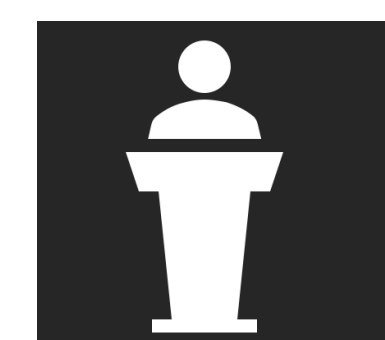


Response to Restrictions on Electronic Nicotine Delivery Systems: A Systematic Review



PRESENTER:
Chris Cadham

BACKGROUND

- The FDA is considering a ban on all flavour additives in electronic nicotine delivery systems (ENDS).
- The effects of such a policy are unknown.
- Evidence from existing and hypothetical bans can provide insights.

METHODS

- We conducted a systematic review of the literature on the effects of bans on flavoured ENDS either exclusively or in conjunction with other tobacco products.
- We searched PubMed, and Scopus
- Studies were grouped by type of ban:

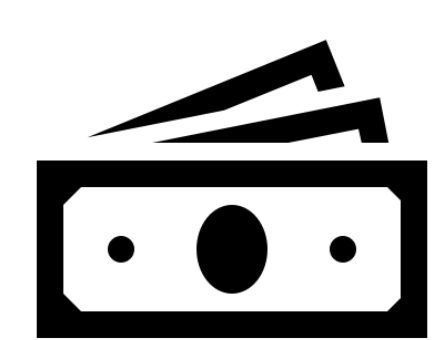


Hypothetical Flavour Ban

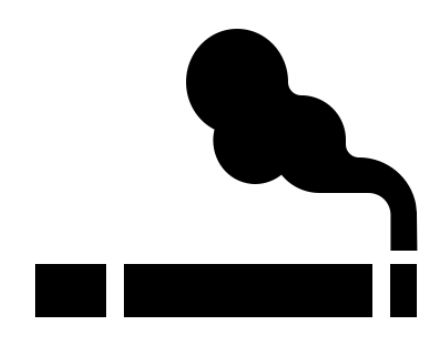


Implemented Flavour Ban

- Studies were then grouped by theme:



