

Health Policy Research Brief

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Access to Safe Parks Helps Increase Physical Activity Among Teenagers

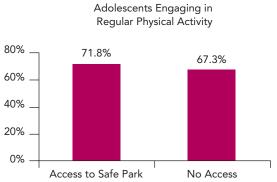
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ore than one out of every four adolescents in California (29.3%)—nearly one million teenagers—get less than the recommended levels of physical activity. Access to safe parks or other places for physical activity—along with other characteristics of the neighborhoods in which adolescents live—have an important effect on whether teens meet recommendations for physical activity and whether they get any activity at all.

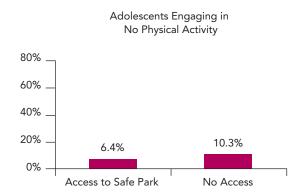
In California, the percent of teens engaging in regular physical activity is higher when teens have access to a safe park than when they have no access (71.8% vs. 67.3%; Exhibit 1). In addition, the percentage of teens who get *no* physical activity at all is higher among those with no access to a safe park than among those who have access to a safe park (10.3% vs. 6.4%).

However, one out of four California adolescents (25.3%)—more than 825,000 in all—has no access to a safe park, playground or open space for physical activity. This access is particularly important for adolescents living in urban areas and for less advantaged adolescents, such as those from low-income families, those living in multi-unit apartment buildings and those living in neighborhoods perceived as unsafe. This policy brief focuses on neighborhood

Exhibit 1 Percent of Adolescents Engaging in Regular Physical Activity and No Physical Activity by Access to a Safe Park, Ages 12-17, California 2003



Source: 2003 California Health Interview Survey



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Exhibit 2

Percent of Adolescents Engaging in Regular Physical Activity and No Physical Activity by Area of Residence and Access to a Safe Park, Ages 12-17, California 2003

	Regular Physical Activity %	No Physical Activity %
Area of Residence		
Urban	66.8	9.4
2nd City	73.5	6.3
Suburban	70.7	6.7
Rural	76.1	4.5
Area of Residence and Access to a	Safe Park	
Urban with Safe Park	68.6	7.8
Urban with no Safe Park	61.3	14.1
Rural with Safe Park	74.7	5.2
Rural with no Safe Park	78.7	3.2
All Adolescents	70.6	7.3

Source: 2003 California Health Interview Survey

characteristics that influence whether or not and how much adolescents engage in physical activity, based on data from the 2003 California Health Interview Survey (CHIS 2003).

Regular physical activity, along with a healthful diet, is key to preventing obesity and many chronic health conditions associated with obesity. Insufficient physical activity contributes to obesity and to risk of complications and death from chronic conditions, such as Type 2 diabetes, heart disease, hypertension and some cancers. It is also associated with greatly increased costs for medical care and lost productivity, estimated to cost California approximately \$13 billion a year.

Urban Teens Less Active, But Access to Parks Helps

The prevalence of regular physical activity is lower among teens living in urban areas than among those living in rural areas (66.8% and 76.1%, respectively; Exhibit 2). In addition, the percent of teens getting no physical activity is more than twice as high in urban areas (9.4%) as in rural areas (4.5%).

Access to a safe park has a bigger benefit for teens who live in cities. Among teens living in urban areas, the prevalence of regular physical activity is higher if they have access to a safe park (68.6% vs. 61.3%), and the prevalence of no physical activity is nearly cut in half if they have access to a safe park (14.1% vs. 7.8%; Exhibit 2). However, for teens living in rural areas, access to a safe park does not affect rates of regular physical activity or of no physical activity, presumably because they have other opportunities for being physically active.

Teen Physical Activity Related to Type of Housing and Access to Parks

Adolescents living in multi-unit apartment buildings get less physical activity than those living in houses. The prevalence of regular physical activity is higher among teens living in houses (72.9%) than among teens living in apartment buildings or other housing with more than one unit (63.1%; Exhibit 3). Moreover, the percentage of adolescents who get no physical activity at all is higher among teens living in apartment buildings (10.2%) than among those living in houses (6.5%).

