

# Tobacco in Australia

## Facts & Issues

---

### Relevant news and research

#### 18.6.10 E-cigarette use and mental health

*Last updated December 2024*

Research:	2
18.6.10 E-cigarette use and mental health	2
News:	15
18.6.10 E-cigarette use and mental health	15

## Research:

### 18.6.10 E-cigarette use and mental health

Pericot-Valverde, I, Heo, M, Nahvi, S, Barron, JVoss, S, Ortiz, EG et al . (2024). Effects of E-Cigarettes on Combustible Cigarette Smoking Among Adults with Opioid Use Disorder on Buprenorphine: Single Arm ERASER Pilot Trial. *Nicotine Tob Res.* Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39484988>

Tawba, W, El Qadiri, M, Al-Adhami, M, Almehmeed, N, Al-Rawi, NH, & Awad, M. (2024). Electronic cigarettes and their association with stress, depression, and anxiety among dental students in the UAE-a pilot cross sectional study. *PeerJ*, 12, e18167. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39430561>

Awad, AA, Itumalla, R, Gaidhane, AM, Khatib, MN, Ballal, S, Bansal, P et al. (2024). Association of electronic cigarette use and suicidal behaviors: a systematic review and meta-analysis. *BMC Psychiatry*, 24(1), 608. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39256668>

Gardner, LA, O'Dean, S, Rowe, AL, Hawkins, A, Egan, L, Stockings, E et al. (2024). Research Letter: E-cigarette use and mental health during early adolescence: An Australian survey among over 5000 young people. *Aust N Z J Psychiatry*, 48674241267908. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39222017>

Kirchner, TR, Tian, D, Li, J, Srivastava, P, & Zheng, Y. (2024). Cigarette smoking, e-cigarette use, and sociodemographic correlates of mental health and tobacco-related disease risk in the All of Us research program. *J Am Med Inform Assoc*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39231067>

Lee, DN, Kim, HM, & Stevens, EM. (2024). How stress influences e-cigarette health message perceptions and intentions to abstain from vaping among young adults who vape. *Addict Behav*, 160, 108174. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39321718>

Hanafin, J, Sunday, S, & Clancy, L. (2024). Inequalities in Smoking and E-Cigarette Use in Young Adults With Mental Ill-Health, 20 years After Ireland's Smoking Ban. *Tob Use Insights*, 17, 1179173X241283744. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39290597>

Higgins, ST, Sigmon, SC, Tidey, JW, Heil, SH, Gaalema, DE, Lee, DC et al. (2024). Reduced Nicotine Cigarettes and E-Cigarettes in High-Risk Populations: 3 Randomized Clinical Trials. *JAMA Netw Open*, 7(9), e2431731. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39240566>

Huang, X, Lai, W, Xu, Y, Zhang, Y, Wang, W, Wang, H et al. (2024). Association of conventional and electronic cigarette use with suicidality in Chinese adolescents: The moderating effect of sex and school type. *J Affect Disord*, 365, 492-500. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39187181>

Do, EK, Tulsiani, S, Koris, K, Minter, T, & Hair, EC. (2024). Depression, anxiety, stress, and current e-cigarette use: Results from the Truth Longitudinal Cohort of youth and young adults (2022-2023). *J Affect Disord*, 365, 628-633. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39182517>

Zvolensky, MJ, Shepherd, JM, Clausen, BK, Redmond, BY, De Dios, M, & Cano, MA. (2024). Combustible cigarette smokers versus dual combustible and electronic users: Evaluation of

differences in anxiety, depression, and transdiagnostic constructs among Latinx adults. *J Ethn Subst Abuse*, 1-18. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/39145994>

Wilkinson AV, Chen B, Swann AC, Graham DP, Nielsen DA, et al. Use of cigarettes and e-cigarettes, impulsivity and anxiety: Influences on suicidal ideation among youth and young adults in Texas. *Nicotine & Tobacco Research*, 2024. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/39028574>

Trigg J, Calabro R, Anastassiadis P, Bowden J, and Bonevski B. Association of anxiety and depression symptoms with perceived health risk of nicotine vaping products for smoking cessation. *Front Psychiatry*, 2024; 15:1277781. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38487571>

Stanley AK, Frederickson K, and Pokhrel P. Electronic Cigarette Use and Anxiety Among College Students: "Trapped in That Cycle". *Journal of Addictions Nursing*, 2024; 35(2):59-66. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38829995>

