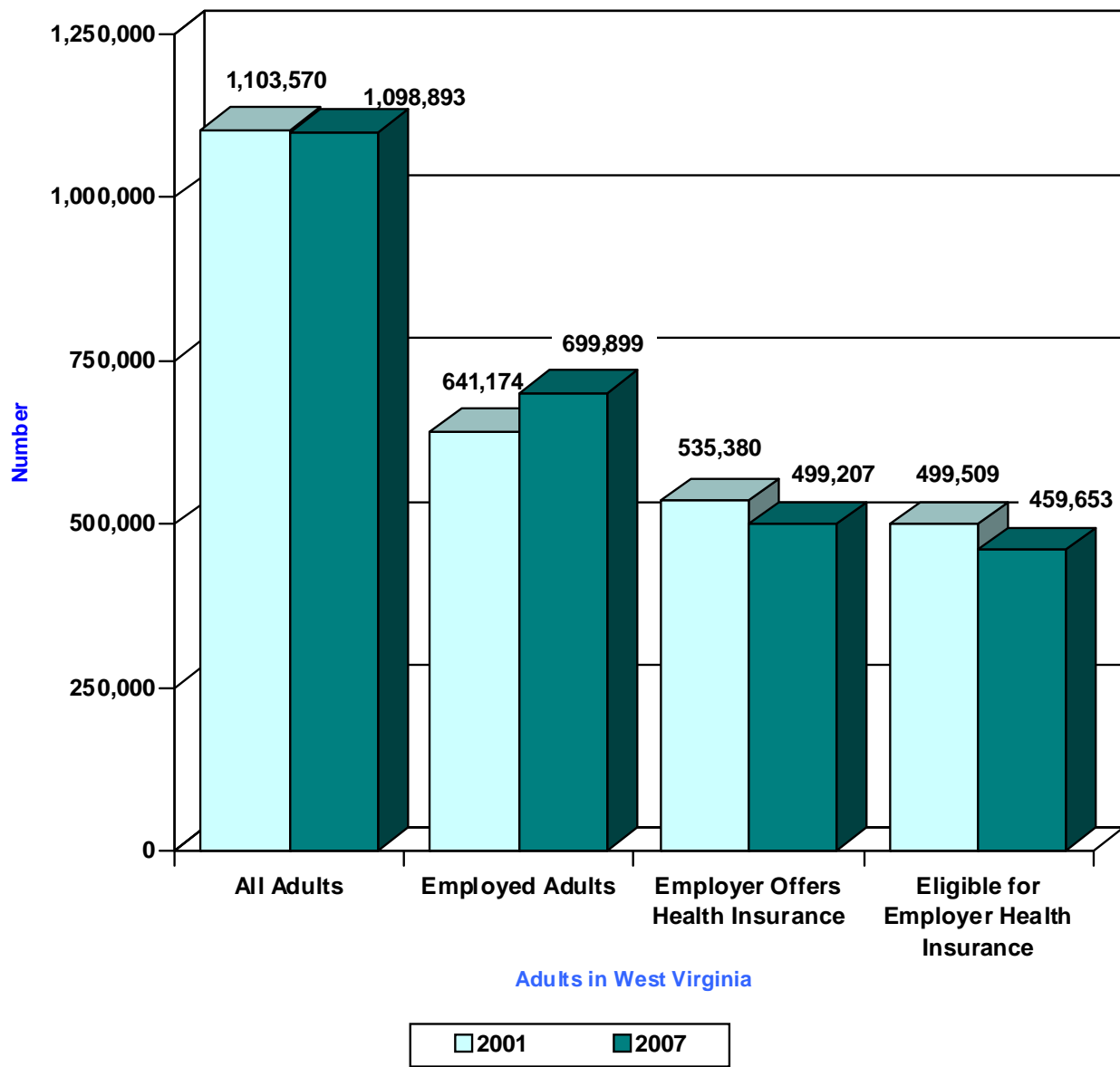


Figure 29 shows that between 2001 and 2007, there were increases in number of adults reporting employer health insurance for the smallest firms (<10 employees and 10-49 employees), but decreases among firms with more than 100 employees. This could reflect either changes in insurance availability or changes in the number of firms of various sizes.

**Figure 29**  
**Health Insurance Offered by Employers' Firm Size**

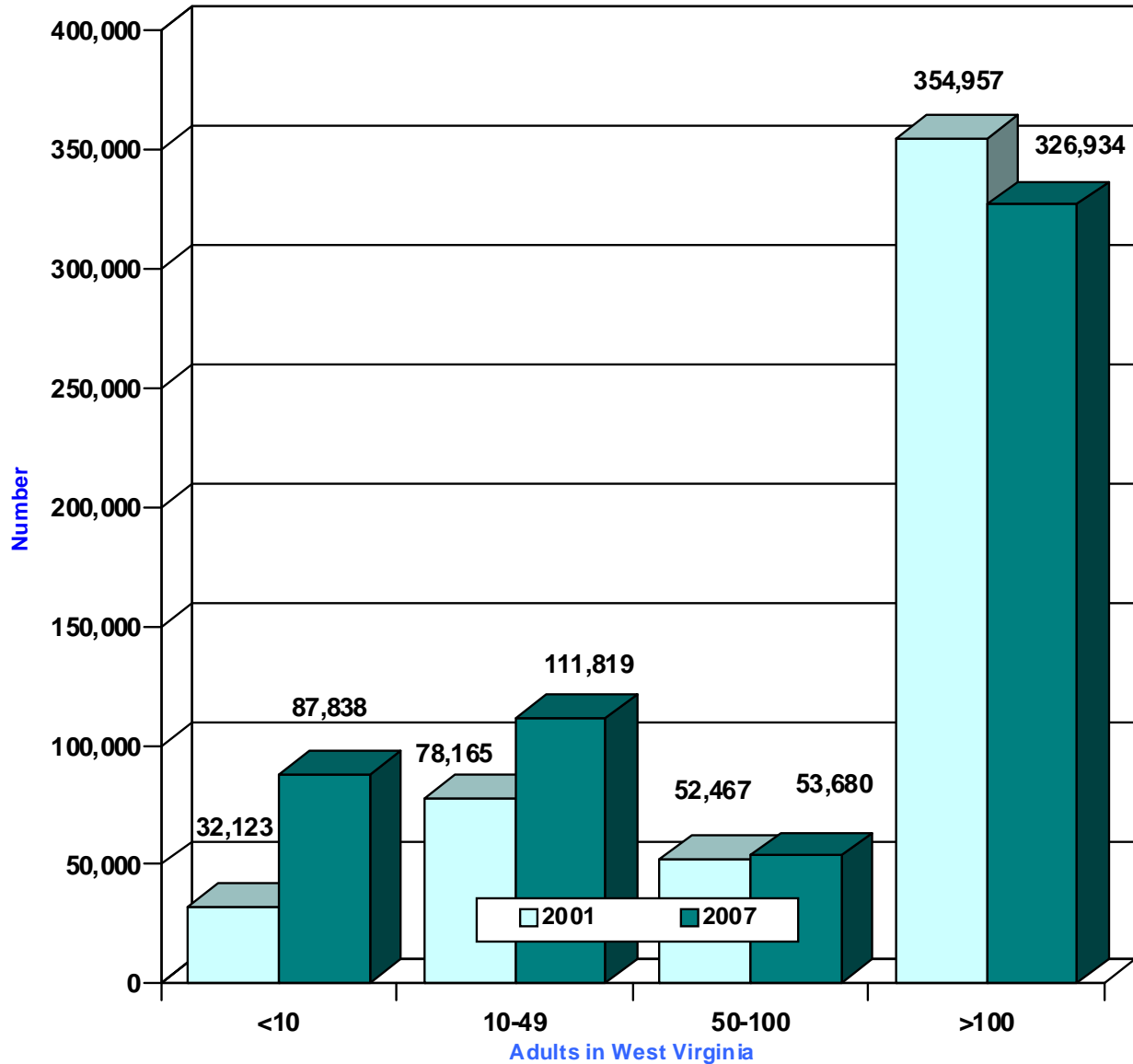
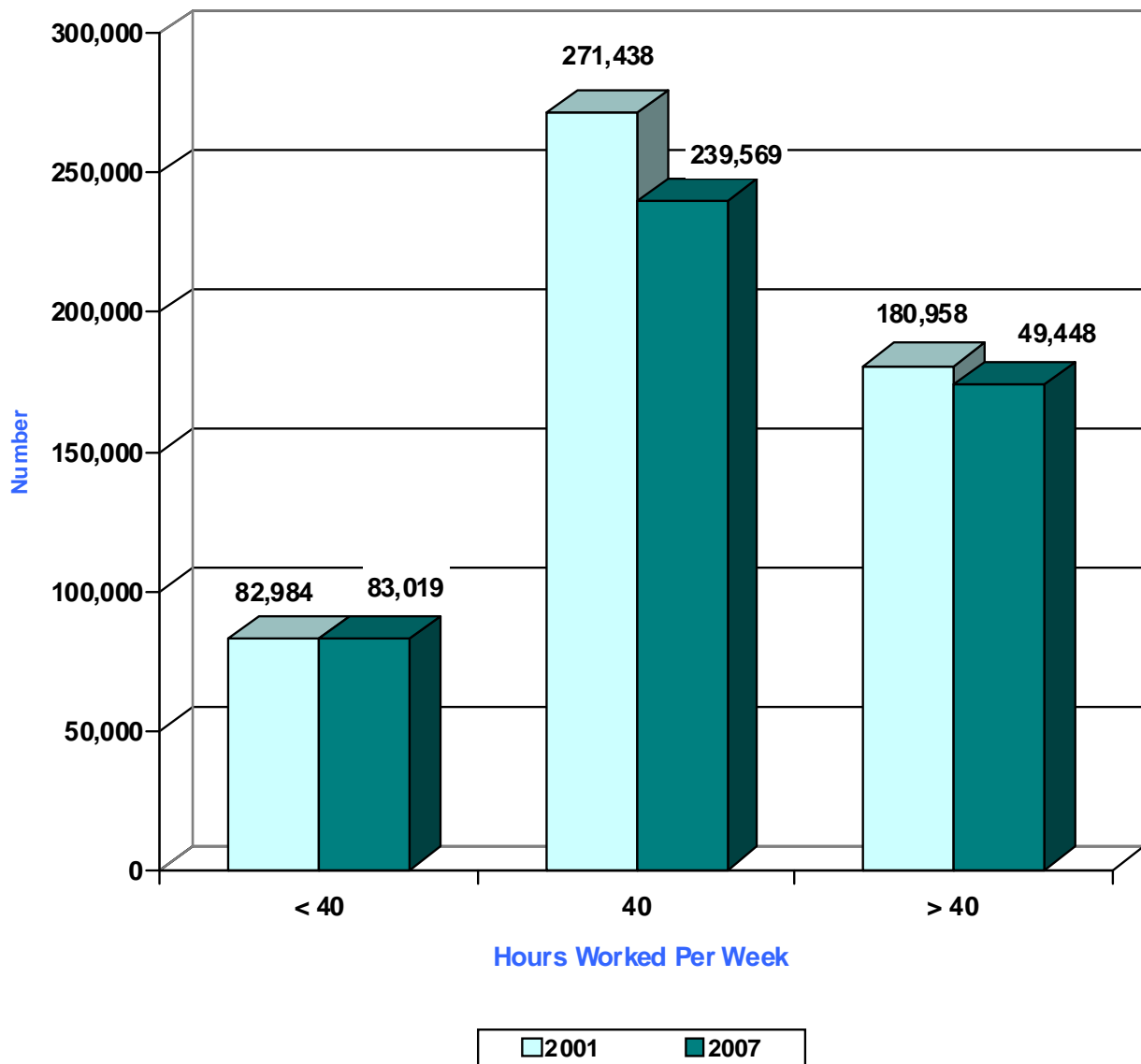




