

SMOKE-FREE GENERATION

This toolkit was developed to provide scientific evidence regarding raising the minimum legal age of sale of tobacco products. This toolkit is not for or against any specific legislative proposal.



A comprehensive approach to reduce and prevent youth tobacco and e-cigarette use, includes limiting youth access to tobacco products and e-cigarettes.

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RISK FACTORS

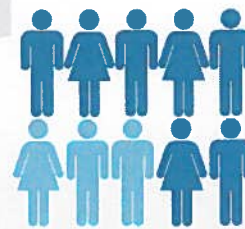
- **More than 90%** of current adult smokers **first used cigarettes before 19**, and almost 100% reported first using cigarettes before 26.¹
- On Guam, **2 out of 3 current adult smokers started before 18.**²
- According to Guam PDN's poll on December 2, 2015, **75%** of respondents were in favor of raising the MLA to 21.³

Most adults favor making **21** the minimum age of sale for tobacco products



3 out of **4**

U.S. adults **favor** making 21 the minimum age of sale for tobacco products.



This includes

7 out of **10**

U.S. adult **cigarette smokers** who **favor** making 21 the minimum age of sale.



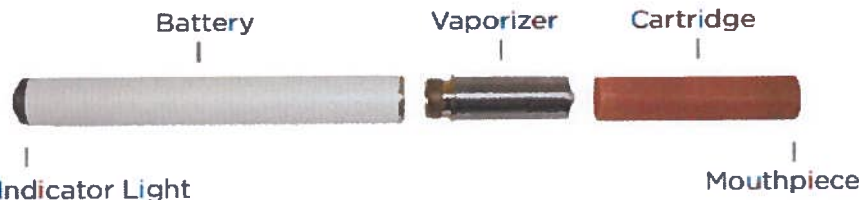
Source: American Journal of Preventive Medicine

- Youth rely on the 18-20 year olds in their **social circles to get them cigarettes.**³ Raising the MLA to 21 years would limit youth's access to cigarettes.⁴
- Smokers on average tend to **have more accidents/injuries at work, use more sick days at work, and access more healthcare benefits than non-smokers.**⁵
- Adolescent brains are uniquely vulnerable to the effects of nicotine—this means that adolescents are more prone to forming a biological and behavioral addiction.⁶


Sources:


1. Institute of Medicine, 2015.
2. DPHSS Behavioral Risk Factor Surveillance System, 2013
3. Guam Pacific Daily News, December 2, 2015
4. DiFranza and Colemn, 2001
5. Taylor, Shelley E. (2011). Health Psychology (9th Edition). New York: McGraw Hill.
6. Institute of Medicine, 2015.

E-CIGARETTES

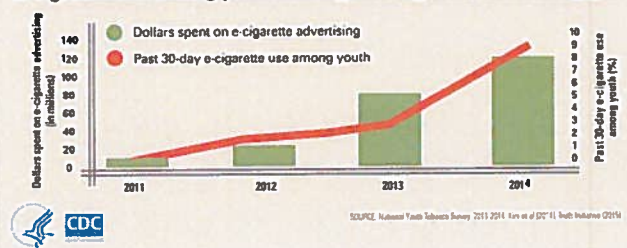


 **82% of 12-17 year olds** reported having seen an e-cigarette ad in 2015.¹


 60% of high school students on Guam have experimented with e-cigarettes, and 32% are current users.³


 Among middle school students on Guam, 38% have experimented with e-cigarettes, while 23% are current users.⁴


E-cigarette use among youth is rising as e-cigarette advertising grows



 Youth who reported using e-cigarettes are **twice** as likely to smoke regular cigarettes than youth who have never used e-cigarettes.³

 Exposure to liquid nicotine, found in e-cigarettes has led to a dramatic increase in calls to poison control centers (**3,073 calls** in 2015). More than half of those calls reported accidental ingestion and exposure by children under the age of 6 years.^{5,6}

 **25 e-cigarette explosions** caused fires between 2009-2014. However, most e-cigarette explosions are reported only if they cause injury so it is likely that the number of explosions from e-cigarettes are much higher.⁷

 **E-cigarette vapor** contains known Group 1 carcinogens such as formaldehyde and acetaldehyde. Increasing the amount of voltage of the device, increases the amount of toxins vaped.⁸ Toxins are inhaled not only by the user but also by those around them.

