

APPENDIX D.--BIVARIATE RELATIONSHIPS AMONG INSURANCE STATUS AND SELECTED SOCIODEMOGRAPHIC CHARACTERISTICS OF UNINSURED ADOLESCENTS

Appendix D analyzes the bivariate relationships between a number of demographic and household factors and the likelihood of an adolescent being without health coverage. These include: parent's insurance status, poverty and family income, adolescents' living arrangements, race and ethnicity, parent's marital status, parent's education region and residence, and parent's work status and other employment characteristics.

Many of these demographic and socioeconomic characteristics of adolescents are intercorrelated, and most are correlated with family income. When family income is controlled, the strength of many of the relationships diminishes. Section 3 of this Background Paper assesses the relationships of these demographic and social characteristics with health insurance status independent of family income.

Parent's Insurance Status

Virtually all adolescents who have private health insurance are covered as a dependent on a parent's policy. Most adolescents (81 percent) live with an insured parent and almost all such parents insure their adolescent dependent(s); only 3 percent of adolescents living with an insured parent are uninsured (see figure 1 in Executive Summary). To a large extent, then, the problems of uninsured adolescents are the problems of uninsured parents. Twelve percent of all adolescents live with uninsured parents and more than three-quarters of those who do are also uninsured. Almost two out of three uninsured adolescents (64 percent) live with

parents who are also uninsured (figure 1 in Executive Summary).

Poverty and Family Income²

Family income is closely associated with adolescent health insurance status. Adolescents in poor or near-poor families³ (i. e., with family incomes below 150 percent of the Federal poverty level) are much more likely to be uninsured than others; approximately 29 to 32 percent are without public or private coverage (table D-1). In contrast, less than 5 percent of adolescents in families at 300 percent of poverty or above are uninsured. Note also that while the poor and near-poor comprise less than 30 percent of the overall adolescent population, they account for twice the proportion (i.e., 60 percent) of all uninsured adolescents.

Despite the strong relationship between low family income and the likelihood of being uninsured, it should be recognized that for adolescents, as for adults, it is by no means true that all the uninsured are poor. While 41 percent of uninsured adolescents live below the Federal poverty level, one-third are between 100 and 199 percent of poverty, and more than a quarter are at 200 percent of poverty or above.

Although similar proportions of those below 50 percent of poverty and those between 100 and 149 percent of poverty are without health insurance (i.e., 31 and 29 per-

¹ Note that, throughout this paper, references to the parent reflect the characteristics of the household head unless only the spouse had employment-based health coverage. The "household head" is designated after a discussion between the interviewer and the respondent following certain rules (E. Welniak, personal communication, July 24, 1989).

² Poverty status is expressed in relation to the official Federal poverty level. In 1987, the Federal poverty level was \$9,056 for a family of three. See appendix E for Federal poverty levels from 1979 through 1988.

³ "poor" refers to those whose family incomes are below the Federal poverty level; "near-poor" describes family incomes between 100 and 149 percent of the Federal poverty level; and very poor is equal to or less than 50 percent of the Federal poverty level.

**Table D-1 --- Health Insurance Status of Adolescents, Age 10-18
by Selected Demographic and Household Characteristics, 1987**

