

Played

Smoking and Video Games

Truth Initiative is a public health organization dedicated to achieving a culture where all youth and young adults reject tobacco. We and other partners in the public health community have worked together to raise awareness of “smoking in the movies” and the influence of tobacco imagery in films upon youth audiences.

Movies are just a fraction of the screened entertainment consumed by adults and youth alike. And the influence of smoking imagery in entertainment is not confined to feature films. This paper explores tobacco use in a medium that is firmly established as a channel for youth and young adults: video games.

We have reviewed the available existing research on tobacco use in video games, conducted interviews with gamers about their experiences with tobacco imagery in video games and summarized what we have found thus far. We are a public health organization working to change cultural norms associated with tobacco and help create the first tobacco-free generation of

“ This paper explores tobacco use in a medium that is firmly established as a channel for youth and young adults: video games. ”

youth. This paper should start a discussion about smoking and video games. We hope it will lead to more research on whether such images are influencing kids to smoke and more interest in and enthusiasm for potential changes within the video gaming industry.

IN THIS REPORT

WHAT YOU SHOULD KNOW ABOUT TOBACCO USE IN VIDEO GAMES:

- Tobacco use is prevalent in video games played by youth.
- Tobacco use in video games is viewed as making characters “tougher” or “grittier.” In some cases, players can choose to make their characters use tobacco, and in other cases, players have no choice about whether their characters use tobacco.
- Tobacco use in video games is likely to promote youth smoking. The U.S. Surgeon General has concluded that exposure to tobacco use in films promotes youth smoking. Video games are likely to work in similar ways.
- Video game content descriptors often fail to mention tobacco use.

WHAT INDIVIDUALS AND ORGANIZATIONS CAN DO TO ENSURE TOBACCO USE IN VIDEO GAMES IS NOT CONTRIBUTING TO YOUTH TOBACCO USE:

- Monitor the content of games purchased for and used by youth.
- Urge the Entertainment Software Rating Board (ESRB) to rate games containing tobacco with a “Mature” rating and disclose tobacco use in all games where it occurs.
- Call on game developers and publishers to immediately stop including tobacco use and tobacco images in their games, particularly those marketed to or played by youth.



Screenshot; *Bioshock Infinite: Burial at Sea*
Source: <http://bioshock.wikia.com/wiki/Elizabeth>

“ He’d be smoking a cigar, and it kind of made him look more important and more in charge, you know. He was the cool-looking dude, and he’s smoking this big cigar, and he’s giving orders to his people. ”

- Male, 18-21 years old

BACKGROUND

According to the 2015 Common Sense Census, American teens aged 13-18 are exposed to an average of nearly nine hours of entertainment media on any given day. Playing video games ranks as the second favorite media activity for teens, and 56% of teens play video, computer or mobile games on any given day. Those teens who play games average two hours and 25 minutes per day. (Figure A) Overall, teens spend more time per day on average playing video, computer or mobile games than using social media.¹

“ I mean of course it was very influential because you were seeing it over and over. It’s described as cool. It’s described as something that grown-ups do, strong men, people who have things in life, careers, things like that. So it did really affect me. ”

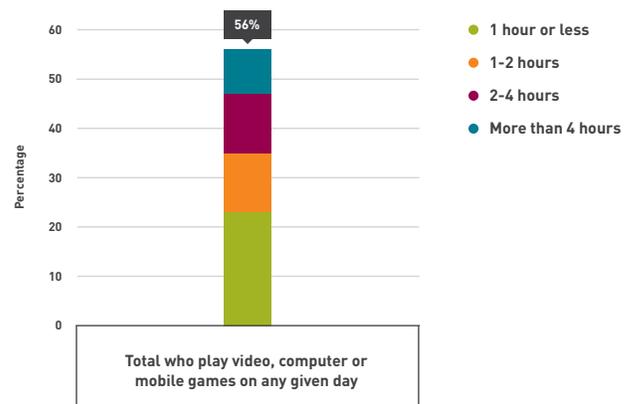
- Male, 18-21 years old

We know that entertainment media has a strong influence on tobacco use. In its 2012 monograph on the role of media in tobacco use, the National Cancer Institute (NCI) found that, “media communications play a key role in shaping tobacco-related knowledge, opinions, attitudes and behaviors among individuals and within communities.”² The Centers for Disease Control and Prevention (CDC) notes that young people are “uniquely susceptible” to these types of influences given their stage of

development.⁴ Narratives in entertainment media are persuasive and “provide role models for behaviors, create attitudes and beliefs consistent with the message and generate empathy.”² While the important issue of violence in video games is well-known, few adults may realize how many of the story lines feature tobacco use. These narratives contribute to the perception that smoking is common, and research has found that youth who perceive smoking to be common in media are more likely to smoke.³

