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Cigar Use in New Jersey Among Adolescents and Adults

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More than 3000 youths become daily smokers each day.[1] Millions of youths will die from a tobacco-caused disease,[2] and tobacco use remains the single leading preventable cause of death in the United States.[3] However, re-

cent data indicate that the prevalence of cigarette smoking among youths nationally has declined since 1998.[4] Although the decline in cigarette use among youths is encouraging, the emergence of other tobacco products, such as cigars, as alternative forms of tobacco use by youths is alarming. The purpose of this report is to compare cigar use among adolescents and adults on the basis of data from New Jersey and the United States.

We used 3 sources of data in this report. For adolescents, data for New Jersey are from the 1999 New Jersey Youth Tobacco Survey, and national data are from the 1999 National Youth Tobacco Survey. For adults, data for New Jersey are from the 1998 Behavioral Risk Factor Surveillance System (BRFSS)[5]; cigar data were not collected in the 1999 BRFSS. Comparable adult cigar use data were not nationally available.

The methodology of the Youth Tobacco Survey, a school-based questionnaire, is described in detail elsewhere.[6] In brief, the New Jersey Youth Tobacco Survey used a 2-stage cluster sample design to obtain a representative statewide sample of students (N=15 871) in grades 7 through 12. Likewise, the National Youth Tobacco Survey used a 3-stage cluster sample design to produce a nationally representative sample of students (N=15 061) in grades 6 through 12. Both surveys were conducted during the fall school semester. For the purposes of this report, we excluded sixth-grade students from the National Youth Tobacco Survey middle-school sample to standardize comparisons.

Operational definitions of "current cigar use" were comparable in the 1999 Youth Tobacco Survey (i.e., smoked a cigar on 1 day or more in preceding 30 days) and the 1998 BRFSS (i.e., smoked a cigar in past month), offering a unique opportunity to compare youth and adult cigar smoking prevalence. Differences between prevalence estimates were considered to be statistically significant if the 95% confidence intervals did not overlap.

Last, note that data from the Youth Tobacco Survey and the BRFSS are based on self-reports, which are subject to underreporting or overreporting. The extent of this response bias cannot be determined, but school-based surveys may tend toward overreporting, whereas telephone surveys like the BRFSS tend toward underreporting of tobacco use behaviors.

TABLE 1—Ever and Current Cigar Use by Middle-School Students, High-School Students, and Adults in New Jersey and the United States

	Ever Cigar Use				Current Cigar Use			
	New Jersey[a]	95% CI	United States[b]	95% CI	New Jersey[a]	95% CI	United States[b]	95% CI
Middle school								
Male	26.0	(23.7, 28.3)	24.3	(21.4, 27.2)	11.0	(9.6, 12.4)	9.6	(7.9, 11.3)
Female	17.6	(15.1, 20.1)	13.5	(11.1, 15.9)	7.5	(6.3, 8.7)	5.3	(3.8, 6.8)
Total	21.8	(19.9, 23.7)	18.9	(16.6, 21.2)	9.3	(8.3, 10.3)	7.4	(6.1, 8.7)
High school								
Male	48.6	(45.6, 51.6)	51.1	(48.0, 54.2)	24.2	(22.1, 26.3)	20.3	(18.4, 22.2)
Female	33.0	(30.8, 35.2)	31.9	(29.1, 34.7)	12.6	(10.8, 14.4)	10.2	(8.6, 11.8)
Total	40.5	(38.7, 42.3)	41.6	(39.0, 44.2)	18.4	(17.1, 19.7)	15.3	(13.9, 16.7)
Adult								
Male	54.3	(50.6, 58.0)	NA		12.5	(10.1, 14.9)	NA	
Female	15.1	(12.9, 17.3)			1.3	(0.6, 2.0)		
Total	33.8	(31.6, 36.0)			6.6	(5.4, 7.8)		

Note: NA = not available.
Source. [a]New Jersey Youth Tobacco Survey 1999 (adolescents) and Behavioral Risk Factor Surveillance System 1998 (adults). [b]National Youth Tobacco Survey 1999.