Figure 30 shows that from 2001 to 2007, there were fewer full-time employees being offered health insurance. This could reflect declines in insurance availability or declines in full time jobs. Numbers for part-time employees are about the same in 2007 as they were in 2001.

**Figure 30**  
**Employer Offers Health Insurance**  
**Part-time and Full-time Employees**



## VIII. Has Access to Healthcare Changed?

This section of the report will discuss:

- Having a usual *place* to go for medical care
- Seeing a regular health care *provider*
- Ability to obtain needed medical care
- Reasons for being unable to obtain needed medical care

People were asked if they had a usual place to go for health care, and if so, what that place was. The percentage of adults that had a usual place to go for their medical care remained about the same from 2001 to 2007 and stood at 80 percent in 2007. There were, however, changes in these usual sites of care. Table 4 shows a decline in those who report a physician's office as the usual source, and an increase in those reporting the use of community health centers, which in West Virginia often translates to federally qualified health care centers for persons with low income or no insurance. *These figures include only persons who reported that they had a usual source of care.*

Usual Site of Care	Percentage of Sample	
	2001	2007
Physician's Office	72.3	64.7
Community Health Center	12.1	23.8
Hospital Outpatient Clinic	7.3	2.5
Hospital Emergency Room	2.5	2.4
Urgent Care Center	1.9	2.8
VA Medical Center	1.9	0.9
Other	2.0	2.9
Total	100.0%	100.0%

\* Includes only adults who have a usual place for medical care, about 80% in 2007.

Table 5 shows a similar trend for the uninsured. The use of community health centers and emergency rooms is increasing, and the use of physician offices is decreasing. This table is limited to the 51% of *uninsured* adults that had a usual place for medical care.

<b>Table 5</b>		
<b>Usual Site of Medical Care Among Uninsured Adults*</b>		
	<b>Percent of Uninsured Adults</b>	
<b>Usual Site of Medical Care</b>	<b>2001</b>	<b>2007</b>
Physician's Office	50.5	39.2
Community Health Center	23.5	38.5
Hospital Outpatient Clinic	10.8	2.9
Hospital Emergency Room	7.3	10.9
Free Clinic	2.1	4.4
VA Medical Center	2.0	0
Urgent Care Center	1.7	0.8
Other	2.1	3.3
Total	100%	100%

\* Includes only uninsured adults who have a usual place for medical care, approximately 51 percent of uninsured adults.

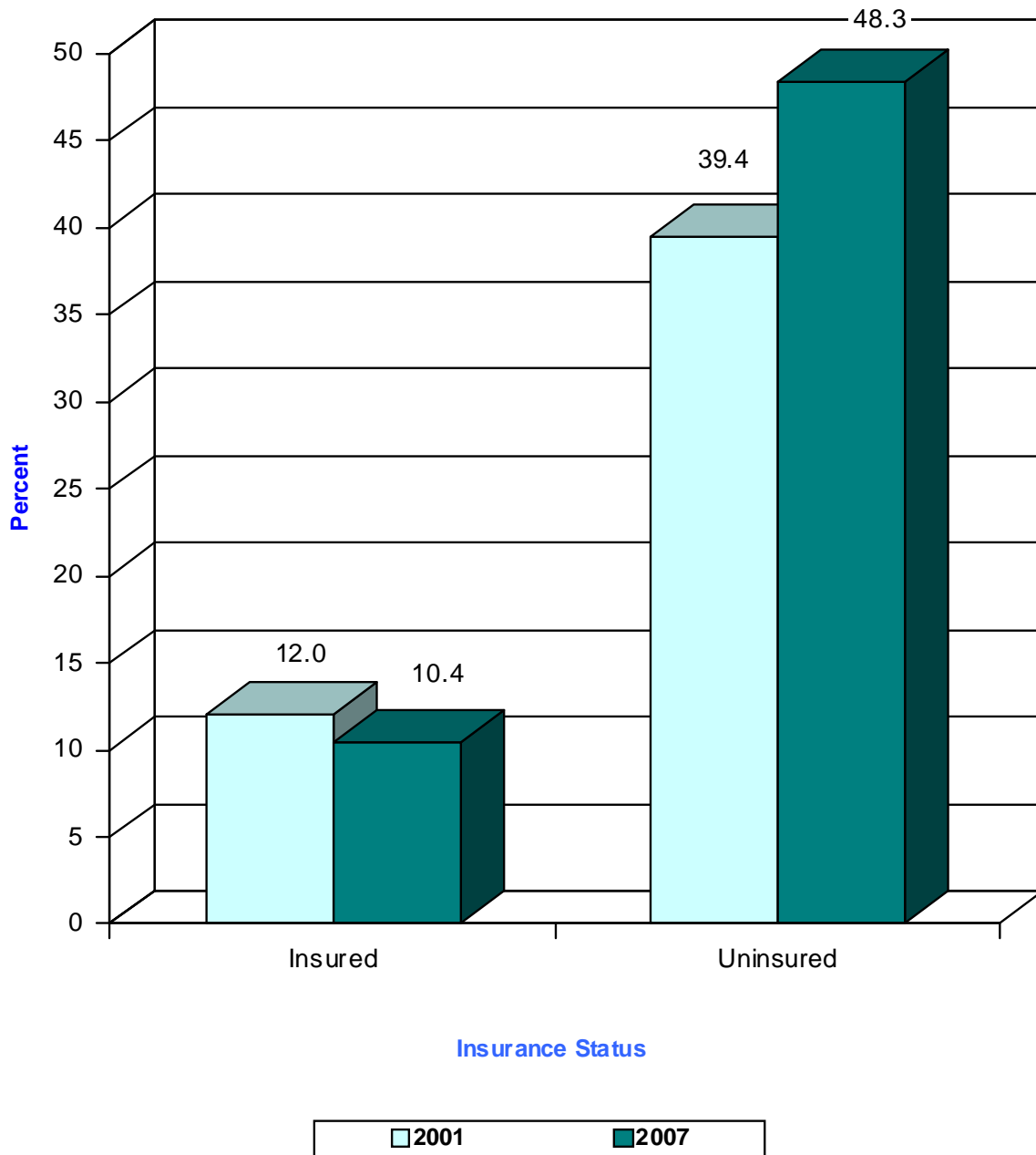
90% of insured persons report a usual source of care, compared to 51% of uninsured persons. Even among insured persons with a usual source of care, the use of physician offices is in decline, in favor of increased use of community health centers (Table 7).

