

# California's Rural Youth

A report of the 4-H Center for Youth Development

University of California, Davis



# California's Rural Youth

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4-H Center for Youth Development  
Department of Human and Community Development  
University of California, Davis



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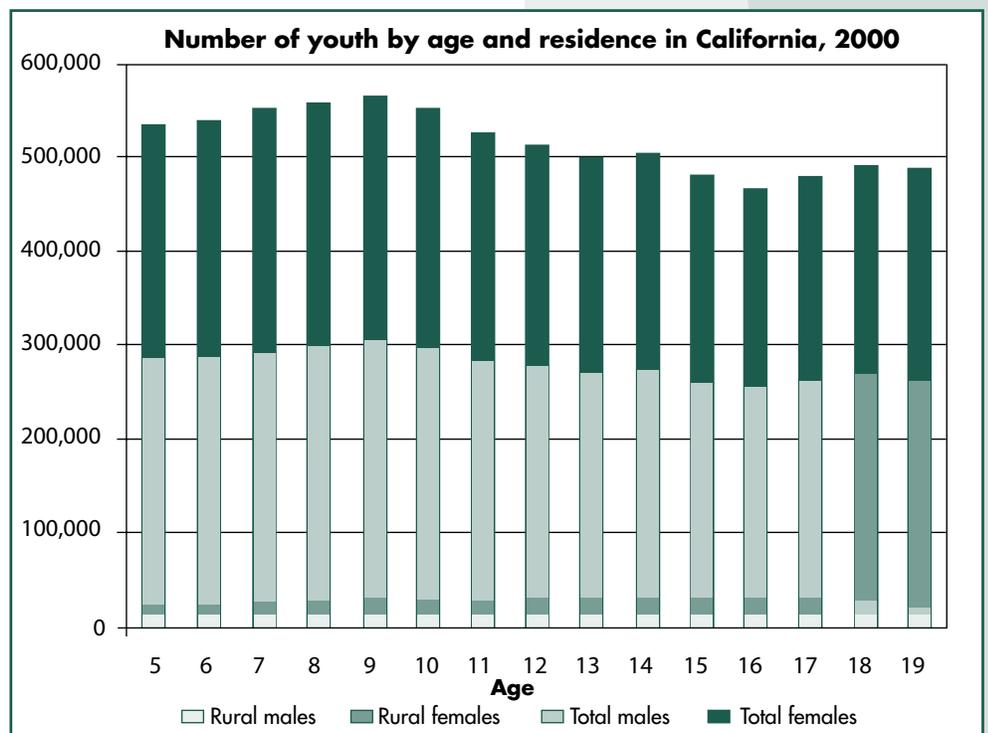
## Executive summary

Rural adolescents in California have many strengths but also face unique challenges. Their rural locations provide unique opportunities for spending time in agriculture and/or in nature. However, often rural areas have lower levels of services, fewer resources available in schools, and fewer job opportunities. This report surveys the well-being of rural youth, including general demographics, assets, and issues of concern.

## Key findings

### Demographics

- According to Census data, there were 2,941,559 adolescents ages 12 to 17 in California in 2000. Among these, 184,025 lived in rural areas.
- Census data showed that in 2000, 5.5 percent of California's population was rural, substantially lower than the national figure of 21 percent. About 5.2 percent of all children under 18 in California lived in a rural area, as did 6.3 percent of adolescents ages 12 to 17. About 0.4 percent of California adolescents lived on a farm. About one in five California adolescents lived in a suburban area (i.e. in an urban area but not in the central city).
- About 52 percent of 5 to 17 year olds in rural areas were male in 2000, compared with 51 percent in California as a whole. Rural youth tended to be slightly older than youth elsewhere in California. The total number of youth peaked at age 9 in California overall, but at age 14 in rural areas. There were almost one-quarter fewer 19 year olds in rural areas than 17 year olds (about 23,000 19-year-olds, compared with about 30,000 17-year-olds), confirming that a large number of adolescents leave rural areas when they finish high school.
- One in five of California's rural adolescents was born outside the United States; 46 percent speak a language other than English at home.
- Over fifteen percent of California's rural youth lived in families who were below the poverty line in 1999, compared with 18.3 percent for youth in the state as a whole.
- About 40 percent of rural adolescents had parents who had education beyond high school, somewhat lower than the percentage for California adolescents as a whole.
- Almost half (48 percent) of rural adolescents in California are Latino, 44 percent are non-Hispanic white, and the remainder are other races/ethnic groups. Rural youth in California are more heavily Latino than youth in the state as a whole.



- About two-thirds of rural adolescents in California as well as adolescents in other places live with two parents.

#### *Assets*

- Almost 95 percent of rural adolescents believed their parents cared “very much” about them. About 86 percent said a parent or other adult in their home believed they would be a success, and two-thirds talked with a parent (or other adult in their home) about their problems.
- The vast majority of rural adolescents reported having friends who really cared about them and who helped them when they were having a hard time.
- Over 70 percent reported that a teacher at school believed they would be a success, and about 60 percent reported a teacher cared about them.
- Most rural students reported feelings of self-confidence and self-efficacy. For example, 87 percent said “I can do most things if I try,” and almost 80 percent said “There is a purpose to my life.”
- Three in four reported feelings of empathy, such as feeling bad when someone got their feelings hurt.
- About 82 percent of adolescents reported having “goals and plans for the future.”

#### *Behavior*

- About half of rural adolescents ages 12 to 17 worked for pay during the past 12 months, slightly higher than the percentage for youth in California as a whole.
- About 44 percent of rural adolescents were moderately physically active during at least 3 of the previous 7 days.
- Alcohol use among rural adolescents is relatively common. In addition, more than one in four rural California adolescents has ridden with a driver who had been drinking.
- About 8 percent of rural adolescents ever smoked cigarettes regularly; more than half of those began smoking before age 13. Almost 5 percent of rural adolescents smoked on at least 20 of the past 30 days.
- Almost one in four California adolescents was threatened by someone during the past 12 months. Geographic differences were not significant. About 12 percent of rural youth said they had been stalked by someone.

#### *Education*

- In 2002, students in rural California schools scored slightly higher on the Academic Performance Index than did students in other geographic areas.
- Students in rural areas were also less likely to drop out of school than were students in other areas. In the 2001-2002 school year, about 1.5 percent of students in rural schools dropped out of school, less than half the rate for those who attended schools in urban areas.
- About two-thirds of rural schools in the United States offer vocational education classes. There tend to be fewer types of vocational offerings available at rural than at non-rural schools, probably because rural schools have fewer resources to offer a variety of classes than do larger, urban or suburban schools.

#### *Physical and mental health*

- Just 45 percent of rural adolescents in California reported that they were in very good or excellent health in 2001. This was significantly lower than the 52

percent of all California adolescents who were reported to be in very good or excellent health.

- About 14 percent of rural youth in California had no health insurance in 2001, compared with 11 percent of adolescents statewide. Rural California youth were also more likely than other adolescents to have insurance through public programs such as Medi-Cal or Healthy Families; more than 1 in 4 rural adolescents had coverage through Medi-Cal. Fewer than half of rural adolescents had employer-sponsored health insurance.
- Over 8 percent of rural youth in California said they felt “downhearted and sad” during most or all of the previous 4 weeks. About 7 percent felt nervous most or all of the time during the past 4 weeks.

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## What is rural?

There are several definitions of what areas might be considered rural. Generally, rural areas are those not in a city or large town. However, the definitions of rural used in this report vary depending on what urban/rural variable was available within the data source used in each particular graph. Below are some definitions that are used within this report.

For the 2000 Census, the definition of rural used by the United States Census Bureau is all territory, population, and housing units located outside of urbanized areas (UAs) and urbanized clusters (UCs). Boundaries of urbanized areas and urbanized clusters delineate densely settled areas, which consist of:

- core census block groups or blocks that have a population density of at least 1,000 people per square mile, and
- surrounding census blocks that have an overall density of at least 500 people per square mile.

In addition, under certain conditions, less densely settled territory may be part of each UA or UC. Rural areas may include named “places” (cities, towns, or communities with names) as well as areas that are not considered specific “places.” Geographic areas, such as census tracts, counties, metropolitan areas, and the territory outside metropolitan areas, often include both urban and rural territory, so the population and housing units they contain frequently are classified partly as urban and partly as rural. The Census Bureau classifies as “urban” all territory, population, and housing units located within an urbanized area or an urban cluster.

California Health Interview Survey (CHIS) data, used in several locations in this report, include a five-level variable for rural and urban produced by a demographic research company called Claritas. Claritas coded zip codes in California to five urbanization categories based on population density data from 1990, 2000, and 2001. Respondents to CHIS were coded to these categories depending on their zip code of residence.

Some data in this report were drawn from the California Department of Education (CDE). CDE has coded schools into eight geographic categories based on Census bureau data; the coding depends on the school's location within or outside of Metropolitan Statistical Areas, their status as an incorporated place (or not), and the size of the city or town in which the school is located, for those in cities or towns.

California has 58 counties and according to the California State Rural Health Association, only three are considered entirely urban (1). Twenty-nine of California's counties are considered totally rural. The California Rural Health Policy Council uses three definitions when describing rural, frontier and non-rural areas:

- “Rural” describes areas of less than 250 persons per square mile and not wholly containing an incorporated area of greater than 50,000;
- “Frontier” describes areas of less than 7 persons per square mile;
- “Non-rural” describes areas with more than 50,000 people and with more than 250 persons per square mile.

Using this definition, rural California includes 3.8 million residents, 11 percent of the total population, and 75 percent of the land mass in California. California's rural population is increasing: According to the 1990 Census, 3,232,000 people lived in rural areas in California. The 2000 Census reported there were 3,876,000 rural residents, an increase of 20 percent.

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# DEMOGRAPHICS

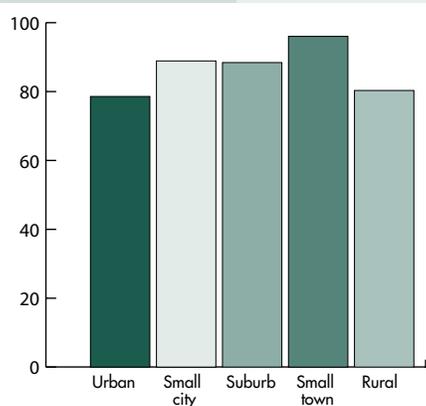
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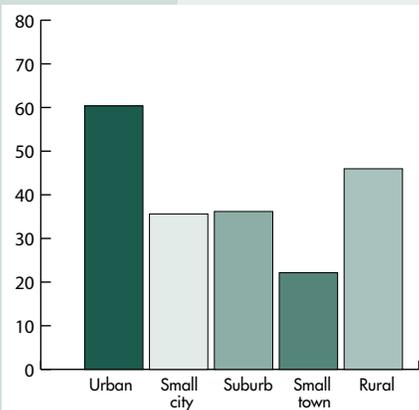
## Country of birth and language spoken at home

### Background

Country of birth has large impacts on education, and may affect health and other developmental outcomes. Parents and youth who do not speak English may encounter difficulties interacting with teachers, health care providers, and others. Foreign-born adolescents are more likely than the U.S.-born to drop out of high school (1); foreign-born parents have lower education levels than U.S.-born parents (2). Age also matters: youth who arrive in the U.S. at older ages are less likely than those coming earlier to finish high school (3). Health and employment may also be affected by country of birth. The foreign-born population is less likely than the U.S.-born to have health insurance (4). However, young (15-to-34 year old) immigrants appear to have lower mortality rates than the native-born (5). The stronger cultural identity of foreign-born adolescents may be protective; immigrant adolescents are subject to lower rates of depression than similar U.S.-born adolescents (6). Among Latinos, recent arrivals earn more and are less likely to be unemployed than second-generation Latino teens (7). Some research shows that immigrants to rural areas have lower incomes and higher unemployment rates than either immigrants to urban areas or the urban native-born population (8).



Percentage of adolescents ages 12-17 who were born in the United States, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who speak another language at home, California Health Interview Survey, 2001

### Country of birth among California youth

According to 2001 California Health Interview Survey data, about 85 percent of California adolescents were born in the United States. Youth in urban areas (78 percent) and youth in rural areas (80 percent) were less likely than youth in other geographic areas to have been born in the United States. About 96 percent of small-town adolescents were U.S. born.

A total of 11 percent of California adolescents, including 15 percent of adolescents in rural areas, are not U.S. citizens.