Selected demographic and household characteristics	Total ^b	No health insurance coverage	Insured: private and public		
			Private only	Medicaid only	Other ^c
Parentis insurance status:					
not living with parents	100.0%	41.0%	37.9%	16.8%	4.4%
parent not insured	100.0	77.0	21.8	0.8	0.4
parent is insured	100.0	3.3	79.8	10.7	6.1
.....					
Family income as a percentage of poverty:^d					
less than 50 percent	100.0	30.9	16.6	48.4	4.2
50 to 99 percent	100.0	32.2	23.6	38.1	6.1
100 to 149 percent	100.0	29.4	53.4	10.7	6.5
150 to 199 percent	100.0	21.5	69.2	3.1	6.2
200 to 299 percent	100.0	10.3	82.8	1.0	6.0
300 percent and above	100.0	4.6	90.7	0.2	4.6
.....					
Living arrangement:					
living with both parents	100.0	10.7	80.3	3.2	5.8
living with father only	100.0	18.4	67.7	7.4	6.5
living with mother only	100.0	20.1	45.8	30.5	3.7
not living with parent ^e	100.0	41.0	37.9	16.8	4.4
.....					
Race/ethnicity:					
white, non-Hispanic	100.0	11.5	78.7	4.7	5.1
black: non-Hispanic	100.0	19.2	47.2	27.1	6.5
Hispanic	100.0	31.2	46.2	18.8	3.7
other	100.0	17.5	59.4	14.9	8.1
.....					
Region:^f					
Northeast	100.0	9.2	76.6	10.9	3.3
Midwest	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
.....					
Residence:					
central city	100.0	17.5	58.2	19.2	5.0
other MSA ^g	100.0	12.4	77.7	5.1	4.7
nonMSA ^g	100.0	16.7	67.8	10.3	5.2
not identified	100.0	14.1	72.6	6.2	7.1
.....					
Sex:					
male	100.0	14.3	70.6	9.9	5.3
female	100.0	15.5	69.4	9.9	5.3
.....					
Parent's work status:^{h,i}					
full-year, full-time	100.0	9.5	86.4	0.9	3.1
full-year, part-time	100.0	22.9	59.0	11.2	6.7
part-year	100.0	25.0	48.2	20.8	6.0
nonworker	100.0	18.2	13.2	51.9	16.7
.....					
Parent self-employed^b					
self-employed	100.0	25.8	66.6	3.1	4.5
not self-employed	100.0	11.2	81.2	3.8	3.8
nonworker	100.0	18.2	13.2	51.9	16.7
.....					
Size of parent's employer^j					
fewer than 25 employees	100.0	24.8	64.7	3.7	6.8
25 to 99 employees	100.0	17.0	72.3	1.8	8.9
100 to 499 employees	100.0	13.3	77.4	0.9	8.5
500 to 999 employees	100.0	12.5	78.6	1.9	7.0
1000 employees or more	100.0	9.8	81.2	0.6	8.4
.....					

Table D-1.--Health Insurance Status of Adolescents, Age 10-18 by Selected Demographic and Household Characteristics, 1987 (cont'd)

Selected demographic and household characteristics	Total ^a	No health insurance coverage	Insured: private and public		
			Private only	Medicaid only	Other ^c
<u>Industry of parentis employer^a</u>					
public administration	100.0%	4.9%	84.1%	1.5%	9.5%
durable goods	100.0	8.1	87.2	1.8	2.9
mining	100.0	8.6	87.3	0.9	3.1
transportation	100.0	9.0	85.6	1.5	3.9
finance	100.0	10.6	86.2	1.1	2.2
professional services	100.0	10.8	82.4	4.0	2.9
nondurable goods	100.0	11.0	83.2	3.0	2.8
wholesale trade	100.0	11.3	83.2	2.7	2.8
entertainment	100.0	15.8	74.3	3.4	6.4
business services	100.0	19.5	66.7	8.7	5.1
nonworker/other	100.0	20.9	15.0	49.1	15.0
retail trade	100.0	21.1	66.6	8.1	4.1
construction	100.0	22.5	66.8	5.2	5.6
agriculture	100.0	29.4	62.0	4.4	4.3
personal services	100.0	30.5	52.8	14.1	2.6
.....					
<u>Parentis education:^b</u>					
less than 9 years	100.0	30.1	39.3	27.2	3.3
9 to 11 years	100.0	21.7	49.3	23.6	5.3
high school graduate	100.0	12.5	73.9	8.5	5.0
some college	100.0	10.5	77.6	4.6	7.3
college graduate	100.0	6.8	86.7	1.8	4.7
post graduate	100.0	3.9	90.6	0.5	5.1
.....					
<u>Parent's marital status:^h</u>					
married	100.0	10.9	79.8	3.4	5.8
widowed	100.0	29.2	51.3	14.0	5.5
divorced	100.0	18.9	57.9	19.0	4.2
separated	100.0	20.2	44.5	33.0	2.3
never married	100.0	15.3	24.6	56.7	3.3

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

^bPercentages may not total 100 percent due to rounding.

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

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

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

^fNortheast includes: Connecticut, Maine, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Midwest includes: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Swth Dakota, and 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, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

^gMSA = Metropolitan Statistical Area.

^hIncludes only unmarried adolescents living with their parents.

ⁱFull-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 so weeks during the year. Nonworkers neither worked nor sought work during 1987.

^jData are from the 1983 Current population Survey. More current data are not available.

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

cent respectively) the source of coverage differs markedly for these two groups. Those under 50 percent of poverty **who are** insured are most likely to be covered by Medicaid while those between 100 to 149 percent of poverty with coverage are more likely to be enrolled in a private health insurance plan.

