# Health and Science Research Request for Proposals

#### **TOPIC**

# **Use of Electronic Nicotine Delivery Systems Among Youth**

**Issue date** Tuesday, May 16, 2023

Closing date Monday, July 10, 2023

Closing time 12 Noon – UK Time

**Submit proposals to** (See submission instructions in RFP)

Financing instrument Grant

Financing amount Amount consistent with proposal and work plan (paid in US

dollars)

**Financing duration** Maximum of 12 months, consistent with proposal and work plan

Contact information support@smokefreeworld.org

Please note that the following two requests for proposals (RFPs) are published together in this cycle, but are focused on distinct topics:

- The first RFP, *Risk of Progression to Cigarette Smoking After Use of Electronic Nicotine Delivery Systems*, seeks to examine the likelihood of combustible cigarette initiation after using electronic nicotine delivery systems (ENDS). This RFP was previously open <u>February 6 March 10, 2023</u> and is being reopened for submissions.
- The second RFP, *Use of Electronic Nicotine Delivery Systems Among Youth,* seeks to investigate the initiation of ENDS use among young people.

### **Background**

Existing scientific evidence suggests that electronic nicotine delivery systems (ENDS) are effective tobacco cessation tools¹ and considerably less harmful alternatives to combustible cigarettes (CC) for adult smokers.² However, the use of ENDS by youth is a concern because their motivations for initiation, reasons for continuation, and future implications differ from those of adults.³,⁴ Thus, the status of ENDS use among youth and the associated risk factors have been extensively examined by public health experts, policymakers, and members of the scientific community.⁵,6,7

Previous studies have suggested that the dynamic interplay between several individual, interpersonal, and social factors impacts youth choices about abstinence, vaping, smoking, quitting, and switching between nicotine products. Individual-level characteristics include factors such as age, gender, race, education, concurrent smoking or substance use status, mental health, and perceptions about ENDS. Interpersonal influences include factors such as ease of access to ENDS products, use of CC or ENDS by parents or friends, parental and peer perceptions, and parental education. Social factors include local regulations, cost, advertisements, and the acceptability of ENDS products. Sp.10 Depending on the above factors, young individuals may follow diverse pathways to initiating ENDS use and varied trajectories toward continuation, cessation, or switching.

A few studies have suggested there is a "gateway effect" of e-cigarette use on subsequent CC use among youth.<sup>11</sup> However, a competing hypothesis, known as common liability theory, emphasizes the role of shared risk factors that may result in the use of both ENDS and CC.<sup>12</sup> Several other studies have shown the substitution effect of ENDS on CC use, proving that decreasing accessibility to ENDS leads to increased CC use and vice versa.<sup>3,10,13</sup>

Due to the above-described complexity, an inadequately designed study may result in paradoxical, misleading conclusions that will likely be associated with numerous confounders, biases, and other limitations. Given the importance of the subject, a sophisticatedly designed study is necessary to investigate the net impact of ENDS use among youth at the population level vis-à-vis CC smoking.

## **Objectives**

The Foundation for a Smoke-Free World ("the Foundation") will fund innovative research projects aimed at providing scientifically credible information on youth initiation and use of ENDS at the population level, in relation to substitution for combustible cigarettes. Researchers may use primary or secondary data and a variety of methodological approaches. Priority will be given to analytical methods, but the Foundation will also consider other types of studies to produce novel descriptive information that can serve as a foundation for subsequent research.

Suggested research topics include (but are not limited to) the following:

- Descriptive studies that will produce novel information about ENDS and tobacco use among youth. These studies might identify and describe previously unknown longitudinal trajectories of ENDS use, or studies providing new information about ENDS use for important populations that have not been previously studied. Examples include:
  - o Current prevalence, trends, and perceptions among youth from diverse sociodemographic populations
  - o Comparisons of knowledge and attitude about various nicotine products among youth from diverse populations

- o Reasons for and predictors of youth ENDS initiation and sustainment, including links with high-risk behaviors such as use of drugs and alcohol
- o Outcomes and unintended consequences of youth ENDS initiation among distinct population subgroups by race, education, socioeconomic status, and demography
- Analyses of secondary data, for example, Monitoring the Future (MTF), Population Assessment of Tobacco and Health (PATH), national Youth Risk Behavior Survey (YRBS), Behavioral Risk Factor Surveillance Survey (BRFSS) or other local or international studies that can identify important linkages among various socioeconomic, health and other factors related to youth ENDS initiation
- Implementation research examining and comparing the existing interventions for nicotine cessation or reduction among youth, such as school-based programs, public health programs, and policy interventions

The research areas listed above are only a few examples of topics aligned with the Foundation's mission, and the list is not meant to be exhaustive. The Foundation encourages applicants to propose innovative and creative research questions that will advance knowledge about youth ENDS initiation.

