

### **The demand for smokeless tobacco among male high school students in the United States: The impact of taxes, prices and policies.**

Tauras J; Powell L; Chaloupka F; Ross H. *Applied Economics* 39(1): 31-41, 2007. (21 refs.)

Despite the deleterious effects of smokeless tobacco use, very little is known about the effects of tobacco control policies on smokeless tobacco demand. This paper uses data extracted from the 1995-2001 National Youth Risk Behavior Surveys (YRBS) augmented with tobacco taxes, prices and policies to estimate smokeless tobacco demand equations among male high school students. The estimates indicate that higher smokeless tobacco taxes would significantly reduce the number of male students who use smokeless tobacco and the number of days smokeless tobacco users use smokeless tobacco. Moreover, smokeless tobacco products and cigarettes were found to be economic complements in consumption. Copyright 2007, Taylor & Francis.

### **Regular smoking and asthma incidence in adolescents.**

Gilliland FD; Islam T; Berhane K; Gauderman WJ; McConnell R; Avol E et al. *American Journal of Respiratory and Critical Care Medicine* 174(10): 1092-1100, 2006. (47 refs.)

Rationale: Although involuntary exposure to maternal smoking during the in utero period and to secondhand smoke are associated with occurrence of childhood asthma, few studies have investigated the role of active cigarette smoking on asthma onset during adolescence. Objectives: To determine whether regular smoking is associated with the new onset of asthma during adolescence. Methods: We conducted a prospective cohort study among 2,609 children with no lifetime history of asthma or wheezing who were recruited from fourth- and seventh-grade classrooms and followed annually in schools in 12 southern California communities. Regular smoking was defined as smoking at least seven cigarettes per day on average over the week before and 300 cigarettes in the year before each annual interview. Incident asthma was defined using new cases of physician-diagnosed asthma. Measurements and Main Results: Regular smoking was associated with increased risk of new-onset asthma. Children who reported smoking 300 or

more cigarettes per year had a relative risk (RR) of 3.9 (95% confidence interval [95% CI], 1.7-8.5) for new-onset asthma compared with nonsmokers. The increased risk from regular smoking was greater in nonallergic than in allergic children. Regular smokers who were exposed to maternal smoking during gestation had the largest risk from active smoking (RR, 8.8; 95% CI, 3.2-24.0). Conclusions: Regular smoking increased risk for asthma among adolescents, especially for nonallergic adolescents and those exposed to maternal smoking during the in utero period. Copyright 2006, American Thoracic Society.

### **The extent to which tobacco marketing and tobacco use in films contribute to children's use of tobacco: A meta-analysis.**

Wellman RJ; Sugarman DB; DiFranza JR; Winickoff JP. *Archives of Pediatrics & Adolescent Medicine* 160(12): 1285-1296, 2006. (132 refs.)

Objective: To quantify the effect of exposure on initiation of tobacco use among adolescents. Data Sources: Asystematic literature search of MEDLINE, PsychINFO, ABI/INFORM, and Business Source Premier through October/November 2005 was conducted. Unpublished studies were solicited from researchers. Study Selection: Of 401 citations initially identified, 51 (n = 141949 participants) met the inclusion criteria: reporting on exposure and tobacco use outcomes and participants younger than 18 years. Included studies reported 146 effects; 89 were conceptually independent effects. Data were extracted independently by 3 of us using a standardized tool. Weighted averages were calculated using a linear mixed-effects model. Heterogeneity and publication bias were assessed. Main Exposures: Exposures (tobacco advertising, promotions, and samples and pro-tobacco depictions in films, television, and videos) were categorized as low or high engagement based on the degree of psychological involvement required. Main Outcome Measures: Outcomes were categorized as cognitive (attitudes or intentions) or behavioral (initiation, tobacco use status, or progression of use). Results: Exposure to pro-tobacco marketing and media increases the odds of youth holding positive attitudes toward tobacco use (odds ratio, 1.51; 95% confidence interval, 1.08-2.13) and more than doubles the odds of initiating tobacco use (odds ratio, 2.23; 95%

confidence interval, 1.79-2.77). Highly engaging marketing and media are more effective at promoting use (odds ratio, 2.67; 95% confidence interval, 2.19-3.25). These effects are observed across time, in different countries, with different study designs and measures of exposure and outcome. Conclusions: Pro-tobacco marketing and media stimulate tobacco use among youth. A ban on all tobacco promotions is warranted to protect children. Copyright 2006, American Medical Association.

