



THE PATH TO SMOKING ADDICTION STARTS AT VERY YOUNG AGES

Lifetime smoking and other tobacco use almost always begins by the time kids graduate from high school.¹ Young kids' naïve experimentation frequently develops into regular smoking, which typically turns into a strong addiction -- well before the age of 18-- that can overpower the most well-intentioned efforts to quit. Accordingly, any efforts to decrease future smoking levels among high school students, college-aged youths, or adults need to include a focus on reducing experimentation and regular smoking among teenagers and even pre-teens, as well. Delaying the age when kids first experiment with cigarettes or first begin smoking can also reduce the risk that they become regular or daily smokers and increase their chances of successfully quitting if they do begin regular smoking.

How Early Do Kids Try Smoking?

Very little data about smoking is regularly collected for kids under 12, but the peak years for first trying to smoke appear to be in the sixth and seventh grades, or between the ages of 11 and 12, with a considerable number starting even earlier. For example, in a nationwide *Monitoring the Future* survey, thirteen percent of eighth grade students reported having first smoked by the fifth grade (ages 10 and 11), and 28 percent have tried smoking by the eighth grade.²

A survey of 1,663 fifth grade students in Washington State found that 30 percent of the 10- and 11-year-olds had already tried at least one cigarette, with a little less than 10 percent having tried at least two.³ That study was done almost 10 years ago when youth smoking rates were much lower. Similarly, a 1992 survey of 10- to 17-year-old smokers in Massachusetts found that they tried their first cigarette, on average, at age 12.⁴ In 1999, a nationwide survey of high school students found that roughly one out of four had smoked at least one entire cigarette before age 13.⁵ By the end of high school, nearly 60 percent of all kids have tried smoking.⁶

How Soon Do Kids Become Regular, Daily Smokers?

More than a third of all kids who ever try smoking a cigarette become regular, daily smokers before leaving high school.⁷ In fact, the addiction rate for smoking (the percentage of experimenters who ultimately become habitual users) is higher than the addiction rates for marijuana, alcohol, or cocaine.⁸ Moreover, a September 2000 study found that symptoms of addiction -- strong urges to smoke, anxiety or irritability, or unsuccessfully quit attempts -- can appear in young kids within weeks or only days after occasional smoking first begins, and well before daily smoking has even started.⁹ A 2007 study in the *Archives of Pediatric and Adolescent Medicine* found that some youths experience tobacco dependence within a day of first inhaling.¹⁰

This addictive power of cigarettes explains the findings of a *Monitoring the Future* survey that approximately four percent of eighth graders and eight percent of tenth graders had already become regular daily smokers. In the twelfth grade, a fifth of all students have smoked in the past 30 days, and 12 percent are regular, daily smokers.¹¹ Smoking rates among kids who drop out of high school are even higher.¹²

To look at it another way, every day more than 4,000 kids under 18 try smoking for the first time, and another 1,000 kids who have already experimented with cigarettes become new regular daily smokers.¹³ Overall, nearly 80 percent of all adult smokers first become regular smokers before the age of 18 and 90 percent do so before leaving their teens.¹⁴

Although some kids who become regular smokers quit before leaving high school, almost three out of every four regular smokers in high school have already tried to quit but failed. At any given time, fewer than one in seven high school smokers have even been able to successfully stop smoking for just 30 days or more.¹⁵ While only three percent of daily smokers in high school think that they will still be

smoking at all in five years, more than 60 percent are still regular daily smokers seven to nine years later.¹⁶

Although Stopping Youth Smoking Initiation is Best, Simply Delaying It Can Produce Substantial Benefits

The earlier a kid first tries smoking the higher his or her chances of ultimately becoming a regular smoker and the less likely he or she is to quit.¹⁷

Research also shows that the earlier people begin to smoke the higher the risk they have of contracting lung cancer or experiencing a range of risk factors and health problems in adulthood.¹⁸ Overall, roughly a third of all kids who become regular smokers before adulthood will eventually die from smoking.¹⁹ If current trends continue more than five million of the kids, under 18, who are alive today will die from tobacco-related causes.²⁰

There is also evidence that smoking is sometimes a first step toward other substance abuse –stopping or delaying that first step will reduce that risk that kids will progress to other harmful substances.²¹

Campaign for Tobacco-Free Kids, June 16, 2008 / Meg Riordan

Related Campaign for Tobacco-Free Kids Fact Sheets (available at www.tobaccofreekids.com)

- Tobacco Harm to Kids
<http://www.tobaccofreekids.org/research/factsheets/pdf/0077.pdf>
- Smoking & Kids
<http://www.tobaccofreekids.org/research/factsheets/pdf/0001.pdf>
- Tobacco Use Among Youth
<http://www.tobaccofreekids.org/research/factsheets/pdf/0002.pdf>
- Smokeless (Spit) Tobacco & Kids
<http://www.tobaccofreekids.org/research/factsheets/pdf/0003.pdf>
- Where Do Youth Smokers Get Their Cigarettes?
<http://www.tobaccofreekids.org/research/factsheets/pdf/0073.pdf>
- Tobacco Company Marketing To Kids
<http://www.tobaccofreekids.org/research/factsheets/pdf/0008.pdf>
- Smoking and Other Drug Use
<http://www.tobaccofreekids.org/research/factsheets/pdf/0106.pdf>

¹ Substance Abuse and Mental Health Services Administration, (SAMHSA), HHS, Calculated based on data in National Household Survey on Drug Abuse, 2001. <http://oas.samhsa.gov/facts.cfm>

² Johnston, L.D., et al., Institute for Social Research, University of Michigan. *Monitoring the Future National Survey Results on Drug Use, 1975-2002. Volume I Secondary School Students*, (2003). National Institute on Drug Abuse, NIH Publication No. 03-5375
http://monitoringthefuture.org/pubs/monographs/vol1_2002.pdf

³ Bowen, D.J., et al., "Description of Early Triers," *Addictive Behavior* 16(3-4): 95-101 (1991).

