

TOBACCO21

"HEALTHY TOWNS, HEALTHY KIDS."TM



IT'S SIMPLE MATH:

Raising the minimum tobacco sales age to 21 will dramatically reduce tobacco use.

Just 2% of tobacco sales help produce 90% of new smokers.

Cigarette sales to those under 21 account for only 2.12% of total sales. But, because 90% of smokers start by the age of 21, these are the very sales that help lead to 9 out of every 10 new smokers. This means that the impact on store owners will be minimal and will only affect a very small percentage of their tobacco sales in the short term.¹

Raising the minimum tobacco sales age to 21 can reduce smoking rates to single digits.

Only 10% of smokers start at the age of 21 or older.² If the current smoking rate is about 20%,³ then by simple math, if someone reaches the age of 21 as a non-smoker, that individual has only a 2% chance of becoming a smoker ($.1 \times .2 = .02 = 2\%$).

This strategy is already working.

In 2005, Needham, MA voted to raise and enforce the minimum tobacco sales age of 21. In 2006, before full enforcement, the town had a youth smoking rate of 13% compared with 15% in the surrounding communities. By 2010, the youth smoking rate in Needham was down to 6.7% while the surrounding communities' rate only decreased to 12.4%. The percent decline in youth smoking in Needham was nearly triple that of its neighbors.⁴

Many people who purchase for distribution to minors are between the ages of 18 and 20.

Since most students do not reach twenty-one years of age while still enrolled in high school, increasing the legal age of sale would greatly reduce the number of students who could purchase tobacco products. By decreasing the number of eligible buyers in high school, this action will help reduce youth smoking by decreasing the access of students to tobacco products.

A similar strategy was highly successful in addressing alcohol sales.

A national age 21 law for alcohol sales resulted in reduced alcohol consumption among youth, decreased alcohol dependence, and has led to dramatic reductions in drunk driving fatalities.^{6,7} At the time, some critics of the policy argued that because 18 year-olds can vote and enlist in the military, they should be allowed to be sold alcohol. Despite these arguments, the increase in the minimum sales age for alcoholic beverages has saved tens of thousands of lives of young drivers, their passengers, and others on the road.⁸

¹ Winickoff JP, Hartman L, Chen ML, Gottlieb M, Nabi-Burza E, DiFranza JR. Minimal Retail Impact of Raising Tobacco Sales Age to 21. American Journal of Public Health. 2014. In Press.

² This is a conservative estimate. Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey, 2008. Analysis by the American Lung Association, Research and Program Services Division using SPSS software.

³ CDC. Morbidity and Mortality Weekly Report. "Current Cigarette Smoking. Among Adults — United States, 2011." November 9, 2012. 61(44):889-894.

⁴ Analysis of 2011 Youth Risk Behavior Surveillance System (YRBSS) data by Jonathan P. Winickoff, MD, MPH, Associate Professor of Pediatrics, Harvard Medical School.

⁵ DiFranza JR, Wellman RJ, Mermelstein R, et al. The natural history and diagnosis of nicotine addiction. Current Reviews in Pediatrics. 2011;7(2):88-96.

⁶ Wagenaar AC. Minimum drinking age and alcohol availability to youth: Issues and research needs. In: Hilton ME, Bloss G, eds. Economics and the Prevention of Alcohol-Related Problems. National Institute on Alcohol Abuse and Alcoholism (NIAAA) Research Monograph No. 25, NIH Pub. No. 93-3513. Bethesda, MD: NIAAA; 1993:175-200.

⁷ DeJong W, Blanchette J. "Case Closed: Research Evidence on the Positive Public Health Impact of the Age 21 Minimum Legal Drinking Age in the United States." J. Stud. Alcohol Drugs, Supplement 17, 108-115, 2014.

⁸ NHTSA's National Center for Statistics and Analysis, March 2005. "Calculating Lives Saved Due to Minimum Drinking Age Laws." Washington, DC, U.S., DOT.



THE VULNERABLE TEEN/YOUNG ADULT BRAIN

Nearly 90% of smokers started smoking by age 20.¹

Scientific study of the brain is increasingly showing a distinct gap between when we are physiologically mature and neurobiologically mature.²

In fact, there could be as much as a 4-7 year difference. During this period the brain continues to be highly vulnerable.²

The minimum age of military service does not equal readiness to enlist in a lifetime of smoking.

THE SCIENCE OF BRAIN WIRING



From neuroscience experiments, we know that the frontal lobe - the seat of human judgment - is not fully wired until age 25. ³ This is why some describe the period from 18-25 years as emerging into adulthood.² During this critical period, the brain remains especially vulnerable to tobacco addiction.⁴

Delaying the age of initiation of nicotine significantly prevents a lifetime of addiction.

99% of lifetime smokers started smoking before the age of 26.²

Tobacco affects the development of the brain in areas of addiction during this vulnerable period.^{4,5}

The tobacco industry knew all of this as early as 1986

"Raising the legal minimum age for cigarette purchaser to 21 could gut our key young adult market..."

-Philip Morris report, January 21, 1986⁶

Brain health is public health

¹SAMHSA. Calculated based on the data in the 2011 National Survey on Drug Use and Health.

²The Surgeon General Report. 2012. "Preventing Youth Tobacco Use." <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/factsheet.html>.

³Crews et al, Adolescent Cortical Development: A Critical Period of vulnerability for addiction; Pharmacol Biochem Beh, 2007, pages 189-199.