### **A national survey of tobacco cessation programs for youths.**

Curry SJ; Emery S; Sporer AK; Mermelstein R; Flay BR; Berbaum M et al. *American Journal of Public Health* 97(1): 171-177, 2007. (26 refs.)

Objectives. We collected data on a national sample of existing community-based tobacco cessation programs for youths to understand their prevalence and overall characteristics. Methods. We employed a 2-stage sampling design with US counties as the first-stage probability sampling units. We then used snowball sampling in selected counties to identify administrators of tobacco cessation programs for youths. We collected data on cessation programs when programs were identified. Results. We profiled 591 programs in 408 counties. Programs were more numerous in urban counties; fewer programs were found in low-income counties. State-level measures of smoking prevalence and tobacco control expenditures were not associated with program availability. Most programs were multisession, school-based group programs serving 50 or fewer youths per year. Program content included cognitive-behavioral components found in adult programs along with content specific to adolescence. The median annual budget was \$2000. Few programs (9%) reported only mandatory enrollment, 35% reported mixed mandatory and voluntary enrollment, and 56% reported only voluntary enrollment. Conclusions. There is considerable homogeneity among community-based tobacco cessation programs for youths. Programs are least prevalent in the types of communities for which national data show increases in youths' smoking prevalence. Copyright 2007, American Public Health Association.

### **Changes in adolescents' sources of cigarettes.**

Robinson LA; Dalton WT; Nicholson LM. *Journal of Adolescent Health* 39(6): 861-867, 2006. (28 refs.)

Purpose: No previous research has tracked changes in teen sources for tobacco. Such information might help public health officials to target tobacco control efforts more precisely. This investigation used a two-year longitudinal design to determine (1) how adolescents'

sources change and (2) whether the timing of smoking onset and duration of tobacco use predict the number and types of sources accessed. Methods: A survey assessing usual sources of cigarettes and related variables N as administered to 4461 seventh-graders annually. Of the target population, 79% provided baseline data, and 64.2% participated in all surveys. Results: At baseline, 30% of the 1144 smokers got cigarettes from peers, compared with 11% using stores, 6% using vending machines, and 17% who stole them. Age of smoking onset did not predict the number or types of sources teens accessed. We did, however, find a significant effect of duration of smoking, showing that more practiced smokers were more likely to get cigarettes both from stores and from their friends. Further, the longer students smoked, the more likely they were to have friends who smoked. Conclusions: Our results indicated that the means through which teens got their first cigarettes were similar, regardless of when smoking onset occurred. In contrast, as teens became more established smokers, they increased the number of sources they used and relied more on both stores and peers. Once adolescents become smokers, they form a social network of fellow smokers who support their habit, making it even more difficult to quit. Copyright 2006, Society for Adolescent Medicine.

### **Cigarette smoking and the risk for alcohol use disorders among adolescent drinkers.**

Gruzca RA; Bierut LJ. *Alcoholism: Clinical and Experimental Research* 30(12): 2046-2054, 2006. (44 refs.)

Background: Cigarette smoking and alcohol use disorders (AUDs) are closely linked, but it is not clear whether higher rates of AUD among smokers are solely attributable to heavier drinking or, alternatively, whether smokers are more vulnerable to alcohol abuse and dependence than nonsmokers who drink comparable quantities. We sought to address this issue using data from a nationally representative U.S. sample of adolescents and young adults. Specifically, we analyzed the relationship between cigarette smoking, drinking, and AUDs. Methods: Data were from the aggregated 2002 through 2004 U.S. National Survey on Drug Use and Health. Participants were randomly selected, household-dwelling adolescents and young adults (ages 12-20) from the noninstitutionalized, civilian population of the United States (N=74,836). Measurements included current DSM-IV alcohol abuse or dependence, number of drinks in the past 30 days, and past-year cigarette smoking, defined as having smoked more than 100