<b>Table 6 Usual Site of Medical Care Among Insured Adults*</b>		
	<b>Percent of Insured Adults</b>	
<b>Usual Site of Medical Care</b>	<b>2001</b>	<b>2007</b>
Doctor's Office	76.0	68.7
Community Health Center	10.2	21.5
Hospital Outpatient Clinic	6.7	2.5
Hospital Emergency Room	1.7	1.1
Free Clinic	0.1	0.6
VA Medical Center	1.8	1
Urgent Care Center	1.9	3.1
Other	1.6	1.5
Total	100%	100%

\* Includes only insured adults who have a usual place for medical care, approximately 90 percent of insured adults.

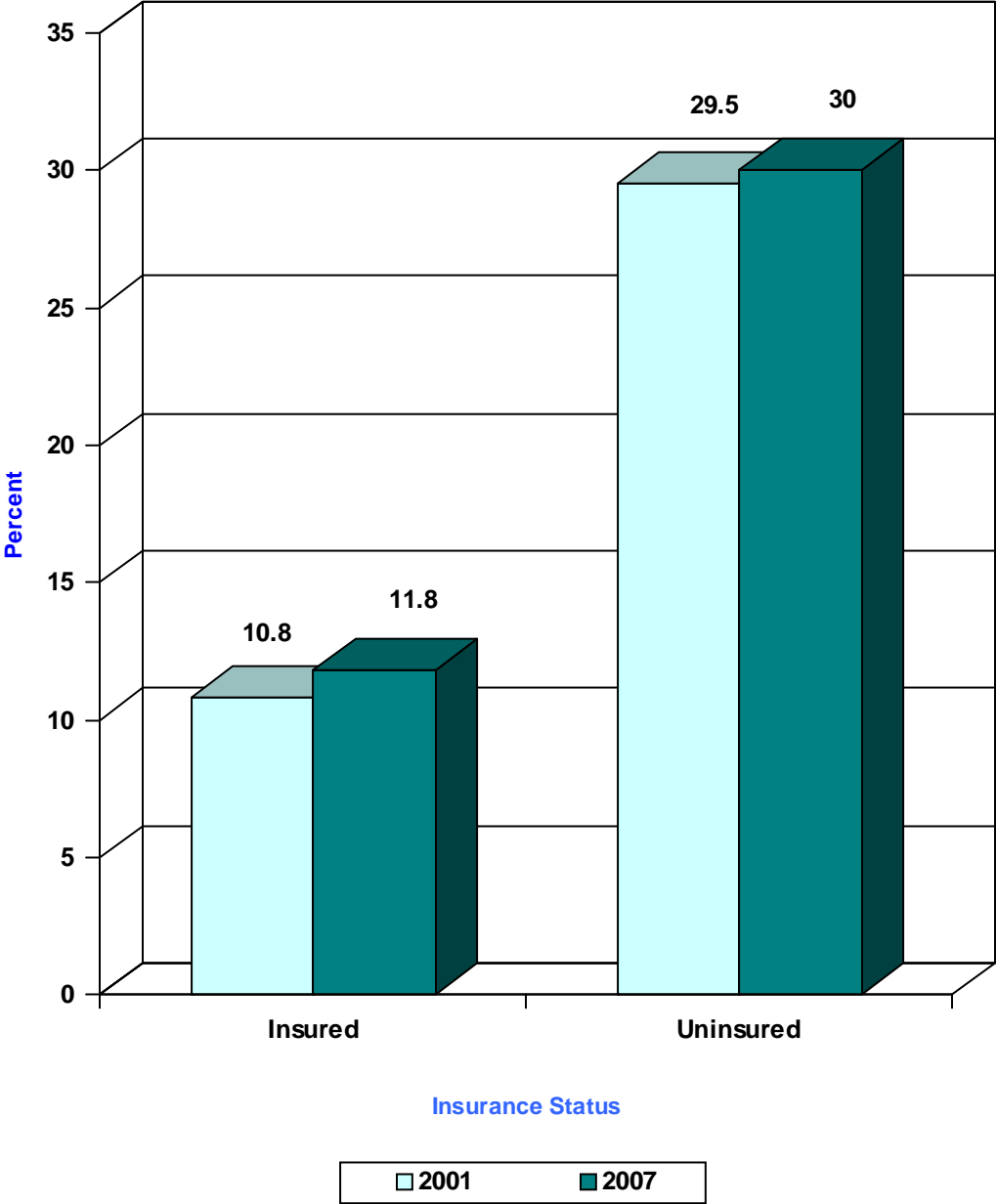
Figure 31 shows the change in the percent of adults that did not have a usual place for medical care between 2001 and 2007. There has been a slight but steady decline for insured adults, and increases for uninsured adults.

**Figure 31**  
**No Usual Place for Medical Care**



Distinct from a usual *place* for care, Figure 32 shows results for the percent of adults without a regular healthcare *provider*. Uninsured persons are at higher risk, and rates have remained largely unchanged between 2001 and 2007.

**Figure 32**  
**No Regular Healthcare Provider**



Results for adults who were unable to get all of their medical needs met the previous year are illustrated in Figure 33. This figure is much higher among those without insurance compared to those with insurance, and has been increasing over time, to the 2007 rate of 54.5%. Overall, about 22% of adults report being unable to get all needed care.

