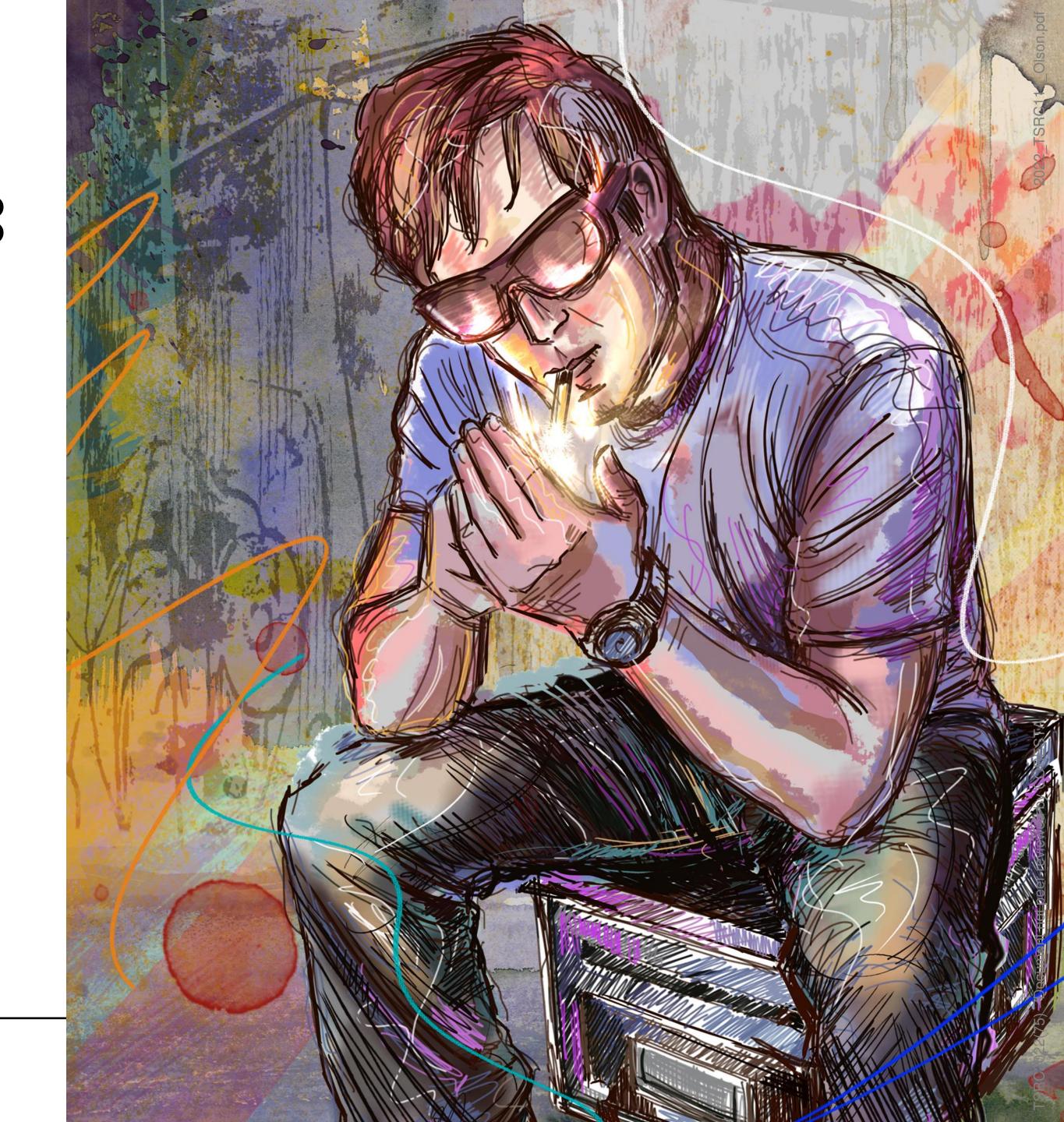
Where Cigarettes Serve As Currency: Can Vaping Be Better?