The relatively large number of California young people who were themselves born in another country, or whose parents were immigrants, has resulted in a large number of youth who speak a language other than English at home. In 2001, fully 45 percent of 12 to 17 year olds reported that they spoke a language other than English at home. This included 46 percent of rural adolescents and 60 percent of urban adolescents. The lowest percentage was found among small-town adolescents (22 percent).

Overall, 81 percent of California adolescents reported that they spoke English “very well,” including 77 percent of rural adolescents. Slightly less than 4 percent of adolescents (including 8 percent of adolescents in rural areas) reported that they spoke English “not well” or “not at all.” The percentage for rural youth was significantly higher than for small city, small town, or suburban youth and was higher (though not significantly) than the 6 percent reported for urban youth.

### Discussion

A high percentage of California children and youth are themselves immigrants or are children of immigrants. Although only 15 percent of California adolescents 12 to 17 were born in another country, close to half speak a language other than English at home. Having parents who may be limited in their ability to speak English may cause difficulties if the parents need to communicate with teachers, health care providers, or others in day-to-day life. Children of parents who do not speak English may encounter greater parent-child conflict as the child may be expected to translate for the parents (2).

The California education system has used various methods, from bilingual education to ESL classes to immersion, to serve children who speak other languages. There are many educational programs designed to address the unique needs of immigrant adolescents (9). The significantly higher proportion of adolescents in rural areas who report they speak English “not well” or “not at all” is influenced by the high percentage of foreign-born adolescents in rural areas. However, this high percentage may also stem from problems in the educational system available to rural, foreign-born youth. It is possible that schools in rural areas may be less well equipped to deal with children who do not speak English than are schools in urban or suburban areas. The large number of youth in rural areas who speak English “not well” or “not at all” will be poorly equipped to obtain higher education or high-wage jobs as they age into adulthood.

**Methods**

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked both adolescents and their parents in which country they were born.

**Race/ethnicity**

**Background**

California is one of the most ethnically diverse states in the union. This diversity has increased substantially over the past few decades as immigration has increased. The Census bureau projects racial and ethnic diversity to continue to increase (1). Youth from nonwhite racial and ethnic groups are at increased risk of health and developmental problems; much of this disparity results from socioeconomic differentials, but they also may bear the brunt of racism and discrimination, which can adversely impact well-being (2). Racial residential segregation adversely impacts education and employment opportunities and as such may impact health and development (3).

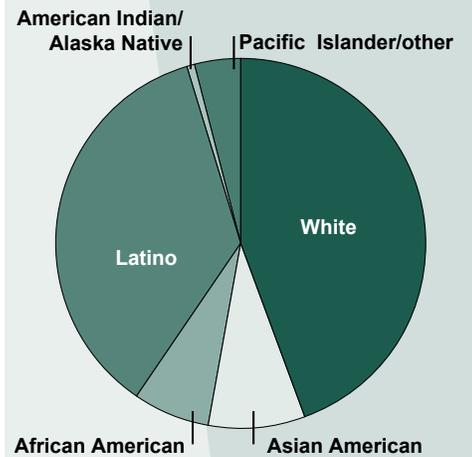
**The race/ethnicity of California youth**

According to 2001 California Health Interview Survey data, 44 percent of adolescents ages 12 to 17 were non-Hispanic white; 36 percent were Latino; 8 percent were Asian American; 7 percent were African American; 1 percent were American Indian or Alaska Native; and 4 percent were Pacific Islander, multiple race, or of another single race/ethnicity.

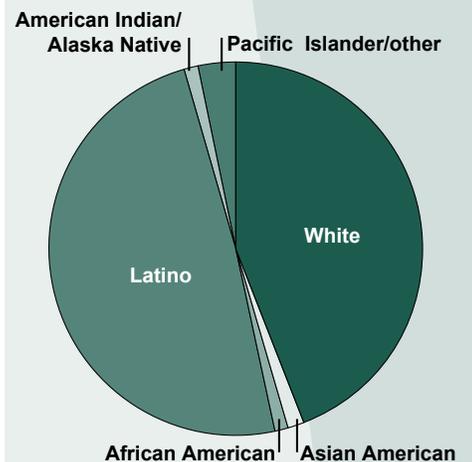
As in California as a whole, rural areas had no single racial/ethnic majority in the adolescent population. Rural adolescents were more likely than adolescents in other areas to be Latino; 48 percent of rural youth were Latino. Rural adolescents were about as likely as youth in the state as a whole to be white. About 44 percent of rural adolescents were white, 3 percent were Pacific Islander or other, about 1 percent were Asian, 1 percent were African American and 1 percent were American Indian/Alaska Native.

**Discussion**

Rural adolescents in California are predominantly Latino and white. They are more likely to be Latino than adolescents in California as a whole.



Race/ethnic distribution of all California adolescents, California Health Interview Survey, 2001



Race/ethnic distribution of rural adolescents, California Health Interview Survey, 2001

## Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked respondents to which racial and ethnic group(s) they belonged.

## Family structure and family size

### Background

Nationally, there were 10 million single-mother families in 2000, 2 million single-father families, and 26 million two-parent families (1). Children and adolescents who live with two parents tend to have greater financial resources available to them. Children and adolescents living in single-parent families are more likely to live in poverty (2). There is a large body of literature showing negative behavioral effects on adolescents of living in a single-parent family. For example, adolescents in single-parent families are less likely to graduate from high school, less likely to attend college, more likely to smoke, more likely to drink alcohol, and more likely to be sexually active than adolescents in two-parent families (3). They are also more likely to use illicit drugs (4). However, some research indicates the effects of family structure may have been overstated in previous research. Long-term impacts on adult income of living in a single-mother family disappear after adjusting for maternal occupation and employment (5), and effects on test scores and behaviors disappear after adjusting for income and parenting practices (6). Good parenting practices can mitigate the effects of poor economic circumstances on development (7). The financial effects of single parenting may also be mitigated by public programs. Among children of less-educated parents, children of single mothers appear to have better access to health care than children in two-parent families, probably because of public health insurance programs (8). Some research also suggests there are racial/ethnic differences in the impact of family structure on child well-being (9).

### Family structure among California adolescents

According to the 2001 California Health Interview Survey, about 65 percent of California adolescents ages 12 to 17 lived with two married parents. Those may have included biological, adoptive, or stepparents. This percentage did not vary significantly by geographic area in California. (About 1 percent of adolescents lived with both their parents, but the parents were not married.)

About 8 percent of adolescents had parents who had never married (including 11 percent of rural adolescents), while about one in four had parents who were separated, divorced, or widowed. For all of these measures, there were no statistically significant geographic differences.

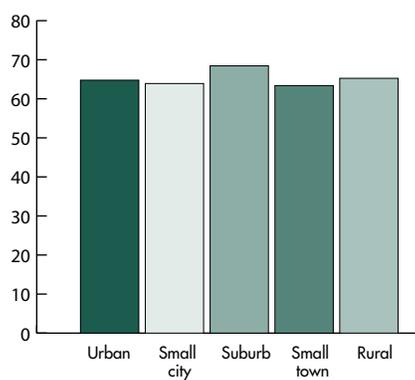
There were no statistically significant geographic differences in family size. Rural youth lived in families averaging 4.8 persons, compared with 4.7 for adolescents statewide.

### Discussion

Regardless of where they live, most California adolescents live with two married parents. However, one in three California adolescents lives with a single parent, including 32 percent of rural adolescents. There were few geographic differences in family structure among California teenagers.

### Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. The



Percentage of adolescents who lived with two married parents, California Health Interview Survey, 2001

CHIS is a random stratified telephone sample survey of Californians of all ages. For this topic, the CHIS asked adolescents and their parents about the family structure in their household.

## Parental education

### Background

Youth whose parents have a higher level of education are more likely to finish high school and continue on to college (1). In addition, higher levels of parental education are associated with positive parent-child interactions, such as reading to young children (2); a wide range of health and developmental outcomes, such as adolescent sexual behavior (3); and higher family incomes. Youth whose parents have higher education levels are at a significant advantage. For this section, we examined the percentage of adolescents whose parents had any education beyond high school.

### Rural California youth and parental education

Overall, slightly over half of California adolescents had a parent who had education beyond high school. There were large geographic differences in levels of completed parental education. The percentage of rural youth whose parents had more than a high school education (40 percent) was similar to the percentage for urban youth, but was significantly below the percentage for youth living in small towns, small cities, and suburbs.

### Discussion and recommendations

California's rural youth face significant challenges as a result of the relatively low levels of education of their parents. Parents who have not themselves attended college have a more difficult time helping their children to navigate the many hurdles of the college admissions process. They are likely to have lower levels of the income needed to finance higher education for their children. Rural youth in California may have especially great needs for school counseling and other out-of-home resources to encourage their continued academic development.

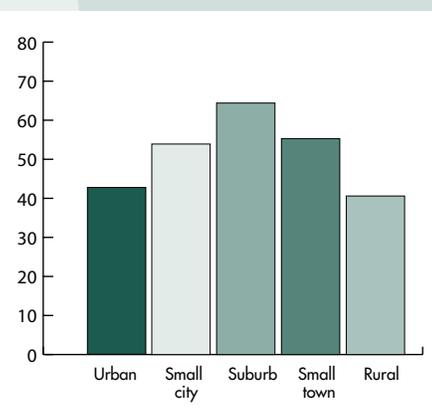
### Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. The questions on parental education were answered by the parent of the adolescent who was surveyed.

## Family income

### Background

Children and adolescents living in low-income families fare poorly in a wide range of areas, including education, health, housing, and many others. Adolescents living in poverty are more likely than those in higher-income families to have difficulty in school, to become a teenage parent, and, in later life, to be unemployed and have lower incomes (1). Children and adolescents in poor families have higher rates of depression, anxiety, and behavior problems (2) and are more likely to be overweight (3) than children in higher-income families. Adolescents in lower-income families are more likely than adolescents in higher-income families to smoke and less likely to exercise (4); they



Percentage of adolescents ages 12-17 whose parents had education beyond high school, California Health Interview Survey, 2001

have higher rates of some sexually transmitted diseases (5). In addition to one's own family's income, living in a low-income community also negatively impacts a range of developmental outcomes and behaviors (6-8).

### Family incomes of California youth

According to 2001 California Health Interview Survey data, 21 percent of adolescents ages 12 to 17 were living below the poverty line (families of four would have to earn less than \$18,104 in 2001 to be considered to be living in poverty). Both rural and urban adolescents were more likely than those in other areas to be poor. In 2001, 30 percent of rural adolescents and 31 percent of urban adolescents were living below the poverty line, compared with 12 percent of adolescents who lived in suburbs.

These numbers are substantially higher than those reported in the 2000 Census, which found that overall, 15.5 percent of rural 12-17 year olds were living below poverty in 1999, including 14.8 percent of 12-17 year olds who lived on rural farms; 18.3 percent of urban 12-17 year olds were reported to be below poverty. However, the Census's definition of 'rural' differs from that described in the California Health Interview Survey, which may be one reason for the disparity. Overall, the 2000 Census showed that rural households were slightly more likely to have incomes below \$50,000 annually than were other (urban and suburban) households.

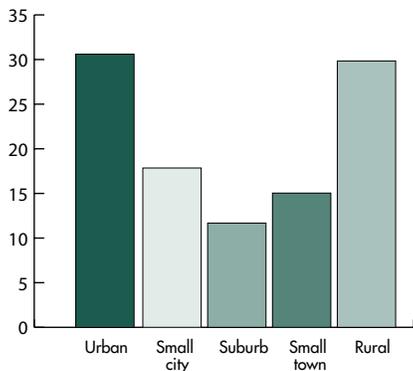
According to CHIS data, the percentage of adolescents whose families have low incomes – below 200% of poverty or less than \$36,208 for a family of four – was also high in rural areas. Overall, almost 59 percent of rural adolescents were living in low-income families, compared with 42 percent for adolescents in California as a whole. Just 28 percent of rural adolescents lived in a family whose income was at least 300 percent of the poverty line (over \$54,312 for a family of four in 2001), compared with 42 percent of adolescents in the state as a whole and 57 percent of suburban adolescents.