**Figure 33**  
**Unable to Get All Needed Medical Care**

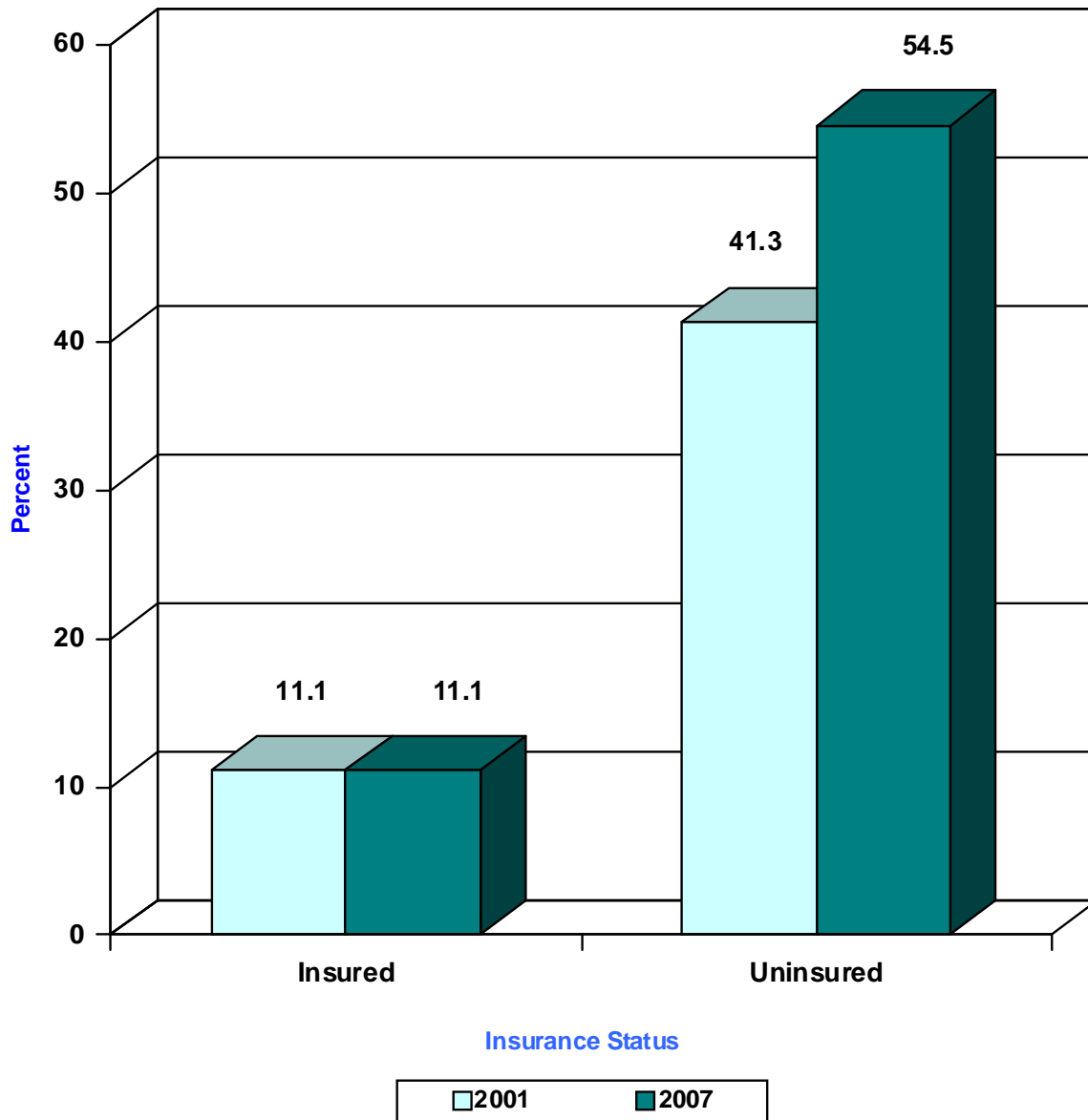
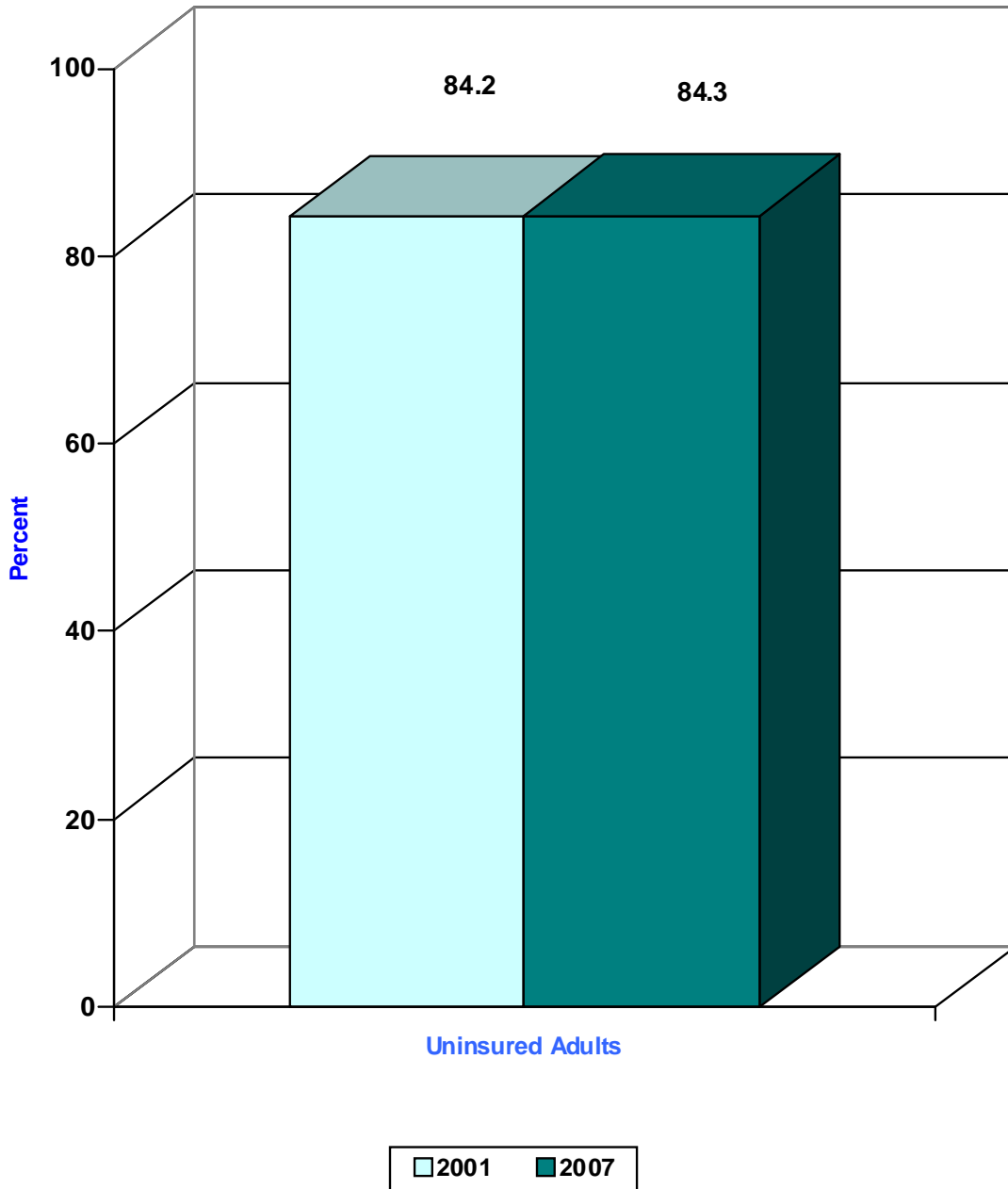


Figure 34 shows that between 2001 and 2007, cost remains the biggest obstacle among uninsured adults who did not receive all of the medical care that they needed.

**Figure 34**  
**% Who Cite Cost as the Reason for Uninsured Adults**  
**Not Getting All Needed Medical Care**





## IX. Has Utilization of Healthcare Services Changed?

In this section of the report, we will discuss:

- Prescription drug use
- Ambulatory healthcare visits
- Hospitalization

Figure 35 shows that persons without insurance continue to experience greater difficulties in meeting prescription needs because of costs. Almost 87% of uninsured adults could not fill at least one prescription due to cost; the 2007 figure is higher than the figure for 2001. Even among those with insurance, 34% could not fill all prescriptions due to cost.

