

Adult non-compliance with tobacco-free schools: A risk factor for youth tobacco use?

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Disclosure Statement

FUNDING

This work was supported by the Mississippi State Department of Health. The information, views, and opinions contained herein are those of the authors and do not necessarily reflect the views and opinions of this organization.

DECLARATION OF INTERESTS

The authors have indicated they have no potential conflicts of interest to disclose.



Background

- Mississippi implemented a law prohibiting tobacco use on public school property in 2000.
 - Criminal Code §97-32-9 (2000) prohibits students from possessing tobacco on any educational property.
 - Code §97-32-29 (2000) further **prohibits the use of tobacco on any educational property for adults**
 - Code § 97-32-3. Definitions (1997-2002) defines tobacco as any substance that contains tobacco, **including, but not limited to**, cigarettes, cigars, pipes, snuff, smoking tobacco or smokeless tobacco; "tobacco product" also means cigarette rolling papers.



Background

- This study examines compliance with this law as assessed by the percentage of students who report having seen school personnel using tobacco while on campus.
- Furthermore, we examined the association of seeing a teacher or coach using tobacco with student tobacco use.
- Data are from the 2016 and 2017 Mississippi Youth Tobacco Surveys



Methods

- Mississippi Youth Tobacco Survey administered to high school students in the fall of 2016 and 2017.
- Multi-stage sample design with public schools selected with a probability proportional to enrollment size.
- Classrooms randomly selected within schools and all students in selected classes were eligible for participation.
- Data were collected via anonymous, self-administered questionnaires.



Response Rates

- **2016**
 - School Response Rate, 90.0%
 - Student Response Rate, 87.1%
 - Overall Response Rate, 78.4%
- **2017**
 - School Response Rate, 84.0%
 - Student Response Rate, 88.5%
 - Overall Response Rate, 74.3%



Results, 2016

- Overall, 19.0% report having seen a teacher or coach use tobacco products on school property in the past 12 months.
- Among Mississippi high school students,
 - 9.4% report current cigarette smoking and
 - 7.1% report current smokeless tobacco use.