### Discussion

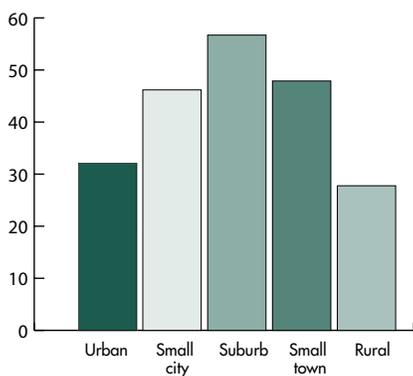
Rural adolescents in California frequently live in families of low income. Poverty rates for California adolescents are substantially higher than the 11.7 percent of the nation and 16.3 percent of all children who were poor nationally in 2001 (9). The percentage of adolescents who live in poverty was substantially higher in rural (and urban) areas than in small cities, small towns, or suburbs. Even in suburbs, however, a substantial number of adolescents lived below poverty or in low-income families.

### Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked parents of adolescents how much the family's income was and how large the family was, and calculated percentages of poverty based on their responses.



Percentage of adolescents whose families were living below the poverty line, California Health Interview Survey, 2001



Percentage of adolescents living in families earning at least 300 percent of the poverty line, California Health Interview Survey, 2001

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# PROTECTIVE FACTORS

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## Connectedness to family

### Background

Having a good relationship with their parents is critical to positive development among adolescents and has a beneficial effect on a range of aspects of young people's lives. Adolescents who report close relationships with their parents are more likely to delay first intercourse (1) and less likely to become pregnant in adolescence (2). They report better emotional states, fewer suicide attempts, and lower involvement with violence than youth who are poorly connected to their families (3). Adolescents with close relationships to parents are less likely to report negative behaviors or emotional disturbance (4). Having a close relationship with parents has also been demonstrated to have protective effects for tobacco, alcohol, and marijuana use (5) as well as for adolescent driving behavior, including the number of offenses and crashes in which the youth was involved (6).

### Rural California youth and parent-child connectedness

The 2001 California Health Interview Survey included eight measures of adolescents' connectedness to their parents, including measures of parental knowledge about behaviors and time use, and perceived caring on the part of parents.

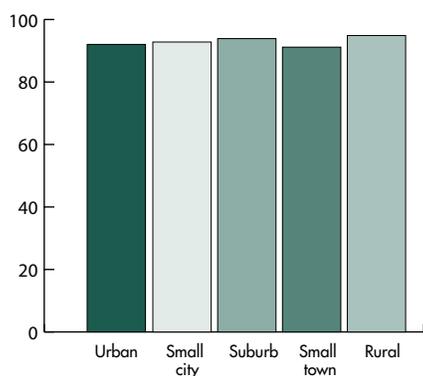
Most adolescents who participated in CHIS reported fairly strong connections to their parents. There were few significant geographic differences in parent-child connectedness. The measure with the strongest indicator of connectedness between parents and children was caring. Over 92 percent of young people reported that they believed their parents cared "very much" about them, including almost 95 percent of rural adolescents.

The measure suggesting the lowest connection was for parental knowledge about the adolescent's sexual activity (regardless of whether the youth was sexually active). Just over half of young people said their parents knew "a lot" about their sexual activity, including 49 percent of rural youth.

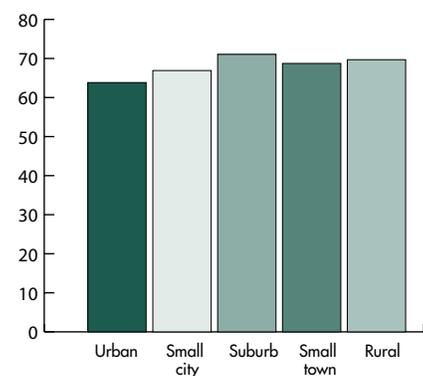
Parental knowledge about adolescents' free time seemed to be relatively low. Only about two-thirds of adolescents said their parents knew "a lot" about how they spent their free time. About 80 percent of adolescents reported their parents knew "a lot" about their whereabouts at night, and a similar percentage reported that there was an adult at home in the afternoons.

Parental knowledge about young people's alcohol use was somewhat less common than knowledge of their whereabouts. Overall, 72 percent of adolescents reported their parents knew a lot about their alcohol use (whether or not the adolescent drank), including 69 percent of rural youth. Slightly more than three-quarters of adolescents, including 76 percent of rural youth, said their parents knew "a lot" about their tobacco use (regardless of whether they used tobacco or not).

The California Healthy Kids survey, a school-based survey of adolescents in middle and high school, also asked several questions about connections to family. The following table shows some of the results reported by rural adolescents about the connections they have with their parents or other adults in their home.



Percentage of adolescents ages 12-17 who believed their parents cared "very much" about them, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who reported that their parents knew "a lot" about their free time, California Health Interview Survey, 2001

The majority of rural students had one or more adult family members who provided support, and most felt they made a difference in their families. Most students (62 percent) also reported that they helped to make decisions with their families.

<b>Family support and assets among rural adolescents,</b> <i>California Healthy Kids Survey, 1998-2002</i>	
A parent or adult in my home...	Percentage responding "pretty much" or "very much" true
...believes I will be a success.	85.9
...talks with me about my problems.	65.1
...listens to me when I have something to say.	76.9
I do things at home that make a difference.	61.3

### Discussion and recommendations

Connection to parents is an important protective factor for adolescent well-being. California's young people report being fairly well connected to their parents, with some exceptions. Rural youth in California reported a similar level of connection to their parents as did young people in other parts of the state. In general, adolescents felt overwhelmingly that their parents cared very much about them, and California Healthy Kids Survey data showed this was true for adolescents in rural areas as well. Areas in which parent-child relationships seemed to have more room for improvement included parental knowledge about their children's alcohol use, sexual activity, and free time.

### Methods

Data for the charts were drawn from the California Health Interview Survey (CHIS) for 2001. The questions on parental education were answered by the parent of the adolescent who was surveyed. Additional data were drawn from the California Healthy Kids Survey.

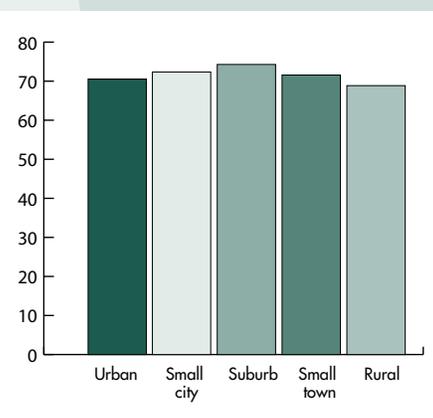
## Developmental assets

### Background

Developmental assets, also known as protective factors, have been demonstrated to be associated with long term success, including improved health in adolescence (1), higher levels of achieved education (2), and protection against a range of poor outcomes such as suicidal thoughts and behaviors, violence, substance abuse, and early sexual activity (3). While much research on adolescent health, well-being, and development has focused on risk factors and negative behaviors, emerging research in positive youth development shows that data on risk factors provide only a limited picture of youth. Even those who have few or no risk factors may have many additional needs to assist in their positive development. Promoting positive outcomes for youth requires a focus on the assets and strengths available to young people.

### Assets among rural youth in California

These data were drawn from the 1998-2002 California Healthy Kids Survey (CHKS) module on resiliency. These questions were asked of youth in the 7<sup>th</sup> to 12<sup>th</sup> grades. Slightly more than two-thirds of rural schools participating in the CHKS chose to administer the resiliency module. There were questions on a variety of genres of assets, including social support received from friends, family or others at home, teachers or



Percentage of adolescents ages 12-17 who reported that their parents knew "a lot" about their alcohol use, California Health Interview Survey, 2001

other adults at school, and other adults outside school and home. In addition, questions were included on activities in which the youth participated and whether they felt they were “making a difference.”

<b>Peer support among rural adolescents,</b> <i>California Healthy Kids Survey, 1998-2002</i>	
A friend my age...	Percentage responding “pretty much” or “very much” true
...really cares about me.	81.9
...helps me when I’m having a hard time.	74.1
...talks with me about my problems.	68.6
My friends get into a lot of trouble.	23.2

Most students in rural schools reported that they had friends their age who cared about them and who talked with them about their problems. Relatively few (about 17 percent) said a friend “teases me too much.”

<b>School assets among rural adolescents,</b> <i>California Healthy Kids Survey, 1998-2002</i>	
A teacher or adult at school...	Percentage responding “pretty much” or “very much” true
...believes I will be a success.	71.1
...cares about me.	60.2
...listens to me when I have something to say.	68.0
I do things at school that make a difference.	40.6

Between 60 and 71 percent of students reported having teachers or other adults at school who cared about and supported them. Somewhat less than half of students believed they made a difference at school, and a smaller percentage (37 percent) reported helping to decide things at school “like class activities or rules.”

<b>Other assets reported by rural adolescents in the California Healthy Kids Survey, 1998-2002</b>	
Statement	Percentage responding “pretty much” or “very much” true
I can do most things if I try.	86.7
I can stand up for myself without putting others down.	73.5
I participate in music, art, sports, or a hobby outside of my home and school.	60.6
There is a purpose to my life.	79.2
An adult outside of home or school believes that I will be a success.	81.9
I help other people outside of my home and school.	62.9
I have goals and plans for the future.	81.9
I plan to graduate from high school.	91.8

Some additional assets are listed above. Most students reported feeling self-confident, and most felt perceptive about their own moods and feelings. About three in four reported feelings of empathy: they felt bad “when someone gets their feelings hurt,” and a similar percentage reported that they “try to understand what other people go through.” About four in five had an adult outside of home or school whom they trusted and who cared about them. Most had goals and plans for the future; almost 92 percent planned to graduate from high school, and 87 percent planned to attend college or another school beyond high school.

**Discussion and recommendations**

The majority of rural students reported several developmental assets. Support from family members, peers, teachers or other adults at school, and other adults outside of home and school were all reported by a majority of students. A substantial number of students reported some problems; close to one in four said they felt they were alone in the world, and 27 percent said “A teacher or adult at school is mean to me.” About one in three said it was “not true” or “only a little true” that their friends tried to “do what is right,” and about one in four agreed that “my friends get into a lot of trouble.” Nonetheless, peer and family support generally appeared strong among rural adolescents, and most felt confident about themselves and their futures.

**Methods**

Data were drawn from the California Healthy Kids Survey.

School achievement

**Background**

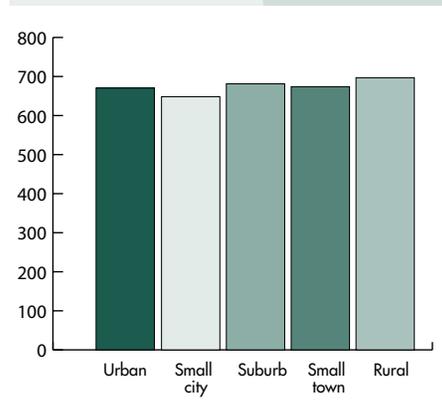
Rural education has often been described as an arena in which relatively low student achievement outcomes can be expected.(1) Nationally, in 1998, the percent of high school dropouts among persons 16-24 years old in metropolitan areas was 11.6 percent, compared to 12.7 percent in non-metropolitan areas (2) .

Rural student achievement has improved more than that of non-rural students in recent years. In a study designed to identify schooling factors affecting student achievement in rural and non-rural school settings, results indicated that while rural schools often have relatively fewer resources, the achievement scores of rural students have been comparable to national averages in virtually every subject tested (3).

Rural schools typically lack facilities, physical plants, course materials and educational programs typical of larger, more resource-rich districts, yet they also provide numerous positive factors which positively affect student achievement. These include strong staff commitment, low student-teacher ratios, individualized instruction, cooperative learning opportunities, and close ties to the community.

**Rural California academic achievement rates**

As indicated in the figure, students in rural areas scored higher on Academic Performance Index scores during the 2001-2002 school year than did students in all other geographic regions. Students in rural areas scored more similarly to students in suburban areas than they did to students living in urban, small cities and small towns.



Average Academic Performance Index scores by geographic location of the school, 2001-2002 school year, California

### **Discussion**

The achievement rates of students in rural schools supports research that indicates a connection between school environment, classroom resources and practices, and student outcomes. Rural schools tend to have social and organizational contexts conducive to higher performance, but they suffer from poorer curricular and instructional conditions. As California's rural population increases, the focus for educators will need to be on maintaining the positive qualities of rural education, while improving areas of instructional weakness. Collaboration across levels and agencies of government will be required for continued improvement in rural education (4).

### **Methods**

Data were drawn from the Academic Performance Index, School Report, through DataQuest, California Department of Education.

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## Vocational education and training opportunities

### **Background**

The transition from high school to productive jobs or higher education is an important consideration for youth in all communities. Vocational training and opportunities for youth in rural areas are of concern because businesses and schools often have inadequate funding or personnel to offer training necessary to prepare youth for their future goals. Training that reflects the job market available in the community is greatly needed for youth who are unable or choose not to attend college, and for those who wish to remain in their communities.