⁴Morales et al, Cigarette Exposure, Dependence & Craving are Related to Insula Thickness in Young Adult Smokers; Nature/Neuropsychopharmacology, 2014, pages 1-7

⁵U.S. Department of Health and Human Services. "The Health Consequences of Smoking — 50 Years of Progress: A Report of the Surgeon General." Atlanta, GA: U.S.

Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

⁶Philip Morris Discussion Draft of Sociopolitical Strategy <http://legacy.library.ucsf.edu/tid/aba84e00/pdf>



RESPONSES TO CONVENIENCE STORE OWNERS' CONCERNS

Big tobacco (RJR and Philip Morris USA) have been working through the retailers.

The arguments you may hear:

We will go out of business.

When Needham increased the sales age to 21 in 2005 not a single convenience store went out of business.

Restaurant and bar owners had the same fear when smoking was banned, and this did not happen.¹

Tobacco sales to 18-20 year olds are only 2% of retail tobacco sales.²

CVS and Target have decided to stop selling all tobacco products, leaving more tobacco business for convenience stores.

We make our profits from the ancillary purchases (milk and bread) when people come in to buy cigarettes.

98% of tobacco sales and all associated ancillary purchases will be unaffected.²

18-20 year olds will have more money for other in-store purchases that are not tobacco.

They will just go to other towns and we will lose business.

Lower smoking rates are better for business.

A city or town that creates fewer smokers will have higher socioeconomic status, better health status, better jobs, and better quality of life for all residents.³

Research has shown a minimal retail impact of raising the sales age to 21.²

In fact, since 2005 in Needham, there is no evidence for youth traveling to other towns to purchase tobacco.

Each town that goes to 21 increases the likelihood that the surrounding towns will also go to 21.

Small decreases in youth access to retail tobacco are strongly associated with lower tobacco use.

The key point is that youth will quit or use less tobacco, and those who don't smoke are less likely to start.^{4,5}

We want this to go to the state legislature to make it a level playing field.

The banning of tobacco in bars and restaurants was won on the local level first before it went to the state.

This is a ploy by the Tobacco Industry.

When Utah's Senator Reid was asked why Tobacco21 didn't pass at the state level, he explained it to us in three words: "The Tobacco Lobby."

¹ Hahn, EJ, "Smokefree Legislation: A Review of Health and Economic Outcomes Research," American Journal of Preventive Medicine 39(6S1):S66-S76, 2010.

² Winickoff JP, Hartman L, Chen ML, Gottlieb M, Nabi-Burza E, DiFranza JR. Minimal Retail Impact of Raising Tobacco Sales Age to 21. American Journal of Public Health. 2014. In Press.³

³ U.S. Department of Health and Human Services. "The Health Consequences of Smoking — 50 Years of Progress: A Report of the Surgeon General." Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.






⁴ Scully M, McCarthy M, Zacher M, Warne C, Wakefield M, White V. Density of tobacco retail outlets near schools and smoking behavior among secondary school students. Aust New Zealand J Pub Health. 2013;37(6):574-78.

⁵ Henriksen L, Feighery EC, Schleicher NC, Cowling DW, Kline RS, Fortmann SP. Is adolescent smoking related to the density and proximity of tobacco outlets and retail cigarette advertising near schools? Prev Med. 2008 Aug;47(2):210-4.



THE MILITARY/AGE RESTRICTION ARGUMENT

What you can't do until you are 21 years or older:

-  Buy alcohol
During the Vietnam era, 29 states lowered the alcohol purchase age to 18 and highway death rates made a significant climb. Raising the sales age back to 21 caused the death rate to drop significantly.¹
-  Casino gambling
-  Get a 'license to carry' gun permit.
-  Rent a car (must be age 25 - crash rates don't drop significantly until then)
-  Rent a hotel room in some hotels.

The argument: If you can go to war and bear arms at 18 you should have the right to smoke.

Response: **The minimum age of military service does not equal readiness to enlist in a lifetime of smoking.**

IN FACT:

The U.S. Army Surgeon General says soldiers who smoke are less combat ready and take longer to heal.²

The U.S. Military is taking steps to ban all tobacco sales on military bases. Easy access to cigarettes has led to a 33.6% smoking rate among active duty military.²

Years of studies, including a comprehensive study on 9.3 million military beneficiaries, have revealed lung cancer mortality rates are double among Veterans.³

Veterans who served to protect our freedom but contracted emphysema from addiction to the discounted cigarettes in the military have lost **their** freedom.⁴

¹ DeJong et Blanchette: Case Closed: Research Evidence on the Positive Public Health Impact of Age 21 MLDA in the US, Journal of Studies On Alcohol and Drugs/ Supplement No17.2014 pg108-115

² <http://www.army.mil/standto/archive/issue.php?issue=2012-11-20>

³ A Study of Cancer in the Military Beneficiary Population, Guarantor: Raymond Shelton Crawford III, MD MBA, Contributors: Raymond Shelton Crawford III, MD MBA; Julian Wu, MD MPH; Dae Park, MD; Galen Lane Barbour, MD; Military Medicine, Vol. 172, October 2007

⁴ <http://www.iom.edu/~media/Files/Report%20Files/2009/MilitarySmokingCessation/Combating%20Tobacco%20Military%20for%20web.pdf>



NOTES

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