

# USAGE OF ELECTRONIC CIGARETTES AMONG YOUTH IN THE UNITED STATES

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## FOOTNOTES

1. "Electronic Cigarettes (E-Cigarettes)," National Institute on Drug Abuse, accessed July 1, 2019, <https://www.drugabuse.gov/publications/drugfacts/electronic-cigarettes-e-cigarettes>.
2. "Quick Facts on the Risks of E-Cigarettes for Young People," Centers for Disease Control and Prevention, June 6, 2019, [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html).
3. "The Facts on E-Cigarette Use among Youth and Young Adults." Know The Risks, e-Cigarettes & Young People, U.S. Department of Health, accessed March 12, 2019, <https://e-cigarettes.surgeongeneral.gov/>.
4. "Quick Facts on the Risks of E-Cigarettes."
5. "Nicotine," Illinois Institute for Addiction Recovery, accessed March 12, 2019, [www.addictionrecov.org/Addictions/?AID=44](http://www.addictionrecov.org/Addictions/?AID=44).
6. "Type of Tobacco Product | Tobacco Control Laws," accessed August 17, 2019. <https://www.tobaccocontrolaws.org/litigation/browse/tobacco-type/>.
7. "Our Impact." Truth Initiative, Inspiring Tobacco-Free Lives, accessed March 21, 2019, <https://www.truthinitiative.org/who-we-are/our-impact>.
8. "Tobacco Use by Youth is Rising."
9. Ibid.
10. Ibid.
11. Karen A. Cullen, Bridget K. Ambrose, Andrea S. Gentzke, Benjamin J. Apelberg, Ahmed Jamal, and Brian A. King, "Notes from the Field: Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students — United States, 2011–2018 | MMWR," Centers for Disease Control and Prevention, November 16, 2018, [https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s\\_cid=mm6745a5\\_w](https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s_cid=mm6745a5_w).
12. "Tobacco Use By Youth Is Rising."
13. Ibid.
14. "Historical Timeline of Electronic Cigarettes," CASAA, April 11, 2015, <http://www.casaa.org/historical-timeline-of-electronic-cigarettes/>.
15. "Is Vaping Better Than Smoking?" American Heart Association, accessed August 2, 2019, <https://www.heart.org/en/healthy-living/healthy-lifestyle/quit-smoking-tobacco/is-vaping-safer-than-smoking>.
16. "2016 SGR: E-Cigarette Use Among Youth and Young Adults," Centers for Disease Control and Prevention, July 24, 2017, [https://www.cdc.gov/tobacco/data\\_statistics/sgr/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/data_statistics/sgr/e-cigarettes/index.htm).