### **Vocational education available to rural youth**

A national survey of high school vocational programs available during 1998-99 examined the delivery methods by public high schools in urban, suburban, and rural areas. The differing needs of each local labor market impact the demand for vocational education. Vocational offerings may be more limited in rural areas than in urban and suburban areas in part because rural high schools tend to be smaller than high schools in other areas.

Overall, two-thirds of high schools offered at least one vocational education program. The percentage of schools in rural areas that offered such programs was identical to the percentage for the state as a whole.

Most vocational classes in each geographic area were offered by comprehensive high schools rather than by schools specifically geared toward vocational education, but that was particularly true in rural areas (fewer than 10 percent of vocational programs were in vocational-only schools).

In 1998-99 the average student enrollment in rural public high schools was 437, compared to 1,120 for schools in suburban and urban areas (1). According to the survey, the systems used to deliver vocational education were slightly different in urban areas than in suburban and rural areas. However, the number of programs offered and the specific programs offered did vary across locales. Among the public high schools that offered at least one program for any of the 28 selected occupations, an average of 25 percent of the programs offered by non-rural schools were for projected fast-growing occupations, compared to 17 percent for rural schools (2).

**Distribution of offerings**

An initial comparison of the distribution of vocational education offerings in urban, suburban and rural areas revealed no differences between urban and suburban areas. Therefore, for the analysis the suburban and urban areas were grouped together to compare to the rural areas. Rural high schools offered classes in an average of 3.7 occupations, somewhat fewer than what was offered at non-rural high schools (4.8 occupations on average).

Specifically, rural schools were less likely than non-rural to offer programs in technical occupations. Rural schools also were less likely than non-rural schools to offer programs for health and life science occupations. Rural schools were less likely than non-rural schools to offer most types of business and marketing classes. However, rural and non-rural schools were equally likely to offer classes in the areas of accountant/bookkeeper (46 percent).

There were some types of occupations that were more likely to be offered at rural schools than at non-rural schools. Rural schools were more likely than non-rural schools to offer training in welding (28 percent vs. 19 percent). Rural schools were slightly more likely to offer classes in agricultural science than were non-rural schools (30 percent vs. 27 percent). However, the percentage of schools offering any classes in the building trades was approximately the same for rural and non-rural schools (3).

The chart at the bottom right shows the percentage of schools offering five specific programs most commonly available in rural areas.

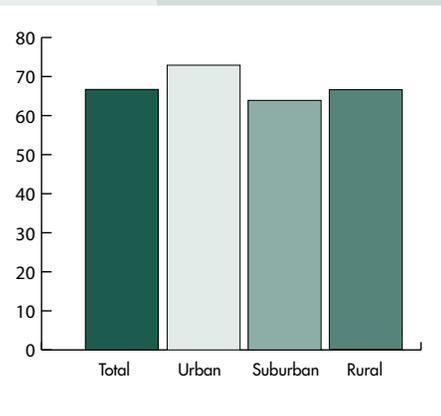
**Discussion**

There are many vocational classes and opportunities available to youth in California. Most remote communities offer some job training in the schools, although the extent and diversity of classes offered cannot compare to those of large cities. The results of the vocational programs survey show that the variety and diversity of course offerings in rural areas are significantly less than those offered overall and by non-rural schools. Generally, programs offered by non-rural schools were more likely than those offered by rural schools to prepare students for “urban” and fast-growing types of occupations, which may be a reflection of the labor market in both areas (4).

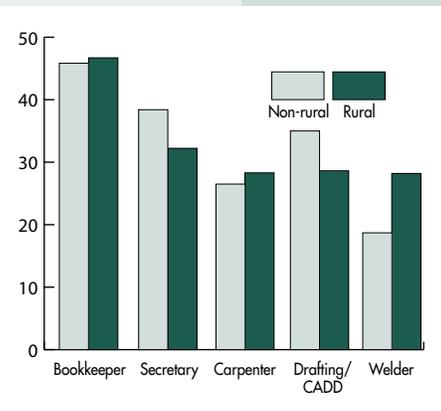
Numerous problems may impact vocational education at the rural level, including budget cuts expected for the coming fiscal year. As a result the state Regional Occupational Centers and Programs Office of the California Department of Education has mandated that the mission of the program (which serves 460,000 students in California each year) is to educate youth 16 years and older (5). Traditionally, rural school districts have received funding for average daily attendance (ADA) for youth who are 14 and 15 years old and enrolled in vocational education classes. Many valuable classes may be lost due to insufficient enrollment because the younger students were always counted on to fill this need. Vocational classes in high schools are not only essential for job training but also expand the schools’ elective options. Program directors also note that currently funds are unavailable to hire technicians to repair state-of-the-art equipment and that funding for training instructors is also insufficient (6).

**Methods**

Data were drawn from the U.S. Department of Education, National Center for Education Statistics and the Fast Response Survey System, “Survey on Vocational Programs in Secondary Schools.”



Percentage of public high schools offering at least one vocational education program, FRSS, Survey on Vocational Programs in Secondary Schools, 1998-1999.

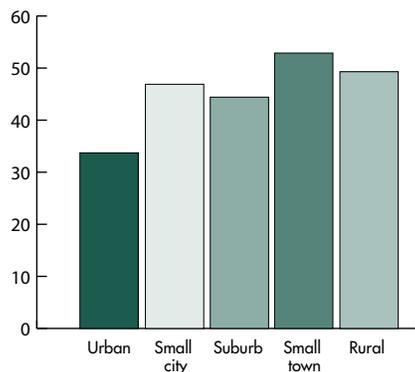


Percentage of public high schools offering the vocational programs most commonly offered in rural schools, United States, FRSS, Survey on Vocational Programs in Secondary Schools, 1998-1999.

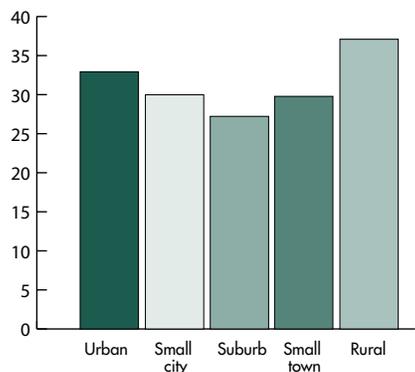
## Employment

### Background

Employment is common among adolescents in the United States. Data from the National Longitudinal Survey of Youth (NLSY) showed that 57 percent of 14-year-olds were employed at some point during the year (1). About half of these youth were in a traditional employee job, while the other half worked in more informal types of jobs, such as babysitting or mowing lawns. NLSY data showed substantial racial and ethnic and socioeconomic differences in employment; African American and Latino youth are less likely to work than white youth (1). However, some of these disparities have decreased over the past two decades (2). Residential segregation impacts youth employment; youth living in areas with more retail stores tend to have higher employment rates, and non-Hispanic white youth are more likely than other youth to live in areas where jobs are available (3). Work may impact the ability to spend time in school. Educational attainment tends to be lower for those working more than 20 hours a week during the school year, or for those not working at all, than for those working 1 to 20 hours per week (2).



Percentage of adolescents ages 12-17 who worked in the past 12 months, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who worked more than 20 hours a week during the previous summer, California Health Interview Survey, 2001

### Employment among California youth

According to 2001 California Health Interview Survey data, about 42 percent of adolescents ages 12 to 17 had worked for pay in the past 12 months. There were large geographic differences in the percentage of adolescents who had worked. Just one-third of urban youth had worked, but 49 percent of rural youth and 53 percent of small-town youth worked.

The CHIS also asked about the amount of time adolescents spent working. About 31 percent of adolescents had worked more than 20 hours a week during the previous summer. This included about 37 percent of rural youth (and just 27 percent of suburban youth).

About 27 percent of rural adolescents and 30 percent of all adolescents reported that they worked more than 10 hours a week during the school year.

### Discussion and recommendations

Substantial numbers of adolescents work for pay. This employment is an important way into the adult labor market, although time spent working can also have a negative impact on the ability to spend time pursuing education. Rural youth were at least as likely as youth elsewhere in California to be employed, and were significantly more likely than youth in urban areas to work.

### Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked adolescents whether they worked during the past year; how many hours per week they worked during the school year; and how many hours per week they worked during the summer.

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# HEALTH



## Health status and health conditions

### Background

Adolescence is generally one of the healthiest times of life. However, in addition to minor illnesses, there are many adolescents who have chronic conditions or injuries. The most common chronic condition is asthma; about 12 percent of children under 18 have been diagnosed with asthma (1). A similar percentage have respiratory allergies (1). Injuries are also common in adolescence. For adolescents, the primary causes of emergency room visits due to injury include being struck by or against an object or a person; falls; motor vehicle traffic-related injuries; and being cut by a sharp object (2). Falls tend to decrease with age, but motor vehicle accidents increase through the teenage years (2).

### Health status and health conditions among California youth

About 52 percent of 12 to 17 year olds in the California Health Interview Survey reported that they were in very good or excellent health. Just 45 percent of rural adolescents said they were in very good or excellent health, significantly lower than the 55-56 percent reported for youth living in small towns and small cities.

About 16 percent of California adolescents reported that a doctor had told them they had asthma. This included 13 percent of rural youth; the highest percentage was reported for youth in small cities, 19 percent of whom had been told they had asthma. However, geographic differences were not statistically significant.

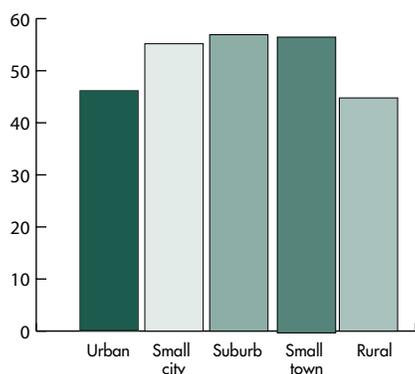
About 14 percent of adolescents reported that they had been injured seriously enough during the past 12 months to seek medical advice or treatment. This included about 15 percent of rural adolescents. Youth in small towns were significantly more likely than rural youth to report serious injuries. Both suburban and small-town youth were more likely to report serious injuries than urban youth.

About 12 percent of adolescents reported that they had missed 3 or more days of school due to illness during the past 4 weeks. There were no significant geographic differences in missing school due to illness.

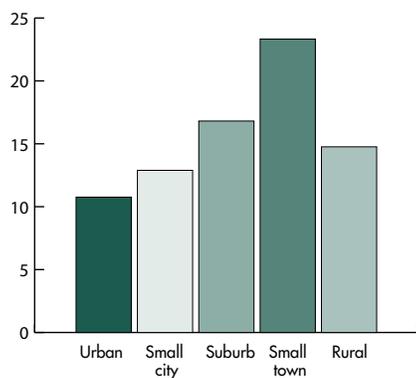
According to the 2000 Census, about 6.5 percent of rural young people ages 5 to 15 (a total of 20,506 rural young people) had at least one physical, sensory, mental, or self-care disability. There were no significant differences in disability rates between rural and urban youth.

### Discussion

Just over half of adolescents in California reported themselves to be in very good or excellent health in 2001. This percentage was substantially lower than the 82 percent of children 12 to 17 nationally who were reported by adult family members to be in very good or excellent health during 1998 (1). However, Latinos were less likely to report themselves as being in very good or excellent health than non-Hispanic whites (75 percent of Latino adolescents said they were in very good or excellent health compared with 88 percent of white adolescents in 1998 [1]), so the relatively large percentage of Latinos in the CHIS may have been one reason the rates were low.



Percentage of adolescents ages 12-17 who reported that they were in very good or excellent health, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who reported that they had been seriously injured during the previous 12 months, California Health Interview Survey, 2001

The percentage of California adolescents who reported they had asthma (16 percent) was similar to the percentage for adolescents nationwide (about 15 percent) (2). The 14 percent who reported injuries serious enough to seek medical care was slightly less than the 17 percent of 12 to 17 year olds nationwide who had such an episode during 1998 (2).

**Methods**

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked the adolescent about his or her general health status, whether s/he had been diagnosed with asthma, and whether s/he had sought medical advice or treatment for an injury during the previous 12 months.

**Health insurance and health care**

**Background**

Health insurance is critical to obtaining needed health care. Uninsured children and adolescents generally receive less preventative care than insured children and therefore are at greater risk of hospitalization for preventable conditions (1).

