American College of Preventive Medicine

Policy Recommendation on raising the minimum age of legal access (MLA) to tobacco products

Policy Recommendations:

American College of Preventive Medicine (ACPM) strongly advocates that states and local jurisdictions adopt legislation to raise the minimum age of legal access (MLA) to all tobacco products to 21 years.

ACPM further encourages the U.S. Congress to pass federal legislation to raise the MLA to all tobacco products to 21 years for nation-wide adoption.

Background:

Tobacco use is responsible for 480,000 deaths per year in the United States.[1] Smoking costs the US more than $300 billion per year in the form of direct medical costs and lost productivity due to premature deaths.[2]

Recent research on adolescent psychosocial and neurobiological development suggests that young adulthood (18-26 yrs.) is a vulnerable period to drug addictions.[3] Data from the 2012 National Survey on Drug Use and Health (NSDUH) suggests that 54 percent of daily smokers are smoking daily before age 18 and 85 percent are doing so by age 21.[4] Thus, if the initiation of tobacco use is delayed until 21 years of age, many more people may remain smoke free for their entire lives.

Federal Law (Tobacco Control Act[5] of 2009) has set the minimum age of legal access (MLA) to tobacco products at 18 while allowing states and localities to raise the age. Currently in the U.S, 6 states have increased the MLA. Hawaii and California have increased it to 21 years of age while Alabama, Alaska, New Jersey and Utah have set the MLA at 19 years. 200 cities/counties across the nation have raised the MLA to 21 years of age.[6]

There is a broad public support to raise the minimum legal age to 21 for smoking[7, 8] in the United States.

Public health implications of raising the MLA:

1. Raising the MLA to 21 will likely prevent or delay the initiation of tobacco use.
2. Raising the MLA to 21 will likely reduce the prevalence of tobacco use.
3. Raising the MLA will likely lead to substantial reductions in smoking related mortality.
4. Raising the MLA will likely immediately improve the health of adolescents and young adults.
5. Raising the MLA will likely improve maternal, fetal, and infant outcomes by reducing the likelihood of maternal and paternal smoking.

Evidence:

Tobacco 21 policies are new and there are no systematic evaluations of the policies being implemented. Nevertheless, in Needham, MA, Tobacco 21 policy was introduced in 2005 and since then there is a reported decrease in tobacco use in adolescents and adults when compared to the surrounding jurisdictions where the policy was not implemented.[9, 10] Similar policies on alcohol use can be examined to predict outcomes. The U.S. Congress enacted the National Minimum Drinking Age Act in 1984 encouraging the states to raise the Minimum Legal Drinking Age (MLDA) to 21. All States and DC adopted the policy by 1988. There is extensive literature evaluating the effects of raising MLDA to 21 that showed decline in rates of drinking and binge drinking in under 21 and decline in traffic accidents .[11]

Due to a paucity of direct evidence, the Institute of Medicine (IOM) convened a committee that along with examining the existing literature on tobacco use initiation used mathematical modelling and other contextual methods to predict the likely public health outcomes of raising the minimum age for purchase of tobacco products.[6] The following can be concluded from the IOM committee report:

1. Raising the MLA to tobacco products to 21 years will likely prevent or delay the initiation of tobacco use among adolescents and young adults.

The committee, after considering factors like biological sensitivity of adolescent and young adult brain to nicotine addiction, access to tobacco products and social norms, estimated that raising MLA to 21 will be more effective than to 19 in preventing initiation of tobacco use. For example, the 18-year-old can network with a 19 yr. old but may not have social contacts 21 years of age to obtain tobacco products.

2. Raising the MLA to 21 will likely reduce smoking prevalence.

The Committee used the initiation estimates in established mathematical models like SimSmoke and CISNET (Cancer Intervention and Surveillance Modeling Network) to predict prevalence of smoking. The models predicted that if MLA were to increase today nationwide to 21 years of age there will be a 12% decrease in the prevalence of tobacco use by the time today's teenagers become adults.

3. Raising the MLA will likely lead to substantial reductions in smoking-related mortality.

The CISNET model predicted that MLA 21 will result in an 11% reduction in life-time premature smoking-related deaths and large reductions (>10%) in life-time years of life lost (YLL) by adopting nationwide MLA 21 for new generations. The CISNET Yale Lung cancer model estimated a 10.5% increase in the percentage of lung cancer deaths prevented for MLA 21 by 2080. This translates into approximately 223,000 fewer premature deaths, 4.2 million fewer years of life lost, and 50,000 fewer deaths from lung cancer for those born between 2000 and 2019.

4. Raising the MLA will likely immediately improve the health of adolescents and young adults.

The committee concluded that raising the MLA will likely immediately improve the health of adolescents and young adults by reducing the number of those with adverse physiological effects such as increased inflammation and impaired immune functioning caused by smoking. And as the initial birth cohorts affected by the policy change age into adulthood, the benefits of

the reductions of the intermediate and long-term adverse health effects will also begin to manifest.

5. Raising the MLA will likely improve maternal, fetal, and infant outcomes by reducing the likelihood of maternal and paternal smoking

Relative to the status quo, if the MLA were raised now to age 21 nationwide, modeling projects that by 2100 there would be an estimated 286,000 fewer pre-term births, 438,000 fewer cases of low birth weight, and roughly 4,000 fewer sudden infant death syndrome (SIDS) cases among mothers age 15 to 49. The SimSmoke model predicts that about three times more low birth weight, preterm birth and SIDS cases could be avoided under MLA 21 than under MLA 19.

6. Raising the MLA will also lessen the population's exposure to secondhand smoke and its associated health effects, both now and in the future.

References:

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