

3. SOCIODEMOGRAPHIC CHARACTERISTICS OF UNINSURED ADOLESCENTS

Understanding the sociodemographic factors that are related to adolescent health insurance status is key to unraveling the problem of those who are uninsured. Parent's insurance status, poverty and family income, who adolescents live with, race and ethnicity, parent's marital status and education, region and residence, and parent's work status, and employment characteristics are all related to insurance status (see appendix D). However, many demographic and socioeconomic characteristics of adolescents are highly inter-correlated, and most are correlated with family income. The following examines these relationships and assesses their correlation with health insurance status independent of family income.¹

Family Income

Family income is the most important determinant of health insurance status for all age groups. The poor, regardless of other factors, are the most likely to be uninsured. Adolescents in poor or near-poor families are much more likely to be uninsured than others; approximately 30 percent are without any coverage, public or private (see table 1 in Executive Summary). In contrast, half as many adolescents whose family income is between 150 and 299 percent of poverty and less than 5 percent of adolescents of adolescents in families at 300 percent of poverty or above are uninsured.

Race and Ethnicity

The correlation between race and lack of health coverage almost disappears when family income is taken into account. Black adolescents are much more likely than whites to live in or near poverty (and thus to be uninsured); more than half of black adolescents are in families with incomes below 150 percent of poverty compared to 19 percent of whites (figure 4). Yet, black and white adolescents who live in families with similar incomes are insured at similar rates

(table 3). Nonetheless, how black and white adolescents are covered does differ within the same income categories, especially among those living in or near poverty. White adolescents who live below 150 percent of poverty are twice as likely as black adolescents in similar economic circumstances to have private health coverage. Black adolescents in this income category are twice as likely as whites to be covered by Medicaid.

This is not the case for Hispanic adolescents however. Hispanic adolescents are much more likely than others to be uninsured regardless of family income. In families with incomes below 150 percent of poverty, for example, 43 percent of Hispanic adolescents are uninsured, compared to 30 percent of non-Hispanic whites and 26 percent of non-Hispanic blacks (table 3). This may be because Hispanics are more likely than others to work in agriculture and domestic service where coverage rates are historically low. In addition, Hispanic adolescents who are "undocumented aliens" are not routinely eligible for Medicaid; eligibility is a State option.²