cigarettes across the lifetime and having smoked during the past year. Results: Past-year smokers (prevalence=16.0%) drank in higher quantities than never-smokers, but were also at elevated risk for AUD when compared with never-smokers who drank equivalent quantities. The effect was observed across age groups, but was more prominent among younger adolescents. After adjusting for drinking quantity and sociodemographic variables, smokers had 4.5-fold higher odds of AUD than never-smokers [95% confidence interval (95% CI), 3.1-6.6]. Youths who reported smoking but did not cross the 100-cigarette threshold were at intermediate risk [odds ratio (OR), 2.3; 95% CI, 1.7-3.3]. Differences in AUD between smokers and never-smokers were most pronounced at lower levels of drinking. Conclusions: The results are consistent with a higher vulnerability to AUDs among smokers, compared with nonsmokers who drink equivalent quantities. Copyright 2006, Research Society on Alcoholism.

#### **Effect of televised, tobacco company-funded smoking prevention advertising on youth smoking-related beliefs, intentions, and behavior.**

Wakefield M; Terry-McElrath Y; Emery S; Saffer H; Chaloupka FJ; Szczytko G et al. *American Journal of Public Health* 96(12): 2154-2160, 2006. (33 refs.)  
Objective. To relate exposure to televised youth smoking prevention advertising to youths' smoking beliefs, intentions, and behaviors. Methods. We obtained commercial television ratings data from 75 US media markets to determine the average youth exposure to tobacco company youth-targeted and parent-targeted smoking prevention advertising. We merged these data with nationally representative school-based survey data (n=103172) gathered from 1999 to 2002. Multivariate regression models controlled for individual, geographic, and tobacco policy factors, and other televised antitobacco advertising. Results. There was little relation between exposure to tobacco company-sponsored, youth-targeted advertising and youth smoking outcomes. Among youths in grades 10 and 12, during the 4 months leading up to survey administration, each additional viewing of a tobacco company parent-targeted advertisement was, on average, associated with lower perceived harm of smoking (odds ratio [OR]=0.93; confidence interval [CI]=0.88, 0.98), stronger approval of smoking (OR= 1.11; CI=1.03,11.20), stronger intentions to smoke in the future (OR=1.12; CI=1.04,1.21), and greater likelihood of having smoked in the past 30 days (OR=1.12; CI=1.04,11.19). Conclusions. Exposure to

tobacco company youth-targeted smoking prevention advertising generally had no beneficial outcomes for youths. Exposure to tobacco company parent-targeted advertising may have harmful effects on youth, especially among youths in grades 10 and 12. Copyright 2006, American Public Health Association.

#### **Predictors of smoking cessation processes among secondary school students.**

Stanton W; Baade P; Moffatt J. *Substance Use & Misuse* 41(13): 1683-1694, 2006. (37 refs.)

Many adolescents want to quit and have specific ideas on how they want to go about it. This study extended the search for factors related to different aspects of quitting. Four cross-sectional surveys of Queensland (Australia) secondary schools every three years over the past decade (1993, 1996, 1999, and 2002). A total of 9993 school students in grades 8 to 12 completed the survey. The data for 2451 students who had smoked in the last week (51% female) were used for the analysis of smoking cessation outcomes. The outcome measures for the study represented various smoking cessation outcomes, such as a desire to quit, attempts to quit, quitting for a week or more, and an intention not to be smoking in the following year. More than 60% of adolescent smokers are involved in the process of smoking cessation. The strongest predictor of cessation was whether or not students had actively influenced other students not to smoke. This finding supports the concept of involving adolescents more actively in prompting their peers to try quitting and supporting their efforts to quit smoking. Copyright 2006, Taylor & Francis.

#### **A test of biosocial models of adolescent cigarette and alcohol involvement.**

Foshee VA; Ennett ST; Bauman KE; Granger DA; Benefield T; Suchindran C et al. *Journal of Early Adolescence* 27(1): 4-39, 2007. (95 refs.)