Among teens living in apartment buildings, having access to a safe park increases the prevalence of regular physical activity from 56.1% to 65.6%, and it cuts the percent getting no physical activity in half (from

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	Regular Physical Activity %	No Physical Activity %
Type of Housing		
House	72.9	6.5
Multi-unit apartment building	63.1	10.2
Type of Housing and Access to a Safe Park	C	
House with Safe Park	73.6	5.9
House with no Safe Park	70.8	8.3
Apartment with Safe Park	65.6	8.0
Apartment with no Safe Park	56.1	16.3
All Adolescents	70.6	7.3

Source: 2003 California Health Interview Survey

16.3% to 8%; Exhibit 3). However, access to a safe park has little effect on teens living in houses, possibly because they have more opportunities for physical activity at home.

Low-income Teens Less Active, But Access to Parks Helps

Adolescents from low-income families get less physical activity than those from more affluent families. Approximately two-thirds of teens with family incomes below 300% of the Federal Poverty Level (FPL) engage in regular physical activity compared with three-fourths of teens with family incomes at or above that level (Exhibit 4).

Access to a safe park makes more of a difference for teens from moderate- and low-income families than for those with incomes at or above 300% of the poverty level—the upper half of the income distribution in California. Among teens from families with incomes below 300% FPL, 63.1% of those with no access to a safe park get regular physical activity compared with 68.7% of those with access to a safe park (Exhibit 4). In addition, 12% of those with no access to a safe park get no physical activity compared with 7.6% of those with access. Among teens from more affluent families (300% FPL and

above), approximately three-fourths of teens get regular physical activity and approximately 5-7% get no physical activity regardless of whether or not they have access to a safe park. Low-income teens have fewer options for physical activity, so they are more dependent on parks.

Teen Physical Activity Related to Perceptions of Neighborhood Safety

Three-quarters of a million adolescents in California—nearly one in four—live in neighborhoods in which their parents report that people are afraid to go out at night. Teens who live in neighborhoods that are perceived as unsafe get less activity. Approximately two-thirds (65.1%) living in neighborhoods perceived as unsafe engage in regular physical activity compared with nearly three-fourths (72.3%) of those who live in neighborhoods in which people are not afraid to go out at night (Exhibit 5). Moreover, the percent of teens getting no physical activity is nearly twice as high among teens living in neighborhoods perceived as unsafe (11.4%) as it is for teens living in neighborhoods perceived as safe at night (6.1%).

Having access to a safe park is particularly important for teens who live in neighborhoods

Percent of Adolescents Engaging in Regular Physical Activity and No Physical Activity by Family Income (as percent of Federal Poverty Level) and Access to a Safe Park, Ages 12-17, California 2003

	Regular Physical Activity %	No Physical Activity %
Federal Poverty Level		
Below 100%	67.5	9.1
100-199%	65.3	9.8
200-299%	68.9	7.5
300% and above	75.4	5.2
Federal Poverty Level and Access to a Saf	e Park	
Below 300% FPL with Safe Park	68.7	7.6
Below 300% FPL with No Safe Park	63.1	12.0
300% FPL and above with Safe Park	75.2	4.9
300% FPL and above with No Safe Park	76.3	6.5
All Adolescents	70.6	7.3

Note: In 2003, the Federal Poverty Level was \$12,384 for a family of two; \$14,680 for a family of three; and \$18,810 for a family of four.

Source: 2003 California Health Interview Survey

in which people are afraid to go out at night. Among teens living in neighborhoods perceived as unsafe, 16.3% of those with no access to a park that is safe during the day get no physical activity compared with 9% of those who have access to a park that is safe during the day (Exhibit 5). The percent of teens getting regular physical activity is slightly higher among teens with access to a safe park (66.4%) than among teens with no access (62.5%); however, this difference is not statistically significant.