California has one of the highest proportions of uninsured persons in the United States; during 1999-2001, 19.2 percent of Californians were uninsured, compared with 14.5 percent in the United States as a whole (2). The percentage of U.S. residents without health insurance increased between 2000 and 2001, after several years of declines (2). Young adults 18 to 24 are the least likely to be insured of any group; nationally, 11.7 percent of children under 18 were uninsured in 2001, as were 28.1 percent of young adults (2).

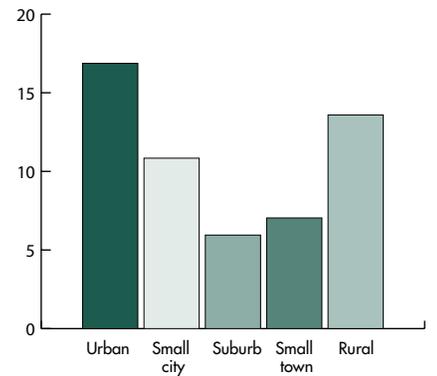
Routine physical examinations are recommended for adolescents to monitor general health and assess development. In addition, routine screening can detect illnesses that might otherwise go unnoticed, such as chlamydia (3).

**Health insurance among California youth**

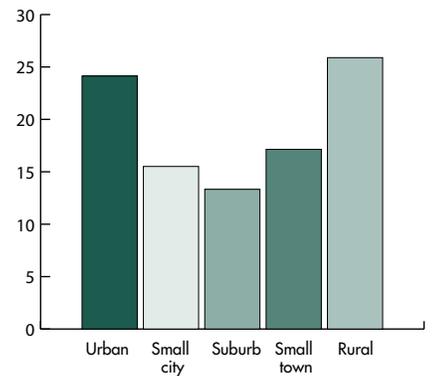
Data from the California Health Interview Survey indicate that more than 11 percent of adolescents 12 to 17 in California were uninsured in 2001. Suburban youth were the least likely to be uninsured, at 6 percent; 14 percent of rural youth were uninsured, as were 17 percent of urban adolescents.

About 19 percent of California adolescents are covered through the Medi-Cal program, and an additional 4 percent are covered by Healthy Families (California's name for the State Children's Health Insurance Program). Rural adolescents were almost twice as likely as suburban adolescents to be covered by Medi-Cal: over 25 percent of rural adolescents (and 24 percent of urban adolescents) received Medi-Cal coverage, compared with 13 percent of suburban adolescents. Rural adolescents were also more likely than other teenagers to be covered through the Healthy Families program (although this difference was not statistically significant).

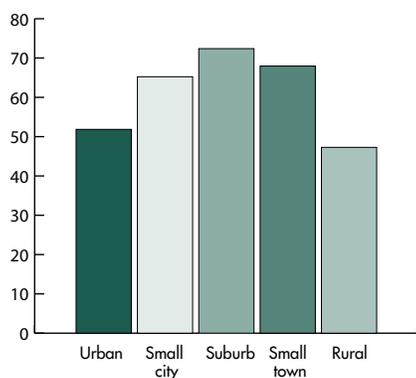
Overall, 61 percent of adolescents had employer-sponsored coverage, most through their parents' places of employment. However, rural adolescents were less likely than teens in other parts of California to have employer-sponsored health insurance. Just 47 percent of rural teenagers and 52 percent of urban teenagers were covered by employer-sponsored plans, compared with 72 percent of suburban adolescents. These differences were statistically significant.



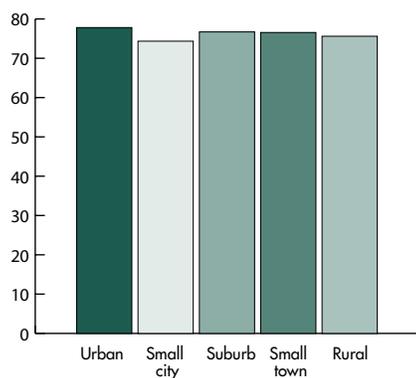
Percentage of adolescents ages 12-17 who had no health insurance, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who received Medi-Cal, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who had employer-sponsored health insurance, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who received a routine physical examination during the previous 12 months, California Health Interview Survey, 2001

A small number of adolescents, fewer than 1 percent overall but 2.1 percent in rural areas, have health insurance coverage through the Indian Health Service.

Overall, 84 percent of adolescents reported that they had a usual source of health care (a usual place or person from whom they obtained care). About 80 percent of rural adolescents reported having a usual source of care. (Youth who reported that their usual source of care was an emergency room were not included as having a usual source of care, as emergency rooms do not provide preventative care or continuity of care.)

About three-quarters of 12 to 17 year olds said they had had a routine physical examination or checkup during the past 12 months, and 85 percent had visited a dentist, dental hygienist, or orthodontist during that time period. Just 2 percent of adolescents reported that they had never had a dental visit. Rural adolescents were about as likely as others to have had a checkup in the previous 12 months but slightly less likely than others to have had a dental visit.

Reports of more serious health problems were less common. Just over one in five adolescents reported that they had visited an emergency room during the past 12 months; the percentage was the same for rural youth. About 4 percent of adolescents had been hospitalized in the past 12 months, and about 6 percent said there had been a time during the past 12 months when they did not get health care they needed.

Confidentiality in receiving needed health care seemed to be a concern among adolescents responding to the California Health Interview Survey. Only about one-third of adolescents, including 39 percent of rural adolescents, said they knew of a place where they could go to see a doctor without their parents knowing. Relatively few adolescents, about 3 percent (including 3 percent of rural adolescents), reported that they had been discriminated against when receiving health care during the previous 12 months.

## Discussion

Fewer than half of California's rural adolescents have health insurance coverage provided through an employer. This large gap is partially covered through public programs such as Medi-Cal and Healthy Families. However, a substantial number of California teenagers, including disproportionate numbers in rural as well as urban areas, remain uninsured. Large increases in the costs of employer-sponsored coverage have resulted in increases in costs to employees (4).

Rural areas tend to have higher percentages of individuals who have low wages, who are self-employed (e.g., farmers), and/or who work for small businesses (5); this job structure creates challenges in a health insurance system based primarily on insurance provided by a large employer. Large corporations often have lower insurance costs because of having a larger risk pool; larger organizations are more likely than small ones to offer health insurance (6). A declining state budget is likely to result in greater cutbacks in public health insurance programs that are critical to covering the half of rural and urban adolescents who are uninsured. The California Legislative Analyst's Office issued a report indicating that HMOs have been withdrawing from rural communities in California, further exacerbating the problems rural children, youth, and adults have in obtaining needed health care (7).

The percentage of adolescents who reported that they had a usual source of health care other than an emergency department, about 80 percent for rural adolescents, was substantially lower than the 92 percent reported for adolescents 12 to 17 nationally in 1998 (8). Being uninsured is associated with having no usual source of care, as uninsured persons are likely to have a more difficult time finding a health care provider.

Most adolescents appeared to be receiving needed health care, although about 6 percent reported having a delay in receiving care during the past year.

Two-thirds of adolescents in California did not know of a way to receive health care without their parents knowing. The American Academy of Pediatrics affirms the right of adolescents to confidentiality in health care, except in life-threatening situations, although they believe providers should encourage adolescents to include their parents in health care decision making (9). Most adolescents want the ability to obtain confidential health care, although relatively few are able to do so (10).

## **Methods**

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked the adolescent and his or her parent extensive questions about coverage by a variety of health insurance types, including Medi-Cal, Healthy Families, insurance provided by an employer, Indian Health Service programs, and other programs.

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## Mental health

### **Background**

The Surgeon General's Report on Mental Health defines mental health as "a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity" (1). Understanding cognitive and social development is critical to comprehending mental health in childhood. Mental illness in children is believed to arise from interactions between characteristics of the child (including biological, psychological, and genetic factors) and his or her environment (including family relationships, peer and neighborhood factors, school and community factors); these factors interact to shape one another over the course of the child's development (1). The tendency of young people to adapt to their environments also affects their mental health (1). Mental illness is somewhat unlike other kinds of diseases in that frequently, behaviors and problems lie on a spectrum; differences may be measured in degrees rather than simply having a problem or not (1). Some mental health problems of young people, such as autism and schizophrenia, are believed to have primarily biologic origins. Others, such as depression and anxiety, may have a biological component but may also result from psychosocial and/or environmental factors. The most serious physical outcome of depression is suicide. Nationally, 25 percent of girls and 14 percent of boys in grades 9-12 in 1999 reported seriously considering or attempting suicide (2).

### **Reported depression and anxiety among California youth**

There were few statistically significant geographic differences in reported mental health among California adolescents, using data from the 2001 California Health Interview Survey. However, generally speaking, youth living in suburbs tended to report the lowest rates of depression and anxiety, while both youth living in urban areas and youth living in rural areas tended to report higher rates.

*Depression:* About 5 percent of California adolescents ages 12 to 17 reported that they felt "downhearted and sad" most or all of the time during the past four weeks. Over 8 percent of rural youth felt "downhearted and sad" most or all of the time during the past 4 weeks. This percentage was not statistically different from youth in other areas of

California. Overall, 77 percent of California adolescents felt they were “a happy person” most or all of the time, including 72 percent of rural youth.

*Anxiety:* About 6 percent California adolescents reported feeling nervous most or all of the time during the past four weeks, including a little over 7 percent of rural adolescents.

In contrast, 63 percent of adolescents statewide (including 63 percent of rural adolescents) said they felt calm and peaceful most or all of the time during the past four weeks.

About 11 percent of adolescents 12 to 17 reported that they had received psychological or emotional counseling during the past 12 months. This percentage did not vary by geographic area.

Overall, about 31 percent of adolescents who had had a routine physical examination (checkup) during the past 12 months reported that their physician had asked about their emotions or moods. This included 27 percent of adolescents in rural areas, the lowest reported percentage for any area (although geographic differences were not statistically significant).

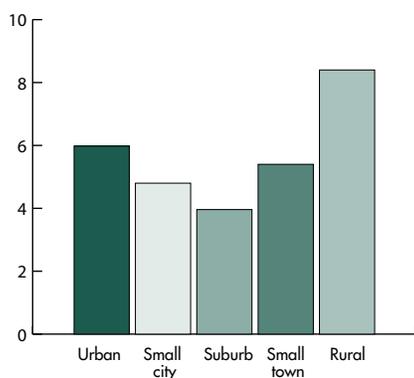
## Discussion

National estimates of the prevalence of major depression among adolescents ages 9 to 17 are about 6 percent (2). Anxiety disorders (including separation anxiety disorder, generalized anxiety disorder, social phobia, and obsessive-compulsive disorder) are more common among adolescents; the one-year prevalence of anxiety disorders is about 13 percent for youth ages 9 to 17 (2).

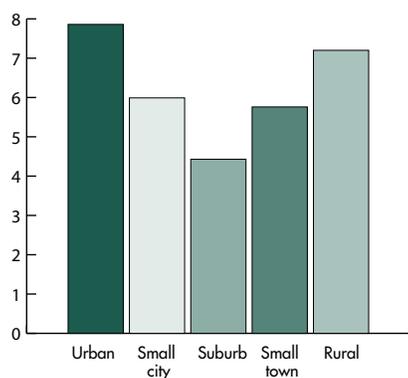
The percentage of California adolescents who reported feeling “downhearted and sad” most or all of the time is similar to the national prevalence of major depression; the percentage who felt nervous most or all of the time is substantially lower than national estimates of anxiety disorders, but the simple question asked in CHIS cannot be equated with a clinical diagnosis of anxiety disorder. Many other mental health problems, such as attention deficit/hyperactivity disorder, autism, other developmental delays, and schizophrenia, were not captured in the data sets we were able to use.

Rural adolescents in California tend to report somewhat higher levels of depression and anxiety than do suburban adolescents. This may be of particular concern because the concentration of medical and psychological services in urban areas means that mental health services are likely to be less available to rural adolescents than to youth living in other areas of the state. In addition, despite the somewhat higher levels of anxiety and depression, just over one in four had a physician specifically ask about their emotions or moods at their last doctor’s visit.

Lower rates of health insurance among rural families are also a concern, since health insurance is critical to obtaining adequate mental health services. Nationally, 21 percent of children and adolescents use mental health services each year; this includes the 16 percent of children who use school mental health services (1). (This percentage is significantly higher than the 11 percent of California adolescents who reported receiving psychological or emotional counseling; the mental health services figure likely includes more types of services than simply counseling.) Much of the mental health service system is funded by state and local governments (1); state budget cuts could have an impact on the availability of mental health services to rural, as well as other, adolescents.