The authors test biosocial models that posit interactions between biological variables (testosterone, estradiol, pubertal status, and pubertal timing) and social context variables (family, peer, school, and neighborhood) in predicting adolescent involvement with cigarettes and alcohol in a sample of 409 adolescents in Grades 6 and 8. Models including the biological and contextual variables and their interactions explain significantly more variance in adolescent cigarette and alcohol involvement than do models including only the main effects of the biological and contextual variables. Post hoc analyses of significant interactions suggest that, in most cases, moderation occurred in the hypothesized direction.

Consistent with dual hazards models of adolescent antisocial behaviors, the relationships between the biological and substance use variables become positive and stronger as the context becomes more harmful. Considerations of adolescent substance use should recognize the possible role of biological variables and how their influence may vary by social context. Copyright 2007, Sage Publications.

**A school nurse-delivered adolescent smoking cessation intervention: A randomized controlled trial.**

Pbert L; Osganian SK; Gorak D; Druker S; Reed G; O'Neill KM et al. *Preventive Medicine* 43(4): 312-320, 2006. (39 refs.)

**Background.** The aim of the present study was to evaluate the efficacy of a school nurse-delivered smoking cessation intervention to improve abstinence rates among adolescents interested in quitting. **Methods.** Seventy-one high schools in Massachusetts were randomized to either a four-session one-on-one school nurse-delivered smoking cessation intervention (37 schools, n = 571) or usual smoking cessation care control condition (34 schools, n = 577). Adolescents in grades 9-12 who smoked in the past 30 days completed surveys at baseline, 6 weeks and 3 months. The study was conducted during the 2002-2003 school year. **Results.** Thirty-day self-reported abstinence rates were significantly greater in students in the intervention compared to control condition at 6 weeks (18% vs. 2%, respectively) and 3 months (24% vs. 5%, respectively). After adjusting for school and potential confounders, students in the intervention schools had odds of quitting 8 times greater than students in the control schools at 6 weeks (OR = 8.4; 95% CI 3.7, 20.6) and 6 times greater at 3 months (OR = 6.4; 95% CI 3.4, 11.4). School nurses delivered intervention with a high degree of fidelity. **Conclusions.** A four-session smoking cessation intervention can feasibly be

delivered by school nurses and increase self-reported short-term abstinence rates among students interested in quitting smoking. Copyright 2006, Elsevier Science.

**Child and adolescent psychiatrists' practices in assisting their adolescent patients who smoke to quit smoking.**

Price JH; Sidani J; /Price JA. *Journal of the American Academy of Child and Adolescent Psychiatry* 46(1) 60-67, 2007. (40 refs.)

**Objective:** This national study examined the practices and perceptions of smoking cessation activities among child and adolescent psychiatrists. **Method:** A random sample of child and adolescent psychiatrists was identified from the membership list of the American Academy of Child and Adolescent Psychiatry and was mailed a valid and reliable 34-item questionnaire. **Results:** A total of 184 responses (47%) were received. A plurality (48%) of psychiatrists reported being self-taught in smoking cessation techniques. A majority (67%) of psychiatrists were in the maintenance stage for asking about smoking status. However, only 19% consistently made attempts to assess willingness to quit, and 30% consistently gave messages urging the smoker to quit. The perceived number of barriers for addressing smoking was negatively correlated with psychiatrists' levels of confidence ( $r = -0.35$ ,  $p < .001$ ) and preparedness ( $r = -0.39$ ,  $p < .001$ ) in addressing smoking cessation. Estimations by the psychiatrists of youths who smoked were 61% of those with conduct disorders, 46% of those with schizophrenia, and 40% of those with attention-deficit/hyperactivity disorder. **Conclusion:** Considering the perceived high rate of patient smoking and the lack of formal training in smoking cessation, more postgraduate education is needed to adequately prepare child and adolescent psychiatrists for addressing tobacco cessation. Copyright 2007, Lippincott, Williams & Wilkins