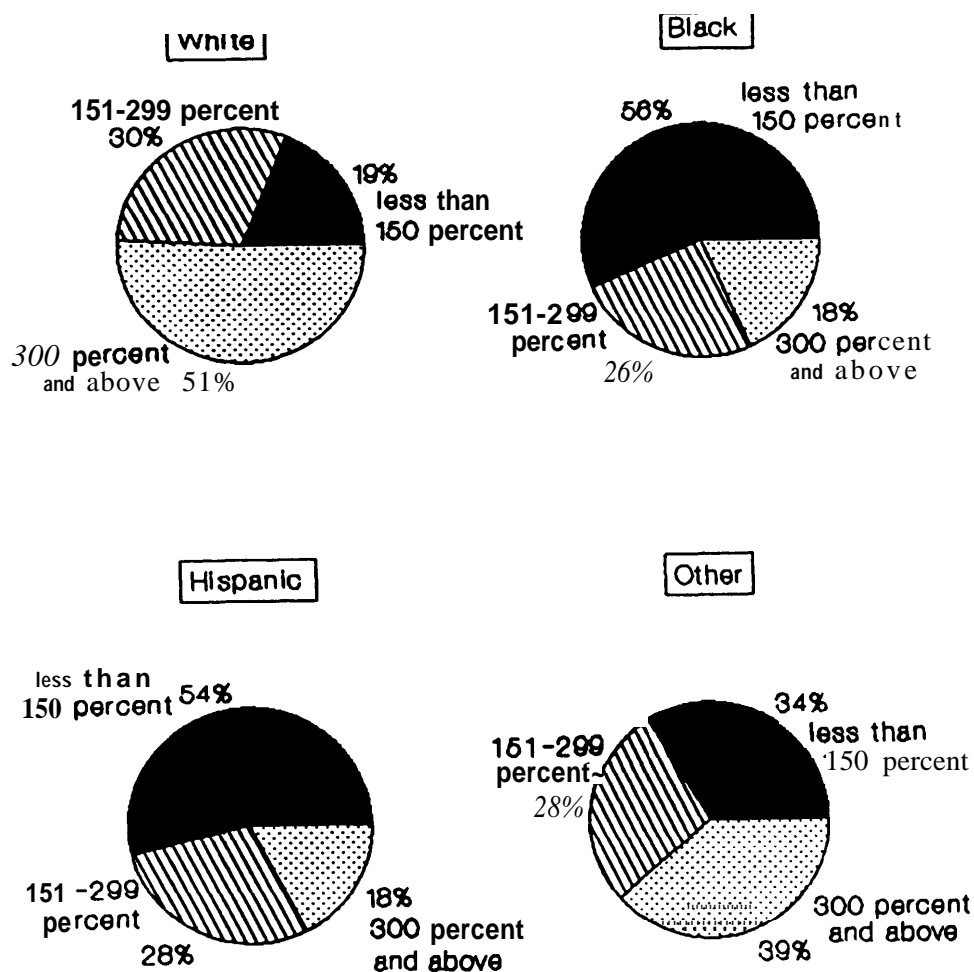
Living Arrangement

It is clear that adolescents who live with two parents are more likely to be insured than others. However, a more complicated

¹ See appendix E for Federal poverty levels in 1979 to 1988.

² Other contributing factors may be family composition and number of workers in the family. If Hispanic families living in poverty are more likely than others to include both husband and wife, they will be less likely to be eligible for Medicaid. Census data indicate that, of families below the poverty level, Hispanic families are more likely than Black non-Hispanic families, but not more likely than white non-Hispanic families, to include both husband and wife (U.S. Department of Commerce, August 1988). In addition, employment-based health insurance may not be available to a working-poor Hispanic family if it includes more than one wage-earner.

Figure 4.--Poverty Status of Adolescents, Age 10-18, by Race/Ethnicity, 1987*



*Poverty status is expressed in relation to the Federal poverty level. In 1987, the Federal poverty level was \$9,056 for a family of three.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

**Table 3--- Family Income, Race and Ethnicity,
and Health Insurance Status of Adolescents, Age 10-18, 1987**

Family income as a percentage of poverty ^a	Race/ethnicity	Total ^b	No health insurance coverage	Insured: private and public		
				Private only	Medicaid only	Other ^c
less than 150 percent	white, non-Hispanic	100.0%	29.8%	41.0%	22.4%	6.7%
	black, non-Hispanic	100.0	25.6	22.5	46.0	5.8
	Hispanic	100.0	42.6	22.3	32.6	2.5
	other	100.0	27.4	23.0	43.9	5.7
150 to 299 percent	white, non-Hispanic	100.0	12.6	80.7	1.0	5.6
	black, non-Hispanic	100.0	14.1	74.4	3.6	7.9
	Hispanic	100.0	22.5	67.9	4.3	5.3
	other	100.0	19.7	68.9	0.7	10.7
More than 300 percent	white, non-Hispanic	100.0	4.0	91.7	0.2	4.1
	black, non-Hispanic	100.0	6.6	85.7	0.9	6.7
	Hispanic	100.0	7.3	84.1	0.1	8.5
	other	100.0	10.5	84.2	0.4	5.0

^aIn 1987, the Federal poverty level was \$9,056 for a family of three.

^bPercentages may not total 100 percent due to rounding.

^cIncludes adolescents with CHAMPUS, Medicare, or any combination of public and private coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

picture of the effects of living arrangement on health insurance status emerges when family income is taken into account. Part of the reason why adolescents who do not live with two parents are often uninsured is because they are also likely to be poor. Most adolescents who live with only one parent live in or near poverty: 60 percent of adolescents who live with their mother only are in families below 150 percent of poverty (table 4). Adolescents who do not live with a parent at all are even more likely to live in or near poverty. In contrast, only 16.2 percent of adolescents in two-parent families live below 150 percent of poverty.

Almost half of poor or near-poor adolescents who live with their mother only are insured under the Medicaid program (table 5). In fact, this group of adolescents is more likely than any others, even two-parent family dependents, to have health coverage. For adolescents in families at 150 percent of poverty or above, however, the expected relationship between living arrangement and insurance status is found; those who live with both parents are much more likely than others to have health coverage.³

Parent's Education

The effects of parental education, even controlling for family income, are quite strong; at each income level, adolescents whose parents have little formal education are much more likely to be uninsured than adolescents whose parents have had more education (table 6).

The relatively strong relationship between level of education and insurance status may result from a number of factors: those with more education are likely to have

greater assets to protect and are thus likely to be more risk averse than those with less education (and also more likely to be able to afford to buy insurance); those with more education are likely to be valued more highly in the labor market, thus, even controlling for cash income we would expect their total compensation to be greater; and those with more education may be inclined to value the consumption of medical care more highly than those with less education.

