

ORIGINAL RESEARCH

School Factors Associated With the Percentage of Students Who Walk or Bike to School, School Health Policies and Practices Study, 2014

Sherry Everett Jones, PhD, JD, MPH; Sarah Sliwa, PhD

Suggested citation for this article: Everett Jones S, Sliwa S. School Factors Associated With the Percentage of Students Who Walk or Bike to School, School Health Policies and Practices Study, 2014. *Prev Chronic Dis* 2016;13:150573. DOI: <http://dx.doi.org/10.5888/pcd13.150573>.

bike to school, only 47.7% of schools had crossing guards, 62.4% had bicycle racks, and 33.3% provided promotional materials.

Conclusion

Several low-cost or no-cost strategies were associated with having 26% or more students who walked or biked to school, but these strategies are not commonly used in schools.

PEER REVIEWED

Abstract

Introduction

Active school transport, such as by walking or biking, increases physical activity levels, which has health and academic benefits for children. We examined school demographic and other characteristics to determine their association with the percentage of students who walk or bike to school.

Methods

We analyzed data from the Centers for Disease Control and Prevention's 2014 School Health Policies and Practices Study. The response rate for the module containing questions about transportation was 70% (N = 577). Multivariate logistic regression models examined whether certain school characteristics were associated with a school having 26% or more of students who walk or bike to school in the morning on an average school day.

Results

In most (61.5%) schools, 10% or fewer students walked or biked to school in the morning on an average school day; in 22.7% of schools, 26% or more students did so. Although having crossing guards (adjusted odds ratio [AOR] = 3.3; 95% confidence interval [CI], 1.9–6.0), having bicycle racks (AOR = 2.7; 95% CI, 1.2–5.8), and providing promotional materials to students or families on walking or biking to school (AOR = 2.9; 95% CI, 1.7–5.1) were associated with having 26% or more students who walk or

Introduction

Active transport to school, such as walking or biking, increases physical activity levels in children (1,2), and physical activity has health (1) and academic (3–5) benefits; however, the percentage of students who walk or bike to school has declined in recent decades (6,7). Concerns about time or convenience, distance from home to school, weather, and safety (related to traffic and crime) are common barriers to active school transport (8–12). Estimates vary, but studies generally find that fewer than 20% of students walk or bike to school (7,8,10). Factors that have been shown to support active school transport are the location of schools near students' homes as well as infrastructure and policies that address safety support (12–14). Historically, schools were sited near the families they served (15), but that practice has declined: in 1969, slightly more than half of students lived a mile or more from their schools; in 2001, three-quarters did (16).

Recognizing the benefits of active school transport, the 2015 campaign "Step it up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities" encourages walking to school through community-wide approaches that address safety concerns (17). In addition, *Healthy People 2020* includes 2 developmental objectives focusing on students walking and biking to school (18). Strategies meant to promote active transportation are not well evaluated (1). Studies that try to quantify the benefits of school and environmental policies have limited generalizability because of the specific populations or regions studied



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