Smith CE, Mason TB, Kechter A, Monterosso JR, and Tackett AP. Eating Disorder Symptomatology Among Young Adult Cigarette and E-Cigarette Users. *Substance Use and Misuse*, 2024; 59(8):1221-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38533542>

Phetphum C, Prajongjeep A, and Phuengnam K. Relationship between electronic cigarette use, dual smoking habits, and psychological distress among youth in Northern Thailand: A cross-sectional study. *Tobacco Induced Diseases*, 2024; 22. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/38765695>

Ng THJ, Sarikahya MH, Hudson R, Szkudlarek HJ, Perez-Valenzuela E, et al. Adolescent nicotine exposure induces long-term, sex-specific disturbances in mood and anxiety-related behavioral, neuronal and molecular phenotypes in the mesocorticolimbic system. *Neuropsychopharmacology*, 2024. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38521861>

Naylor H, Howie A, and Every-Palmer S. Vaping in mental health inpatient units: A qualitative study of consumer and staff views on electronic nicotine delivery systems. *Australas Psychiatry*, 2024:10398562241236634. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38430065>

McLeish AC, Walker KL, and Hart JL. Emotion Dysregulation and E-Cigarette Expectancies among College Student E-Cigarette Users. *Substance Use and Misuse*, 2024:1-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38317024>

Lee PH, Tervo-Clemmens B, Liu RT, Gersten MB, Jung JY, et al. Use of Tobacco Products and Suicide Attempts Among Elementary School-Aged Children. *JAMA Netw Open*, 2024; 7(2):e240376. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38407905>

Lanza HI, Waller K, and Sevillano L. Bidirectional relationships between nicotine vaping and maladaptive eating behaviors among young adults. *Addictive Behaviors Reports*, 2024; 19:100547. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38725608>

Lallai V and McGrath KC. Editorial: The impact of nicotine and e-cigarettes on mental health. *Front Psychiatry*, 2024; 15:1446934. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38993390>

Kava CM, Watkins SL, Gilbert PA, Villhauer TJ, Welter TL, et al. E-cigarettes in college: Associations between mental health and e-cigarette use with other substances. *Tob Prev Cessat*, 2024; 10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38828438>

Kang W and Malvaso A. Understanding the longitudinal associations between e-cigarette use and general mental health, social dysfunction and anhedonia, depression and anxiety, and loss of confidence in a sample from the UK: A linear mixed effect examination. *J Affect Disord*, 2024; 346:200-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37956830>

Gimm G, Schulz JA, Rubenstein D, and Casseus M. Examining the prevalence of nicotine vaping and association of major depressive episodes among adolescents and young adults by disability type in 2021. *Addictive Behaviors*, 2024; 152:107975. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38309240>

Do EK, Aarvig K, Panigrahi G, and Hair EC. Past-Year Mental Illness Diagnosis and E-cigarette Use Status Among a College-Aged Sample: Findings From the National College Health Assessment (2017-2019). *American Journal of Health Promotion*, 2024; 38(4):468-77. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38146733>

Cai J and Bidulescu A. E-cigarette use or dual use of E-cigarette and combustible cigarette and mental health and cognitive impairment: Findings from the National Health Interview Survey, 2020-2021. *J Affect Disord*, 2024; 351:878-87. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38211743>

Brierley ME, Gaidoni S, and Jongenelis MI. Psychological distress and e-cigarette use among young Australians: An exploratory, qualitative study. *Tobacco Induced Diseases*, 2024; 22. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38899118>

Bennett ME, Medoff D, Cowan T, Fang L, Kacmarek C, et al. Tobacco smoking and nicotine vaping in persons with first episode psychosis. *Schizophr Res*, 2024; 267:141-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38547716>

Australian Institute of Health and Welfare. Mental health and use of alcohol, tobacco, e-cigarettes and other drugs. Canberra: AIHW. 2024. Available from: <https://www.aihw.gov.au/reports/mental-health/mental-health-alcohol-drugs>.

Australian Bureau of Statistics. Mental health findings for LGBTQ+ Australians. ABS. 2024. Available from: <https://www.abs.gov.au/articles/mental-health-findings-lgbtq-australians>.