**Figure 35**  
**Did Not Fill All Prescriptions Due to Cost**

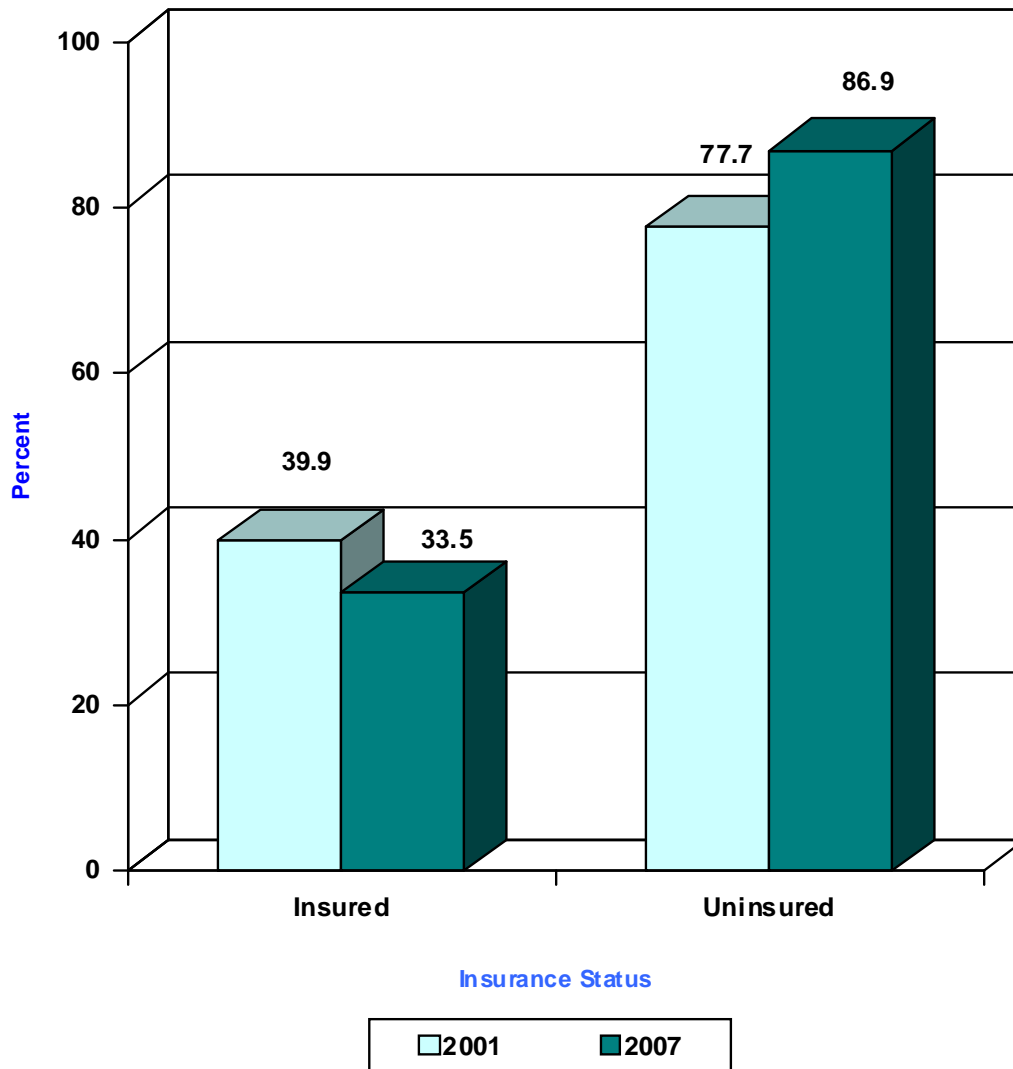


Figure 36 shows the percent of adults that visited a healthcare provider during the previous six months. Rates have not changed greatly over time and remain lower for persons without insurance.

**Figure 36**  
**Visited a Healthcare Provider in Previous Six Months**

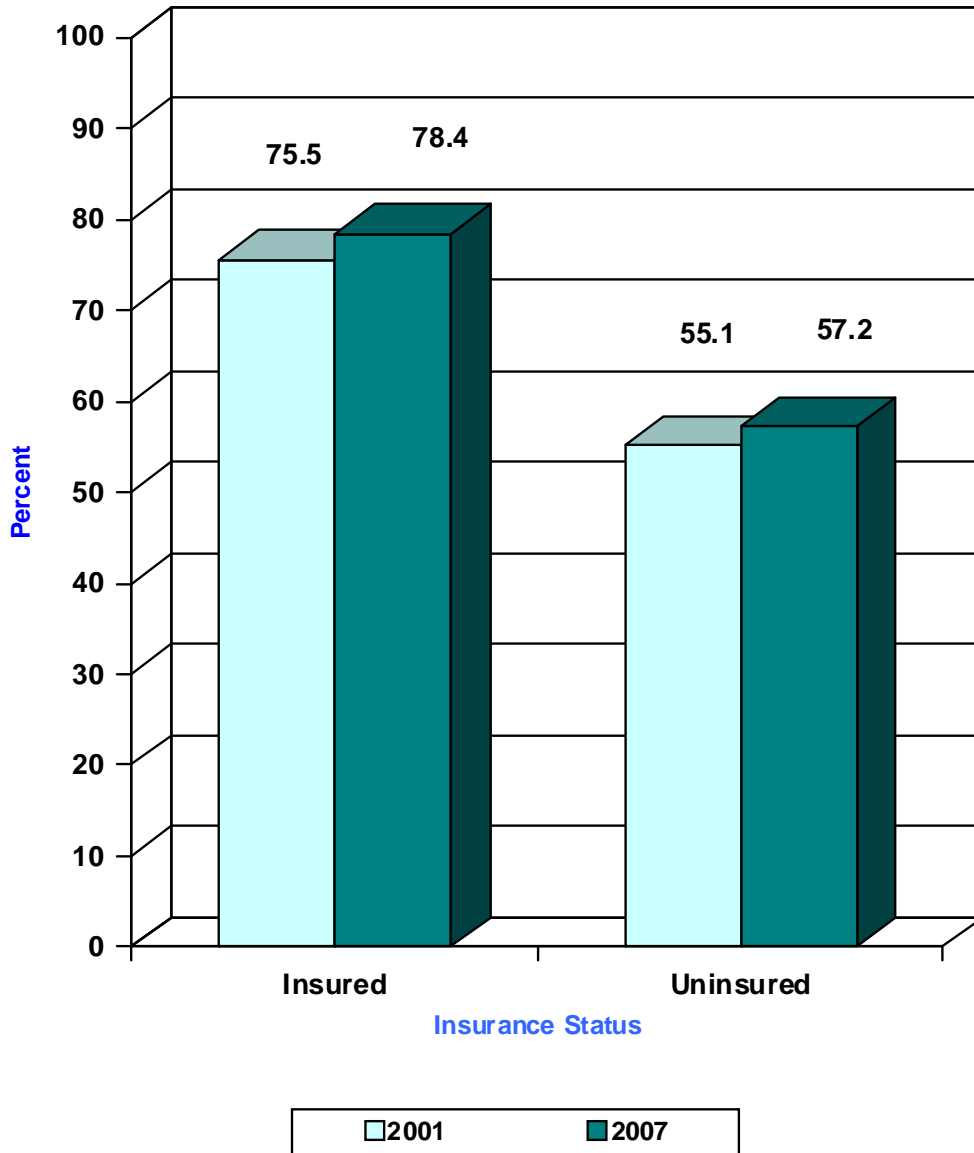


Figure 37 shows the percent of adults with a hospital stay during the past year. Uninsured persons remain less likely than insured persons to have had an overnight hospital stay.

**Figure 37**  
**Overnight Hospital Stay in Previous Year**

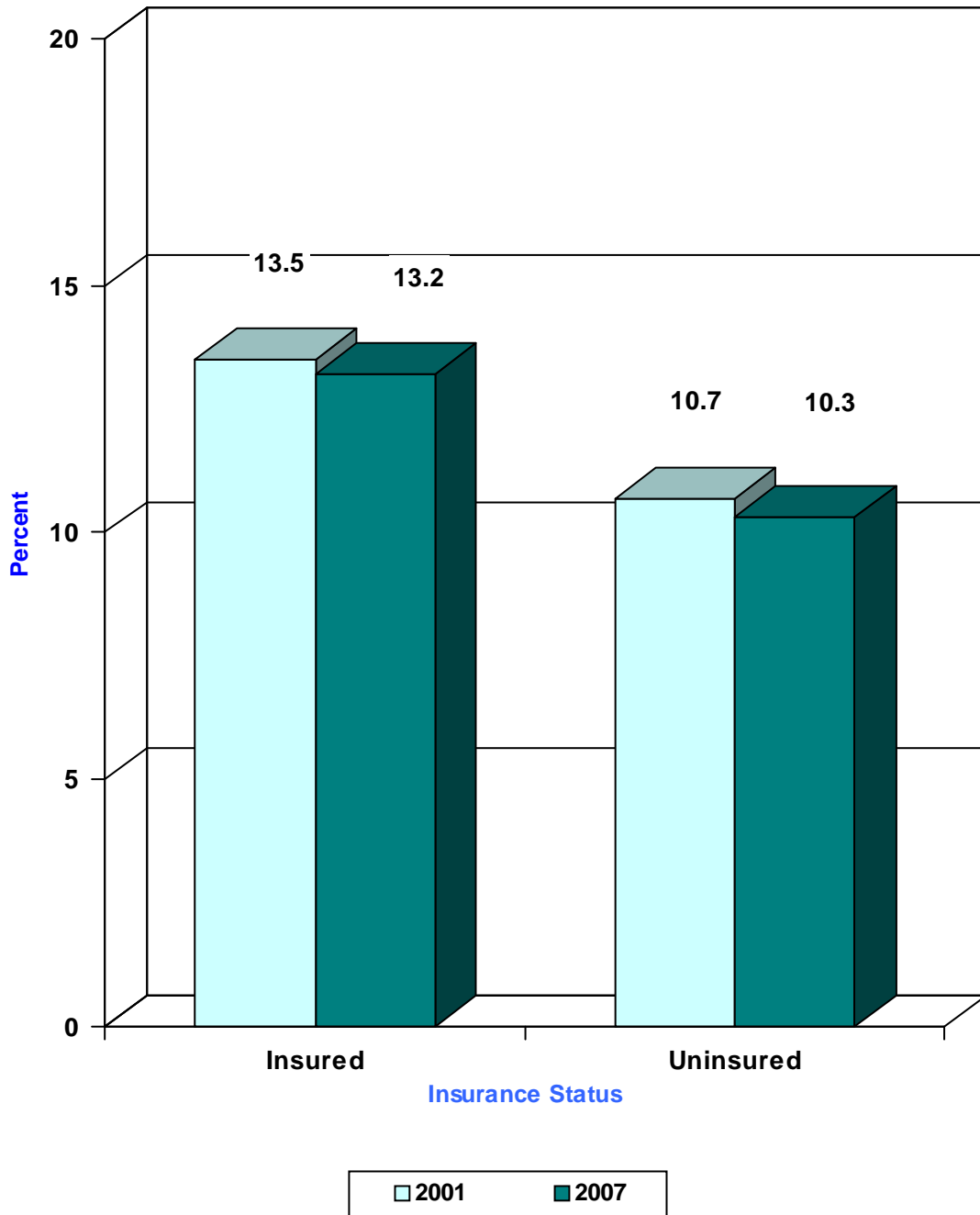


Table 7 provides information on the percent of *all adults with a visit to a health care provider* who visited each site of medical care at least once. Respondents could report visits to one or more of the listed sites.