But to put the relative importance of education in some perspective, in preliminary multivariate analyses⁴ it appears that, for adolescents, low family income (i.e., below 150 percent of poverty) is a much stronger predictor of being uninsured than having a parent with limited education (i.e., less than a high school education).

Parent's Work Status and Employment Characteristics

Controlling for family income, adolescents who live with full-time workers are somewhat more likely than those living with

³ This result is one of the only findings in this section that is at variance with the findings from the 1984 National Health Interview Survey (NH IS) (Newacheck and McManus, 1989). Using the 1984 NH IS, Newacheck and McManus conclude that controlling for family income there is no relationship between being in a single parent family and lack of health insurance.

⁴ Multivariate analyses were not well enough developed to report in full here. Correctly specified analyses are a nontrivial problem. Although limited dependent variable models can be estimated with a 0-1 dependent variable measuring whether or not an adolescent is insured, such models do not correspond directly to any choices being made. Rather, there is a hierarchical decision process. One way of specifying it is as follows: an adult either works at a job with health benefits offered or not, and if so, decides whether or not to cover any adolescent children. If no benefits are offered, the children may or may not be eligible for Medicaid, and if eligible, the parent decides whether or not to apply. If there is no employer-provided insurance and no public program, then the parent decides whether or not to buy nongroup insurance. Rather than one simple model with a yes/no variable for insurance, at least three models should be estimated (i.e., yes/no on employer provided insurance, Medicaid eligibility/coverage, and purchase of nongroup insurance). It may be, of course, that reasonably accurate estimates of the "effects" of independent variables can be achieved from estimation of the simple combined model, but this is not yet clear.

Table 4--- Adolescent's Living Arrangement by Family Income, 1987

Family income as a percentage of Poverty ^a	Living arrangement	Proportion of adolescents
less than 150 percent	living with both parents	16.2%
	living with father only	25.2
	living with mother only ^b	60.0
	not living with parent ^b	65.4
.....		
151 to 299 percent	living with both parents	31.0%
	living with father only	28.8
	living with mother only	24.7
	not living with parent	19.9
.....		
300 percent and above	living with both parents	52.8%
	living with father only	46.0
	living with mother only	15.2
	not living with parent ^b	14.8

^aIn 1987, the Federal poverty level was \$9,056 for a family of three.

^bThe CPS category "adolescents not living with their parents" includes adolescents who live with other relatives (i.e., grandchildren, nieces, nephews, etc.) or unrelated individuals, those living on their own (or with their own spouse and/or children), and married adolescents who reside with their parent(s). Married adolescents are categorized this way because the Census Bureau assumes that most private health insurance plans exclude them from their parent's policies.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

Table 5.--Family Income, Living Arrangement, and Health Insurance Status of Adolescents, Age 10-18, 1987

Family income as a percentage of Poverty ^a	Living arrangement	Total ^b	No health insurance coverage	Insured: private and public		
				Private only	Medicaid only	Other ^c
less than 150 percent	living with both parents	100.0%	34.0%	41.4%	17.3%	7.3%
	living with father only	100.0	33.9	32.8	27.0	6.3
	living with mother only ^d	100.0	23.4	23.0	49.5	4.1
	not living with parent ^d	100.0	44.0	27.8	22.8	5.5
.....						
150 to 299 percent	living with both parents	100.0	11.4	80.9	1.0	6.9
	living with father only	100.0	18.2	73.0	1.2	7.5
	living with mother only ^d	100.0	18.5	75.1	2.8	3.6
	not living with parent ^d	100.0	37.0	51.7	8.3	3.0
.....						
300 percent and above	living with both parents	100.0	3.2	91.9	0.1	4.8
	living with father only	100.0	10.1	83.4	0.5	6.0
	living with mother only ^d	100.0	9.5	87.9	0.9	1.8
	not living with parent ^d	100.0	33.2	64.0	1.6	1.2

^aIn 1987, the Federal poverty level was \$9,056 for a family of three.

^bPercentages may not total 100 percent due to rounding.

^cIncludes adolescents with CHAMPUS, Medicare, or any combination of @lie and private coverage.