Advertising is also a key factor in youth tobacco use initiation.⁴ The depiction of tobacco use in games serves, in effect, as free advertising for tobacco companies. And, as a tobacco company report famously said in 1984, younger adults are the only source of replacement smokers.⁵

Figure A: **Gaming among Teens Aged 13-18**



Source: *Common Sense. The Common Sense Census: Media Use by Teens and Tweens. 2015.*

While there is little scientific research to date on the particular question of the impact of tobacco use in video games on youth smoking rates, there is a robust body of research demonstrating that exposure to smoking in movies increases the likelihood that a young person will begin to smoke.⁶ In fact, 44% of adolescents who start smoking do so because of smoking images they have seen in the movies.⁷ The relationship between smoking in the movies and youth smoking behavior raises the strong prospect that smoking in video games has a similar influence. This is troubling, since youth spend considerably more time on average playing video games than watching movies in theaters (Figure B).⁸ The 2015 Common Sense Census also found a dramatic difference between time spent playing video games and time spent going to the movies.¹

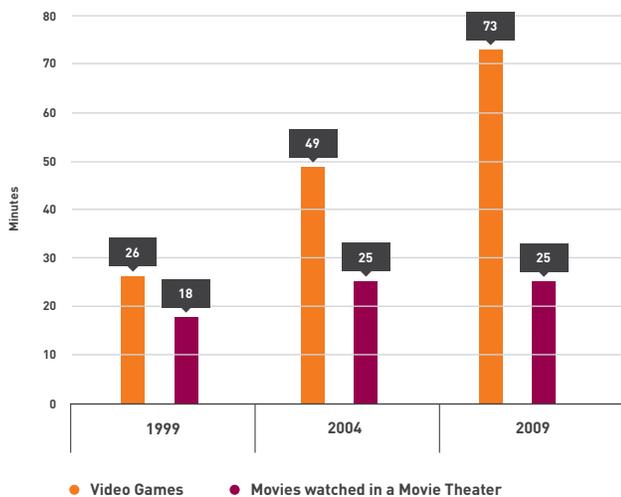
WHAT WE KNOW

There is a lot still to be learned about smoking and video games. But we know enough to have serious, well-based concerns. As we will discuss, tobacco products are prevalent in video games, used by the “cool” characters and sometimes by the players themselves in the virtual world of the game and are often not reflected in a game’s rating.

“Yeah, I’ve noticed it in a ton of video games that people are always like smoking cigarettes or cigars or something like that.”

- Male, 15-17 years old

Figure B: Average Time 8-18 Year Olds Spend Playing Video Games Versus Watching Movies in Theaters on a Typical Day: 1999-2009



Source: Kaiser Family Foundation, *Generation M2: Media in the Lives of 8-18 Year Olds*. 2010.

First, tobacco use is widespread in video games played by youth. A 2012 study found a steady increase over the past decade in tobacco content in video games rated appropriate for kids as young as 10. For example, of all new games introduced in 2011 that were rated “Everyone 10+” (content generally suitable for ages ten and up), 12.6% featured tobacco. The same study found that between 1994 and 2011, 60 out of 78 large publishers included tobacco imagery in at least one, and often more, of their games rated appropriate for youth.⁹



Screenshot; *Starcraft II: Wings of Liberty*
Source: http://starcraft.wikia.com/wiki/T-280_space_construction_vehicle

For instance, in the popular game *Starcraft II: Wings of Liberty*, a battlefield game rated “Teen” (content generally suitable for ages 13 and up), three of the 13 soldiers that a player can select smoke. In addition, the only characters in the game capable of doing particular tasks are shown holding a lit cigarette in their mouths with another behind their ears.¹⁰

In 2015, Truth Initiative commissioned a series of video interviews with 44 teen and young adult “gamers,” who all recalled seeing smoking in games on a regular basis. Video game characters smoke in best-selling game franchises such as *Grand Theft Auto*, *Call of Duty* and *Halo*. More than 100 million copies of games from these franchises featuring tobacco use have been sold. While all are rated “Mature,” (content generally suitable for ages 17 and up), they are played by teenagers nationwide. For example, in a survey of more than 9,000 youth and adults across the

U.S., nearly 40% of gamers aged 12-17 have played *Call of Duty: Black Ops*, just one of several games in the *Call of Duty* franchise featuring smoking.¹¹ Another study of U.S. adolescents found that nearly half (49.5%) reported that their parents allowed them to play Mature-rated games at least occasionally.¹² The gamers who participated in the video interviews described having few restrictions from their parents on the types of video games they played growing up. They also recalled being exposed to smoking in video games when they were as young as 10 or 11 years old.