17. Kristy Marynak, Andrea Gentzke, Teresa W. Wang, Linda Neff, and Brian A. King, "Exposure to Electronic Cigarette Advertising Among Middle and High School Students — United States, 2014–2016," *MMWR, Morbidity and Mortality Weekly Report* 67 no. 10 (2018): 294–99, <https://doi.org/10.15585/mmwr.mm6710a3>.
18. "4 Marketing Tactics E-Cigarette Companies Use to Target Youth," n.d., Truth Initiative, accessed July 1, 2019, <http://www.truthinitiative.org/research-resources/tobacco-industry-marketing/4-marketing-tactics-e-cigarette-companies-use-target>.
19. "Is Vaping Better Than Smoking?"
20. "Teens and E-Cigarettes," National Institute on Drug Abuse, February 11, 2016, <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/teens-e-cigarette-s>.
21. Kar-Hai Chu, Jon-Patrick Allem, Tess Boley Cruz, and Jennifer B. Unger, "Vaping on Instagram: Cloud Chasing, Hand Checks and Product Placement," *Tobacco Control* 26 no. 5 (2017): 575–78, <https://doi.org/10.1136/tobaccocontrol-2016-053052>.
22. Mark Oliver, "Juul Stops Sale of Flavored E-Cigarettes amid Mounting Pressure from FDA," KSLNewsRadio, November 14, 2018, <https://kslnnewsradio.com/1894471/placeholder-article-juul/>
23. Alisa A. Padon, Erin K. Maloney, and Joseph N. Cappella, 2017, "Youth-Targeted E-Cigarette Marketing in the US," *Tobacco Regulatory Science* 3 no. 1 (January 1, 2017) 95–101, <https://doi.org/10.18001/TRS.3.1.9>.
24. Tushar Singh, Israel T. Agaku, René A. Arrazola, Kristy L. Marynak, Linda J. Neff, Italia T. Rolle, and Brian A. King, 2016, "Exposure to Advertisements and Electronic Cigarette Use Among US Middle and High School Students," *Pediatrics* 137 no. 5 (May 01, 2016) <https://doi.org/10.1542/peds.2015-4155>.
25. Cullen, "Use of electronic cigarettes."
26. "JUUL, JUUL Labs Inc.," Stanford Research into the Impact of Tobacco Advertising, accessed August 17, 2019, [http://tobacco.stanford.edu/tobacco\\_main/images\\_ecigs.php?token2=fm\\_ecigs\\_st647.php&token1=fm\\_ecigs\\_img34819.php&theme\\_file=fm\\_ecigs\\_mt057.php&theme\\_name=Independent%20Brands&subtheme\\_name=JUUL,%20JUUL%20Labs%20Inc](http://tobacco.stanford.edu/tobacco_main/images_ecigs.php?token2=fm_ecigs_st647.php&token1=fm_ecigs_img34819.php&theme_file=fm_ecigs_mt057.php&theme_name=Independent%20Brands&subtheme_name=JUUL,%20JUUL%20Labs%20Inc).
27. "4 Marketing Tactics E-Cigarette Companies Use to Target Youth."
28. Jidong Huang, Zongshuan Duan, Julian Kwok, Steven Binns, Lisa E. Vera, Yoonsang Kim, Glen Szczytko, and Sherry L. Emery, "Vaping vs. JUULing: How the Extraordinary Growth and Marketing of JUUL Transformed the US Retail E-Cigarette Market," *Tobacco Control* 28 no. 2 (2019): 146–51, <https://doi.org/10.1136/tobaccocontrol-2018-054382>.
29. "E-Cigarette Sellers Offer Grants to Students at Harvard, Top Colleges," CBS News, June 8, 2018, <https://www.cbsnews.com/news/e-cigarette-sellers-offer-grants-to-students-at-harvard-to-p-colleges/>.
30. Collin Binkley, "Vaping Essays: E-Cigarette Sellers Offering Scholarships," AP NEWS, June 8, 2018, <https://apnews.com/a35ba8a0200c4a27943da3b9254b9fe5>.
31. "E-Cigarette Sellers Offer Grants to Students at Harvard, Top Colleges."
32. "4 Marketing Tactics E-Cigarette Companies Use to Target Youth."

33. "Blu ECigs Announces Sponsorship of Sasquatch! Music Festival," PRNewswire, May 20, 2013, <https://www.prnewswire.com/news-releases/blu-ecigs-announces-sponsorship-of-sasquatch-music-festival-208127521.html>.
34. "Activities of the E-Cigarette Companies," E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General, Chapter 4, Centers for Disease Control and Prevention (US), 2016 <https://www.ncbi.nlm.nih.gov/books/NBK538679/>.
35. Greta Hsu, Jessica Y. Sun, and Shu-Hong Zhu, "Evolution of Electronic Cigarette Brands From 2013-2014 to 2016-2017: Analysis of Brand Websites," *Journal of Medical Internet Research* 20 no. 3 (March 12, 2018): 80, <https://doi.org/10.2196/jmir.8550>.
36. "Vape Juice," Hot Juice, accessed August 2, 2019, <https://hotjuice.com/vape-juice/>.
37. "JUUL Fails to Remove All of Youth's Favorite Flavors from Stores," Truth Initiative, accessed August 2, 2019, <https://truthinitiative.org/research-resources/emerging-tobacco-products/juul-fails-remove-all-youths-favorite-flavors-stores>.
38. Bridget K. Ambrose, Hannah R. Day, Brian Rostron, Kevin P. Conway, Nicolette Borek, Andrew Hyland, and Andrea C. Villanti, 2015, "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *JAMA* 314 no. 17, (November 3, 2015): 1871–73, <https://doi:10.1001/jama.2015.13802>.
39. A. McNeill, L. S. Brose, R. Calder, and S. C. Hitchman, "E-Cigarettes: An Evidence Update," Public Health England, August 2015, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/733022/Ecigarettes\\_an\\_evidence\\_update\\_A\\_report\\_commissioned\\_by\\_Public\\_Health\\_England\\_FINAL.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733022/Ecigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf)
40. "E-Cigarettes: Public Health England's Evidence-Based Confusion," *The Lancet* 386, no. 9996 (August 29, 2015): 829, [https://doi.org/10.1016/S0140-6736\(15\)00042-2](https://doi.org/10.1016/S0140-6736(15)00042-2).
41. Jeffrey G. Willett, Morgane Bennett, Elizabeth C. Hair, Haijuan Xiao, Marisa S. Greenberg, Emily Harvey, Jennifer Cantrell, and Donna Vallone, "Recognition, Use and Perceptions of JUUL among Youth and Young Adults," *Tobacco Control* 28 no. 1 (2019): 115–16, <https://doi.org/10.1136/tobaccocontrol-2018-054273>.
42. "Teens and E-Cigarettes," National Institute on Drug Abuse, February 11, 2016, <https://www.drugabuse.gov/related-topics/trends-statistics/infographics/teens-e-cigarette-s>.
43. Meghan E. Morgan, Grace Kong, Dana A. Cavallo, Deepa R. Camenga, and Suchitra Krishnan-Sari, "Nicotine Concentration of E-Cigarettes Used by Adolescents," *Drug and Alcohol Dependence* 167 (October 2016): 224–27, <https://doi.org/10.1016/j.drugalcdep.2016.06.031>.
44. Sakae Scott, interview by Cade J. Hyde, April 3, 2019, "Status of E-Cigarette Usage in Correctional High Schools."
45. Ibid.
46. Ibid.
47. James Tsai, "Reasons for Electronic Cigarette Use Among Middle and High School Students — National Youth Tobacco Survey, United States, 2016," *MMWR. Morbidity*