Sales



Individual Behaviour



Compliance

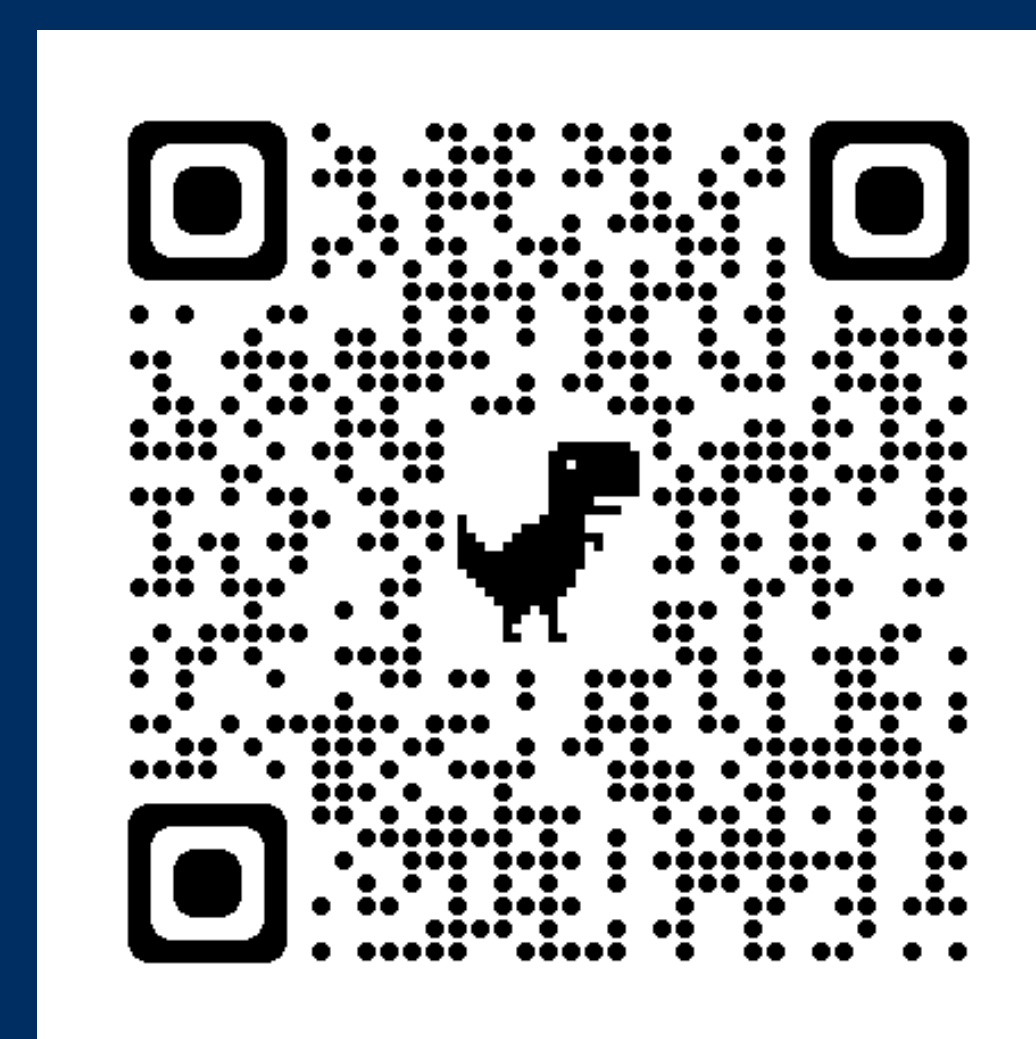


Public Opinion

RESULTS

- 39 studies were included.
- Studies were primarily located in the US and evaluated local bans in CA and MA
- Behaviour/sales: Use of ENDS falls, while evidence on use of other products is mixed.
 - Different outcome measures limit comparability of studies.
 - Reliance on local bans limits generalizability of behaviour effects to proposed FDA regulations.
- Compliance: Flavoured product availability in stores fell following bans.
 - Banned flavours remained available at 6-20% of stores. Flavoured products available online offered alternative workarounds.
- Public opinion: May be rising in recent years; differences exist by sample characteristics.

The effects of ENDS flavour restrictions on tobacco use remain unclear. Study results are heterogenous and vary depending on jurisdiction level. Retail compliance with restrictions was high.



