A silver lining to higher prices at the pump? Gasoline prices and teen driving behaviors.

Submitted by admin on Fri, 03/14/2014 - 8:56am

Title
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Publication Type
Journal Article

Year of Publication
2014

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Journal
Am J Health Promot

Volume
28

Issue
3

Pagination
146-54

Date Published
2014 Jan-Feb

ISSN
0890-1171

PURPOSE: Existing literature shows negative relationships between gasoline price and motor vehicle crashes, particularly among teens. This paper extends that literature by evaluating the relationship between gasoline price and self-reported risky driving among teens.


SETTING: Secondary data from survey administered in private and public high schools across the United States.

SUBJECTS: Students in grades 9 through 12, surveyed biennially from 2003 to 2009 (n = 58,749).

MEASURES: Outcomes are (self-reported) driving without seatbelts, driving after consuming alcohol, and moderate physical activity (like walking or bicycling). State-level retail gasoline prices constitute the main predictor variable.

ANALYSIS: Multivariate logistic models are estimated for the full sample, as well as by gender, race/ethnicity, and age. Individual characteristics, state unemployment, and state driving policies are controlled for. Standard errors are clustered at the state level. Results are reported in form of risk differences.

RESULTS: Higher gasoline prices are negatively and significantly associated with driving without seatbelts. Associations are particularly strong for males and minorities. There are fewer statistical associations between gasoline prices and driving after drinking. Higher gasoline prices are positively associated with more moderate physical activity.
CONCLUSION: Higher gasoline prices are associated with less risky driving behaviors among teens, and they may be associated with more active forms of transportation, like walking and bicycling. The study limitations are discussed.