^dIncludes adolescents not living with their parents and married adolescents living with their parents.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

**Table 6--- Family Income, Education of Family Head,
and Health Insurance Status of Adolescents, Age 10-18, 1987**

Family income as a percentage of poverty ^a	Education of family head ^b	Total ^c	No health insurance coverage	Insured: private and public		
				Private only	Medicaid only	Other ^d
less than 150 percent	less than 9 years	100.0%	35.8%	21.1%	40.5%	2.5%
	9 to 11 years	100.0	27.2	22.4	45.1	5.3
	high school graduate	100.0	27.0	37.3	29.7	6.0
	some college	100.0	27.3	39.9	24.0	8.8
	college graduate	100.0	19.4	52.5	19.6	8.5
	post graduate	100.0	18.1	58.9	11.6	11.3
150 to 299 percent	less than 9 years	100.0	22.4	67.0	4.3	6.3
	9 to 11 years	100.0	21.1	72.2	2.6	4.2
	high school graduate	100.0	10.8	82.2	1.3	5.7
	some college	100.0	12.3	78.5	0.6	8.6
	college graduate	100.0	11.0	83.7		5.4
	post graduate	100.0	6.8	86.6		6.6
300 percent and above	less than 9 years	100.0	12.8	85.9		1.2
	9 to 11 years	100.0	7.6	84.8		7.7
	high school graduate	100.0	3.8	92.2	0.2	3.8
	some college	100.0	3.7	90.1	0.3	6.0
	college graduate	100.0	4.1	91.7	0.2	4.0
	post graduate	100.0	2.6	93.0	0.1	4.4

^aIn 1987, the Federal poverty level was \$9,056 for a family of three.

^bRefers only to parent(s) who reside with unmarried adolescents.

^cPercentages may not total 100 percent due to rounding.

^dIncludes adolescents with CHAMPUS, Medicare, or any combination of public and private coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

part-time or part-year workers to be insured, but the relationship is weak (table 7). Given the same family income, an adolescent whose parent is a part-time or part-year worker is 3 to 7 percentage points more likely to be uninsured than an adolescent whose parent is a full-time, full-year worker.

When family income is held constant, the relationships between industry of parent's employment and lack of insurance are attenuated, but do not disappear. Part of the reason why adolescents whose parents work in agriculture or retail trades are more likely than other adolescents to be uninsured is that such adolescents are much more likely than others to be poor; however industry does have some independent effect on the probability of being uninsured, particularly among middle income groups (i.e., 150 to 299 percent of poverty).

As would be expected given the more favorable tax treatment of employer-sponsored insurance and the advantages of purchasing insurance in the large group market, controlling for family income does not substantially attenuate the relationship between self-employment and lack of health insurance. Among adolescents in middle- and upper-income families, adolescents whose parents are self-employed are much more likely than others to be uninsured (table 7).

Residence⁵

The bivariate relationship between residence (i.e., central city, suburban, rural) and insurance status (see appendix D) virtually disappears when family income is held constant.

⁵ This paper follows Census Bureau terminology for residence and region.

Understanding Why Health Insurance Status Varies Across Regions

The proportion of adolescents without health coverage varies widely across regions of the country (see figure 5 for a map of United States census regions; see appendix D). Almost one out of five Southern and Western adolescents are uninsured while less than one out of ten Northeastern and Midwestern adolescents are without coverage (table 8). These differences appear to be largely due to the extent to which adolescents have private coverage; approximately 76 percent of adolescents in the North are privately insured compared to 65 percent in the South and 54 percent in the West.⁶ Medicaid coverage varies as well, but the regional differences are relatively small (i.e., North, 11 percent; South and West, 9 percent).

These findings concur with other research (Newacheck and McManus, in press; Short, et al., 1988). The large difference across regions in the extent of private insurance coverage has led researchers to conclude that most of the regional variation in coverage rates is due to differences in the extent to which employers offer health insurance benefits. In the North, the more unionized, industrial labor force is more likely to have employment-related benefits than workers in the South and West. It has also been noted that more restrictive Medicaid eligibility policies in the South contribute to lower coverage rates, but the extent of this contribution has not been measured before.

This section examines regional differences in coverage rates more closely and finds that Medicaid eligibility, particularly in the South and to some degree in the West, plays a more critical role vis a vis the uninsured than has been generally recognized.

⁶ Because insurance status in the Northeast and Midwest is so similar, in the remainder of this section the two areas are combined and referred to as the "North."

Table 7.--Family Income, Selected Parental Characteristics, and Health Insurance Status of Adolescents, Age 10-18, 1987