Aljohani FA, Alzubaidi BY, Al-Rafdan RH, Alblawi HM, Alrehayan RH, et al. E-cigarette use, psychological distress, and daily activity participation among adults in Riyadh. *Front Psychiatry*, 2024; 15:1362233. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38680785>

Adzrago D, Sulley S, and Williams F. Immigration status-related exclusive e-cigarette use and cannabis use and their dual use disparities associated with mental health disorder symptoms. *Drug and Alcohol Dependence*, 2024; 255:111083. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/38215510>

Adjei A, Wilkinson AV, Chen B, Mantey DS, and Harrell MB. Does the time to nicotine dependence vary by internalizing symptoms for young people who use e-cigarettes? An analysis of the Population Assessment of Tobacco and Health (PATH) study, (Waves 1-5; 2013-2019). Addictive Behaviors, 2024; 156:108075. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38810488>

Winburn C and Ofei-Dodoo S. Nicotine Dependence from Electronic Cigarettes Use and Depressive Symptoms Among Adolescents. Kans J Med, 2023; 16:1-4. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36703951>

Welty CW, Gerald LB, Nair US, and Haynes PL. Vaping and Sleep as Predictors of Adolescent Suicidality. American Journal of Health Promotion, 2023; 37(1):39-46. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35786017>

Wang Y, Sung HY, Lea Watkins S, Lightwood J, Yao T, et al. The association of current exclusive e-cigarette use and dual use of e-cigarettes and cigarettes with psychological distress among U.S. adults. Preventive Medicine Reports, 2023; 36:102425. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37810268>

Truong M and Cotton E. The impact of vaping on adolescent mental health. Australian Institute of Family Studies. 2023. Available from: <https://aifs.gov.au/resources/policy-and-practice-papers/impact-vaping-adolescent-mental-health>.

Tildy BE, McNeill A, East K, Gravely S, Fong GT, et al. Self-reported depression and anxiety and healthcare professional interactions regarding smoking cessation and nicotine vaping: Findings from 2018 International Tobacco Control Four Country Smoking and Vaping (ITC 4CV) Survey. Tob Prev Cessat, 2023; 9:26. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37533461>

Taylor E, Brose LS, McNeill A, Brown J, Kock L, et al. Associations between smoking and vaping prevalence, product use characteristics, and mental health diagnoses in Great Britain: a population survey. BMC Medicine, 2023; 21(1):211. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37316913>

Salinas KZ, Saran S, Saulnier K, Hoglen B, Houser KR, et al. A Comparison of Mental Health Symptoms among Adults Who Vape Nicotine, Cannabis, or Both. Substance Use and Misuse, 2023:1-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38115560>

Ofei-Dodoo S, Winburn C, and Faust L. Assessing Electronic Cigarette Use and Depressive Symptoms among Adolescents in Kansas. Ann Fam Med, 2023; (21 Suppl 1). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36976852>

Martinez M, Espinoza VE, Garcia V, Uribe KP, Negishi K, et al. Withdrawal from repeated nicotine vapor exposure increases somatic signs of physical dependence, anxiety-like behavior, and brain reward thresholds in adult male rats. Neuropharmacology, 2023:109681. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37611823>

Kim J and Lee S. Factors associated with Korean adolescent's e-cigarette use by the severity level of generalized anxiety disorder (GAD-7). J Affect Disord, 2023; 340:129-38. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37544484>

Keum BT, Cano MA, Valdovinos IC, and Boland DZ. Impact of online and offline racism on cigarette smoking, marijuana use, and vaping via depressive/anxiety symptoms among racially minoritized emerging adults. *Am J Orthopsychiatry*, 2023. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37471019>

Jacobs W, Orozco G, Villanueva G, and Merianos AL. E-Cigarette and Cannabis Use Patterns, Depression, and Suicide Behaviors Among US Youth: Analysis of 2019 Youth Risk Behavior Survey Data. *American Journal of Health Promotion*, 2023; 37(1):77-83. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/35792818>

Harlow AF, Han DH, Eckel SP, McConnell R, Leventhal AM, et al. The interaction of e-cigarette use and mental health symptoms on risk of cigarette smoking initiation among young adults in the United States. *Addiction*, 2023; 118(12):2317-26. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37620973>

Erhabor J, Boakye E, Osuji N, Obisesan O, Osei AD, et al. Psychosocial stressors and current e-cigarette use in the youth risk behavior survey. *BMC Public Health*, 2023; 23(1):1080. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37280552>

Emerson E. Brief report: the prevalence of smoking and vaping among adolescents with/without intellectual disability in the UK. *Journal of Intellectual Disability Research*, 2023. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37530199>

Dunbar MS, Davis JP, Tucker JS, Seelam R, Rodriguez A, et al. Parallel trajectories of vaping and smoking cannabis and their associations with mental and physical well-being among young adults. *Drug and Alcohol Dependence*, 2023; 251:110918. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37611482>

DeAtley T, Harrison A, Cassidy R, Kuo C, Higgins ST, et al. Subjective experiences, contexts, and risk perceptions of very low nicotine content cigarettes and electronic cigarettes among people with depression and anxiety disorders who smoke. *Drug and Alcohol Dependence*, 2023; 244:109767.

Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36638679>

Bista S, Lechner WV, Anderson M, Kenne KN, and Kenne DR. Cigarette and e-cigarette use as a function of psychological distress following COVID-19 related university campus closures. *American Journal of Drug and Alcohol Abuse*, 2023; 1-10. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/36920934>

Bautista M, Mogul AS, and Fowler CD. Beyond the label: current evidence and future directions for the interrelationship between electronic cigarettes and mental health. *Front Psychiatry*, 2023; 14:1134079. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37645635>

Azagba S, Ebling T, and Korkmaz A. Social media and e-cigarette use: The mediating role of mental health conditions. *J Affect Disord*, 2023; 344:528-34. Available from:

<https://www.ncbi.nlm.nih.gov/pubmed/37852589>

Azagba S, Ebling T, Adekeye OT, and Shan L. Corrigendum to "Mental health condition indicators and e-cigarette use among sexual minority youth" [J. Affect. Disord. 319 (2022) pages 1-7]. J Affect Disord, 2023. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37517976>

Adzrago D, Harrell MB, Fujimoto K, Jones A, and Wilkerson JM. Association between E-Cigarette Use Behaviors and Anxiety/Depression among Black/African American Adults Based on Sexual Identity. International Journal of Environmental Research and Public Health, 2023; 20(3). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36767446>

Adzrago D, Fujimoto K, Harrell MB, Jones A, and Wilkerson JM. Association between e-cigarette use behaviors and perceived harmfulness of e-cigarettes and anxiety/depression symptoms among Black/African American Adults. Preventive Medicine Reports, 2023; 31:102080. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36471769>

Xie Z, Cartujano-Barrera F, Cupertino P, and Li D. Cross-Sectional Associations of Self-Reported Social/Emotional Support and Life Satisfaction with Smoking and Vaping Status in Adults. International Journal of Environmental Research and Public Health, 2022; 19(17). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36078438>

Wong JA, Pratt SI, Ferron JC, Gowarty M, and Brunette MF. Characteristics of and reasons for electronic cigarette use among adult smokers with schizophrenia/schizoaffective disorder. Ann Clin Psychiatry, 2022; 34(1):e13-e20. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35166668>

Wade NE, Courtney KE, Doran N, Baca R, Aguinaldo LD, et al. Young Adult E-Cigarette and Combustible Tobacco Users Attitudes, Substance Use Behaviors, Mental Health, and Neurocognitive Performance. Brain Sci, 2022; 12(7). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35884696>

Patanavanich R, Vityananan P, Neelapaichit N, Chariyalertsak S, Kessomboon P, et al. Association between electronic cigarette use and depression among Thai adolescents: The Thailand National Health Examination Survey 2019-2020. Tobacco Induced Diseases, 2022; 20:103. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36447457>

Nguyen HV and Mital S. Effects of e-cigarette use on mental health among youths: quasi-experimental evidence from Canada. Addiction, 2022; 117(10):2673-82. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35545859>

Masaki K, Taketa RM, Nakama MK, Kawamoto CT, and Pokhrel P. Relationships Between Depressive Symptoms, Anxiety, Impulsivity and Cigarette and E-cigarette Use Among Young Adults. Hawaii J Health Soc Welf, 2022; 81(3):51-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35261985>

Mantey DS, Clendennen SI, Sumbe A, Wilkinson AV, and Harrell MB. Perceived stress and E-cigarette use during emerging adulthood: A longitudinal examination of initiation, progression, and continuation. Preventive Medicine, 2022; 160:107080. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35568160>

Kechter A, Ceasar RC, Simpson KA, Schiff SJ, Dunton GF, et al. A chocolate cake or a chocolate vape? Young adults describe their relationship with food and weight in the context of nicotine vaping. *Appetite*, 2022; 175:106075. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35525332>