<p style="text-align: center;"><b>Table 7</b> <b>Ambulatory Healthcare Visits in Previous Six Months by Site of Visit</b></p>		
Site of Visit	Percentage* with Visit, 2001	Percentage* with Visit, 2007
Doctor's Office	65.5	68.0
Hospital Outpatient Clinic	14.8	11.0
Urgent Care Center	11.4	10.1
Hospital Emergency Room	17.7	18.1
Community Health Center or Free Clinic	7.2	14.1
Mental Health Center	4.5	4.5
School Health or Public Health Center	2.4	1.6
Chiropractor's Office	4.9	6.2
VA Medical Center	2.2	1.5

\* The denominator excludes adults with an unknown site or frequency of ambulatory healthcare visits.

Table 8 duplicates the previous table for the uninsured only, and Table 9 for the insured only.

<p style="text-align: center;"><b>Table 8</b>  <b>Ambulatory Healthcare Visits in Previous Six Months by Site of Visit: Uninsured</b></p>		
<p style="text-align: center;"><b>Site of Visit</b></p>		
	<p style="text-align: center;"><b>Percentage* with a Visit, 2001</b></p>	<p style="text-align: center;"><b>Percentage* with a Visit, 2007</b></p>
Physician's Office	43.7	47.8
Hospital Outpatient Clinic	9.0	7.1
Urgent Care Center	10.6	7.8
Hospital Emergency Room	18.8	18.2
Community Health Center or Free Clinic	10.9	26.6
School Health or Public Health Center	3.0	2.7
Chiropractor's Office	2.6	1.5

\* The denominator excludes adults with an unknown site or frequency of ambulatory healthcare visits.

**Table 9**  
**Ambulatory Healthcare Visits in Previous Six Months by Site of Visit: Insured**

<b>Site of Visit</b>		
	<b>Percentage* with a Visit, 2001</b>	<b>Percentage* with a Visit, 2007</b>
Physician's Office	70.8	73.5
Hospital Outpatient Clinic	16.2	12.0
Urgent Care Center	11.6	10.8
Hospital Emergency Room	17.3	18
Community Health Center or Free Clinic	6.3	10.7
School Health or Public Health Center	2.3	1.3
Chiropractor's Office	5.5	7.5

\* The denominator excludes adults with an unknown site or frequency of ambulatory healthcare visits.

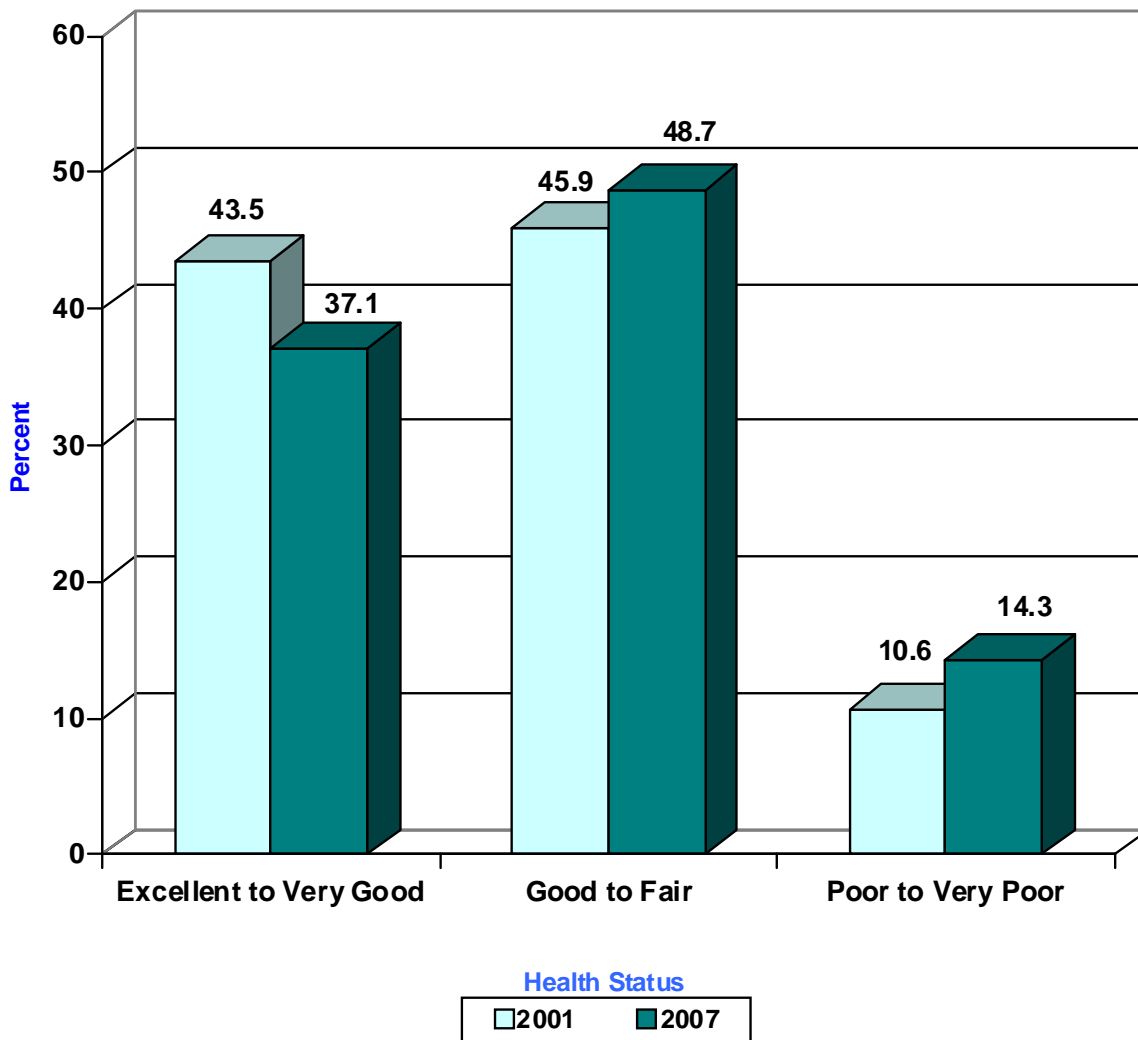
## X. Has the Health Status of Uninsured and Insured Adults Changed?