Conclusions and Policy Recommendations

Despite the well-documented benefits of regular physical activity, nearly one million California teens do not get recommended levels of physical activity, including 240,000 who get no activity at all. Teens with no access to a safe park get less activity, as well as those who live in urban areas, those who live in apartment buildings, teens from low-income families, and those living in neighborhoods perceived as unsafe. Not only is access to a safe park important in encouraging adolescents to get more physical activity, it is critical for teens living in urban

Percent of Adolescents Engaging in Regular Physical Activity and No Physical Activity by Perceived Neighborhood Safety and Access to a Safe Park, Ages 12-17, California 2003

Exhibit 5

	Regular Physical Activity %	No Physical Activity %
Perceived Neighborhood Safety		
Safe at Night	72.3	6.1
Unsafe at Night	65.1	11.4
Perceived Neighborhood Safety and A	ccess to a Safe Park	
Safe at Night with Safe Park	73.2	5.7
Safe at Night with No Safe Park	69.4	7.7
Unsafe at Night with Safe Park	66.4	9.0
Unsafe at Night with No Safe Park	62.5	16.3
All Adolescents	70.6	7.3

Source: 2003 California Health Interview Survey

areas and for adolescents who live in apartment buildings, low-income families or unsafe neighborhoods.

Improving the characteristics of the places where adolescents live can have a positive impact on increasing physical activity among adolescents. Having access to parks appears to help teens overcome several barriers to physical activity. Increasing the availability of and access to safe spaces for physical activity is a particularly promising strategy for encouraging physical activity among all adolescents. Moreover, increasing availability of safe places for recreation can increase physical activity among those groups of adolescents who are less active. In addition to availability of and access to places for physical activity, the quality of the spaces that are available can have an impact on physical activity.3 State and local governments along with community members should focus on the following strategies for increasing availability of and access to safe spaces for activity:

- Support the availability of school recreation facilities for use by the community after school and on weekends.
- Improve the quality of existing recreational facilities, particularly in low-income and urban neighborhoods.
- Support programs, staffing and maintenance for existing parks and recreational facilities, particularly in low-income and urban neighborhoods. The availability of staff, equipment, and facilities in public spaces affects the quality and usefulness of those facilities. Inadequate resources and lack of trained staff can reduce the usefulness of already available facilities.⁴
- Improve police patrols around parks perceived as unsafe, to encourage more use by teens.
- Invest in the development of new parks and recreational facilities in disadvantaged areas currently lacking in such facilities.

Data Source

All statements in this report that compare rates for one group with another group reflect statistically significant differences (p<0.10) unless otherwise noted.

The findings in this brief are based on data from the 2003 California Health Interview Survey (CHIS 2003). CHIS 2003 completed interviews with 4,010 adolescents ages 12-17, drawn from every county in the state, in English, Spanish, Chinese (both Mandarin and Cantonese), Vietnamese and Korean. CHIS 2003 provides the most recent information available on adolescent physical activity for the state of California. Regular physical activity is defined as performing at least 20 minutes of vigorous activity on three or more of the last seven days, or at least 30 minutes of moderate activity on five or more of the last seven days. Adolescents who engaged in regular physical activity were considered to meet recommendations for physical activity. Adolescents were considered to get no physical activity if they reported performing no vigorous activity and no moderate activity in the past week. Adolescents were considered to have access to a safe park if they reported that there was a park or open space within walking distance of home and they perceived this park or open space to be safe during the day. Classification of area of residence is based on the population density of the adolescent's zip code.

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Notes

- U.S. Department of Health and Human Services.
 Physical activity and health: A report of the Surgeon General. Atlanta, GA. Department of Health and Human Services, Centers for Disease Control and Prevention, 1996.
- 2 Chenoweth D. (2005). The Economic Costs of Physical Inactivity, Obesity, and Overweight in California Adults During 2000. Cancer Prevention and Nutrition Section, California Department of Health Services, Sacramento, California. www.dbs.ca.gov/cpns.
- Giles-Corti B, Broomhall MH, Knuiman M, Collins C, Douglas K, Ng K, Lange A, Donovan RJ. Increasing walking: how important is distance to, attractiveness, and size of public open space? American Journal of Preventive Medicine. 2005; 28(2 Suppl 2):169-176. Romero AJ. Low-income neighborhood barriers and resources for adolescents' physical activity. Journal of Adolescent Health. 2005;36:253-259.
- 4 Romero AJ. Low-income neighborhood barriers and resources for adolescents' physical activity. *Journal of Adolescent Health*. 2005;36:253-259. Kahn EB, Ramsey LT, Brownson RC, Heath GW, Howze EH, Powell KE, Stone EJ, Rajab MW, Corso P. The effectiveness of interventions to increase physical activity. A systematic review. *American Journal of Preventive Medicine*. 2002;22(4 Suppl):73-107.

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