Living Arrangement and Parent's Marital Status

Whether an adolescent has health coverage is also related to whom he or she lives **with** and parent's marital status. Half of all uninsured adolescents live in two-parent families (figure D-1), and those who live in two-parent families are also more likely than other adolescents to be insured (table D-1). About **11 percent of adolescents in two-parent families are without health coverage**. In contrast, about 20 percent of adolescents who live with only one parent are uninsured. Adolescents living with widowed, divorced, separated, or never married parents are more likely to be uninsured than those living with married parents; 29, 19, 20, and 15 percent, respectively, do not have health insurance (table D-1). Those adolescents who do not live with at least one of their parents, 6 percent overall (figure D-2), are at greatest risk for being uninsured; 41 percent are without coverage (table D-1).⁴

Race and Ethnicity

There are considerable differences in insurance status among white, **black, and**

Hispanic adolescents.⁵ More than 30 percent of Hispanic adolescents, 19 percent of blacks, and 12 percent of whites do not have health coverage (table D-1). Race and ethnicity are also correlated with type of coverage; relative to whites, insured black and Hispanic adolescents are much more likely to be covered by Medicaid than by a private health plan.

Parent's Education

The likelihood of being insured increases sharply as parent's education increases. More than one out of five adolescents whose parents were not graduated from high school are uninsured. In contrast, less than 7 percent of adolescent dependents of college graduates are without coverage (table D-1).

Region and Place of Residence

The proportion of adolescents without health insurance varies across region. 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.

Note also that urban (i.e., central **city**) and rural (i.e., non-metropolitan statistical area) adolescents are more likely to be uninsured than those who live in suburban areas (table D-1).

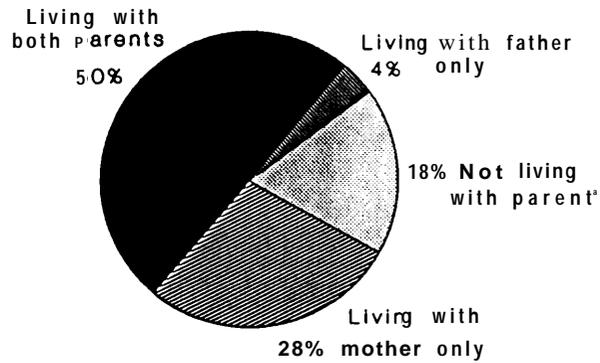
Parent's Work Status and Other Employment Characteristics

Adolescents living with nonworkers, part-year workers, or part-time workers are more likely than adolescents living with full-year, full-time workers to be uninsured (table D-1). Nevertheless, approximately half of all the uninsured adolescents who live with a parent live with a full-year, full-time worker

⁴ The 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 U.S. Census Bureau assumes that most private health insurance plans exclude them from their parent's policies. Of the 6.4 percent of adolescents 'not living with their Parents', approximately half live with "other relatives", 1.1 percent with unrelated individuals, and the remainder are in other categories.

⁵ The racial and ethnic distribution of adolescents in 1987 is shown in figure D-3. Hispanic includes both black and white adolescents of Hispanic origin. "White" and "black" are non-Hispanic only.

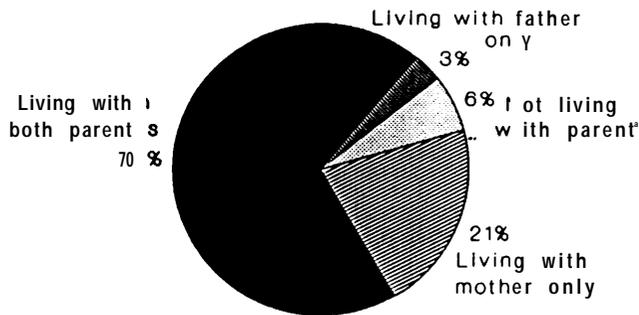
Figure D-1 --- Living Arrangements of Uninsured Adolescents Only



^aIncludes 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 1987 Current Population Survey.