and Mortality Weekly Report 67 (February 16, 2018)

<https://doi.org/10.15585/mmwr.mm6706a5>.

48. Stephen E. Gilman, Richard Rende, Julie Boergers, David B. Abrams, Stephen L. Buka, Melissa A. Clark, Suzanne M. Colby, Brian Hitsman, Alessandra N. Kazura, Lewis P. Lipsitt, Elizabeth E. Lloyd-Richardson, Michelle L. Rogers, Cassandra A. Stanton, Laura R. Stroud, Raymond S. Niaura, "Parental Smoking and Adolescent Smoking Initiation: An Intergenerational Perspective on Tobacco Control," *Pediatrics* 123 no. 2 (February 1, 2009): 274–81, <https://doi.org/10.1542/peds.2008-2251>.
49. "Fact or Fiction: What to Know About Smoking Cessation and Medications," FDA, May 3, 2019, <http://www.fda.gov/consumers/consumer-updates/fact-or-fiction-what-know-about-smoking-cessation-and-medications>.
50. "Quick Facts on the Risks of E-Cigarettes"
51. "Progress Erased: Youth Tobacco Use Increased During 2017-2018 | CDC Online Newsroom | CDC," Centers for Disease Control and Prevention, April 16, 2019, <https://www.cdc.gov/media/releases/2019/p0211-youth-tobacco-use-increased.html>.
52. Lucinda J. England, Rebecca E. Bunnell, Terry F. Pechacek, Van T. Tong, and Tim A. McAfee, "Nicotine and the Developing Human: A Neglected Element in the Electronic Cigarette Debate," *American Journal of Preventive Medicine* 49 no. 2 (August 2015): 286–93, <https://doi.org/10.1016/j.amepre.2015.01.015>.
53. "2016 SGR: E-Cigarette Use Among Youth and Young Adults."
54. "Electronic Cigarettes (E-Cigarettes)."
55. Rachana Krishna and Tony I. Oliver, "Bronchiolitis Obliterans (Obliterative Bronchiolitis, Constrictive Bronchiolitis)," StatPearls Publishing, March 13, 2019, <http://www.ncbi.nlm.nih.gov/books/NBK441865/>.
56. Ibid.
57. Ibid.
58. Laura Bach, "Electronic Cigarettes and Youth."
59. Won Hee Lee, Sang-Ging Ong, Yang Zhou, Lei Tian, Hye Ryeong Bae, Natalie Baker, Adam Whitlatch, Leila Mohammadi, Hongchao Guo, Kari C. Nadeau, Matthew L. Springer, Suzaynn F. Schick, Aruni Bhatnagar, Joseph C. Wu, "Modeling Cardiovascular Risks of E-Cigarettes With Human-Induced Pluripotent Stem Cell–Derived Endothelial Cells," *Journal of the American College of Cardiology* 73 no. 21 (June 4, 2019): 2722–37, <https://doi.org/10.1016/j.jacc.2019.03.476>.
60. Ibid.
61. Thivanka Muthumalage, Melanie Prinz, Kwadwo O. Ansah, Janice Gerloff, Isaac K. Sundar, and Irfan Rahman, "Inflammatory and Oxidative Responses Induced by Exposure to Commonly Used E-Cigarette Flavoring Chemicals and Flavored e-Liquids without Nicotine," *Frontiers in Physiology* 8 (January 11, 2018) <https://doi.org/10.3389/fphys.2017.01130>.
62. Ibid.
63. "2016 SGR: E-Cigarette Use Among Youth and Young Adults."
64. Ibid.

