

# Health and Science Research

## Request for Proposals

### TOPIC

## Dual- and Poly-Use of Electronic Nicotine Delivery Systems and Combustible Tobacco Products: Implications for Tobacco Cessation and Harm Reduction

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| Issue date           | Monday, February 6, 2023   |
| Closing date         | Friday, March 10, 2023   |
| Closing time         | 12:00 noon, UK Time  |
| Submit proposals to  | (See submission instructions in RFP)                                       |
| Financing instrument | Grant  |
| Financing amount     | Amount consistent with proposal and work plan.<br>Paid in US dollars       |
| Financing duration   | Maximum of 18 months, consistent with proposal and work plan               |
| Contact information  | <a href="mailto:support@smokefreeworld.org">support@smokefreeworld.org</a> |

## **Background**

Quitting smoking has immediate and long-term health benefits, including improved cardiorespiratory function, reduced cancer risks, better pregnancy outcomes, and increased life expectancy.<sup>1</sup> Although around 70 percent of smokers report wanting to quit, fewer than one in ten succeed.<sup>2</sup> Electronic nicotine delivery systems (ENDS) are relatively new alternatives to smoking and are considered significantly less harmful than combustible cigarettes (CCs).<sup>3</sup> Furthermore, there is credible evidence that ENDS are associated with higher CC cessation rates than either medication or counseling.<sup>4</sup>

However, the benefits of ENDS are unclear when they are used concurrently with one or more toxic forms of tobacco, such as CCs.<sup>5</sup> Further complicating the analysis, dual- and poly-users are highly heterogeneous in their use of these products, with significant variability across different population subgroups by age, race, socioeconomic, and psychosocial status.<sup>6</sup>

Despite extensive research on ENDS over the last decade, data, and knowledge about dual- and poly-use of tobacco products, and the implications of this type of use in tobacco cessation and harm reduction, are still scant. The medical, behavioral, public health, toxicological, and other aspects of dual- and poly-use warrant more research. In addition, there is a dearth of information on the effective strategies, approaches, and interventions to promote quitting or switching entirely to safer nicotine products for dual- and poly-users. Given the heterogeneity of the dual and poly-users, a well-designed study is required to understand their characteristics and to design effective interventions tailored for each subgroup.

## **Objective**

The Foundation for a Smoke-Free World, Inc. (“the Foundation”) seeks proposals to explore the characteristics of dual and poly-users and understand their implications on tobacco cessation and harm reduction. The research proposal should identify fundamental knowledge gaps and strategic areas of

research, followed by a comprehensive plan for the study. Applicants are expected to complete the study within the stipulated period.

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

**Behavioral and public health research areas such as:**

- Prevalence of dual- and poly-use across distinct population subgroups
- Patterns, gradations, trajectories, and outcomes of dual- and poly-use
- Comparisons of sociodemographic and psychosocial profiles of dual- or poly-users with exclusive vapers (i.e., ENDS users) or smokers (i.e., CC users)
- Comparisons of knowledge, attitude, behaviors, and perceptions of dual- or poly-users with nonusers, smokers, vapers, or switchers (smokers who switch entirely to ENDS)
- Reasons for and predictors of dual- and poly-use (i.e., why people concurrently smoke and vape)
- Implementation research examining the existing interventions of tobacco cessation and harm reduction in the context of dual- and poly-users

**Clinical and biological research areas such as:**

- Comparisons of biomarkers of exposure in various subgroups of dual- or poly-users with nonusers, exclusive vapers, and smokers
- Comparisons of cardiovascular, cerebrovascular, or respiratory effects of dual or poly-use with nonuse, exclusive vaping, and smoking
- Comparisons of the effect of dual- and poly-use on pregnancy, diabetes, sleep, or oral/dental health with nonuse, exclusive vaping, and smoking

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

The Foundation will consider appropriate methodologies best suited for the applicant's chosen area(s) of research. However, the proposal must demonstrate a complete understanding of the research area and include a rationale for using the particular methodology. The research may cover one or more areas according to the expertise and capacity of the respective applicant.

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.