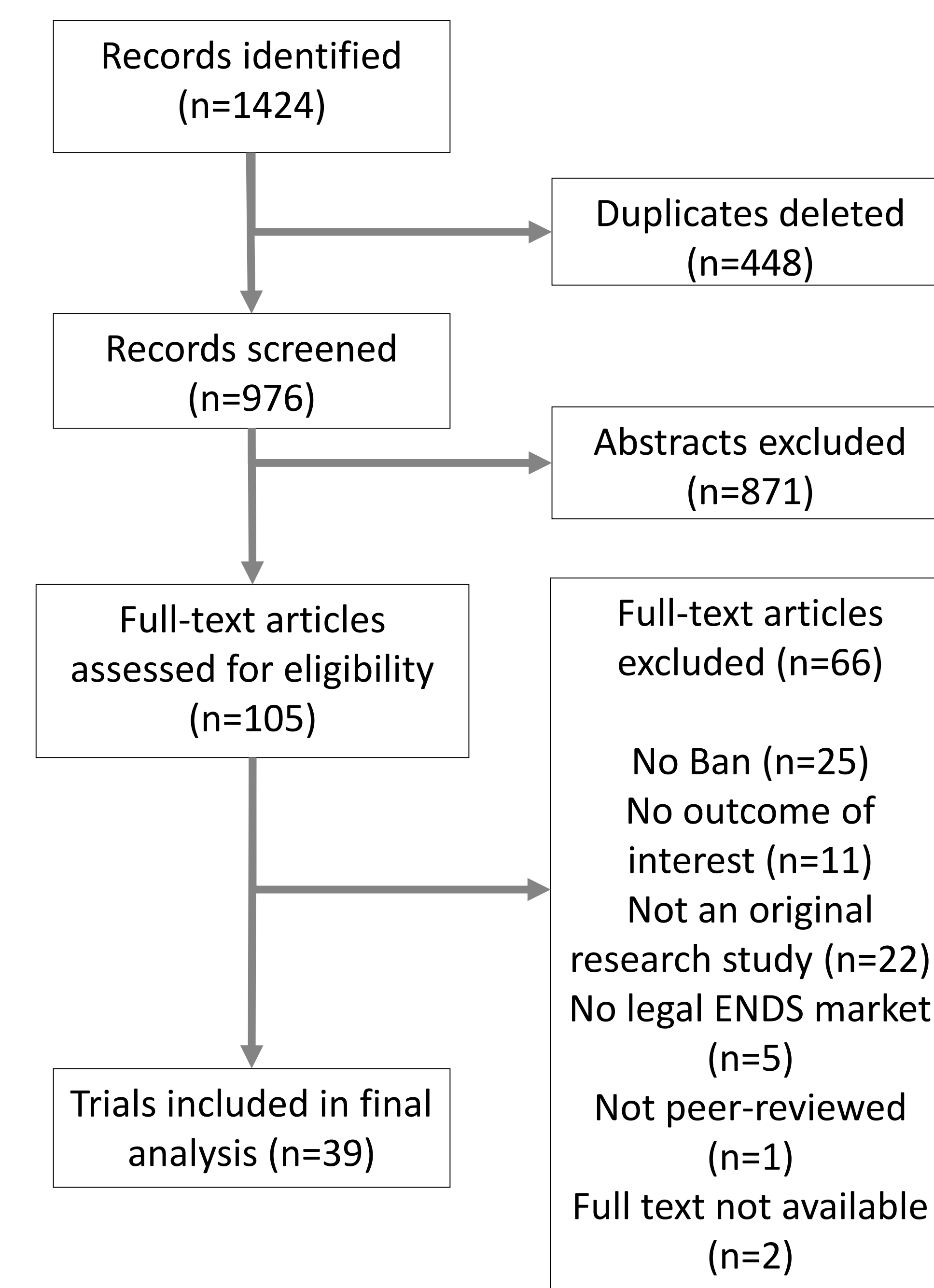
Take a picture to learn more about our research group!

Or email: ccadham@umich.edu

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PRISMA Diagram of Identified Studies of ENDS Flavour Bans



Study Types

Outcome	Hypothetical Ban	Implemented Ban	Total
Sales	0	2	2
Behaviour	8	8	16
Compliance	1	11	12
Public Support	13	1	14

Study Locations

Location	Implemented Bans	
	ENDS Only	ENDS and OTP*
US - Local Ban	1	10
US - State Ban	0	2
International	1	2

Individual Behaviour Outcomes

	Any Flavoured Product	Any Non-Flavoured Product	Cigarette Use	ENDS Use	OTP Use*
Use Rises	0	0	3	0	0
Use Flat	1	0	2	0	0
Use Falls	3	4	0	8	1
Not Reported	9	9	8	5	12

*OTP – other tobacco products

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The authors report no conflicts of interest. This research was funded by the National Institutes of Health, National Cancer Institute and the Food and Drug Administration Center for Tobacco Products (CTP) grant 1U54CA229974. The content of this poster does not reflect the views of the funders. Animations from the Noun Project creators including Arthur Shain, Alerma, Zaidan, and WiStudio.