Second, just as in the movies, tobacco use in video games is often presented in ways that are viewed as positive by youth. In the Truth Initiative video interviews, respondents described smoking characters as “cool,” “badass,” “tough” and “strong.” Tobacco use was viewed as making a character “tougher” or “grittier.” Sometimes, tobacco use is given objectively positive qualities in games. For example, in the game *Fallout: New Vegas*, using chewing tobacco provides a player with increased perception and agility.¹³ In the best-selling *Assassin’s Creed* series, players can purchase and sell tobacco for profit.^{14,15} While participants in the interviews said they would not be influenced by video games to use tobacco, they universally believed that younger consumers, particularly those under the age of 15, would be influenced. In fact, many young adult respondents admitted that, when they were younger, viewing smoking in a video game made them want to smoke.

Third, unlike when people watch movies and merely observe tobacco being used, many games feature playable characters that smoke. In *Grand Theft Auto Online*, players can purchase a pack of cigarettes in the game and have their character smoke them.^{16,17} In some games, players cannot



Screenshot; *Call of Duty: Black Ops III*

Source: <https://www.youtube.com/watch?v=Cfqb1PgPhQI>

even control whether their characters use tobacco. In *Call of Duty: Black Ops III*, released in November 2015, before the player even starts the game, the first interaction with the protagonist is to watch him or her smoke a cigar while cleaning a gun.¹⁸

Fourth, recent research shows that video game content descriptors often fail to mention tobacco use, making it difficult for parents to monitor games for tobacco imagery. In a 2015 survey, researchers verified tobacco content in 42% of the video games that participants reported playing; however, only 8% of these games had received tobacco warnings from the Entertainment Software Rating Board (ESRB).¹⁹ Created by the Entertainment Software Association in 1994, the ESRB is the gaming industry's self-regulatory organization that rates video games and apps.²⁰

ESRB RATINGS: A SUMMARY

The Entertainment Software Rating Board (ESRB) assigns ratings, such as Everyone, Teen and Mature, to video games. It also provides descriptions of the content that factored into each game's rating and interactive elements. The content descriptors are "not intended to be a complete listing of content."

The ESRB uses two different rating processes depending on the game's platform – meaning packaged/boxed games or digitally delivered games:

1. For packaged or boxed video games, publishers provide information to the ESRB prior to a game's release regarding "pertinent content, which essentially translates to anything that may factor into the game's rating," including the "most extreme content in the game." Pertinent content also includes "other relevant factors such as context, reward systems and the degree of player control." In addition, publishers provide the ESRB with a DVD, including the pertinent content. A committee of at least three ESRB trained raters, individuals with no ties to the video game industry, reviews the submission and recommends a rating and content descriptors. The ESRB reviews the recommendation and finalizes the rating. After the game is released, ESRB staff "play-tests a variety of games" to verify that the content disclosure was accurate and complete.
2. For digitally delivered games, publishers complete a questionnaire regarding content and interactive components. The rating is generated by an automated process based upon the responses to the questionnaire.

Source: For a full description of the ratings process, visit ESRB. http://www.esrb.org/ratings/ratings_process.aspx

GAPS IN KNOWLEDGE

While we know that tobacco use is frequently depicted in video games, we do not know the precise extent of such depictions; a methodical review of games on the U.S. market has yet to be conducted.²¹ A 2012 paper on the prevalence of tobacco in games found a significant increase in tobacco content since 2005 in games rated for young adolescents, but its conclusions were based on analyzing information from the ESRB, which has been shown to substantially underreport tobacco imagery.²² Better data need to be collected on the prevalence of smoking in video games.

“Parents and adults should recognize that many video games contain tobacco use and be aware that ESRB content descriptors may fail to mention tobacco content, even when it is present in a game.”

