

Under 50% of U.S. adults using e-cigarettes had previously heard of **tobacco-free nicotine** (TFN), but most understood nicotine was present and tobacco was not.

Of those who had heard of TFN, 66% had knowingly used it.

Synthetic Nicotine: Knowledge, Awareness, Use, and Perceptions of Relative Addictiveness and Harm Among People Who Use E-cigarettes

Background

Synthetic nicotine is nicotine synthesized from chemicals in a lab, AKA tobacco-free nicotine (TFN). Tobacco-derived nicotine (TDN) is nicotine obtained from the tobacco plant. Little is known about consumer knowledge, awareness, use, and perceptions of addiction and harm for synthetic nicotine liquids.

Methods

- Cross-sectional web-based survey completed from Feb. to April 2023
- US adults (21+) who used an e-cig in the past 30 days (N=1163), with 92% being people who used e-cigs daily
- Participant identities were verified
- Participants submitted a valid photo of their most used e-cig
- “TFN” was the verbiage used in the questionnaire items
- We assessed knowledge of the presence of nicotine and tobacco and the source of nicotine in synthetic nicotine products, awareness, ever use, past 30-day use, and perceptions of relative addictiveness and harm of TFN and TDN
- Descriptive analyses were conducted

Results

- Overall, 87% (n=1,009) knew TFN contained nicotine, 89% (n=1,032) knew TFN did not contain tobacco, and 55% (n=636) knew it was created in a lab from chemicals
- About 44% (n=517) had previously heard of TFN
- Of those who had heard of TFN, 66% (n=341) had knowingly used it
- Among participants who knowingly used TFN, 83% (n=284) had knowingly used it in the past 30 days, with 48% (n=163) having knowingly used it everyday
- Further, 76% (n=879) and 61% (n=708) of participants perceived TFN and TDN as equally addictive and harmful, respectively

Conclusions

- The vast majority understood nicotine was present and tobacco was not. There was less understanding that TFN is created in a lab from chemicals
- Of those who previously heard of TFN, many reported knowingly using TFN products
- Most perceived TFN and TDN as equally addictive and harmful; however, we provided a TFN definition and 92% of the sample used e-cigs daily
- These findings are from our initial data exploration. We plan to examine reasons for first and continued use of synthetic nicotine products and explore unknowing synthetic nicotine use

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Tobacco industry	E-cigarette & nicotine product industry	Pharma industry
NO	NO	NO
NO	NO	NO

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