New online tool helps keep college campuses smoke and tobacco free

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A unique study published today in the Oxford University Press journal *Nicotine & Tobacco Research* looks at the impact of a new online reporting tool in shaping college campus attitudes and behaviors about smoke and tobacco free (STF) policies.

The study is co-authored by Elisa Tong, an internist and tobacco researcher with UC Davis Comprehensive Cancer Center. It looked at whether a new online tool for crowdsourced reporting of tobacco use and related litter called Tobacco Tracker is effective in supporting STF policies on college campuses. Campus-wide surveys were administered to current students, faculty and staff at two California public universities—both with 100% smoke- and tobacco-free policies in place.

"What we found is that the Tobacco Tracker is effective in helping ingrain smoke free policies into campus life," said Tong.

While STF policies are necessary to reduce tobacco-related problems, they are not sufficient without effective enforcement. Reliance on social enforcement by most colleges makes increasing campus-level engagement with these policies a critical, unmet need to accelerate the impact of tobacco control policy.

"Campus community members are critical to the success of their smoke- and tobacco-free policies. Almost all adult daily smokers started smoking before the age of 26, making college and university campuses a high priority for these policies," said Kimberley Pulvers, lead author and principal investigator of the study with the California State University San Marcos Department of Psychology.

Study outcomes

The joint University of California and California State University study results showed that awareness of the Tobacco Tracker to report tobacco use or related litter on campus doubled, and even use of the online tobacco reporting tool tripled, from pre- to post-assessment.

Additional suggested changes include increased readiness to enforce the STF policy, decreased witnessing of smoking/vaping on campus,

decreased exposure to smoking/vaping on campus, increased accurate knowledge of the STF policy and increased preference for a 100% STF campus.

Tong said reluctance to confront individual tobacco users poses a barrier to effective social enforcement, which is why the online Tobacco Tracker is an effective alternative. The online tool engages the campus community, capitalizing on broad support for campus smoke- and tobacco-free policies.

"Given that the Tobacco Tracker provides specific locations of smoking, vaping and related litter, reports can be used to provide targeted actions such as special attention and education where there is concentrated tobacco activity," said Pulvers.

Methodology + technology

Tobacco Tracker was created using the Environmental Systems Research Institute's Survey123 for ArcGIS Version 9.2. Survey123 is a smart form-based survey tool enabled for text, images and mapping using a geographic information system (GIS).

When a student, faculty or staff member sees someone smoking or using an e-cigarette or sees tobacco-related litter, they put that data into the online tool, using a smart phone or computer. They can even include a photo. The tool reports that data in real time, with GIS-tagged locations, allowing for hotspots to be reported and analyzed. Smartphone users are encouraged to save the Tobacco Tracker site to the home screen of their phones as a shortcut.

To encourage participation in the study, respondents could provide contact information to be entered into a weekly $10 gift card drawing. About 6,000 students, faculty, and staff participated in pre- and post-

assessment surveys. Tobacco Tracker data from March 2019 to February 2020 was evaluated. There were 1,163 Tobacco Tracker reports during the study period.

Tobacco Tracker was developed based on student and staff input, as described in a related study published by the same team in the *Journal of Medical Internet Research*. In a user survey, the top motivations for using the tool were a cleaner environment (79%) followed by health concerns (69%).

"The Tobacco Tracker is an easy way for individuals to make a difference for the environment and well-being of the campus community," said Tong.

More information: Kim Pulvers et al, Tobacco Tracker: A New Tool to Support College Smoke and Tobacco Free Policies, *Nicotine & Tobacco Research* (2021). DOI: 10.1093/ntr/ntab187

Sabrina F. Loureiro et al, The Development of an Online Tobacco Tracker Tool to Crowdsource Campus Environmental Reports for Smoke and Tobacco Free College Policies: A Mixed Methods Study (Preprint), *Journal of Medical Internet Research* (2021). DOI: 10.2196/26280

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