We also need to learn more about the relationship between playing video games and smoking, particularly among U.S. adolescents. A 2015 survey found that 26% of males and 22% of females between the ages of 18-24 who play games, also bought cigarettes, but we do not know if or how their smoking behavior is influenced by the games they play.²³ While some studies have found a correlation between video game playing and tobacco use, the results are not consistent across studies.^{24,25} A recent online survey of adults found video game playing to

be more prevalent among smokers, and it also found that smokers reported playing video games more recently and for longer durations.²⁶ A study of Dutch secondary school students found that boys who used marijuana, tobacco and alcohol were nearly twice as likely to report problematic (i.e., excessive or addictive) video gaming, but did not find a relationship between non-problematic game playing and smoking.²⁷ A 2011 study of adolescents in California also had mixed results, with video game playing on weekdays positively correlated with tobacco use, but video game playing on weekends negatively correlated.²⁸ Two other studies found no relationship between tobacco and video game use.^{29,30}

While we need to better understand whether playing video games featuring tobacco increases the likelihood that a person will begin to smoke, the large body of research on smoking in the movies has established a link between exposure and youth uptake based on research conducted across 14 different countries.³¹ In addition, the advanced graphics, sounds and plots of modern video games make playing them even more engaging and interactive than watching a movie. Even gamers themselves opined in the Truth Initiative interviews that smoking in video games likely influences young people to smoke.

More research, such as a properly designed longitudinal study to measure changes in behavior over time and control for confounding factors, such as race, ethnicity, gender and income, could shed light on the relationship between exposure to tobacco imagery in video games and tobacco use behavior.

ACTION NEEDED

The current state of knowledge about tobacco use in video games allows us to call for the following steps. Taken together, they will reduce the risk that our kids could be influenced by video games to use tobacco:

- The ESRB should consistently identify and disclose if any game contains tobacco use or tobacco references. We also support the World Health Organization Framework Convention on Tobacco Control guidelines which recommend “a ratings or classification system that takes into account the depiction of tobacco products, use or images in rating or classifying entertainment media products (for example, requiring adult ratings which restrict access of minors) and that ensures that entertainment media aimed at children (including cartoons) do not depict tobacco products, use or imagery.”³²
- Game developers and publishers should stop including tobacco use and tobacco images in their games, particularly those marketed to or played by youth, regardless of their ESRB rating. Given what we know about the effects of smoking in the movies on youth initiation, they should take this step immediately.
- Parents and adults should recognize that many video games contain tobacco use and be aware that ESRB content descriptors may fail to mention tobacco content, even when it is present in a game. We strongly encourage parents and other adults to take this into consideration when purchasing games for tweens and teens.
- Public health advocates should build public and stakeholder awareness about the issue of tobacco use in video games and support research to learn more about its implications. The public health community should also insist that game developers eliminate tobacco content in video games. Research suggests that pressure on film producers has succeeded in decreasing tobacco imagery in youth-rated movies, and the same efforts should be used to influence game developers and publishers.^{33,34}
- Public health researchers should conduct more studies of the relationship between video games and tobacco, including longitudinal studies that can help shed light on the question of whether exposure to tobacco use in video games leads to increased use or facilitates progression to regular use of tobacco.
- Policymakers should recognize that the prevalence of tobacco use in video games may undermine public health gains in the reduction of youth tobacco use. Indeed, some research suggests that tobacco content in video games suitable for youth increased during the period of time that tobacco decreased in movies.³⁵ They should encourage responsible industry practices. Government agencies such as the Centers for Disease Control and Prevention, Food and Drug Administration and National Institutes of Health should undertake in-depth research on the impact of tobacco use imagery in entertainment media, including video games.