Javed S, Usmani S, Sarfraz Z, Sarfraz A, Hanif A, et al. A Scoping Review of Vaping, E-Cigarettes and Mental Health Impact: Depression and Suicidality. *J Community Hosp Intern Med Perspect*, 2022; 12(3):33-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35711397>

Hennigan KM, Olson KR, Baker JH, and Munn-Chernoff MA. Associations between eating disorder symptoms and smoking and vaping use and motives in college students. *Eat Behav*, 2022; 46:101652. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35839570>

Hahn AW, Ruderman SA, Nance RM, Whitney BW, Eltonsy S, et al. Vaporized Nicotine (E-cigarette) and Tobacco Smoking Among People with HIV: Use Patterns and Associations with Depression and Panic Symptoms. *Journal of Acquired Immune Deficiency Syndromes*, 2022. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36399783>

Gorfinkel L, Hasin D, Miech R, and Keyes KM. The Link Between Depressive Symptoms and Vaping Nicotine in U.S. Adolescents, 2017-2019. *The Journal of Adolescent Health*, 2022; 70(1):133-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34384705>

Farrell KR, Weitzman M, Karey E, Lai TKY, Gordon T, et al. Passive exposure to e-cigarette emissions is associated with worsened mental health. *BMC Public Health*, 2022; 22(1):1138. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35672813>

Dai HD and Leventhal A. Changes in electronic cigarette use among U.S. Adults by cigarette smoking status, sociodemographics, and subjective depression, 2019-2020. *Preventive Medicine Reports*, 2022; 30:102048. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36531098>

Cambron C. E-Cigarette Use Is Associated with Increased Psychological Distress among Youth: A Pooled Cross-Sectional Analysis of State-Level Data from 2019 and 2021. *International Journal of Environmental Research and Public Health*, 2022; 19(18). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36142001>

Baiden P, Szlyk HS, Cavazos-Rehg P, Onyeaka HK, Peoples JE, et al. Use of electronic vaping products and mental health among adolescent high school students in the United States: The moderating effect of sex. *Journal of Psychiatric Research*, 2022; 147:24-33. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35007808>

Azagba S, Ebling T, Adekeye OT, and Shan L. Mental health condition indicators and e-cigarette use among sexual minority youth. *J Affect Disord*, 2022; 319:1-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36116602>

Asharani PV, Seet V, Devi F, Wang P, Royston K, et al. Electronic nicotine delivery systems: prevalence and perception of risk/harm in individuals with mental illness. *Singapore Med J*, 2022. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35851648>

Antwi GO and Rhodes DL. Association between e-cigarette use and depression in US cancer survivors: a cross-sectional study. *J Cancer Surviv*, 2022. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/35169981>

Alqahtani MM, Pavela G, Lein DH, Jr., Vilcassim R, and Hendricks PS. The Influence of Mental Health and Respiratory Symptoms on the Association Between Chronic Lung Disease and E-Cigarette Use in Adults in the United States. *Respir Care*, 2022. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/35440495>

Adzrago D, Sulley S, Mamudu L, Ormiston CK, and Williams F. The Influence of COVID-19 Pandemic on the Frequent Use of E-Cigarettes and Its Association with Substance Use and Mental Health Symptoms. *Behav Sci (Basel)*, 2022; 12(11). Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/36421749>

Sung B. Gender Difference in the Association Between E-Cigarette Use and Depression among US Adults. *Osong Public Health Res Perspect*, 2021; 12(1):13-9. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/33659150>

Patten SB. Vaping and Mental Health. *J Can Acad Child Adolesc Psychiatry*, 2021; 30(1):3-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33552167>

Naveed A, Dang N, Gonzalez P, Choi SH, Mathew A, et al. E-Cigarette Dependence and Weight-Related Attitudes/Behaviors Associated With Eating Disorders in Adolescent Girls. *Front Psychiatry*, 2021; 12:713094. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34526923>

Moustafa AF, Testa S, Rodriguez D, Pianin S, and Audrain-McGovern J. Adolescent depression symptoms and e-cigarette progression. *Drug and Alcohol Dependence*, 2021; 228:109072. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34571288>

McLeish AC, Smit T, Garey L, and Zvolensky MJ. Anxiety Sensitivity and Emotion Dysregulation in Dual and Exclusive E-Cigarette Users. *Substance Use and Misuse*, 2021;1-6. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/34304699>

Manning K, Mayorga NA, Garey L, Kauffman BY, Buckner JD, et al. The Role of Anxiety Sensitivity and Fatigue Severity in Predicting E-Cigarette Dependence, Barriers to Cessation, and Cravings among Young Adults. *Substance Use and Misuse*, 2021;1-7. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/34433376>