In this section, we will discuss:

- Overall self-reported health status of adults
- Self-reported chronic conditions among adults

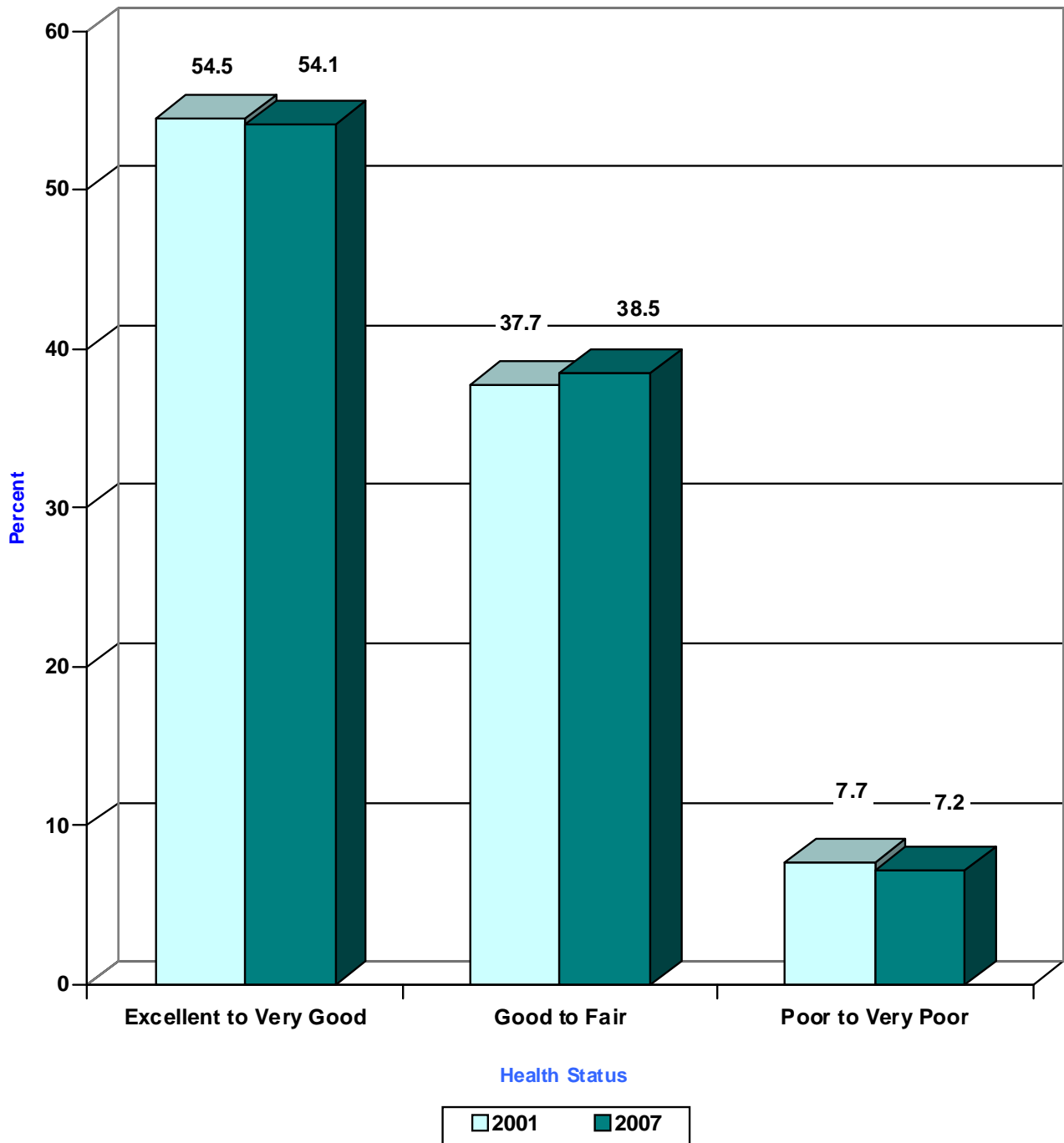
Figure 38 shows that the percent of uninsured adults by health status category. In 2007, 14.3% of uninsured adults reported poor or very poor health status, an increase over the previous survey.

**Figure 38**  
**General Health Status of Uninsured Adults**



There were smaller changes in the overall health status of *insured* adults. Insured adults, compared to uninsured adults from the previous figure, are more likely to report excellent to very good health, and less likely to report poor to very poor health.

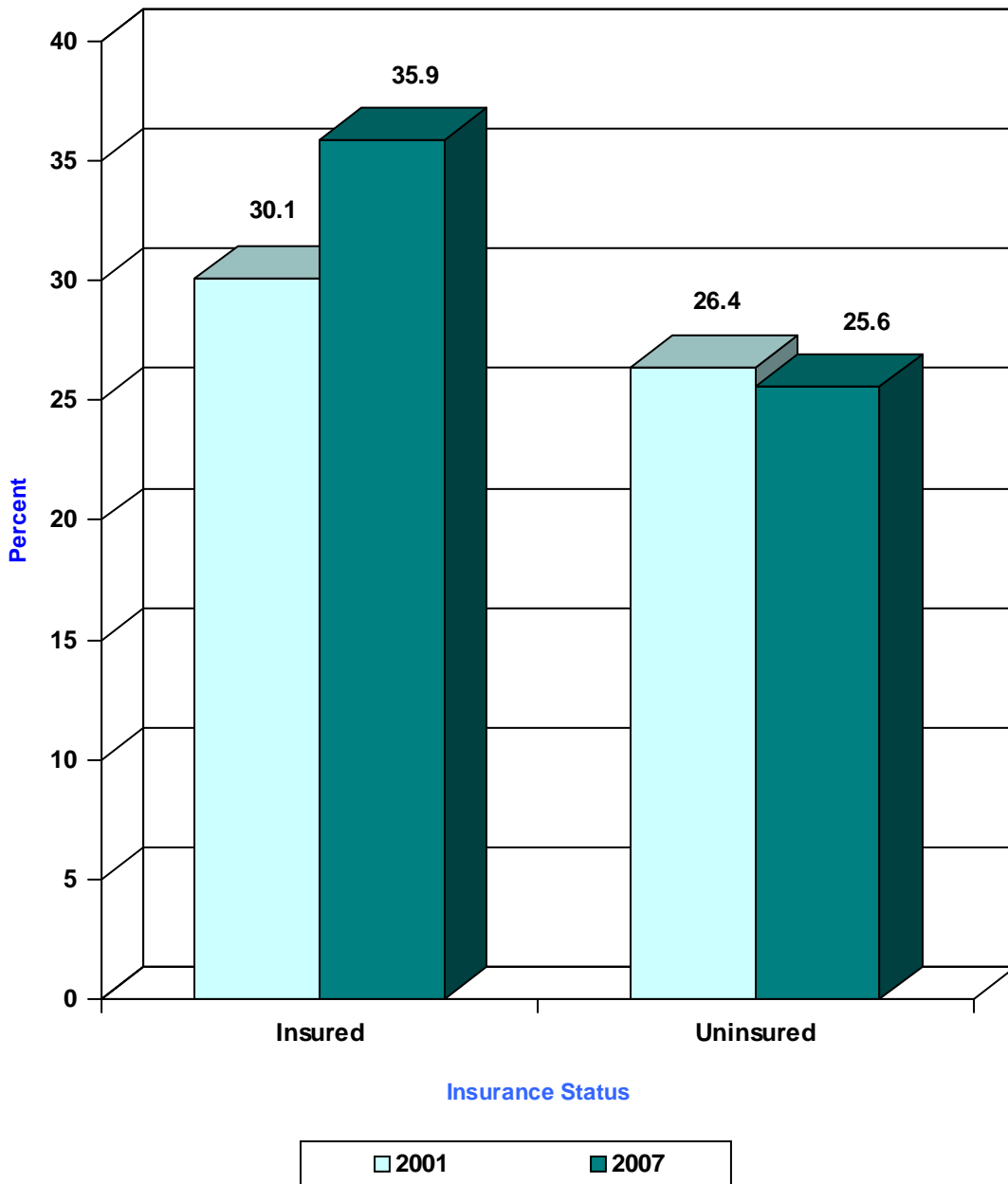
**Figure 39**  
**General Health Status of Insured Adults**





In contrast to self-reported health, the percent of insured adults who reported a chronic health condition or disability in 2007 increased from the previous survey, and was higher than the percent of uninsured adults who reported a chronic health condition (see Figure 40). Perhaps this reflects better chronic disease recognition and better management practices for insured adults.

**Figure 40**  
**Diagnosed with a Chronic Health Condition or Disability**



## XI. Summary

*Assessing Changes in Healthcare in West Virginia Between 2001-2007: The Non-Elderly Adult Report* presents some encouraging changes. However, several discouraging trends and areas of concern remain for adults between the ages of 19 and 64.

Compared to previous surveys, in 2007 there have been increases in the percent of people covered by Medicaid and Medicare for those under 65. This reflects a growing reliance on public sources of coverage and increases in the size of the near elderly population. There is a corresponding decline in the number of younger adults. Coverage by employers declined. Furthermore, among persons who have private insurance, there are fewer people who describe their coverage as comprehensive, as opposed to coverage limited to catastrophic care.

As has been documented in many other studies and contexts,<sup>\*</sup> insurance and health itself are powerfully linked to better education, income and employment. Solving the insurance problem, controlling health care costs linked to uninsurance and underinsurance, and improving health, requires attention to reducing and eliminating health disparities linked to socioeconomic disadvantage.