Comparisons across groups documented remarkably high levels of cigar use among youths in New Jersey and the United States (Table 1). Sex differences were apparent in both adolescents and adults, with males reporting significantly higher rates of ever and current cigar use than females. Rates of ever and current cigar smoking were similar in New Jersey and the United States among high-school students; however, the prevalence of current cigar smoking in New Jersey (18.4; 95% confidence interval (CI)=17.1, 19.7) exceeded the national rate (15.3; CI=13.9, 16.7) by 25%.

The prevalence of cigar smoking in youths relative to adults, especially among females, in New Jersey is troublesome. Ever cigar use in New Jersey was highest among high-school students (40.5; CI=38.7, 42.3), followed by adults (33.8; CI=31.6, 36.0) and middle-school students (21.8; CI=19.9, 23.7). Furthermore, current cigar use was higher among middle-school (9.3; CI=8.3, 10.3) and high-school students (18.4; CI=17.1, 19.7) in New Jersey than it was among New Jersey adults (6.6; CI=5.4, 7.8). The disparity between adolescent and adult current cigar use was most dramatic among females. Middle-school (7.5; CI=6.3, 8.7) and high-school (12.6; CI=10.8, 14.4) females had a current cigar smoking rate 5 and 10 times higher, respectively, than that in adult women (1.3; CI=0.6, 2.0) in New Jersey.

After decades of stagnant consumption, cigar use surged during the 1990s, coinciding with increased cigar marketing, most notably the use of cigars by celebrities. By featuring celebrities such as Madonna, Michael Jordan, and supermodel Elle McPherson using cigars, the cigar industry has successfully marketed their products to adult women and adolescents of both sexes. Advertising and promotional activities have increased the visibility of cigar smoking,[7] thereby "normalizing" cigar use.[8,9] As is evident in New Jersey's data, the "new cigar users" are young people, including adolescent females. The effect of increased cigar marketing on young girls and women is considerable.

Casual cigar use is often dismissed as a non–health issue. However, even moderate cigar use carries significant health risks, including increased risk for oral, oropharyngeal, and laryngeal cancers. And as is the case with other carcinogenic products, risk increases with consumption (i.e., number of cigars smoked) and depth of inhalation. Furthermore, cigars have higher total nicotine content than cigarettes do and can deliver nicotine both through

smoke and through direct oral contact with the tobacco wrapper. Consequently, a special concern is that adolescent cigar use may increase vulnerability for nicotine dependence, predisposing youths to initiation of and continued use of cigarettes and other tobacco products.[8]

The emergence of widespread cigar use among adult women and among adolescents of both sexes—combined with cigar use among men—is a significant public health threat. As funding for tobacco control increases and national rates of cigarette use appear to be declining, we must remain diligent in monitoring all forms of tobacco use. The Youth Tobacco Survey allows states such as New Jersey to monitor multiple forms of tobacco use and to examine emerging patterns among youth. However, even the most responsive surveillance system is rendered ineffectual if data are not disseminated and translated into public health policies and programs. The higher-than-expected levels of youth cigar use in New Jersey and the United States indicate that effective tobacco control programs must focus on all tobacco products, not just cigarettes. ■

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Contributors

C.D. Delnevo directed the New Jersey Youth Tobacco Survey, wrote drafts of the brief, and conducted analyses. E.S. Pevzner provided technical assistance on the New Jersey Youth Tobacco Survey and wrote drafts of the brief. M.B. Steinberg formulated the concept for the brief and wrote drafts of the brief. C.W. Warren provided technical assistance on the New Jersey Youth Tobacco Survey and contributed to the interpretation of results and editing of the brief. J. Slade provided content expertise in cigar use, health effects, and marketing and contributed to the editing of the brief.

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