Kang SG and Bae SM. The Effect of Cigarette Use and Dual-Use on Depression and Sleep Quality. *Substance Use and Misuse*, 2021;1-5. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/34348584>

Gold AK, Otto MW, Hoyt DL, Garey L, Smit T, et al. Do Pain-Related Anxiety and Difficulties With Emotion Regulation Impact Abstinence Expectancies or Motivation to Quit E-Cigarette Use? *J Stud Alcohol Drugs*, 2021; 82(3):414-21. Available from:  
<https://www.ncbi.nlm.nih.gov/pubmed/34100710>

Garrett PI, Honeycutt SC, Marston C, Allen N, Barraza AG, et al. Nicotine-free vapor inhalation produces behavioral disruptions and anxiety-like behaviors in mice: Effects of puff duration, session length, sex, and flavor. *Pharmacol Biochem Behav*, 2021; 206:173207. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34019915>

Ganson KT and Nagata JM. Associations between vaping and eating disorder diagnosis and risk among college students. *Eat Behav*, 2021; 43:101566. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34534874>

Farrell KR, Karey E, Xu S, Gibbon G, Gordon T, et al. E-Cigarette Use, Systemic Inflammation, and Depression. *International Journal of Environmental Research and Public Health*, 2021; 18(19). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34639705>

Cwalina SN, Pacek LR, Barrington-Trimis JL, Tackett AP, and Pentz MA. Cross-Sectional Associations of Multiple Tobacco Product Use with Depressive and Anxiety Symptoms among Young Adult E-Cigarette Users. *Substance Use and Misuse*, 2021;1-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34320919>

Cole C, Wiens T, Taylor J, Danila R, D'Heilly P, et al. Vaping, lung injury, and mental health Minnesota 2018-2019. *Minnesota Medicine*, 2021; 104(3):41-3. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34413546>

Buckner JD, Abarno CN, Zvolensky MJ, Morris PE, Walukiewich-Dienst K, et al. E-cigarettes use prior to smoking combustible cigarettes among dual users: The roles of social anxiety and E-cigarette outcome expectancies. *Addictive Behaviors*, 2021; 117:106854. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33601094>

Becker TD, Arnold MK, Ro V, Martin L, and Rice TR. Systematic Review of Electronic Cigarette Use (Vaping) and Mental Health Comorbidity Among Adolescents and Young Adults. *Nicotine & Tobacco Research*, 2021; 23(3):415-25. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32905589>

Barkhuizen W, Dudbridge F, and Ronald A. Genetic overlap and causal associations between smoking behaviours and mental health. *Scientific Reports*, 2021; 11(1):14871-. Available from: <https://pubmed.ncbi.nlm.nih.gov/34290290>

Alanazi AMM, Alqahtani MM, Lein DH, Jr., and Ford EW. The Relationship Between Asthma Diagnosis and E-Cigarette Use Among Youth and Young Adults: The Mediation Effects of Anxiety, Depression, and Impulsivity and the Moderation Effects of Substance Use. *The Journal of Asthma*, 2021;1-19. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33492187>

Adzrago D, Tami-Maury I, Schick V, and Wilkerson JM. Co-occurring substance use and psychological distress among exclusive e-cigarette use and other tobacco use among sexual and gender minorities in Texas. *Drug and Alcohol Dependence*, 2021; 229(Pt A):109135. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34773886>

Colliding Crises: Youth Mental Health and Nicotine Use. Truth Initiative. 2021. Available from: [https://truthinitiative.org/sites/default/files/media/files/2021/10/Mental%20Health%20and%20Nicotine%20Report\\_10.7.2021.pdf](https://truthinitiative.org/sites/default/files/media/files/2021/10/Mental%20Health%20and%20Nicotine%20Report_10.7.2021.pdf).