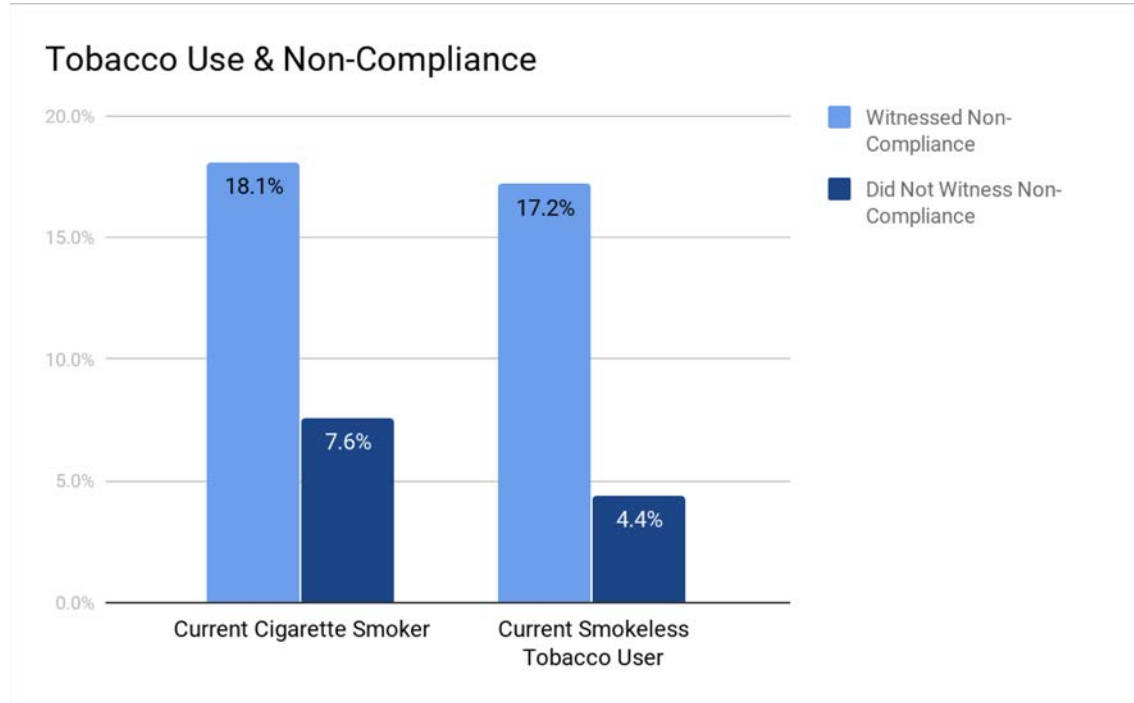
Results 2017

- Overall, 16.8% report having seen a teacher or coach use tobacco products on school property in the past 12 months.
- Among Mississippi high school students,
 - 7.2% report current cigarette smoking and
 - 6.6% report current smokeless tobacco use.



Results, 2016

Youth who report seeing non-compliance with the tobacco-free law are more likely to be current cigarette smokers (18.1%) and current smokeless tobacco users (17.2%) than students who do not report non-compliance (7.6%, 4.4%, respectively, $p < .001$).

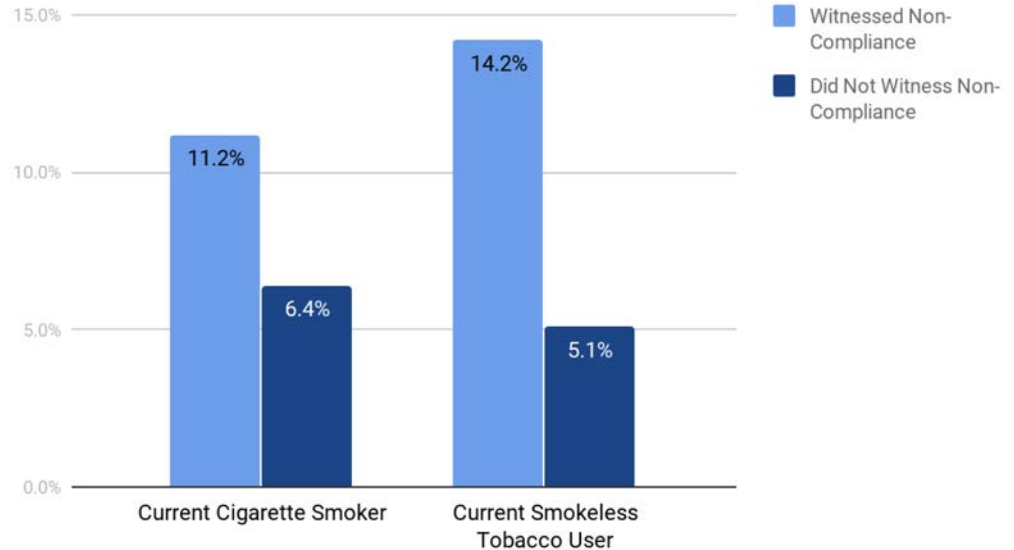




Results, 2017

Youth who report seeing non-compliance with the tobacco-free law are more likely to be current cigarette smokers (11.2%) and current smokeless tobacco users (14.2%) than students who do not report non-compliance (6.4%, 5.1%, respectively, $p < .05$).