65. Kaitlyn M. Berry, Jessica L. Fetterman, Emelia J. Benjamin, Aruni Bhatnagar, Jessica L. Barrington-Trimis, Adam M. Leventhal, and Andrew Stokes, "Association of Electronic Cigarette Use With Subsequent Initiation of Tobacco Cigarettes in US Youths," *JAMA Network Open* 2 no. 2 (2019): 187794–187794, <https://doi.org/10.1001/jamanetworkopen.2018.7794>.
66. Krysten W. Bold, Grace Kong, Deepa R. Camenga, Patricia Simon, Dana A. Cavallo, Meghan E. Morean, and Suchitra Krishnan-Sarin, "Trajectories of E-Cigarette and Conventional Cigarette Use Among Youth," *Pediatrics* 141 no. 1 (January 1, 2018) <https://doi.org/10.1542/peds.2017-1832>.
67. "Our Mission," Truth Initiative, accessed July 3, 2019, <http://www.truthinitiative.org/who-we-are/our-mission>.
68. "Am I A Puppet?" Truth, October 3, 2018, <https://www.thetruth.com/articles/videos/vaping-inner-monologue>.
69. "Our Mission."
70. "Truth in Numbers. Every Life Counts." Annual Report, Truth Initiative, accessed March 12, 2019, <https://truthinitiative.org/sites/default/files/media/files/2019/03/2017-Truth-Initiative-Annual-Report.pdf>.
71. Donna Vallone, Marisa Greenberg, Haijun Xiao, Morgane Bennett, Jennifer Cantrell, Jessica Rath, and Elizabeth Hair, "The Effect of Branding to Promote Healthy Behavior: Reducing Tobacco Use among Youth and Young Adults," *International Journal of Environmental Research and Public Health* 14 (2017): 12, <https://doi.org/10.3390/ijerph14121517>.
72. C. Pechmann and E. T. Reibling, "Anti-Smoking Advertising Campaigns Targeting Youth: Case Studies from USA and Canada," *Tobacco Control* 9 no. 2 (June 1, 2000): 18-31, [https://doi.org/10.1136/tc.9.suppl\\_2.ii18](https://doi.org/10.1136/tc.9.suppl_2.ii18).
73. "Quit Vaping Program Sees High Enrollment and Engagement," Truth Initiative, accessed July 3, 2019, <https://truthinitiative.org/research-resources/quitting-smoking-vaping/quit-vaping-program-sees-high-enrollment-and-engagement>.
74. Ibid.
75. Ibid.
76. "About | BecomeAnEX," BecomeAnEx, accessed September 12, 2019, <https://www.becomeanex.org/whos-behind-ex/>
77. "Quitting E-Cigarettes," Truth Initiative, accessed July 3, 2019, <http://www.truthinitiative.org/research-resources/quitting-smoking-vaping/quitting-e-cigarettes>.
78. Ibid.
79. "Youth Initiatives," Campaign for Tobacco-Free Kids, June 6, 2017, <https://www.tobaccofreekids.org/what-we-do/youth-programs>.
80. "Community and Youth Engagement," Truth Initiative, accessed July 3, 2019, <https://truthinitiative.org/what-we-do/community-and-youth-engagement>.
81. Vallone, "The Effect of Branding."

82. "Talk with Your Teen About E-Cigarettes: A Tip Sheet for Parents," Centers for Disease Control and Prevention, accessed July 3, 2019, [www.e-cigarettes.surgeongeneral.gov/documents/SGR\\_ECig\\_ParentTipSheet\\_508.pdf](http://www.e-cigarettes.surgeongeneral.gov/documents/SGR_ECig_ParentTipSheet_508.pdf).
83. Ibid.
84. "Parent Resources," CATCH, accessed July 3, 2019, <https://catch.org/units/catch-my-breath-high-school>.
85. Stephen E. Gilman, Richard Rende, Julie Boergers, David B. Abrams, Stephen L. Buka, Melissa A. Clark, Suzanne M. Colby, Brian Hitsman, Alessandra N. Kazura, Lewis P. Lipsitt, Elizabeth E. Lloyd-Richardson, Michelle L. Rogers, Cassandra A. Stanton, Laura R. Stroud, and Raymond S. Niaura, "Parental Smoking and Adolescent Smoking Initiation: An Intergenerational Perspective on Tobacco Control," *Pediatrics* 123 no. 2 (January 26, 2009): 274–81, <https://doi.org/10.1542/peds.2008-2251>.
86. Christina Steindl, Eva Jonas, Sandra Sittenthaler, Eva Traut-Mattausch, and Jeff Greenberg, "Understanding Psychological Reactance," *Zeitschrift Für Psychologie* 223 no. 4 (December 8, 2015): 205–14, <https://doi.org/10.1027/2151-2604/a000222>.