Percentage of adolescents ages 12-17 who felt downhearted and sad most or all of the time, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who felt nervous most or all of the time, California Health Interview Survey, 2001

## Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. The CHIS is a random stratified telephone sample survey of Californians of all ages. For this topic, the CHIS asked how frequently the respondent felt down; felt downhearted and sad; felt nervous; or felt he/she was a happy person.

## Physical activity

### Background

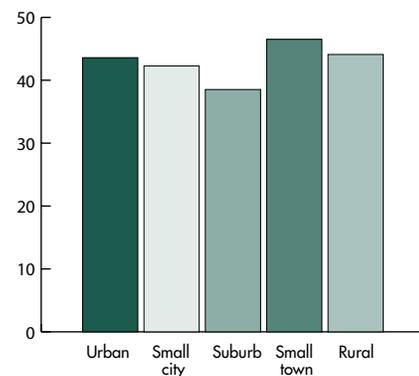
Developing healthy behaviors is an important component of youth development. Regular physical activity is important to maintaining cardiovascular health as well as a healthy weight; it may also prevent some forms of cancer. Physical fitness in childhood and adolescence is associated with physical activity in adulthood (1), which has a strong effect on overall health and mortality. The Surgeon General's Report on physical activity and health found that in the 1995 Youth Behavioral Risk Survey (YRBS), 64 percent of students in 9<sup>th</sup> to 12<sup>th</sup> grade exercised vigorously enough to make them "sweat and breathe hard" for at least 20 minutes during three or more of the previous seven days, up from 54 percent in the 1992 YRBS (2); this percentage increased to 65 percent in 1999 (3). The report also found that physical activity levels declined dramatically during adolescence; 71 percent of 12-year-old boys reported regular physical activity, compared with just 42 percent of 21-year-old men. Corresponding values for females were 66 percent at age 12 and 30 percent at age 21. The *Healthy People 2010* goal for vigorous physical activity in adolescents is for 85 percent of 9<sup>th</sup>-12<sup>th</sup> graders to report vigorous physical activity for at least 20 minutes, 3 or more days per week; a separate goal is for 35 percent to undertake moderate activity for at least 30 minutes, 5 days per week (3).

### Rural California youth and physical activity

Overall, 42 percent of adolescents in the CHIS said that they were moderately active for at least 3 of the past 7 days. This included 44 percent of rural adolescents. There were no statistically significant geographic differences in reported levels of physical activity. Weight lifting and other strength training activities were more commonly reported than moderate physical activity. About 69 percent of California adolescents said they had done exercises to strengthen their muscles in the past 7 days, including 71 percent of rural adolescents. In addition, 59 percent of rural adolescents and 58 percent of adolescents statewide said they played on at least one sports team in the past year.

### Discussion

Rural youth appeared to have about the same level of physical activity as youth in other areas of California. However, the overall level of moderate physical activity reported among California adolescents is relatively low and substantially below that reported in the national Youth Risk Behavior Survey, and is nowhere near the values recommended by the *Healthy People 2010* goals. A majority of adolescents in California, including 56 percent of rural adolescents, did not participate in even moderate levels of regular physical activity in 2001. However, larger numbers of adolescents appear to participate in weight lifting and other strength training activities. It may be more difficult for rural youth than for others to find facilities nearby that allow young people to exercise. The relatively low level of physical activity that California adolescents report is one reason for the increases in overweight observed in recent years. The California education code requires that each student



Percentage of adolescents ages 12-17 who said they exercised moderately during at least 3 of the past 7 days, California Health Interview Survey, 2001

participate in at least 400 minutes of physical education classes for every 10 school days (although students in 10<sup>th</sup> through 12<sup>th</sup> grade may be exempted to participate in driver training) (4); this regulation should imply that the number of students reporting moderate physical activity should be higher than what was reported in the California Health Interview Survey.

### Methods

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked whether the adolescent had exercised moderately in the past 7 days; had done muscle strengthening exercises in the past 7 days; or had played on a sports team during the past year.

## Overweight

### Background

The prevalence of overweight in children is higher in California than the national average and is increasing annually (1). The California Teenage Eating, Exercise and Nutrition Survey (CALTEENS, administered by the California Department of Health Service) data classified 31 percent of California youth age 12 – 17 as overweight or at risk of overweight (2).

Overweight in children and adolescents is generally caused by lack of physical activity, unhealthy eating patterns or a combination of both with genetics and lifestyle playing important roles.

*The Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity* identifies several problems associated with overweight in children and adolescents.

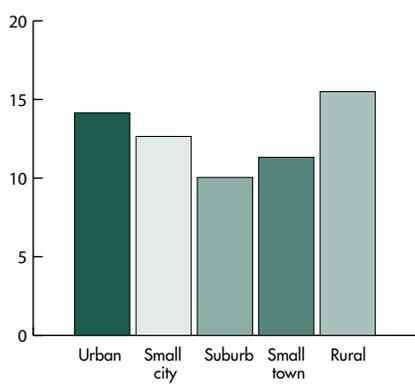
- Risk factors for heart disease, such as high cholesterol and high blood pressure, occur with increased frequency in overweight children and adolescents compared to children with a healthy weight.
- Type 2 diabetes, previously considered an adult disease and frequently associated with overweight, has increased dramatically in children and adolescents.
- Overweight adolescents have a 70 percent chance of becoming overweight or obese as adults.
- Social discrimination, which is associated with poor-self esteem and depression (3), occurs with greater frequency and is the most immediate consequence of overweight.

### Rural California youth and child overweight

According to the 2001 California Health Interview Survey (CHIS), about 12.5 percent of California adolescents ages 12 to 17 were overweight. CHIS is a telephone survey, so overweight was classified according to self-reported weight and height.

Overall, male adolescents in the California Health Interview Survey (about 17 percent) were significantly more likely to report a weight that was classified as overweight than were females (about 8 percent).

Generally speaking, youth in suburban areas tended to have the lowest rates of overweight, while youth in rural areas had the highest rates (about 15.5 percent).



Percentage of adolescents ages 12-17 who were overweight, California Health Interview Survey, 2001

However, geographic differences in overweight rates were not statistically significant.

## **Discussion and recommendations**

Studies that assess the prevalence of overweight in children in rural areas are rare. The study conducted by California Center for Public Health Advocacy, "An Epidemic: Overweight and Unfit Children In California Assembly Districts" found that there were high rates of overweight and unfit children in all 80 Assembly districts in California (2).

However, rural life presents challenges and limitations that may impact both diet and lifestyle.

- **Access to prevention and treatment services.** Rural areas have difficulties attracting nutritionists as well as other health providers.
- **Travel distance to obtain service.** In areas where services may be available, the traveling distance to use these services make receiving services difficult.
- **Limited resources.** Smaller schools have fewer nutrition services.
- **Physical activity opportunities.** Rural areas have fewer exercise facilities and often fewer sidewalks.

The best place to start in child overweight is in prevention. Intervention must begin in preschool and include the family, community, school, health care, media and worksites.

## **Methods**

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked adolescents their weight and height, and overweight was determined by the 95<sup>th</sup> percentile of weight for height according to the Centers for Disease Control and Prevention's 2000 growth chart guidelines, located at <http://www.cdc.gov/growthcharts>.

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# **RISK FACTORS & BEHAVIORS**

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## Dropout rates

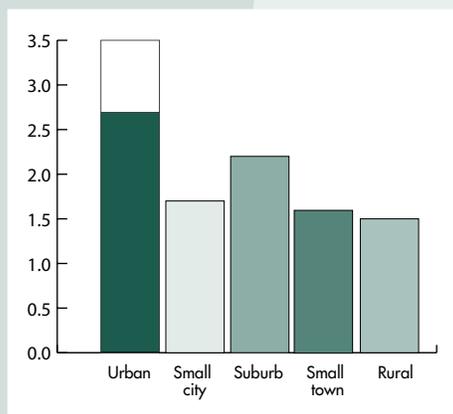
### Background

Over the past 50 years the value of a high school education has changed dramatically. While during the 1950's and through the 1970's a high school diploma was considered an avenue to a promising career, advances in technology have required highly skilled employees, making a high school diploma a minimum requirement into the labor market (1).

There are severe consequences to dropping out of high school. Dropouts are more likely to be unemployed than high school graduates and to earn less money when they do work (2). High school dropouts are also more likely to receive public assistance than high school graduates who do not go on to college (3). Nationally dropout rates have remained relatively stable since the 1980's (4).

### Rural California student dropout rates

The table shows dropout rates for California high school students during the 2001-2002 school year. Students in rural areas had the lowest dropout rates of students in all other geographic regions. The dropout rates for rural students were significantly lower than dropout rates for students in urban areas. Rural students' dropout rates were most similar to those in small cities and small towns.



Percentage of students who dropped out of California high schools, 2001-2002 school year

### Discussion

The factors which affect positive school achievement in rural areas (see *School Achievement*, earlier in this report) are reflected in the lower dropout rates for California rural students. Research has shown that rural schools tend to be a better place for learning in terms of teacher/student absenteeism, safe learning environments, student misbehavior and alcohol and drug use (4). In California, the rural population is increasing (5). As more people move out of nonrural areas into rural areas, geographic regions change, and those areas which are considered rural will, by definition, become nonrural. It may be that dropout rates for rural areas will remain lower than those for other regions, but there will be fewer rural areas in general. The charge to educators will be to determine ways to provide those conditions of rural education that lead to school achievement, to students in more populated regions, in the hopes of mitigating the negative influence on education that appears to come with more populated regions.

### Methods

Data were drawn from the data files for school dropout available on the California Department of Education website.

## Alcohol consumption

### Background

Alcohol consumption by young people may be associated with danger directly from the alcohol itself (poisoning), as well as with high-risk activities that may accompany

alcohol use, such as driving, drug use, and sexual activity. Healthy behaviors are an important component of youth development.

**Results**

Overall, 32 percent of adolescents in the CHIS said that they had ever had an alcoholic drink. CHIS data indicated that there was an inverse relationship between urbanicity and alcohol consumption. The percentage of rural youth who had had a drink (39 percent) was significantly higher than that for urban youth (29 percent).

Overall, about 19 percent of adolescents ages 12 to 17 reported they had ever ridden in a car with a driver who had been drinking. Rural youth (26 percent) were significantly more likely to report having ridden with a drinking driver than were California adolescents as a whole, and were also significantly more likely than urban adolescents (17 percent) to report riding with a driver who had been drinking.

**Discussion**

National data show that alcohol consumption is common among youth and can cause long-term problems. Data presented here show that alcohol consumption among adolescents appears to be more common in rural areas than in some other parts of California. Rural youth in California are more likely to drink alcohol, and are more likely to ride in a car with a driver who has been drinking, than youth in other areas.

Data from the national Youth Risk Behavior Survey indicate that almost 42 percent of ninth grade students reported having consumed alcohol before they were 13 (1), and about 44 percent of ninth grade students reported drinking in the past month. In contrast, about one-third of ninth graders reported smoking in the past month (1). One-fourth of ninth grade students reported binge drinking (having had five or more drinks on one occasion) in the past month (1). The gap between alcohol use by boys and girls has closed. Girls consume alcohol and binge drink at rates equal to boys (1). Rates of drinking differ among racial and ethnic minority groups. Among ninth graders, binge drinking was reported by 30 percent of Hispanic students and 27 percent of non-Hispanic white students, but only 15 percent of African American students and 5 percent of Asian-Pacific Islander students (2).

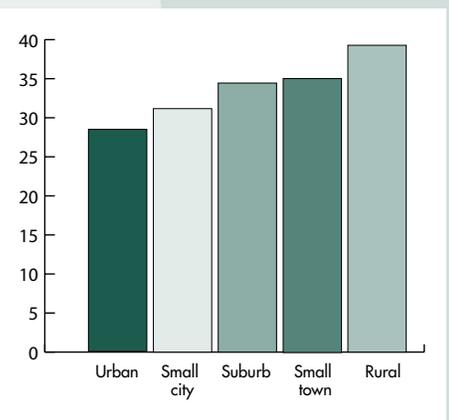
Forty percent of children who start drinking before the age of 15 will become alcoholics at some point in their lives (3). If the onset of drinking is delayed by 5 years, a child's risk of serious alcohol problems is decreased by 50 percent (3).