Tobacco Use and Non-Compliance



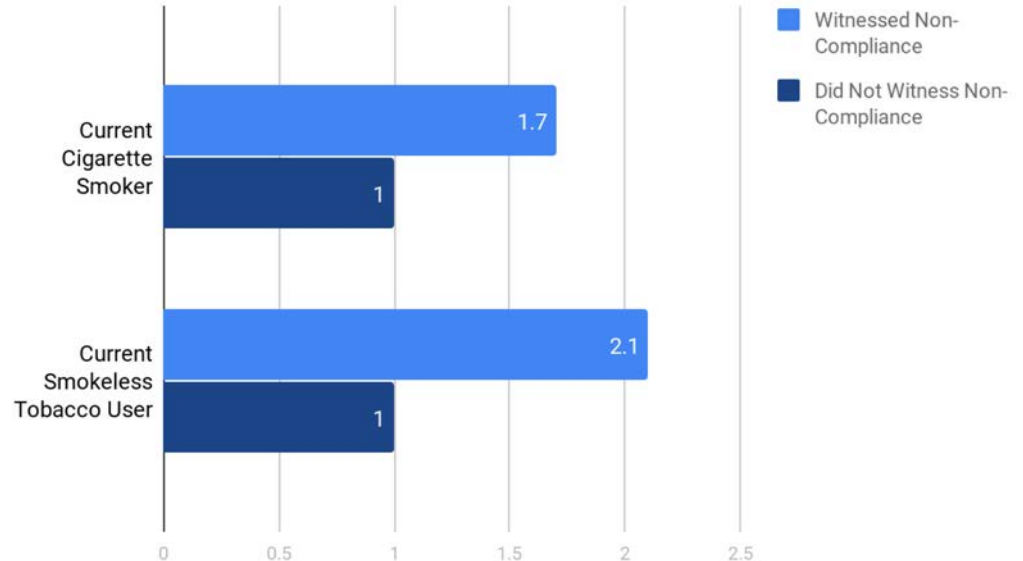


Multivariable Results, 2016

In multivariable analyses adjusting for sex, grade, race, and friends using cigarettes/smokeless tobacco;

- Students who witnessed noncompliance were 1.7 (1.1-2.7) as likely to be current cigarette smokers and 2.1 (1.3-3.4) as likely to be current smokeless tobacco users as students who did not witness noncompliance.

Adjusted Odds Ratios



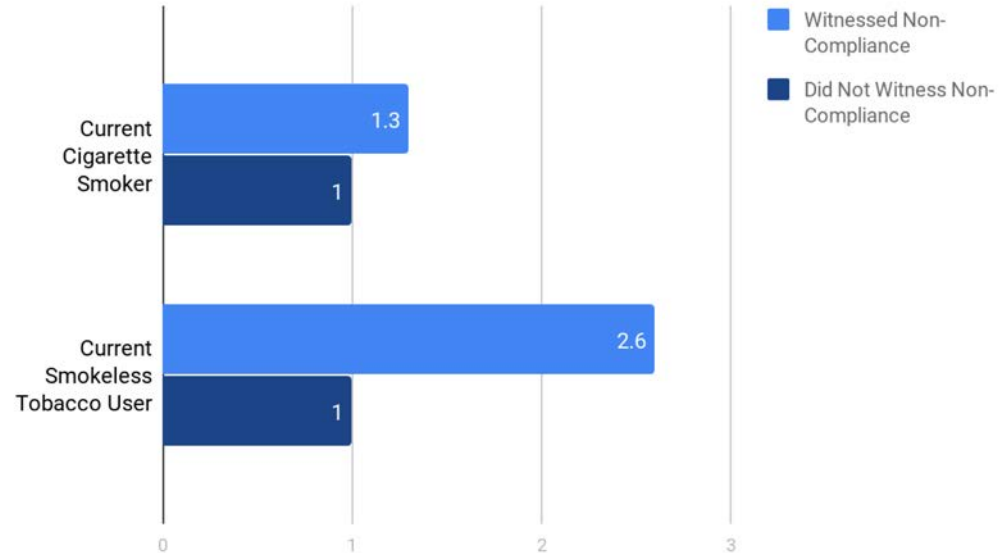


Multivariable Results, 2017

In multivariable analyses adjusting for sex, grade, race, and friends using cigarettes/smokeless tobacco;

- Students who witnessed noncompliance were 1.3 (0.8-2.3) as likely to be current cigarette smokers and 2.6 (1.8-3.6) as likely to be current smokeless tobacco users as students who did not witness noncompliance.

Adjusted Odds Ratios





Discussion

- Students who witness teachers and coaches using tobacco products on school property are approximately twice as likely to smoke cigarettes or dip tobacco.
- This risk factor persisted, even after adjusting for several factors strongly associated with risk of tobacco use.



Limitations

- Self-report data from students
- Tobacco use was not biologically validated
- Cross-sectional data
 - Possibility that students who use tobacco are more observant of teachers who are also using tobacco
- Data is limited to Mississippi



Conclusions

- Witnessing a teacher or coach use tobacco is associated with youth cigarette smoking and smokeless tobacco use, even after adjusting for having close friends who use these products.
- These findings suggest that enhanced compliance with tobacco-free schools is an important aspect of tobacco prevention.



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