Family income as a percentage of poverty ^a	Parental characteristics ^b	Total ^c	No health insurance coverage	Insured: private and public		
				Private only	Medicaid only	Other ^d
less than 150 percent	<u>Parental work status:^{e,f}</u>					
	full-year, full-time	100.0%	31.0%	59.0%	6.4%	3.5%
	full-year, part-time	100.0	37.2	32.8	23.3	6.8
	part-year	100.0	34.0	24.5	35.5	6.0
	nonworker	100.0	19.5	8.6	65.2	6.8
150 to 299 percent	full-year, full-time	100.0	11.6	84.9	0.4	3.1
	full-year, part-time	100.0	16.2	73.6	2.7	7.5
	part-year	100.0	18.7	69.1	4.3	8.0
	nonworker	100.0	18.0	29.8	8.6	43.6
300 percent and above	full-year, full-time	100.0	3.6	93.2	0.1	3.1
	full-year, part-time	100.0	6.1	87.3	0.8	5.8
	part-year	100.0	6.6	90.4		3.0
	nonworker	100.0	7.1	29.1	0.9	61.9
less than 150 percent	<u>Industry of family head:^g</u>					
	public administration	100.0	18.6	55.2	14.4	11.8
	durable goods	100.0	26.9	55.8	12.5	4.9
	transportation	100.0	39.5	43.0	13.3	4.1
	mining	100.0	34.9	54.4	8.6	2.0
	nondurable goods	100.0	28.9	54.1	12.3	4.7
	finance	100.0	31.0	54.7	7.0	7.3
	wholesale trade	100.0	28.7	47.9	17.6	5.9
	professional services	100.0	26.9	50.7	17.9	4.7
	construction	100.0	42.6	30.7	19.4	7.3
	retail trade	100.0	38.7	36.3	19.8	5.2
	business services	100.0	36.5	32.9	28.3	2.3
	entertainment	100.0	31.5	54.9	10.0	3.7
	agriculture	100.0	38.4	47.2	8.7	5.8
150 to 299 percent	personal services	100.0	36.4	34.3	26.7	2.6
	nonworker/other	100.0	19.5	8.6	65.2	6.8
	public administration	100.0	4.1	87.3	0.6	8.1
	durable goods	100.0	8.2	87.6	0.7	3.4
	transportation	100.0	9.3	86.9	0.2	3.6
	mining	100.0	2.5	91.6		6.0
	nondurable goods	100.0	8.4	86.4	1.4	3.9
	finance	100.0	13.3	85.5	0.7	.5
	wholesale trade	100.0	10.2	87.9		1.9
	professional services	100.0	11.5	84.6	0.6	3.3
	construction	100.0	24.0	69.4	0.9	5.7
	retail trade	100.0	16.0	77.1	2.5	4.4
	business services	100.0	22.3	70.2	0.9	6.6
	entertainment	100.0	12.0	76.6	3.3	8.1
	agriculture	100.0	25.6	69.9		4.5
	personal services	100.0	27.2	69.5		1.1
	nonworker/other	100.0	18.0	29.8	8.6	43.6

(continued)

Table 7--- Family Income, Selected Parental Characteristics, and Health Insurance Status of Adolescents, Age 10-18, 1987 (Cont'd)

Family income as a percentage of of poverty ^a	Parental characteristics ^b	Total ^c	No health insurance coverage	Insured: private and public		
				Private only	Medicaid only	Other ^d
300 percent and above	public administration	100.0	2.1	88.1	.	9.8
	durable goods	100.0	2.1	95.5	.	2.4
	transportation	100.0	3.0	92.8	0.2	4.1
	mining	100.0	4.6	93.6	.	1.8
	nondurable goods	100.0	2.5	%3	.	1.2
	finance	100.0	4.1	93.9	.	2.0
	wholesale trade	100.0	4.7	92.7	.	2.5
	professional services	100.0	3.9	93.9	0.2	2.0
	construction	100.0	8.1	86.8	0.3	4.9
	retail trade	100.0	5.2	92.1	0.1	2.6
	business services	100.0	6.1	87.0	0.8	6.1
	entertainment	100.0		98.0	.	2.0
	agriculture	100.0	8.3	90.1	.	1.6
	personal services	100.0	10.8	86.2	.	2.9
	nonworker/other	100.0	7.1	29.1	1.9	61.9
<hr/>						
less than 150 percent	Parent self-employed: ^e					
	self-employed	100.0%	36.8%	47.8%	9.6%	5.8%
	not self-employed	100.0	33.0	43.7	18.4	4.9
150 to 299 percent	non worker	100.0	19.5	8.6	65.2	6.8
	self-employed	100.0	29.8	65.1	0.2	4.8
	not self-employed	100.0	11.2	83.9	1.0	3.9
300 percent and above	non worker	100.0	18.0	29.8	8.6	43.6
	self-employed	100.0	14.2	82.5		3.3
	not self-employed	100.0	3.1	93.5	0.1	3.3
	non worker	100.0	7.1	29.1	1.9	61.9

^aIn 1987, the Federal poverty level was \$9,056 for a family of three.

^bCharacteristics are of household head unless only the spouse had employment-based health coverage.