Zvolensky MJ, Manning K, Garey L, Alfano CA, Mayorga NA, et al. Emotion dysregulation, fatigue, and electronic cigarette expectancies. *Cogn Behav Ther*, 2020;1-16. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33006499>

Weinberger AH, Zhu J, Barrington-Trimis JL, Wyka K, and Goodwin RD. Cigarette use, e-cigarette use, and dual product use is higher among adults with serious psychological distress in the United States: 2014-2017. *Nicotine & Tobacco Research*, 2020. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32285121>

Saeed OB, Chavan B, and Haile ZT. Association Between E-cigarette Use and Depression in US Adults. *Journal of Addiction Medicine*, 2020; 14(5):393-400. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31972763>

Pergadia ML, Newcomer JW, and Gilbert DG. Depression and Nicotine Withdrawal Associations with Combustible and Electronic Cigarette Use. *International Journal of Environmental Research and Public Health*, 2020; 17(24). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33327373>

Peckham E, Mishu M, Fairhurst C, Robson D, Bradshaw T, et al. E-cigarette use and associated factors among smokers with severe mental illness. *Addictive Behaviors*, 2020; 108:106456. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32388396>

Pearson JL. Understanding the complex relationship between e-cigarette use, other substance use, and mental health in adolescence. *Nicotine & Tobacco Research*, 2020. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33377149>

Manning K, Garey L, Viana AG, Smit T, and Zvolensky MJ. The moderating role of anxiety sensitivity in terms of fatigue severity and e-cigarette use expectancies. *Journal of Health Psychology*, 2020;1359105320926534. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32498566>

Kim CW, Jeong SC, Kim JY, Lee JS, Lee JH, et al. Associated factors for depression, suicidal ideation and suicide attempt among asthmatic adolescents with experience of electronic cigarette use. *Tobacco Induced Diseases*, 2020; 18:85. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33117112>

Gaiha SM and Halpern-Felsher B. Escalating Safety Concerns Are Not Changing Adolescent E-Cigarette Use Patterns: The Possible Role of Adolescent Mental Health. *The Journal of Adolescent Health*, 2020; 66(1):3-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31866056>

Braillon A. Mental health of electronic cigarette advocates: Over both sides of the Atlantic. *J Affect Disord*, 2020; 269:192-3. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32339133>

Alanazi AMM, Alqahtani MM, Pavela G, Ford EW, Leventhal AM, et al. Mental Health and the Association between Asthma and E-cigarette Use among Young Adults in The United States: A Mediation Analysis. *International Journal of Environmental Research and Public Health*, 2020; 17(23). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33256193>

Al Rifai M, Mirbolouk M, Obisesan OH, Jia X, Nasir K, et al. The Association of Electronic Cigarette Use and the Subjective Domains of Physical and Mental Health: The Behavioral Risk Factor Surveillance System Survey. *Cureus*, 2020; 12(2):e7088. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32226689>

Zvolensky MJ, Garey L, Mayorga NA, Peraza N, Rogers AH, et al. Pain Severity and Anxiety Sensitivity Interplay Among Exclusive and Dual Electronic Cigarette Users. *J Stud Alcohol Drugs*, 2019; 80(2):211-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31014466>

Rogers JM and Watanabe M. Special issue on "Developmental effects of smoking, vaping, and cannabis use". *Birth Defects Res*, 2019; 111(17):1245-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31566934>

Obisesan OH, Mirbolouk M, Osei AD, Orimoloye OA, Uddin SMI, et al. Association Between e-Cigarette Use and Depression in the Behavioral Risk Factor Surveillance System, 2016-2017. *JAMA Netw Open*, 2019; 2(12):e1916800. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31800073>

Narcisse MR, Dobbs P, Long CR, Purvis RS, Kimminau KS, et al. Electronic cigarette use and psychological distress in the Native Hawaiian and Pacific Islander adults compared with other racial/ethnic groups: Data from the National Health Interview Survey, 2014. *J Community Psychol*, 2019. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31535719>

Li L, Borland R, O'Connor RJ, Fong GT, McNeill A, et al. How Are Self-Reported Physical and Mental Health Conditions Related to Vaping Activities among Smokers and Quitters: Findings from the ITC Four Country Smoking and Vaping Wave 1 Survey. *International Journal of Environmental Research and Public Health*, 2019; 16(8). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31010185>

Hickling LM, Perez-Iglesias R, McNeill A, Dawkins L, Moxham J, et al. A pre-post pilot study of electronic cigarettes to reduce smoking in people with severe mental illness. *Psychological Medicine*, 2019; 49(6):1033-40. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29986786>

Garey L, Smit T, Mayorga NA, Peraza N, Nizio P, et al. Differential Effects of Anxiety Sensitivity on E-Cigarettes Processes: The Importance of E-Cigarette Quit Attempt History. *American Journal on Addictions*, 2019; 28(5):390-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31381212>