Sources:

1. Truth, 2015. http://truthinitiative.org/sites/default/files/Vaporized-Youth_and_young_adult_exposure_to_e-cigarette_marketing.pdf
2. Lovato C, Linn G, Stead LF, Best A. (2011). Impact of tobacco advertising and promotion on increasing adolescent smoking behaviors. Cochrane Database Syst Rev.
3. Guam High School YRBS, 2015
4. Guam Middle School YRBS, 2015
5. American Association of Poison Control Centers (AAPCC), 2015. <http://www.aapcc.org/alerts/ecigarettes/>
6. Tobacco-Free Kids, 2015. <https://www.tobaccofreekids.org/research/factsheets/pdf/0379.pdf>
7. FEMA, 2014.
8. Lukasz, G.M., et al. (2014). Levels of selected carcinogens and toxicants in vapor from electronic cigarettes. Tobacco Control, 23(2), 133-139

LEGAL PRECEDENTS

- In 2005, Needham, Massachusetts was the first town in the United States to raise the minimum legal age (MLA) to 21. In 4 years, there was a decrease in tobacco use by **47%**.
- Over **150 cities and 2 states** have enacted laws that raise MLA to 21, including Hawaii (Senate Bill 1030 signed by Gov. Ige in June 2015) and California (SBx2-7 signed by Gov. Brown in May 2015).¹
- Guam's retailer violation rate (the rate of businesses' non-compliance with the Tobacco Control Act of 1998) was **4.7%** in 2015.³ The clear identification of an underage (under 21) individual on Guam driver's licenses will make **retailer compliance more manageable**.
- **A common argument against raising the MLA to 21 is that if at 18 a person can choose to join the military, then he or she can choose to smoke. However:**⁴
 - ◊ There is no constitutional right to smoke.⁵
 - ◊ The US Military itself recognizes the danger of being addicted to tobacco; the US Army Surgeon General stated that soldiers who smoke are **less ready for combat** and have **delayed wound healing**.⁴
 - ◊ The Department of Defense has issued a Directive (DoDI 1010.10, "Health Promotion and Disease Prevention," April 28, 2014) to promote **tobacco-free living** as one of the seven targeted priorities.⁸
 - ◊ **"Tobacco use undercuts military readiness and harms individual performance."** (Dr. Jonathan Woodson, Asst. Sec. of Defense for Health Affairs)¹
- **Policy impact of raising the minimum legal age for alcohol to 21.** On Guam, there was a decrease in high school and middle school students who had ever tried alcohol after the passing of PL 30-156: Ramon Someros Oberiano Act in 2010:
 - ◊ Guam HS: 68.5% in 2007 down to 58.4% in 2011 and 55.3% in 2013⁶
 - ◊ Guam MS: 34.4% in 2007 down to 31.2% in 2011 and 22.5% in 2013⁶

RECENT FEDERAL UPDATES

In 2016, the **Food and Drug Administration (FDA)** passed "Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act". This "extends the FDA's authority to include the regulation of electronic nicotine delivery systems (such as **e-cigarettes** and **vape pens**), all **cigars, hookah (water pipe) tobacco, pipe tobacco** and **nicotine gels**", and goes into effect on August 8, 2016.⁷

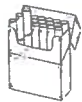
Sources:

1. Tobacco 21
2. IOM, 2015.
3. PEACE office, Synar Program, 2016
4. <https://www.army.mil/standto/archive/issue.php?issue=2012-11-20>
5. Tobacco Control Legal Consortium, 2008.
6. Guam YRBS, 2007-2013
7. FDA, 2016.
8. DoDI 1010.10, April 28, 2014

COST OF TOBACCO USE

Economic Costs

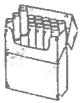
- In Needham, MA, the first locality to raise the minimum age of tobacco sales to 21, **no tobacco retailers went out of business after the bill was passed.**¹
- Tobacco sales to 18-20 year olds are only **2-3%** of retail tobacco sales, therefore raising the age to 21 would not dramatically reduce revenue.¹
- **\$170 billion annually** Smoking costs amount to **8.7%** of total annual healthcare spending in the U.S.²
- **\$85 billion annually** Over **60%** of smoking-attributable healthcare spending was through public health assistance programs such as Medicare and Medicaid.²
 - **14,287 individuals enrolled in Medicare** on Guam in 2015.³
 - **37,370 people enrolled in Medicaid** in first quarter of 2016 (Oct 2015-Dec 2015); may increase due to Medicaid expansion which would expand services to childless adults.⁴
 - Smoking accounts for approximately **11%** of Medicaid program expenditures.⁵
 - **37%** of adults on Medicaid smoke.⁶
- Average price of cigarettes is **\$7** on Guam.⁷
1 pack of cigarettes is equal to:



=



3 L of milk (\$2.56/liter)⁸



=



24 eggs (\$3.44/dozen)⁸



=



2 loaves of bread (\$3.26/loaf)⁸



=



6.6 lbs of rice (\$1.06/lb)⁸

An average smoker smokes 1 pack of cigarettes a day. At \$6.99 per pack, in 1 month this smoker spends \$209.70 on cigarettes. In 1 year, this smoker spends \$2,551.35 on cigarettes.