*Defining dual- and poly-use.* There is a lack of consensus on the definition of dual- and poly-use.<sup>6 7 8 9 10</sup> For this project, the suggested definition is “concurrent use of ENDS and combustible tobacco product(s) one or more times a week within the past month.”

## **Eligibility**

Eligible institutions include academic, 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, or clinical studies. Research experience in addiction or tobacco use is desirable.

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

## **Geographic Focus**

The focus of the work is global. Inclusion of low- and middle-income countries (LMICs) is encouraged.

## Estimated Budget and Duration

**Duration:** The scope of the proposed project should determine the project duration. Maximum duration not to exceed 18 months.

**Budget:** Application budgets consistent with proposal and work plan.

## Evaluation Criteria

Applicants are advised to read and understand the [Foundation's strategic plan](#). 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 within the context of dual- or poly-use
- 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 [Grant Policies and Procedures](#)

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 [here](#). 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, [log in to the portal](#). A list of application portal FAQs can be found [here](#).

If you have any technical issues, please contact the grants management team via [support@smokefreeworld.org](mailto:support@smokefreeworld.org) 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 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 its grantmaking in three broad categories: health and science research, agricultural 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](http://www.smokefreeworld.org).

## References

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- <sup>1</sup> U.S. Dept. of Health and Human Services, Public Health Service, Office of the Surgeon General. (2004). *The health consequences of smoking: A report of the surgeon general*. <https://www.ncbi.nlm.nih.gov/books/NBK44695/>
- <sup>2</sup> Babb, S., Malarcher, A., Schauer, G., Asman, K., & Jamal, A. (2017). Quitting smoking among adults—United States, 2000–2015. *MMWR. Morbidity and Mortality Weekly Report*, *65*(52), 1457–1464. [doi.org/10.15585/mmwr.mm6552a1](https://doi.org/10.15585/mmwr.mm6552a1)
- <sup>3</sup> McNeill, A., Brose, L., Calder, R., Hitchman, S., Hajek, P., & McRobbie, H. (2015). *E-cigarettes: An evidence update. A report commissioned by Public Health England*. Semantic Scholar. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/733022/E-cigarettes\\_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/E-cigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf)
- <sup>4</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. [doi.org/10.1002/14651858.CD010216.pub7](https://doi.org/10.1002/14651858.CD010216.pub7)
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- <sup>6</sup> Sutton, S. K., Brandon, K. O., Harrell, P. T., Martínez, Ú., Simmons, V. N., Gore, L. R., Bullen, C. R., & Brandon, T. H. (2022). Identifying prospective subpopulations of combustible and electronic cigarette dual users in the United States via finite mixture modeling. *Addiction (Abingdon, England)*, *117*(9), 2493–2503. [doi.org/10.1111/add.15906](https://doi.org/10.1111/add.15906)
- <sup>7</sup> Martinez, U., Simmons, V. N., Sutton, S. K., Drobles, D. J., Meltzer, L. R., Brandon, K. O., Byrne, M. M., Harrell, P. T., Eissenberg, T., Bullen, C. R., & Brandon, T. H. (2021). Targeted smoking cessation for dual users of combustible and electronic cigarettes: A randomised controlled trial. *The Lancet. Public Health*, *6*(7), e500–e509. [doi.org/10.1016/S2468-2667\(20\)30307-8](https://doi.org/10.1016/S2468-2667(20)30307-8)
- <sup>8</sup> Baig, S. A., & Giovenco, D. P. (2020). Behavioral heterogeneity among cigarette and e-cigarette dual-users and associations with future tobacco use: Findings from the Population Assessment of Tobacco and Health Study. *Addictive Behaviors*, *104*, 106263. [doi.org/10.1016/j.addbeh.2019.106263](https://doi.org/10.1016/j.addbeh.2019.106263)
- <sup>9</sup> Czoli, C. D., Fong, G. T., Goniewicz, M. L., & Hammond, D. (2019). Biomarkers of exposure among "dual users" of tobacco cigarettes and electronic cigarettes in Canada. *Nicotine & Tobacco Research: Official Journal of the Society for Research on Nicotine and Tobacco*, *21*(9), 1259–1266. [doi.org/10.1093/ntr/nty174](https://doi.org/10.1093/ntr/nty174)
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