REFERENCES

1. Common Sense. *The Common Sense Census: Media Use by Tweens and Teens*. 2015.
2. National Cancer Institute. *The Role of Media in Promoting and Reducing Tobacco Use*. U.S. Department of Health and Human Services, National Institutes of Health; 2012.
3. Ibid.
4. U.S. Department of Health and Human Services. *Preventing tobacco use among youth and young adults: 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, 2012.
5. Burrows DS. Strategic Research report. Younger Adult Smokers: Strategies and opportunities. Truth Tobacco Industry Documents. RJ Reynolds. February 29, 1984. Bates No: 508783540.
6. Forsyth SR, Malone RE (2015). Smoking in video games: A systematic review. *Nicotine Tob Res*, published online July 25, 2015, doi:10.1093/ntr/ntv160.
7. Millett C, Glantz SA (2010). Assigning an 18 rating to tobacco imagery is essential to reduce youth smoking (editorial). *Thorax*, 65:377-378.
8. Kaiser Family Foundation. *Generation M2: Media in the Lives of 8-to 18-Year-Olds*. 2010.
9. Barrientos-Gutierrez T, Barrientos-Gutierrez I, Lazcano-Ponce E, Thrasher JF. Tobacco content in video games: 1994–2011. *Lancet Oncol* 2012 March;13(3):237-8.
10. Barrientos-Gutierrez T, Barrientos-Gutierrez I, Thrasher J. Video games and the next tobacco frontier: smoking in the Starcraft universe. *Tob Control* 2012;21:443-4.
11. Interpret. New Media Measure®. Data from 2012 Q3.
12. Hull JG, Brunelle TJ, Prescott AT, Sargent JD. A longitudinal study of risk-glorifying video games and behavioral deviance. *J of Pers and Soc Psych* 2014, Vol. 107, No.2, 300–325.
13. Fallout Wiki. Available at http://fallout.wikia.com/wiki/Coyote_tobacco_chew [accessed November 12, 2015].
14. Trade Assassin's Creed: Liberation HD Game Guide. Available at <http://guides.gamepressure.com/assassinscreedliberationhd/guide.asp?ID=23679> [accessed November 4, 2015].
15. How to Make More Money in Assassin's Creed Rogue: Sell tobacco, renovate buildings and capture Gang HQs in this thriving economy. Available at <http://www.primagames.com/games/assassins-creed-rogue/tips/how-make-more-money-assassins-creed-rogue> [accessed November 4, 2015].
16. GTA Wiki. Smoking. <http://gta.wikia.com/wiki/Smoking> [accessed November 11, 2015].
17. GTA Wiki. Redwood Cigarettes. http://gta.wikia.com/wiki/Redwood_Cigarettes [accessed November 11, 2015].
18. Infinity Ward. Call of Duty: Black Ops III.
19. Forsyth SR, Malone RE. Tobacco imagery in video games: ratings and gamer recall. *Tob Control*. September 14, 2015, doi: 10.1136/tobaccocontrol-2015-052286.
20. Entertainment Software Rating Board. About ESRB. Available at <http://www.esrb.org/about/>
21. Barrientos-Gutierrez T, Barrientos-Gutierrez I, Lazcano-Ponce E, Thrasher JF. Tobacco content in video games: 1994–2011. *Lancet Oncol* 2012 March;13(3):237-8.
22. Ibid.
23. Interpret. New Media Measure®. Data from 2015 Q1.
24. Hull JG, Brunelle TJ, Prescott AT, Sargent JD. A longitudinal study of risk-glorifying video games and behavioral deviance. *J of Pers and Soc Psych* 2014, Vol. 107, No. 2, 300-325.
25. Forsyth SR, Malone RE (2015). Smoking in video games: A systematic review. *Nicotine Tob Res*, published online July 25, 2015, doi:10.1093/ntr/ntv160.
26. Raiff BR, Jarvis BP, Rapoza D. Prevalence of video game use, cigarette smoking, and acceptability of a video game-based smoking cessation intervention among online adults. *Nicotine Tob Res* 2012; 14, 1453–1457.



REFERENCES CONT.

27. Van Rooij AJ, et al. The (co-)occurrence of problematic video gaming, substance use, and psychosocial problems in adolescents. *J of Behavioral Addictions* 2014; 3(3), 157–165.
28. Shi L, Mao Y. Weekend television viewing and video gaming are associated with less adolescent smoking. *J of Substance Use*, April 2011; 16(2): 109–115.
29. Walther B, Morgenstern M, Hanewinkel R. Co-occurrence of addictive behaviours: personality factors related to substance use, gambling and computer gaming. *Eur Addict Res* 2012;18, 167–174.
30. McClure RF, Mears FG. Video game playing and psychopathology. *Psychol Rep* 1986, 59, 59–62.
31. World Health Organization. *Smoke-Free Movies: from evidence to action*. 3rd edition. 2015.
32. World Health Organization. *Guidelines for implementation for article 13 of the WHO framework convention on tobacco control*. 2009.
33. Glantz SA, Mitchell S, Titus K, et al. Smoking in top-grossing movies. *MMWR Morb Mortal Wkly Rep* 2011;60:909e13.
34. Thrasher JF, Sargent JD, Vargas R, Braun S, Barrientos-Gutierrez T, Sevigny EL, Billings DL, Arillo-Santillan E, Hardin J. Are movies with tobacco, alcohol, drugs, sex, and violence rated for youth?: A comparison of rating systems in Argentina, Brazil, Mexico, and the United States. *International Journal of Drug Policy*. 25: 267-275. 2014.
35. Barrientos-Gutierrez T, Barrientos-Gutierrez I, Lazcano-Ponce E, Thrasher JF. Tobacco content in video games: 1994–2011. *Lancet Oncol* 2012 March;13(3):237-8.