To design intervention programs to prevent alcohol abuse by adolescents, greater information is needed about:

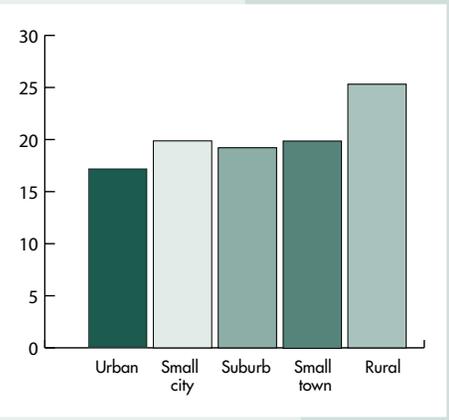
- the place of alcohol use in the context of rural young people's lifestyles and identify their perceptions of the benefits and disadvantages of alcohol use;
- factors which promote alcohol misuse and factors which protect against it;
- current patterns of alcohol consumption among rural young people, including the circumstances and types of drinking;
- rural young people's perceptions of factors that promote harmful drinking patterns, for example, peer attitudes, availability, income, media, etc.;
- rural young people's perceptions of factors that minimize and protect against harmful drinking, such as peer and parental attitudes, availability and restrictions on access, income, and so forth.

**Methods**

Data were drawn from the California Health Interview Survey (CHIS). For this topic,



Percentage of adolescents ages 12-17 who had ever had an alcoholic drink, California Health Interview Survey, 2001



Percentage of adolescents ages 12-17 who had ever ridden in a car with a driver who had been drinking alcohol, California Health Interview Survey, 2001

the CHIS asked whether the adolescent had ever had an alcoholic drink and whether the adolescent had ever ridden in a car with a driver who had been drinking.

## Smoking

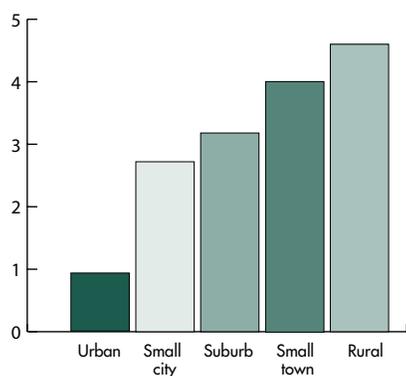
### Background

Cigarette smoking causes over 442,000 deaths in the United States annually (1). In addition to direct health effects on the smoker, smoking results in over 1,000 infant deaths annually, as well as deaths from causes like smoking-attributable fires and cancer and heart disease deaths due to secondhand smoke (1). Smoking cigarettes has been known to be unsafe for over thirty years, yet many adolescents and adults continue to smoke. Adults in California tend to have lower rates of smoking than adults in other states (2). The national *Healthy People 2010* goal is for no more than 16 percent of students in 9<sup>th</sup> to 12<sup>th</sup> grade to have smoked cigarettes in the past month (3). Nationally, about 14 percent of youth in 9<sup>th</sup> to 12<sup>th</sup> grade reported smoking at least 20 of the past 30 days in 2001 (4). Smoking tends to start early; among adolescents 12 to 17 in 1997, the average age of first cigarette use was 12 (3). National data show that male and female adolescents generally smoke at about the same rate, but non-Hispanic white adolescents are significantly more likely to smoke than are either African American or Hispanic adolescents (4).

### Rural California youth and cigarette smoking

Smoking data from the 2001 California Health Interview Survey pointed to a higher rate of smoking among rural California adolescents than among adolescents in other parts of the state. A total of 5 percent of California adolescents ages 12 to 17 reported that they had ever smoked cigarettes regularly, including 8.1 percent of rural adolescents. Almost half of those who had ever smoked regularly (and 53 percent of rural ever-smokers) began smoking before age 13.

Overall, 2.5 percent of California adolescents ages 12 to 17 were frequent smokers in 2001, defined as having smoked on at least 20 of the previous 30 days. This included 4.6 percent of rural adolescents, significantly higher than the 1.2 percent of urban adolescents who reported that they had done so. Rates of quitting smoking were not especially high; among adolescents who reported that they had ever smoked regularly, fewer than one in four reported that they had not smoked at all during the past month.



Percentage of adolescents ages 12-17 who had smoked cigarettes on at least 20 of the past 30 days, California Health Interview Survey, 2001

### Discussion

While their rates of smoking are not as high as students in some other parts of the country, rural youth in California tend to smoke cigarettes at higher rates than youth in other areas of California. For those who start, smoking tends to begin very early, often before the age of 13, despite the fact that purchasing cigarettes is illegal in California before the age of 18. Many materials are available for schools, for adults who work with youth, and for youth themselves, to help them prevent tobacco use among the young people they know (5). Those who wish to implement anti-smoking programs should exercise caution in selection of smoking prevention materials, however: some materials have been developed with funding from tobacco companies, and such programs have been shown to be detrimental to the objective of reducing tobacco use among adolescents (6).

**Methods**

Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this topic, the CHIS asked whether the respondent had ever smoked cigarettes regularly; those who had were then asked at what age they first smoked, how many days they had smoked during the previous 30 days, and for current smokers, how many cigarettes they had smoked per day.

**Drug use**

**Background**

Illicit drug use among teenagers has often been seen as a problem primarily for urban youth. However, research has shown that drug abuse among teen-agers is actually as common in rural areas and small towns as among urban youth. A recent survey of residents and community leaders conducted in northern California identified drug abuse as one of the top issues (1).

**Drug use among California youth**

Overall, one in three adolescents in the California Healthy Kids Survey said they had ever tried an illegal substance. The percentage of rural youth who had ever used illegal substances was essentially the same as the overall percentage and was not significantly different from the percentage reported for urban adolescents (32 percent).

The overall percentage of youth who had said they ever used marijuana in the CHKS was 31 percent, including 30 percent in urban areas and 34 percent for rural youth.

The statistics for adolescents who lived in towns that were not in metropolitan areas were noteworthy. For both questions, these youth had the highest percentage of use of all groups and overall; 42 percent said they had ever tried an illegal substance, and 39 percent said they had ever tried marijuana.

The second most commonly reported drug used was inhalants, reported by 13 percent of youth; ecstasy was reported by 8 percent.

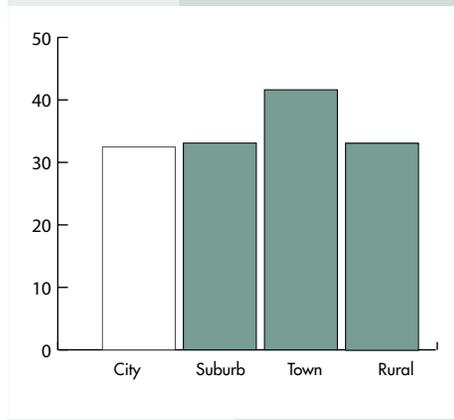
**Discussion**

Clearly the problems of substance abuse remain widespread among American young people. Today, nationwide, over half (53 percent) of students have tried an illicit drug by the time they finish high school. Three out of ten have used some illicit drug *other* than marijuana by the end of 12th grade, and two of those three (21 percent of all 12th graders) did so in the past 12 months (4).

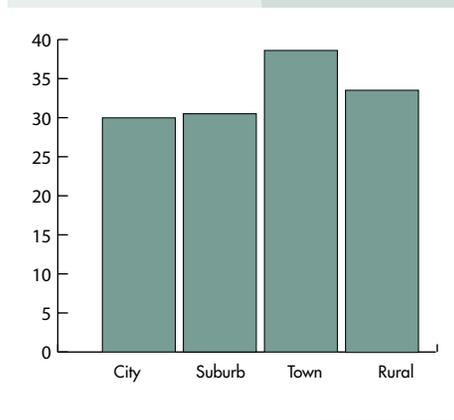
Experts regard rural areas as being especially vulnerable to certain drugs. Methamphetamines are usually manufactured in the countryside because the strong odor can more easily go undetected.

Equally pervasive is the availability of marijuana in rural areas where cultivation is common place and the substance readily available. Marijuana remains the most commonly used illegal drug in the United States (3).

Of particular interest is the high percent of adolescents in towns outside of metropolitan areas who have ever used an illegal substance (42 percent), or the percent who have used marijuana (38 percent). These values are substantially higher than those for both urban and rural areas. The implications of those percentages for rural communities



Percentage of adolescents who said they had ever used an illegal substance, California Healthy Kids Survey, 2001-2002



Percentage of adolescents who said they had ever used marijuana, California Healthy Kids Survey, 2001-2002

with close proximity to towns might have some bearing on the overall drug problem for rural adolescents.

In recent years, the use of a number of drugs declined more in the urban areas than in the non-urban ones, leaving the non-urban areas with higher rates of use, at least for a while. Crack and heroin use are not concentrated in urban areas, as is commonly believed, meaning that no parents should assume that their children are immune to these threats simply because they do not live in a city (3).

## Methods

Data for this survey were drawn from the California Healthy Kids Survey (CHKS) for the 2001-2002 school year. For this topic CHKS asked a series of questions related to overall drug use and specific use of eight different illegal drug substances. Supporting data were also taken from National Center on Addiction and Substance Abuse at Columbia University. The NCASA survey analyzed data from federal, state and local sources.

## Sexual activity

### Background

Sexual activity is fairly common among adolescents. National survey data suggest that between 40 and 50 percent of high school students have ever had sex. However, some recent data suggest that sexual experience among adolescents has been decreasing in recent years (1). Adolescence is an important period for development of healthy attitudes toward sexuality, healthy behaviors, and a sexual identity (sexual orientation and gender identity) (2). Much adolescent sexual expression and exploration is healthy and safe: for example, holding hands and kissing. However, unsafe sexual activity may place adolescents at risk for pregnancy and sexually transmitted infections. Education and support from adults can help adolescents make healthy choices about sexuality (2).

### Sexual activity among youth

Only limited adolescent sexual activity data are available for California, so data presented here are from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of young people. According to the Add Health study, about 41 percent of rural adolescents ages 12 to 18 reported that they had ever had sexual intercourse. This was not statistically significantly different than the 38 percent reported among urban and suburban adolescents.

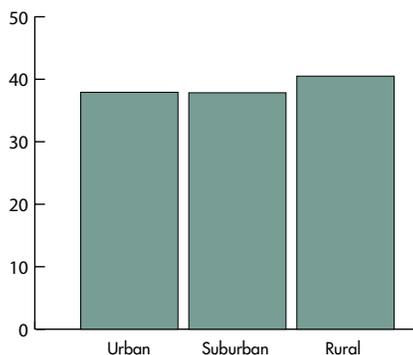
Among those adolescents who had had sex, between 63 and 67 percent had used birth control the first time they had sex. This also did not vary significantly by geographic area.

### Discussion

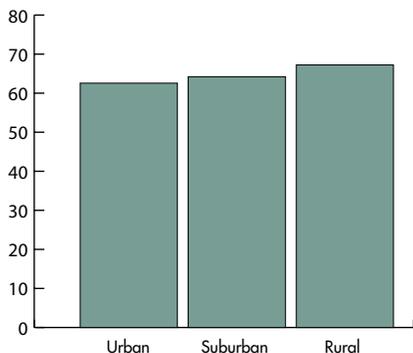
About four in ten adolescents have had sexual intercourse, and about one in three of them did not use birth control the first time they had sex. Comprehensive, age-appropriate sex education has been shown to delay the onset of sexual activity, reduce pregnancy rates, and reduce sexually transmitted disease rates (3). Rural youth were not any more or less likely than urban or suburban youth to be sexually active, according to Add Health data.

### Methods

Data were drawn from the National Longitudinal Study of Adolescent Health.



Percentage of adolescents ages 12-18 who reported they had ever had sex, National Longitudinal Study of Adolescent Health, 1994-95



Percentage of adolescents ages 12-18 who used contraception at first sex, National Longitudinal Study of Adolescent Health, 1994-95

## Youth crime

### Background

According to the Federal Bureau of Investigation (FBI), on a national basis juveniles accounted for 17 percent of all arrests and 16 percent of all violent crime arrests in the year 2000. Juveniles are defined as persons under the age of 18. The period of 1994 to 2000 saw a six-year consecutive drop in the rate of juveniles arrested for violent crimes (1). Violent crimes are categorized as aggravated assault, forcible rape, murder, and robbery. California's declining juvenile felony arrests have paralleled those at the national level for the same time period.

### California juvenile crime statistics

The U.S. Department of Justice and the California Department of Justice catalog statistics on adult and juvenile arrest records annually. The California Department of Justice releases juvenile felony arrest rates in different categories. These charts depict total juvenile felony arrests and juvenile felony arrests for violent offenses from 1992–2000. Juvenile felony arrest rates by county are also published; however, there is no information to indicate whether or not the arrests were for violent offenses (2).