⁴ DiFranza, J.R., et al., "Tobacco Acquisition and Cigarette Brand Selection Among Youth," *Tobacco Control* 3: 334-38 (1994).

⁵ U.S. Centers for Disease Control and Prevention (CDC), *Youth Risk Behavior Surveillance -- United States, 1999, Morbidity and Mortality Weekly Report (MMWR)* 49(SS-5) (June 9, 2000).

⁶ *Monitoring the Future Study* (2002). [This school-based study does not survey kids who have dropped out of school, who tend to have higher smoking rates].

⁷ CDC, "Selected Cigarette Smoking Initiation and Quitting Behaviors Among High School Students – United States, 1997," *MMWR* (May 22, 1998).

⁸ Addiction rates can be determined by looking at the ratio between the number of people who try a substance and the number who become regular daily users. This data is available from both the Monitoring the Future Studies and the National Household Surveys on Drug Abuse. See, also, CDC, "Symptoms of Substance Dependence Associated with Use of Cigarettes, Alcohol, and Illicit Drugs – United States 1991-1992," *MMWR* (November 10, 1995); Anthony, J.C., et al., "Comparative Epidemiology of Dependence on Tobacco, Alcohol, Controlled Substances, and Inhalants: Basic findings from the National Comorbidity Survey," *Experimental and Clinical Psychopharmacology* 2:244-268, 1994, www.hcp.med.harvard.edu/ncs.

⁹ DiFranza, J.R. et al., "Initial Symptoms of Nicotine Dependence in Adolescents," *Tobacco Control* 9: 313-19 (September 2000).

¹⁰ DiFranza, J.R. et al., "Symptoms of Tobacco Dependence After Brief Intermittent Use," *Archives of Pediatric and Adolescent Medicine* 161(7), July 2007.

¹¹ Johnston, L.D., et al., Institute for Social Research, University of Michigan. *Monitoring the Future National Survey Results on Drug Use, 1975-2007*, National Institute on Drug Abuse (2008) <http://www.monitoringthefuture.org/data/07data/pr07cig1.pdf>.

¹² See, e.g., Grunbaum J.A., et al., "Youth Risk Behavior Surveillance--National Alternative High School Youth Risk Behavior Survey, United States, 1998," *MMWR CDC Surveillance Summary* 48(7):1-44 (October 29, 1999); Weller NF, et al., "Health Risk Behaviors of Texas Students Attending Dropout Prevention/Recovery Schools in 1997," *Journal of School Health* 69(1):22-28 (January 1999); C. de Moor, et al., "Patterns and Correlates of Smoking and Smokeless Tobacco Use Among Continuation High School Students," *Addictive Behavior* 19(2):175-84 (March-April 1994).

¹³ Substance Abuse and Mental Health Services Administration, (SAMHSA), HHS, Results from the 2006 National Survey on Drug Use and Health, NSDUH: Detailed Tables. <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect4peTabs10to11.pdf>.

¹⁴ SAMHSA, HHS, Calculated based on data in 2006 National Household Survey on Drug Use and Health, <http://www.oas.samhsa.gov/nsduh.htm>.

¹⁵ CDC, "Selected Cigarette Smoking Initiation and Quitting Behaviors Among High School Students – United States, 1997," *MMWR* (May 22, 1998).

¹⁶ *Monitoring the Future Study* (1998).

¹⁷ See, e.g., Khuder S.A., et al., "Age at Smoking Onset and its Effect on Smoking Cessation," *Addictive Behavior* 24(5):673-7 (September-October 1999); D'Avanzo B., et al., "Age at Starting Smoking and Number of Cigarettes Smoked," *Annals of Epidemiology* 4(6):455-59 (November 1994); Chen J. & W.J. Millar, "Age of Smoking Initiation: Implications for Quitting," *Health Reports* 9(4):39-46 (Spring 1998); Everett S.A., et al., "Initiation of Cigarette Smoking and Subsequent Smoking Behavior Among U.S. High School Students," *Preventive Medicine* 29(5):327-33 (November 1999); Breslau N. & E.L. Peterson, "Smoking cessation in young adults: age at initiation of cigarette smoking and other suspected influences," *American Journal of Public Health* 86(2):214-20 (February 1996).

¹⁸ Hegmann K.T., et al., "The Effect of Age at Smoking Initiation on Lung Cancer Risk," *Epidemiology* 4(5):444-48 (September 1993); Lando H.A., et al., "Age of Initiation, Smoking Patterns, and Risk in a Population of Working Adults," *Preventive Medicine* 29(6 Pt 1):590-98 (December 1999).

¹⁹ CDC, "Incidence of Initiation of Cigarette Smoking," *MMWR* (October 9, 1998).

²⁰ CDC, "Projected Smoking-Related Deaths Among Youth – United States," *MMWR* (November 8, 1996).

²¹ See, e.g., U.S. Department of Health and Human Services, *Preventing Tobacco Use Among Young People: A Report of the Surgeon General* (1994); Center on Addiction and Substance Abuse, Columbia University, *Cigarettes, Alcohol, Marijuana: Gateways to Illicit Drug Use* (October 1994). See, also, Chaloupka, F., et al., "Do Higher Cigarette Prices Encourage Youth to Use Marijuana?," National Bureau of Economic Research (February 1999), www.uic.edu/~fjc/Presentations/Papers/W6939.pdf, Campaign for Tobacco-Free Kids Fact Sheet, "Tobacco Use And Other Drugs" (2000), www.tobaccofreekids.org.