

Substance Use and Suicide in Pacific Islander, American Indian, and Multiracial Youth

Andrew M. Subica, PhD,¹ Li-Tzy Wu, ScD^{2,3}

Introduction: National estimates of U.S. Native Hawaiian and other Pacific Islander (NHPI), American Indian/Alaskan Native (AIAN), and multiracial adolescent substance use and suicidality are scarce because of their small population sizes. The aim was to estimate the national prevalence of, and disparities in, substance use and suicidality among these understudied adolescents.

Methods: Analyses conducted in 2017 of U.S. adolescents (grades ninth to 12th) from the 1991–2015 Combined National Youth Behavioral Risk Surveys estimated (1) prevalence of lifetime and current (past 30-day) substance use, past 12-month depressed mood, and suicidality by racial group; and (2) AORs for depressed mood and suicidality regressed on current alcohol, cigarette, and marijuana use.

Results: Among 184,494 U.S. adolescents, alcohol, cigarettes, and marijuana were commonly used with lifetime prevalence of 75.32%, 58.11%, and 40.55%, respectively, and current prevalence of 44.51%, 24.58%, and 22.01%, respectively. Past 12-month prevalence of suicidal thoughts, suicide planning, and attempted suicide were 18.87%, 14.75%, and 7.98%, respectively. Relative to non-Hispanic whites, NHPI, AIAN, and multiracial adolescents had higher prevalence of using many illicit substances (e.g., marijuana, heroin), depressed mood, and suicidal thoughts, planning, and attempts ($p < 0.05$). Except for NHPIs and current alcohol use, current alcohol and cigarette use were independently associated with 2.0–2.3 times greater AORs ($p < 0.05$) for attempted suicide among the target adolescents.

Conclusions: U.S. NHPI, AIAN, and multiracial adolescents are disproportionately burdened by illicit substance use, depressed mood, and suicidality. Current alcohol and cigarette use may predispose these adolescents toward suicidality, offering potential pathways to alleviate suicide risk. *Am J Prev Med* 2018;■(■):■■■–■■■. © 2018 American Journal of Preventive Medicine. Published by Elsevier Inc. All rights reserved.

INTRODUCTION

Substance use poses a serious public health problem that affects adolescents of all racial backgrounds. In the U.S., 70% of high school seniors have used alcohol, 34% have used tobacco, and 49% tried illicit drugs,¹ with national studies generally finding higher substance use rates among non-Hispanic white and Hispanic versus African-American and Asian-American adolescents.^{2–4} By comparison, little is known about the national substance use patterns of Native Hawaiian and other Pacific Islander (NHPI), American Indian/Alaskan Native (AIAN), and multiracial adolescents,⁵ who may be at heightened risk for substance use⁵—and related

depressed mood and suicide^{6–8}—due to exposure to sizable socioeconomic and health disparities.⁹

Because NHPI, AIAN, and multiracial individuals compose the three smallest U.S. racial groups,¹⁰

From the ¹University of California, Riverside Center for Healthy Communities, School of Medicine, Riverside, California; ²Department of Psychiatry and Behavioral Sciences, Department of Medicine, Duke University Medical Center, Durham, North Carolina; and ³Duke Clinical Research Institute, Durham, North Carolina

Address correspondence to: Andrew M. Subica, PhD, University of California Riverside, Center for Healthy Communities, School of Medicine, 900 University Avenue, Riverside CA 92521. E-mail: subica@gmail.com. 0749-3797/\$36.00

<https://doi.org/10.1016/j.amepre.2018.02.003>

adolescents from these groups are rarely captured by major health surveys in sufficient numbers to systematically examine their national substance use patterns, or compare their data against other adolescent groups—particularly non-Hispanic whites. Accordingly, efforts to identify, target, and address their substance use disparities have been hindered by a lack of detailed information. To address this gap, the current study uses pooled data from the 1991–2015 Youth Risk Behavior Surveys (YRBS) to obtain larger sample sizes to examine the national prevalence of substance use among NHPI, AIAN, and multiracial adolescents. These large samples were further leveraged to explore these adolescents' prevalence of depressed mood and suicidality as adolescent suicide is an escalating national problem¹¹ that remains underexplored among NHPI, AIAN, and multiracial adolescents.