Cho BY. Parent's Depression as a Moderator of the Association Between Offspring's Depressive Symptoms and Use of Combustible Cigarettes and Electronic Vapor Products. *J Behav Health Serv Res*, 2019; 46(4):648–55. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30868451>

Brown JEH, Gartner C, and Carter A. Can e-cigarettes improve the well-being of people with mental health disorders? *Int J Drug Policy*, 2019. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31350106>

Bianco CL. Rates of electronic cigarette use among adults with a chronic mental illness. *Addictive Behaviors*, 2019; 89:1-4. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30237110>

Baltz GM and Lach HW. Perceptions, Knowledge, and Use of Electronic Cigarettes: A Survey of Mental Health Patients. *Issues Ment Health Nurs*, 2019;1-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31058546>

Zvolensky MJ, Mayorga NA, and Garey L. Worry, anxiety sensitivity, and electronic cigarettes among adults. *Psychiatry Res*, 2018; 269:321-7. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30173037>

Hickling LM, Perez-Iglesias R, McNeill A, Dawkins L, Moxham J, et al. Corrigendum to 'A pre-post pilot study of electronic cigarettes to reduce smoking in people with severe mental illness' [Psychological Medicine]. *Psychological Medicine*, 2018;1. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30375306>

Hefner KR, Sollazzo A, Mullaney S, Coker KL, and Sofuooglu M. E-cigarettes, alcohol use, and mental health: Use and perceptions of e-cigarettes among college students, by alcohol use and mental health status. *Addictive Behaviors*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30396534>

Bianco CL. Rates of electronic cigarette use among adults with a chronic mental illness. *Addictive Behaviors*, 2018; 89:1-4. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30237110>

Sharma R, Gartner CE, Castle DJ, and Mendelsohn CP. Should we encourage smokers with severe mental illness to switch to electronic cigarettes? *Australian and New Zealand Journal of Psychiatry*, 2017; 51(7):663-4. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28633573>

Park SH, Lee L, Shearston JA, and Weitzman M. Patterns of electronic cigarette use and level of psychological distress. *PLoS One*, 2017; 12(3):e0173625. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28278239>

Leventhal AM, Urman R, Barrington-Trimis JL, Goldenson NI, Gallegos K, et al. Perceived stress and poly-tobacco product use across adolescence: Patterns of association and gender differences. *Journal of Psychiatric Research*, 2017; 94:172-9.

Lechner WV, Janssen T, Kahler CW, Audrain-McGovern J, and Leventhal AM. Bi-directional associations of electronic and combustible cigarette use onset patterns with depressive symptoms in adolescents. *Preventive Medicine*, 2017; 96:73-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28024859>

Conway KP, Green VR, Kasza KA, Silveira ML, Borek N, et al. Co-occurrence of tobacco product use, substance use, and mental health problems among adults: Findings from Wave 1 (2013-2014) of the Population Assessment of Tobacco and Health (PATH) Study. *Drug and Alcohol Dependence*, 2017; 177:104-11. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28582698>

Hefner K, Rosenheck R, Merrel J, Coffman M, Valentine G, et al. E-cigarette Use in Veterans Seeking Mental Health and/or Substance Use Services. *Journal of Dual Diagnosis*, 2016;0. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27064443>

Gartner C and Hall W. Tobacco harm reduction in people with serious mental illnesses. *Lancet Psychiatry*, 2015; 2(6):485–7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26360430>

Prochaska JJ and Grana RA. E-Cigarette Use among Smokers with Serious Mental Illness. PLoS One, 2014; 9(11):e113013. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25419703>

Cummins SE, Zhu SH, Tedeschi GJ, Gamst AC, and Myers MG. Use of e-cigarettes by individuals with mental health conditions. Tobacco Control, 2014; 23 Suppl 3(Suppl 3):iii48-53. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/24824516>

## News:

### *18.6.10 E-cigarette use and mental health*

Truth Initiative. Nicotine use and stress. 2022. Available from:

[https://truthinitiative.org/sites/default/files/media/files/2022/03/Nicotine%20Use%20and%20Stress\\_FINAL.pdf](https://truthinitiative.org/sites/default/files/media/files/2022/03/Nicotine%20Use%20and%20Stress_FINAL.pdf).

Shoot B. Biggest Vaping Study Ever Links E-Cigs With Heart Attacks and Depression. Fortune. 2019.

Available from: <http://fortune.com/2019/03/08/tobacco-smoking-vaping-electronic-cigarettes-heart-attack-disease-depression/>.