Cost of Smoking-Related Illness

- On Guam, expenses for a 65 year old smoker's smoking-related illness can cost as much as **\$480,954** annually compared to a 65 year old non-smoker's illness costs of **\$9,466** annually. Smokers' illnesses cost **48.9** times more to treat than non-smoker's illnesses.⁹
- Smoking-related illness in the United States costs more than **\$300 billion** each year, including⁵:
 - Nearly **\$170 billion** for direct medical care for adults
 - More than **\$156 billion** in lost productivity including **\$5.6 billion** in lost productivity due to **secondhand smoke exposure**

Sources:

1. Winickoff et al, 2014

2. Xu X et al, 2014

3. Cms.gov, 2015

4. DPHSS Medicaid program, 2016

5. Cdc.gov, 2009

6. Medicaid.gov, 2016

7. Guam Synar Program, 2016

8. Numbeo.com, 2016

9. Staywell Guam, 2014

DATA



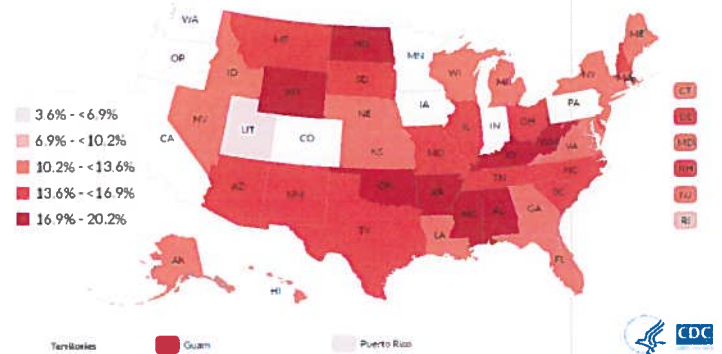
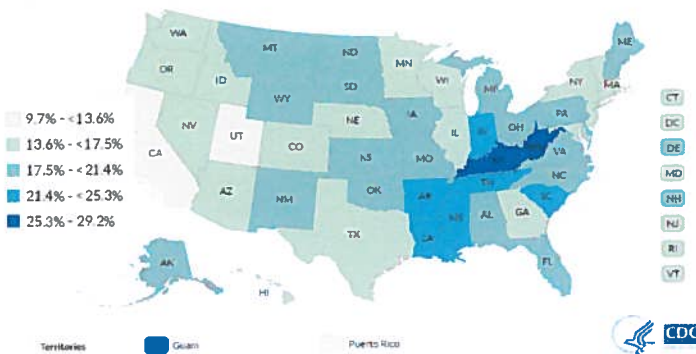
ranks No. 1

- As of 2015, Guam has the **highest smoking rate (29.2%)** among adults of all the US¹ States & Territories.¹

- As of 2015, Guam maintains the **highest prevalence of youth (20.2%)** who are current smokers in the US.²

Current Cigarette Use Among Adults (Behavior Risk Factor Surveillance System) 2014

Current Cigarette Use Among Youth (Youth Risk Behavior Surveillance System) 2013*



- Nationally, tobacco kills up to **1 in every 2 users**.³ On Guam, over **65%** of deaths on Guam in 2014 were related to or worsened by tobacco use.⁴

Youth Tobacco Use:

- 1 in 5 high school** and **1 in 10 middle school** youth currently smoke.^{5,6}
- More **youth males (19.2%)** report current smoking than **females (15.9%)**.⁵
- Majority of high school youth smokers are:⁵
 - 👤 Chamorro (20.1%)
 - 👤 Other Micronesians (23.2%)
 - 👤 Filipino (5.9%)
- 4 in 5 high school smokers** have attempted to quit in the past 12 months.⁵ It takes an average of 11 attempts for a tobacco user to quit.
- Tobacco advertisements** increase the willingness and likelihood of smoking among youth.⁸

Sources:

- CDC, 2015. <https://www.cdc.gov/statesystem/cigaretteuseadult.html>
- CDC, 2016. <https://www.cdc.gov/statesystem/cigaretteuseyouth.html>
- WHO, 2008. http://www.who.int/tobacco/mpower/mpower_report_tobacco_crisis_2008.pdf
- DPHSS Vital Statistics, 2014.
- Guam High School YRBS, 2015.
- Guam Middle School YRBS, 2015
- Lovato C, et. Al. (2011). Impact of tobacco advertising and promotion on increasing adolescent smoking behaviors. Cochrane database Syst Rev.