NHPIs comprise the smallest (but third fastest growing) U.S. racial group,¹⁰ restricting investigation of their substance use problems. Although persistently combined in health data with Asian Americans—who have very low substance use rates¹²—sparse de-aggregated data suggest that substance use may be prevalent, though understudied, among NHPI adolescents.¹² For example, Native Hawaiian adolescents experience greater alcohol problems compared with non-Hawaiians (i.e., alcohol use, binge drinking, chronic drinking),^{13,14} which increases their odds of violence¹⁴ and risky sexual behavior.¹⁵ Suicide is also a major problem affecting NHPIs. In the Pacific Islands, the adolescent suicide rates of NHPIs are among the world's highest,¹⁶ whereas in Hawaii, Native Hawaiian adolescents have significantly higher lifetime prevalence of attempted suicide (12.9%) than non-Hawaiians (9.6%).¹⁷

Although AIANs comprise the second smallest U.S. racial group,¹⁰ some data suggest that AIAN adolescents endure the highest substance use and suicide rates of all adolescents.^{2,18,19} Nationally, 48% of AIAN adolescents (vs 39% of non-Hispanic whites) have ever used any controlled substances,⁶ whereas AIAN child (aged 5–14 years) and adolescent/young adult (15–24 years) suicide rates are 6.6 and 4.0 times greater, respectively, than their non-AIAN peers.²⁰ Yet, despite their high prevalence, few studies have examined the associations between substance use and suicidality among these vulnerable adolescents.

Multiracial adolescents are the fastest growing U.S. youth group, increasing nearly 50% from 2000 to 2010.¹⁰ Yet, researchers know little about their substance use and suicide problems. Limited research has suggested multiracial adolescents use substances at rates similar to non-Hispanic whites,⁵ but are more likely to initiate alcohol, tobacco, and marijuana use and manifest behavioral

problems, including violence, depressed mood, and suicidality, than their monoracial peers.^{7,8,21}

On the basis of prior data from smaller sample sizes that U.S. NHPI, AIAN, and multiracial adolescents may be disproportionately burdened by substance use and suicide, a large nationally representative pooled sample of adolescents (N=184,494) is analyzed to (1) obtain national prevalence estimates of substance use, depressed mood, and suicidality in these understudied minority adolescents; and (2) identify disparities between these estimates relative to non-Hispanic white adolescents. Additionally, because substance use is an important risk factor for depressed mood and suicidality among U.S. adolescents,^{22,23} the associations of current alcohol, cigarette, and marijuana use (the three most commonly used substances by adolescents¹) with depressed mood and suicidality are examined among the target minority adolescents; data that could inform tailored behavioral health prevention approaches for these understudied adolescents.

METHODS

Study Sample

The YRBS is a school-based cross-sectional survey designed to capture the prevalence of health-risk behaviors for the leading causes of adolescent morbidity and mortality (e.g., suicide, vehicle accidents) across time and racial/ethnic populations.²⁴ Using a three-stage cluster sample design, the YRBS draws nationally representative samples of U.S. public and private school students in ninth to 12th grades, while oversampling certain racial minority groups to increase group estimate accuracy²⁴; making YRBS data ideally suited for this investigation. The primary sampling units are large-sized counties or groups of smaller adjacent counties, and student data are weighted to adjust for nonresponse, minority group oversampling, and to match national population projections for each survey year.²⁵

De-identified data of 184,494 adolescents (ninth to 12th grades) from the YRBS Combined National Dataset²⁵ were analyzed upon receiving University of California, Riverside IRB approval as exempt human subjects research. This data set combined all 13 biannually administered YRBS national survey waves from 1991 to 2015—rendering it one of the largest sources of U.S. adolescent substance use and suicide-related prevalence estimates. Participating adolescents self-completed the survey at school using a computer-scannable booklet to facilitate anonymous and voluntary participation, and active or passive parental permission was obtained.²⁴ Variables were standardized across survey waves.

Measures

Participants were coded into racial group using the U.S. Office of Management and Budget's federal race/ethnicity classification standards²⁶: non-Hispanic white, Hispanic, African American, Asian American, NHPI, AIAN, and multiracial. Three dummy variables coded participant age: 12–14 years (reference category), 15–16 years, and 17–18 years. Survey year was coded by decade

Download English Version:

<https://daneshyari.com/en/article/8816482>

Download Persian Version:

<https://daneshyari.com/article/8816482>

[Daneshyari.com](https://daneshyari.com)