^cPercentages may not total 100 percent due to rounding.

^dIncludes adolescents with CHAMPUS, Medicare, or any combination of public and private coverage.

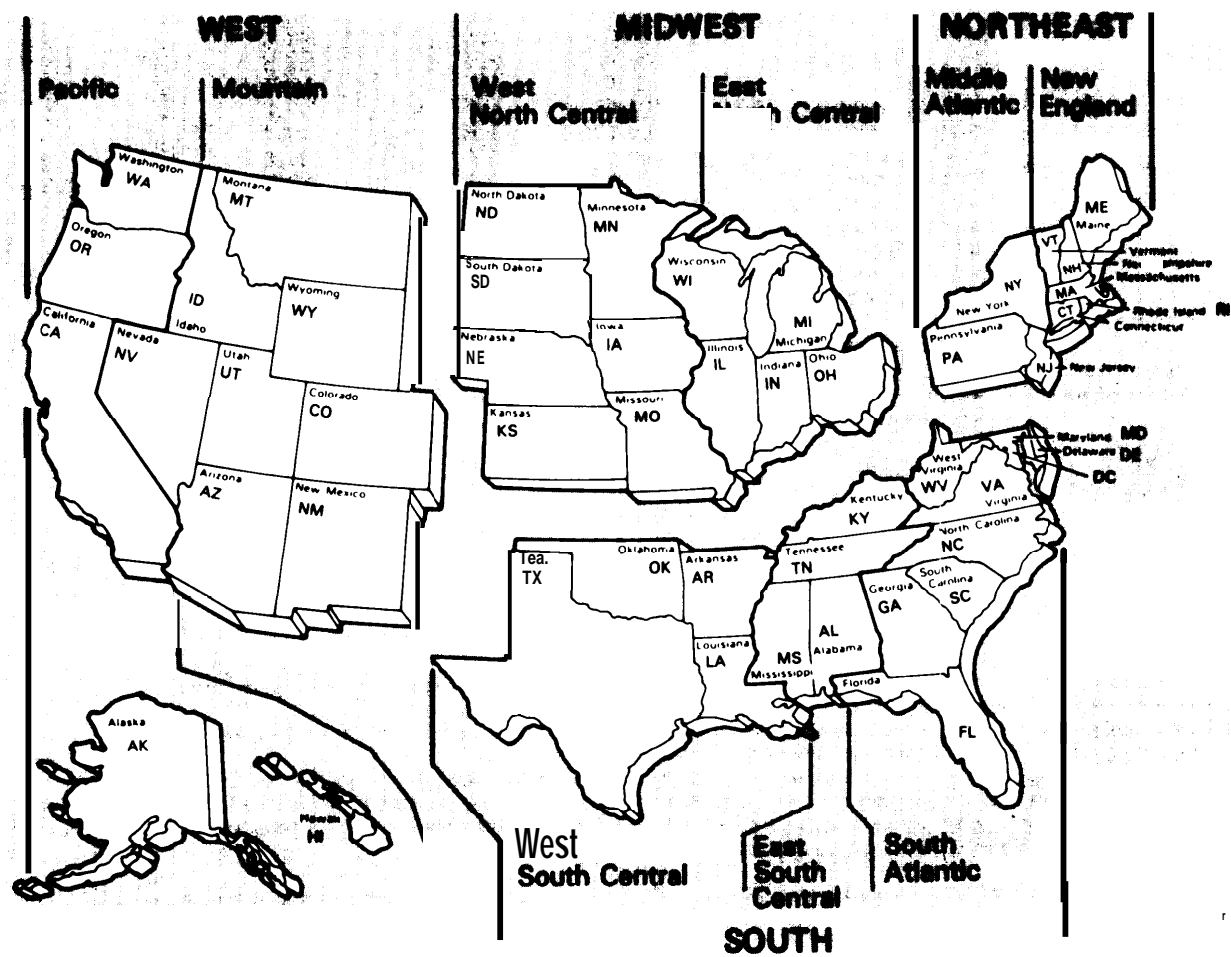
^eIncludes only unmarried adolescents living with their parents.

^fFull-year, full-time refers to workers who worked for at least 35 hours per week for at least 50 weeks.

Full-year, part-time refers to workers who were employed for at least 50 weeks and worked less than 35 hours in a typical week. Part-year workers worked or sought work during the year, but for less than 50 weeks during the year. Nonworkers neither worked nor sought work during 1987.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

Figure 5.--Map of the U.S., Showing Census Divisions and Regions



SOURCE: U.S. Bureau of the Census.