For primary studies involving legal age youth subjects as defined by the submitter, ethical approvals and parental consent will be required according to local and US federal regulations. The Foundation will NOT fund any investigation involving risk to human subjects as defined by US federal regulations (45 CFR 46), available here.

The findings of funded research should be submitted to a peer-reviewed academic journal for publication. The applicant should establish a comprehensive plan to disseminate the new

information through effective channels. The final product(s) should include suggestions for further action based on the findings, as well as recommendations for future research areas.

# **Eligibility**

Eligible institutions include academic, think-tank, and health-related research and science centers and institutions, and other collaborating centers and institutions with experience in related subject areas such as epidemiology, behavioral health, public health, and communication studies. Research experience in addiction or tobacco use is desirable.

Proposals should be submitted by entities registered in their country of origin with an ability to accept research grants from not-for-profit foundations incorporated in the United States

### **Geographic Focus**

The geographic focus should be on localities where safer nicotine delivery systems are legally available.

### **Estimated Budget and Duration**

Duration: The scope of the proposed project should determine the project duration. Maximum duration not to exceed 12 months.

Budget: Application budgets consistent with proposal and work plan

#### **Evaluation Criteria**

Applicants are advised to read and understand the <u>Foundation's Strategic Plan.</u> All study objectives must align with the Foundation's goals.

All proposals must describe how the research will make a novel contribution, the scientific plausibility of the research question, and the likely validity of the proposed methodology.

The following criteria will be used to evaluate submissions:

- The significance of the research question
- The innovation of the research strategy
- The scientific adequacy of the proposed data and methodology
- The expertise and prior experience of the applicant, including demonstrated experience on similar projects
- Adequate physical and intellectual resources to meet the objectives of the proposed research
- Dissemination plans
- Cost vis-à-vis significance and contribution
- Key organizational documents provided to the Foundation as part of the due diligence process, as outlined in <u>Grant Solicitation and Application Process</u>

The Foundation will prioritize proposals that demonstrate a commitment to our values, including diversity, equity, and inclusion, and that provide the Foundation with the opportunity to interact with diverse teams, bringing a range of perspectives.

#### **Submission Instructions**

Applications should be submitted through the Foundation's online portal, which can be accessed <a href="here">here</a>. This link will start the new application form. Upon clicking the link, you will be prompted to log in, and then taken to the application form.

The application form has links to three templates, which are also listed here for your convenience:

- Proposal template
- Budget template
- Work plan template

You may save your application at any time by using the Save & Finish Later button at the end of each page. To return to an in-progress application, <u>log in to the portal</u>. A list of application portal FAQs can be found here.

If you have any technical issues, please contact the grants management team via <a href="mailto:support@smokefreeworld.org">support@smokefreeworld.org</a> and we will be happy to help.

### **Key Information**

The Foundation may disclose proposals, documents, communications, and associated materials submitted in response to this RFP to its employees, consultants, legal counsel, and contractors. The applicant should carefully consider the content of submitted materials if there is any concern about the impact of disclosure of confidential or proprietary information. Although submissions will not be disclosed publicly during the evaluation process, all funded projects (scoping and final awards) will be made public. The Foundation will work with awardees to ensure that any materials made public will not disclose any protected information.

To be considered for an award, the applicant agrees that the Foundation may:

- Amend or cancel the RFP, in whole or in part, at any time
- Extend the deadline for submitting responses
- Determine whether a response does or does not substantially comply with the requirements of the RFP
- Issue multiple awards

The applicant must ensure that it has responded to the RFP with complete honesty and accuracy. If information in the applicant's response changes, the applicant will supplement its response in writing with any deletions, additions, or changes within five days of the change. Any material

misrepresentation, including omissions, may disqualify the applicant from consideration for an award.

#### About Foundation for a Smoke-Free World

The Foundation for a Smoke-Free World is an independent, US nonprofit 501(c)(3) private foundation with the purpose of improving global health by ending smoking in this generation. The Foundation focuses on grantmaking in three broad categories: Health and Science Research; Agriculture Diversification; and Industry Transformation. Funded by annual gifts from PMI Global Services Inc. ("PMI"), the Foundation is independent from PMI and operates in a manner that ensures its independence from the influence of any commercial entity. Under the Foundation's Pledge Agreement with PMI and bylaws, PMI and the tobacco industry are precluded from having any control or influence over how the Foundation spends its funds or focuses its activities. For more information about the Foundation, please visit www.smokefreeworld.org.