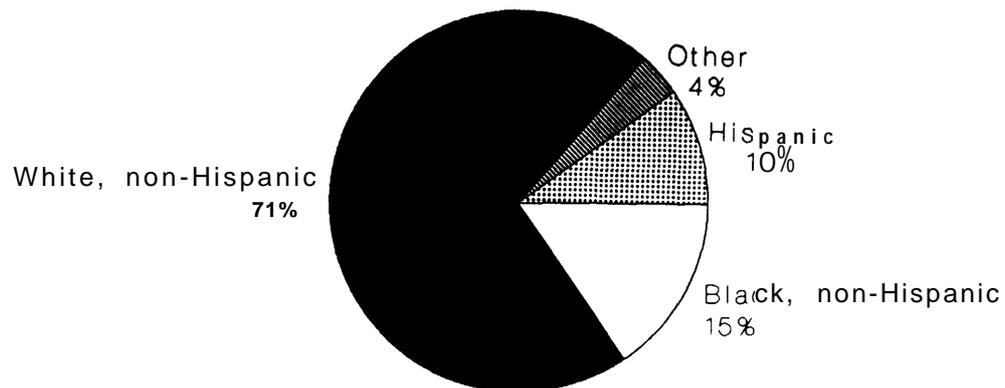
Figure D-2--- Living Arrangements of All Adolescents, Insured and Uninsured



^aIncludes 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 1987 Current Population Survey.

Figure D-3.-- Race/ethnicity of Adolescents, 1987



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

(figure D-4).⁶ Further, most adolescents (70 percent) live with parents who have a significant attachment to the labor force (i.e., full-year, full-time workers) (figure D-5).

More than one-quarter of adolescents whose parents are self-employed are without health coverage (table D-1). There are two likely explanations. First, Federal tax treatment of health insurance contributions favors employees over the self-employed. While no portion of an employer's health insurance contribution is counted as taxable income for the employee, the self-employed may only deduct 25 percent of health insurance premium expenses from taxable income. Second, self-employed parents may not have access to the group health market in which health plans are typically less costly than nongroup policies.

Adolescents' likelihood of being without health coverage increases as the size of their parent's employer decreases. Approximately

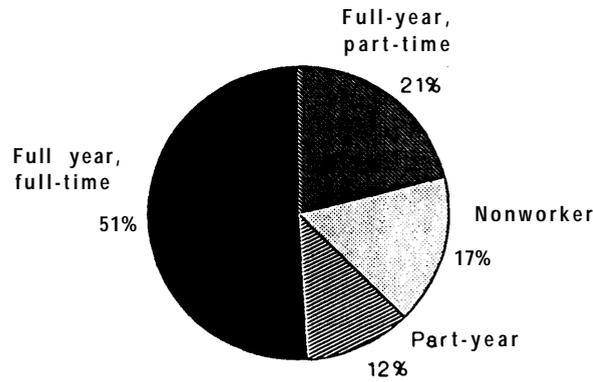
⁶ Full-year, full-time is defined as at least 35 hours per week for at least 50 weeks of the year.

one out of four adolescents whose parents work for small businesses (i.e., fewer than 25 employees) are uninsured, while only 10 percent of those whose parents work in a firm of 1,000 or more employees are uninsured (table D-1).⁷ Although adolescents with parents in small firms are more likely than others to be uninsured, lack of health insurance is not confined to those whose parents work for small businesses. Almost 40 percent of uninsured adolescents have parents who work in firms with 100 or more employees, and an additional 12 percent have parents who work in firms with 25 to 99 employees.

The industry of parent's employers is also related to health insurance status. Coverage rates are lowest in personal services and agriculture, and highest in public administration (i. e., government), durable goods manufacturing, and mining (table D-1).

⁷ These data are drawn from the March 1983 CPS which provides the most current CPS information on firm size. Although the March 1988 CPS included questions concerning firm size, these data are not yet available.

Figure D-4.--Parent's Work Status of Uninsured Adolescents Only^{ab}

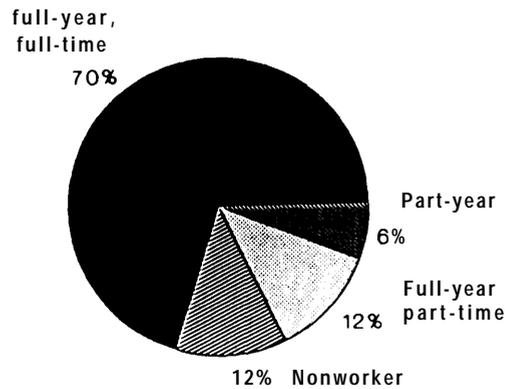


^aRefers to the work status of the household head unless the spouse is providing insurance to the adolescent.

^bFull-year, full-time refers to workers who worked for at least 35 hours per weeks 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 D-5.--Parent's Work Status of All Adolescents^{ab}



^aRefers to the work status of the household head unless the spouse is providing insurance to the adolescent.

^bFull-year full-time refers to workers who worked for at least 35 hours per weeks 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.