Table 8.-- Region and Adolescent Health Insurance Status, 1987

Region ^a	Total	No health insurance coverage	<u>Insured: private and public</u>		
			Private only	Medicaid only	Other ^b
Northeast ^c	100.0%	9.2%	76.6X	10.9%	3.3%
Midwest ^c	100.0	9.3	76.1	11.1	3.6
South	100.0	19.7	64.7	8.8	6.7
West	100.0	18.6	65.4	9.4	6.7

^aNortheast includes: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

^aMidwest includes: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

^aSouth includes: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

^aWest includes: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

^bIncludes adolescents with CHAMPUS, Medicare, or any combination of public and private coverage.

^cIn the text, Northeast and Midwest are combined and referred to as North.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

In order to better understand the regional differences in coverage rates, it is useful to examine differences in three key factors across regions:

- the proportion of adolescents who are poor;
- the proportion of adolescents who receive Medicaid, controlling for family income; and
- the proportion of adolescents with private insurance, controlling for family income.

It is evident that a greater proportion of Southern than Northern adolescents live in poverty (table 9). For example, 12 percent of Southern adolescents are in families below 50 percent of poverty in contrast to 8 percent in the North. It follows that, if other things *were* equal, Southern adolescents should have a significantly higher rate of Medicaid coverage than Northern adolescents. However, only 43 percent of low-income Southerners are covered by Medicaid compared to 61 percent of those in the North. Poor Western adolescents are the least likely to be covered by Medicaid; only 37 percent in families below 50 percent of poverty have Medicaid coverage.

Similarly, Medicaid coverage rates for Northern adolescents are higher than those for Southern adolescents for all income categories. In the West, however, Medicaid coverage rates in families at 100 percent of poverty or above are slightly higher than in the North.

On average, adolescents are 11 percentage points more likely to be covered by private insurance in the North than in the South or West (table 8).

The contribution of each factor to the overall differences across regions in the proportion of adolescents can be measured by constructing three simulations. The **first simulation** computes the rate at which Southern (or Western) adolescents would be uninsured if the distribution of Southern (or Western) adolescents by poverty level equalled the distribution in the North.

The **second simulation** computes the rate at which Southern (or Western) adolescents would be uninsured if the Medicaid coverage rates in the South (or West) were equal to those in the North, controlling for family income.⁷

The **third simulation** computes the rate at which Southern (or Western) adolescents would be uninsured if the proportion of adolescents with private insurance coverage at each level of family income were the same in the South (or West) as in the North. To increase the stability of the estimates, data from the four CPS surveys between 1984 and 1987 are pooled in the analysis.⁸

Simulation Results

From 1983 through 1986, 25 percent of Southern adolescents, 23 percent of Western adolescents, and 16 percent of Northern adolescents were uninsured (table 10). The simulation results reported below break down these differences into their component parts. These results make clear that public policies designed to expand health coverage (such as the Medicaid expansions or employer mandates discussed later in the paper) would have markedly different effects *in* Western and in Southern States than in Northern States.

Southern States---It appears that Medicaid income eligibility requirements are key to the greater proportion of uninsured

⁷ In performing this simulation, a finer breakdown of family income ~~was~~ used than is shown in table 9, including: less than 50 percent of poverty, 50 to 74 percent, 75 to 99 percent, 100 to 124 percent, 125 to 149 percent, 150 to 199 percent, 200 to 249 percent, 250 to 299 percent, 300 to 349 percent, 350 to 399 percent, 400 to 449 percent, 450 to 499 percent, and 500 percent and above. In order to provide more stability to the estimates at this level of detail, an increased sample size, based on pooled data from the March 1984 to March 1987 Current Population Surveys was used.

⁸ Note that because the data used are pre-1988, the absolute proportions of uninsured adolescents shown in this section will be higher than the estimates using the March 1988 CPS. Pre-1988 estimates and estimates based on the March 1988 are not directly comparable.