<sup>&</sup>lt;sup>1</sup> Hartmann-Boyce, J., Lindson, N., Butler, A. R., McRobbie, H., Bullen, C., Begh, R., Theodoulou, A., Notley, C., Rigotti, N. A., Turner, T., Fanshawe, T. R., & Hajek, P. (2022). Electronic cigarettes for smoking cessation. *The Cochrane database of systematic reviews*, *11*(11), CD010216. <a href="https://doi.org/10.1002/14651858.CD010216.pub7">https://doi.org/10.1002/14651858.CD010216.pub7</a>

<sup>&</sup>lt;sup>2</sup> McNeill, A., Brose, L.S., Calder, R., Hitchman, S.C. (2015, August 28). E-cigarettes: an evidence update. A report commissioned by Public Health England. GOV.UK. <a href="https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update">https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update</a>

<sup>&</sup>lt;sup>3</sup> Foxon, F., Selya, A., Gitchell, J., & Shiffman, S. (2022). Population-level counterfactual trend modelling to examine the relationship between smoking prevalence and e-cigarette use among US adults. *BMC public health*, 22(1), 1940. <a href="https://doi.org/10.1186/s12889-022-14341-z">https://doi.org/10.1186/s12889-022-14341-z</a>

<sup>&</sup>lt;sup>4</sup> Evans-Polce, R. J., Patrick, M. E., Lanza, S. T., Miech, R. A., O'Malley, P. M., & Johnston, L. D. (2018). Reasons for vaping among U.S. 12th graders. *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*, 62(4), 457–462. https://doi.org/10.1016/j.jadohealth.2017.10.009

<sup>5</sup> Office of the Surgeon General (2018). Surgeon General's advisory on e-cigarette use among youth. Centers for Disease Control and Prevention. <a href="https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/surgeon-general-advisory/index.html">https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/surgeon-general-advisory/index.html</a>

<sup>6</sup> Auf, R., Trepka, M. J., Selim, M., Ben Taleb, Z., De La Rosa, M., Bastida, E., & Cano, M. Á. (2019). E-cigarette use is associated with other tobacco use among US adolescents. *International journal of public health*, *64*(1), 125–134. https://doi.org/10.1007/s00038-018-1166-7

- <sup>7</sup> Patrick, M. E., Schulenberg, J. E., Miech, R. A., Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2022). Monitoring the future. National survey results on drug use, 1975-2022: secondary school students (PDF). Monitoring the future monograph series. Ann Arbor: Institute for Social Research, The University of Michigan. https://monitoringthefuture.org/wp-content/uploads/2022/12/mtf2022.pdf
- <sup>8</sup> Han, G., & Son, H. (2022). A systematic review of socio-ecological factors influencing current e-cigarette use among adolescents and young adults. *Addictive behaviors*, *135*, 107425. https://doi.org/10.1016/j.addbeh.2022.107425
- <sup>9</sup> Baig, S. A., & Giovenco, D. P. (2020). Behavioral heterogeneity among cigarette and e-cigarette dualusers and associations with future tobacco use: findings from the Population Assessment of Tobacco and Health Study. *Addictive behaviors*, 104, 106263. <a href="https://doi.org/10.1016/j.addbeh.2019.106263">https://doi.org/10.1016/j.addbeh.2019.106263</a>
- <sup>10</sup> Shahab, L., Beard, E., & Brown, J. (2021). Association of initial e-cigarette and other tobacco product use with subsequent cigarette smoking in adolescents: a cross-sectional, matched control study. *Tobacco control*, *30*(2), 212–220. https://doi.org/10.1136/tobaccocontrol-2019-055283
- <sup>11</sup> Shahab, L., Brown, J., Boelen, L., Beard, E., West, R., & Munafò, M. R. (2022). Unpacking the gateway hypothesis of e-cigarette use: the need for triangulation of individual- and population-level data. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*, 24(8), 1315–1318. <a href="https://doi.org/10.1093/ntr/ntac035">https://doi.org/10.1093/ntr/ntac035</a>
- <sup>12</sup> Cheng, H. G., Largo, E. G., & Gogova, M. (2019). E-cigarette use and onset of first cigarette smoking among adolescents: an empirical test of the 'common liability' theory. *F1000Research*, *8*, 2099. <a href="https://doi.org/10.12688/f1000research.21377.3">https://doi.org/10.12688/f1000research.21377.3</a>
- <sup>13</sup> Audrain-McGovern, J., Rodriguez, D., Testa, S., & Pianin, S. (2022). The indirect effect of cigarette smoking on e-cigarette progression via substitution beliefs. *The journal of adolescent health: official publication of the Society for Adolescent Medicine*, *70*(1), 140–146. <a href="https://doi.org/10.1016/j.jadohealth.2021.07.007">https://doi.org/10.1016/j.jadohealth.2021.07.007</a>