Nevertheless, West Virginia's adults – insured and uninsured alike – had relatively reasonable access to health care services, especially in a state that is one of the most rural in the country. About 80 percent of adults had a usual place for care, although doctor's offices are becoming less common as the source for that care. However, closer examination reveals that, similar to the findings presented in 2001, health care access for uninsured adults in 2007 continued to be problematic when compared to adults with health insurance:

- Almost 55% of uninsured persons report being unable to get all needed medical care.
- Cost remains the most significant barrier to accessing healthcare for persons without insurance.
- Uninsured adults had fewer health care provider visits than those with health insurance; were less likely to have a hospital stay; less likely to have had a medication prescribed; less likely to have access to a usual source of care; and they were less likely to say that they were in excellent or very good health.

These findings of the West Virginia Healthcare Survey clearly outline the disparities in access to care and the benefits provided by that care between uninsured adults and their peers with health insurance.

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<sup>\*</sup> See for example, Woolf SH, et al. Giving everyone the health of the educated: an examination of whether social change would save more lives than medical advances. *American Journal of Public Health* 2007;97:679-683.

## **XII. Appendix**

### **Study Methods: 2007 Survey**

#### **Sample Design and Selection**

Taylor, Nelson, Sofres Intersearch (TNSI) conducted the survey. A random sample of 425 households in each of West Virginia's four regions was selected. Each region was preliminarily defined by the County Federal Information Processing Standards (FIPS) code attached to the telephone exchanges for all counties in a region. Using the FIPS codes, a Random Digit Dialing (RDD) sample was generated in each of the four specified regions.

Sample selection was accomplished in three distinct stages. In technical terms, this sample can be described as a stratified, three-stage cluster sample. Briefly, the three stages were defined as follows:

**Stage I:** Selection of Sample Central Offices – From TNSI's consistently updated Master Telephone Exchange File, which contains a listing for each of the approximately 59,000 telephone exchanges (or central offices, identified by the second three numbers of a ten digit telephone number) currently in use in the continental United States, West Virginia exchanges were isolated. These exchanges were then sorted by region. Within each region, a systematic selection of the desired number of exchanges was made. These techniques assured representativeness of the final sample.

**Stage II:** Selection of Sample Households – The last four digits of the telephone numbers in the sample were generated randomly. These numbers were then matched against the known "working banks" for the appropriate telephone exchange. "Banks" are an identification based on the first two digits of the four-digit suffix. Each "bank" contains 100 numbers. "Working banks" are those designated prior to the sample generation to contain at least two numbers assigned to residences. The random four-digit suffixes that fell outside of the "working banks" were rejected. These techniques assured the inclusion of non-listed or non-published residential numbers in their correct proportions.

The sample was then purged of some of the additional non-working numbers using an acoustic analysis system that pre-dialed the numbers and determined that a successful line connection had been made. This occurred prior to an actual ring of the phone.

**Stage III:** Selection of Eligible Respondent – In all households, the interview was conducted with the person most knowledgeable about the health insurance status of the people living in the household. If the person most knowledgeable was not available, a suitable time for a callback was arranged.

The respondent most knowledgeable about the health insurance of the people living in the household was asked to answer health insurance related questions regarding a randomly selected adult (focal adult) and, where appropriate, a child (focal child). The “last birthday” method was used to randomly select the focal adult. The interviewer asked the person on the phone which adult, age 19 or older, in the household had the last birthday (which is a random occurrence). In households with children, the same approach was used to randomly select the focal child. The entire process, at all stages, was based on the strict application of accepted sampling procedures and variance reduction methods.

### **Data Collection**

The TNSI telephone center in Indiana, Pennsylvania served as the lead interviewing site on this project. As lead site, the Indiana phone center was responsible for releasing sample based on instructions from the project director and sampling manager, monitoring quotas during interviewing shifts and alerting the project director of any problems during interviewing shifts. The refusal conversion effort was conducted solely by interviewers in Indiana. Data were collected over a period of four weeks, starting in August 2007. Interviewing was stopped for one week during the holidays. Of course specified callbacks were completed during this time. Interviewing for the study was coordinated through the Horsham, Pennsylvania headquarters. Interviewing shifts ran on weekdays between the hours of 5:30 p.m. and 9:00 p.m. Interviewing shifts also ran on weekend afternoons and evenings. A limited amount of daytime calling was employed as well. Households were never contacted after 9:30 p.m. local time.

Upon initial contact with the household, an attempt was made to complete the full interview. However, some respondents were not available to be interviewed at that time. To accommodate these respondents, TNSI offered to call back at a more convenient time. A thorough effort was made to schedule specified callbacks to accommodate respondents’ time constraints.

A 1:10 supervisor to interviewer ratio was maintained throughout data collection. In addition to project monitoring by the supervisor, a monitor was assigned to work with each supervisor and was primarily responsible for monitoring of the surveys conducted by the interviewing staff. At least 10 % of the interviews were monitored. Monitor conferences were held with each interviewer in order to provide feedback on both interviewing techniques as well as questionnaire administration.

### **Interviewer Training and Preparation**

All TNSI telephone interviewers attended TNSI’s standard orientation and training program upon hiring. Additionally, all interviewers, monitors and supervisors assigned to this project attended a project training session to orient them to the questionnaire, procedures, interviewing techniques and areas where problems may be encountered. Throughout the training session, quality interviewing, professional conduct and proper procedures were emphasized.

## **Computer-Assisted Telephone Interviewing (CATI)**

The survey was conducted using Computer Assisted Telephone Interviewing. The CATI system selects each question from the questionnaire and displays it on a computer terminal. The interviewer, who is on-line via telephone with the designated respondent, reads the question from the computer screen and enters the respondent's answer directly into the computer. Skip pattern logic is programmed into the computer so the program controls the sequence in which questions are asked. Only questions that should be asked (based on the skip pattern) appear on the screen. As an answer is entered by the interviewer, the program conducts on-line editing operations including coding checks, which reject ineligible codes entered by the interviewer for precoded questions and validation checks of any entered data that falls outside of an acceptable range.

The CATI system also includes computer programs that control the release of sample and perform all manual controls and clerical tasks such as scheduling callbacks, adjusting for time zone differences, executing the call rule and cycling and rotating calls through various time periods.

## **Sample Control**

A systematic method to monitor sample was employed throughout the study in an attempt to maximize response rate and reduce non-response bias. In an effort to reduce non-response bias, every sample piece received a minimum of an original call and up to eleven callbacks over twelve separate interviewing sessions. The callbacks were increased to eleven for this study due to the short interviewing period. These attempts varied as to the day of the week and the time of day the call was placed. All sample pieces received at least one daytime call during the week before being considered call-rule exhausted. Daytime calls were dialed beginning at 12 noon and were made during the latter half of the data collection period.

To assure the unbiased contact of sample pieces, TNSI utilized controlled replicate sampling based on the strict application of accepted sampling theory and procedures. In this manner, sampling personnel randomly subdivided the pool of sample pieces in each stratum into mini-samples called replicates. These replicates consisted of independent representative probability samples of the universe in that cell. As data collection progressed, the number of replicates released got smaller. The release of additional replicates only occurred after a substantial number of cases had final dispositions and/or was call-rule exhausted, thereby lowering the number of cases without final contact dispositions at the conclusion of the study. This procedure ensured that only the number of sample pieces required to attain the desired number of interviews for each cell were released.

## **Weighting**

As mentioned in the Introduction, the data were balanced by region, and then adjusted for the probabilities of selection for the number of adults and the number of telephone lines in the household. They were then weighted to match the age, sex, and education distributions of the US Census Bureau's 2002 American Community Study. No variables were imputed in this survey.

## **Definitions of Terms**

### ***Household Income***

Question asked for a range (e.g., \$10,000 - \$20,000) of income from all sources in the year 2007, before taxes.

### ***Medicaid Eligibility***

Survey estimated Medicaid eligibility among uninsured adults by estimating Federal Poverty Level (FPL) from household income and number of people in the household. Marital status was used as a proxy measure of number of adults in the household. Adults in households estimated to be at or below 200% FPL were considered potentially eligible. However, this estimate of potential Medicaid-eligible adults is not precise, since the FPL was based on an income range. Therefore, the number of potential Medicaid-eligible adults estimated by the survey should not be considered exact.

### ***Chronic Condition and Disability***

Question asked if a physician had diagnosed the adult with a chronic disease or disability and, if the response was yes, asked with what condition(s) the adult had been diagnosed. Up to four conditions were accepted.