**Table 9---Health Insurance Status of Adolescents, Age 10-18,
by Region and Family Income, 1987**

Family income as a percentage of poverty ^b	Region ^c	Total population, age 10-18 (in millions)	Percent of the region's adolescents ^d	Total ^e	No health insurance coverage	Insured: private and public ^f		
						Private only	Medicaid only	Other ^g
less than 50 percent	North	1.06	7.8%	100.0%	19.5%	16.0%	60.5%	4.1%
	South	1.31	11.8	100.0	36.2	16.7	42.6	4.6
	West	.47	7.5	100.0	41.8	17.6	37.2	3.5
50 to 99 percent	North	1.19	8.7	100.0	16.5	24.5	53.8	5.2
	South	1.25	11.2	100.0	45.1	24.0	24.4	6.6
	West	.70	11.2	100.0	35.8	21.4	36.2	6.5
100 to 149 percent	North	1.19	8.7	100.0	21.7	59.8	12.4	6.1
	South	1.11	9.9	100.0	37.2	49.4	7.6	5.9
	West	.66	10.6	100.0	30.3	48.3	13.0	8.4
150 to 199 percent	North	1.15	8.4	100.0	13.9	78.7	3.2	4.2
	South	1.23	11.0	100.0	25.8	66.2	1.8	6.2
	West	.62	9.9	100.0	27.0	58.0	5.4	9.7
200 to 299 percent	North	2.79	20.4	100.0	7.6	87.8	0.8	3.8
	South	2.04	18.3	100.0	11.8	79.1	0.5	8.5
	West	1.14	18.3	100.0	14.1	77.0	2.0	7.0
300 percent and above	North	6.28	46.0	100.0	3.7	93.9	0.2	2.3
	South	4.20	37.7	100.0	4.4		0.1	7.0
	West	2.63	42.4	100.0	7.0	86.4	0.5	6.1

^aHealth insurance status for 10- to 14-year-olds has been adjusted. See appendix A for details.

^bIn 1987, the Federal poverty level was \$9,056 for a family of three.

^cNorth includes: Connecticut, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Dakota, Nebraska, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Wisconsin.

South includes: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West includes: Alaska, Arizona, California, Colorado, Idaho, Hawaii, Montana, New Mexico, Oregon, Nevada, Utah, Washington, and Wyoming.

^dPercentages refer to the proportion of adolescents in the indicated region who have family income as shown--e.g., 7.8 percent of adolescents in the North live in families whose income is less than 50 percent of the poverty level.

^ePercentages may not total 100 percent due to rounding.

^fIncludes adolescents with CHAMPUS, Medicare, or any combination of public and private coverage.

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1988 Current Population Survey.

Table 10.--Estimates of the Effects of Poverty and Rates of Medicaid and Private Coverage on Regional Differences in Adolescent Health Insurance Status, 1983-1986

Adolescent Health Insurance Status, 1983-1986				
		Region		
		North	South	West
Proportion				
without health insurance		16.0%	25.2%	22.7%
Proportion				
with Medicaid coverage		11.0	7.8	9.0
Proportion				
with private coverage		69.3	60.4	61.3

Factor	Simulation	Estimated effect on the proportion of adolescents without health insurance	
		South	West
Poverty level	Assume that the region's distribution of adolescents (by poverty level) was the same as in the North.	-1.8%	-0.3%
Medicaid coverage	Assume that the region's rate of Medicaid coverage (by poverty level) was the same as in the North.	-6.2	-2.1
Private coverage	Assume that the region's rate of private coverage (by poverty level) was the same as in the North.	-1.1	-4.3
Total	All of the above	-9.2	-6.7

SOURCE: Office of Technology Assessment, 1989, based on estimates from the March 1984 to March 1987 Current Population Survey.

adolescents in the South. If income-specific Medicaid coverage rates were as high in the South as in the North, 6.2 percent fewer Southern adolescents would be without health insurance; this accounts for approximately 66 percent of the Southern vs. Northern gap in coverage. Given equivalent income-specific rates of private coverage, 1.1 percent fewer Southern adolescents would be uninsured accounting for 15 percent of the gap. Finally, if Southern adolescents were no poorer than those in the North, 1.8 percent fewer Southern adolescents would be uninsured accounting for 20 percent of the gap (table 10).

Western States--- Overall, the proportion of Western adolescents without health insurance exceeds the Northern rate by 6.7 percentage points. Lower rates of private coverage appear to be the most critical factor in the coverage gap, although lower Medicaid coverage rates are important as well. If income-specific rates of private insurance coverage were as high in the West as in the

North, 4.3 percent fewer Western adolescents would be uninsured, reducing the gap between West and North by 65 percent. The remaining 35 percent differential is due to lower income-specific rates of Medicaid coverage.

It is likely that the West's lower private coverage rates (relative to the North) are, in part, due to lower rates of unionization, and greater employment in the traditionally low-coverage agriculture and service sectors. More work is needed to further understand the extent to which these and other factors account for regional differences in income-specific rates of private insurance coverage.⁹

⁹ Other hypotheses to explain these regional differences should be explored. For example, coverage rates might be lower in the West because there are higher rates of self-employment, greater employment in small firms, more people in multiple part-time jobs, the price of insurance is higher, and/or free care is more available.