There were over 93,000 arrests of youth under age 18 for felonies in California in 1992, but by 2000 this number had dropped to about 64,000.

The number of arrests of juveniles in California for violent felony crimes declined from 1994 to 2000.

### Crime in urban and rural areas

The California Department of Finance, Demographic Research Unit, designates 24 counties in California with a rural classification. The other 34 are listed as urban. The graph at right depicts rates of arrests per 1,000 youth ages 12 to 17 in rural and urban counties.

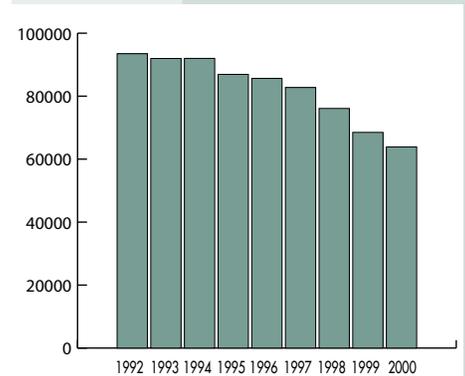
Overall, arrest rates per 1,000 youth declined fairly steadily in urban areas between 1992 and 1998, while in rural areas arrest rates increased slightly from 1992 to 1995 and then declined through 1998. Rural crime rates tended to be slightly lower than rates in urban counties, although the rural rate was higher than the urban rate in 1995.

### Discussion

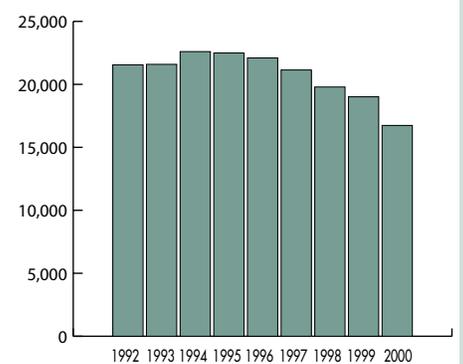
The vast majority of research on youth crime focuses on large metropolitan areas. Rural areas and small towns have, for the most part, been neglected as a field of study. Some studies have been done and they find that although overall crime rates are higher in urban than rural areas, the difference is not as large as is widely assumed (3). Data for California presented above suggest that arrest rates, at least, are similar among youth residing in rural and urban counties.

The most prevalent theory criminologists refer to when accounting for urban crime rates is social disorganization. Social disorganization is the inability of community members to achieve shared values or to solve jointly experienced problems. The principles of the social disorganization theory can apply to rural settings as well as urban (3). However, unlike in urban areas, in rural areas poverty is not associated with juvenile violent crime; in rural areas, poverty is negatively associated with residential instability (4).

Participation in crime peaks during the adolescent years (5). The decreasing supervision



Number of felony arrests among juveniles (youth under age 18), California, 1992-2000



Number of felony arrests among juveniles for violent offenses (homicide, rape, robbery, assault, or kidnapping), California, 1992-2000

as young people age, as well as the increased academic and social demands they face, may play a role in the higher crime rates observed among adolescents (5). Some other researchers have suggested that the combination of low self-control with opportunity may explain the peak of offending occurring in adolescence (6). Social variables, such as community integration or bonding, also appear to be related to juvenile crime rates (7).

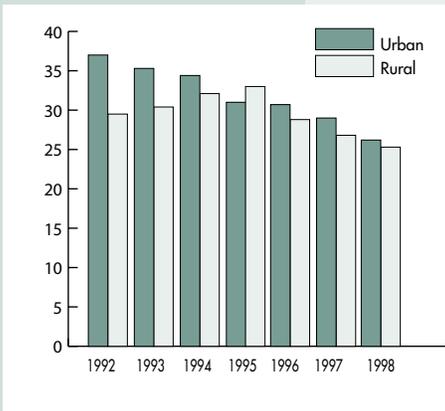
### Methods

Data for the first two charts were drawn from the *Juvenile Felony Arrests by Gender, Offense, and Arrest Rate, Table 3c*, Office of the Attorney General, State of California Department of Justice.

Urban and rural data were drawn from *Crime in Urban and Rural California, 2001*, Office of the Attorney General, State of California Department of Justice.

Counties considered to be rural by the Department of Finance include Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Imperial, Inyo, Kings, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, San Benito, Sierra, Siskiyou, Tehama, Trinity, and Tuolumne.

Urban counties include Alameda, Butte, Contra Costa, El Dorado, Fresno, Kern, Los Angeles, Madera, Marin, Merced, Monterey, Napa, Orange, Placer, Riverside, Sacramento, San Bernadino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Solano, Sonoma, Stanislaus, Sutter, Tulare, Ventura, Yolo, and Yuba. Some “urban” counties have sparsely populated rural areas.



Number of arrests per 1,000 youth, urban and rural counties, California, 1992-1998

## Violence and firearm use

### Background

Young people ages 12 to 17 are twice as likely as adults to be the victims of serious violent crimes, including robbery, rape, aggravated assault, and homicide (1). According to the National Crime Victimization Survey, adolescents ages 12 to 17 in 2000 experienced about 16 serious violent crimes for every 1,000 youth (2). Males were more than twice as likely as females to be victimized (2). Violence perpetrated by adolescents often develops from a context of family violence as well as individual behavior problems, as well as problems among peers, in school, and in the community (3).

Homicides among adolescents tripled in the United States between 1983 and 1993, primarily because of an increase in deaths due to firearms (2). Nationally, over 9 percent of adolescents have carried a weapon to school (not always a gun) (4); almost 29,000 people in the United States died from gun injuries in 2000, 38 percent of which injuries were due to homicide, and almost twice that number received nonfatal gun injuries (5). About one in four U.S. adolescents report that they have easy access to a gun in their home (6).

### California adolescents' experience with violence and firearms

The California Health Interview Survey asks several questions about experience of violence, focusing more on violence in the context of youths' relationships than on crime. In the 2001 California Health Interview Survey, slightly fewer than one in five youth ages 12 to 17 said they had been in a physical fight in the past twelve months.

## CALIFORNIA'S RURAL YOUTH

### 4-H Center for Youth Development

Almost 23 percent reported they had been threatened by someone during the past twelve months, including 30 percent of boys and 15 percent of girls.

Geographic differences in the percentage who had been threatened were not statistically significant.

About 11 percent of California adolescents reported that they had ever been stalked (including over 14 percent of urban youth and about 12 percent of rural youth); there was no difference between boys and girls in the percentage who reported they had been stalked. About seven percent of all adolescents reported they had been stalked during the past twelve months.

Urban youth were significantly more likely than suburban youth to report having been stalked; other geographic differences were not statistically significant.

A very small percentage of adolescents (about 0.6 percent) reported that they had been seriously and intentionally injured by someone during the past 12 months; geographic differences were not statistically significant. (About 4 percent of all adolescents reported having been seriously injured by someone else, but in most of those cases, they reported that the injuries were unintentional.)

One in three California adolescents ages 12 to 17 reported that they had ever held a gun. There were large geographic differences in response to this question, with the lowest amount (24 percent) among urban youth and the highest (48 percent) among small town youth.

About one in five adolescents reported they knew other teenagers who owned guns. Slightly less than 4 percent said they had ever been threatened with a gun; there were no statistically significant geographic differences in the percentage who reported having been threatened with a gun.

Despite the high prevalence of gun handling, over three in four adolescents (77 percent) said they would prefer to live in a world in which it was “impossible to get guns,” including 73 percent of rural adolescents. (The other choices were “easy to get guns” or “difficult to get guns.”)

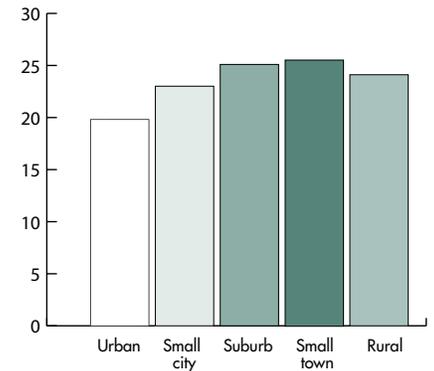
## Discussion

A significant proportion of California's adolescents have experienced or participated in violence. More than one in ten reported having been stalked, and almost one in four were threatened by someone during the past twelve months. The prevalence of these events generally did not vary by geographic areas in California. Rural and small-town areas are often thought of as being safer than urban ones; however, rural and small-town youth were at least as likely as others to report having been threatened or stalked, and they were no less likely than adolescents in other areas to report having been seriously and intentionally injured by someone else during the past 12 months.

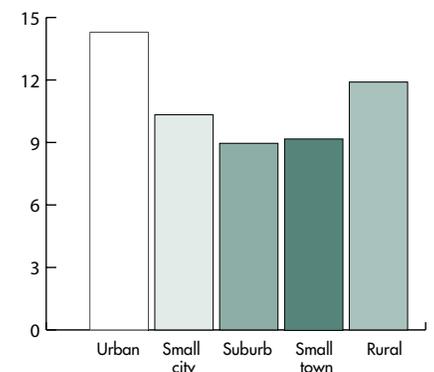
About one in three California adolescents have handled guns, including close to half of rural adolescents. Much of the time, this gun use may have taken place in the context of hunting; two-thirds of those who had ever held a gun said they had been hunting. However, that leaves at least one-third who had held a gun in another context, possibly a violent one, since 4 percent of adolescents had been threatened with a gun.

## Methods

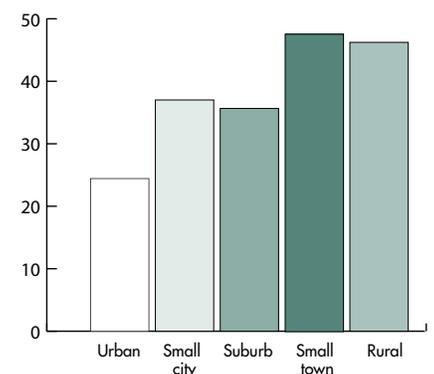
Data were drawn from the California Health Interview Survey (CHIS) for 2001. For this



Percentage of adolescents who have been threatened by someone in the past twelve months, California Health Interview Survey, 2001



Percentage of adolescents who have ever been stalked, California Health Interview Survey, 2001



Percentage of adolescents who have ever held a gun, California Health Interview Survey, 2001

topic, the CHIS asked adolescents whether they had been threatened by someone during the previous twelve months; whether they had been in a physical fight in the past twelve months; whether they had ever been stalked; whether they had been stalked during the previous twelve months; whether they had been seriously injured (enough to receive medical advice or treatment) by someone else during the past 12 months; if so, whether the injury was intentional or unintentional; whether they had ever held a gun; whether they knew anyone else their age who had held a gun; and whether they would prefer to live in a world in which it was easy, difficult, or impossible to get guns.

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## Data sets used in this report

The **California Health Interview Survey** (CHIS) is a random stratified telephone sample survey of Californians of all ages, taken every other year starting in 2001. The survey for adolescents was administered to 5,801 youth ages 12 to 17 in 2001. The overall response rate to the survey was about 38 percent and is weighted to be representative of the California population. The CHIS included a five-category variable for rural and urban; data in this report are presented according to that variable.

The **California Healthy Kids Survey** (CHKS) is a school-based paper survey of middle school students and high school students. 289,949 youth participated in CHKS during the 2001-02 school year. Youth were classified as 'urban' (a central city of a metropolitan area or another city over 250,000 population), 'suburban' (the fringe of a large city), 'town' (i.e. the school was located in a town outside a metropolitan area), or 'rural' according to the California Department of Education's coding for that particular school. Rural schools may have been located either inside or outside of a metropolitan statistical area (i.e. in a county that was part of a larger metro area). Questions on developmental assets were drawn from a module on resiliency that was optional for schools to administer; about 65 percent of students in rural schools (over 27,000) responded to these questions. Resiliency data for students in urban and suburban areas are not present because the percentage of urban and suburban schools that opted to take the resiliency module was relatively low, lower than that for rural schools.

The **National Longitudinal Study of Adolescent Health** (Add Health) is a longitudinal follow-up study of over 18,000 adolescents who were first surveyed at ages 12 to 18 in the 1994-95 school year. The respondents were followed up and resurveyed a year later, and then again in 2001. Schools were selected, and students within those schools as well as their parents and school administrators were surveyed on a variety of topics. The data are weighted to be nationally representative.