Reducing Harm for People in Custody

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75TH TOBACCO SCIENCE RESEARCH CONFERENCE NEW ORLEANS • SEPT. 13, 2022 • PRESENTATION 111

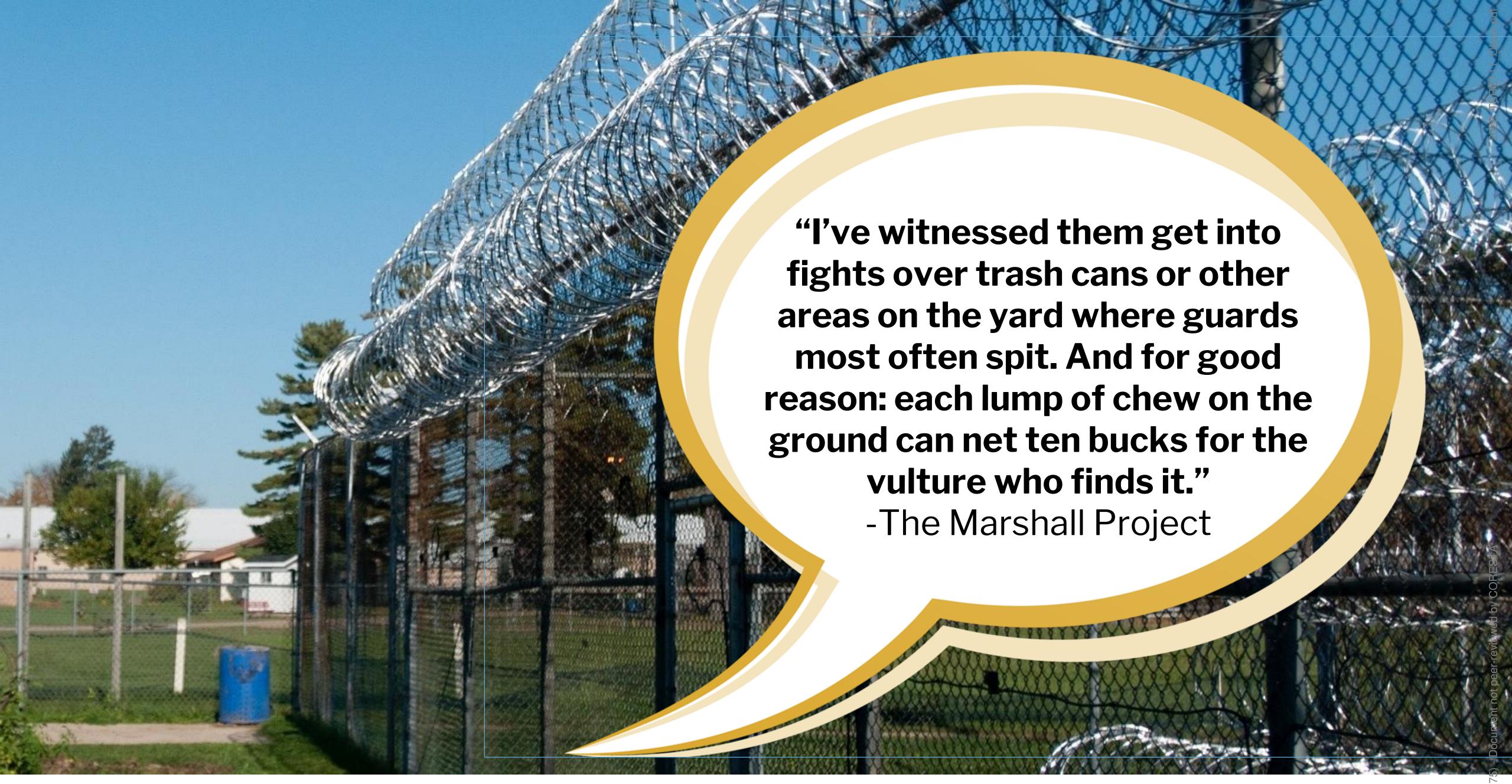


Today

- What tobacco means in prison
- Reasons for high tobacco use by people in custody
- The reality of "smoke-free" prisons (contraband)
- Vaping as an alternative:
 - -U.S. study results
 - -Scotland's experience switching from smoking to vaping
- People in custody are a vulnerable population:
 public health and vaping











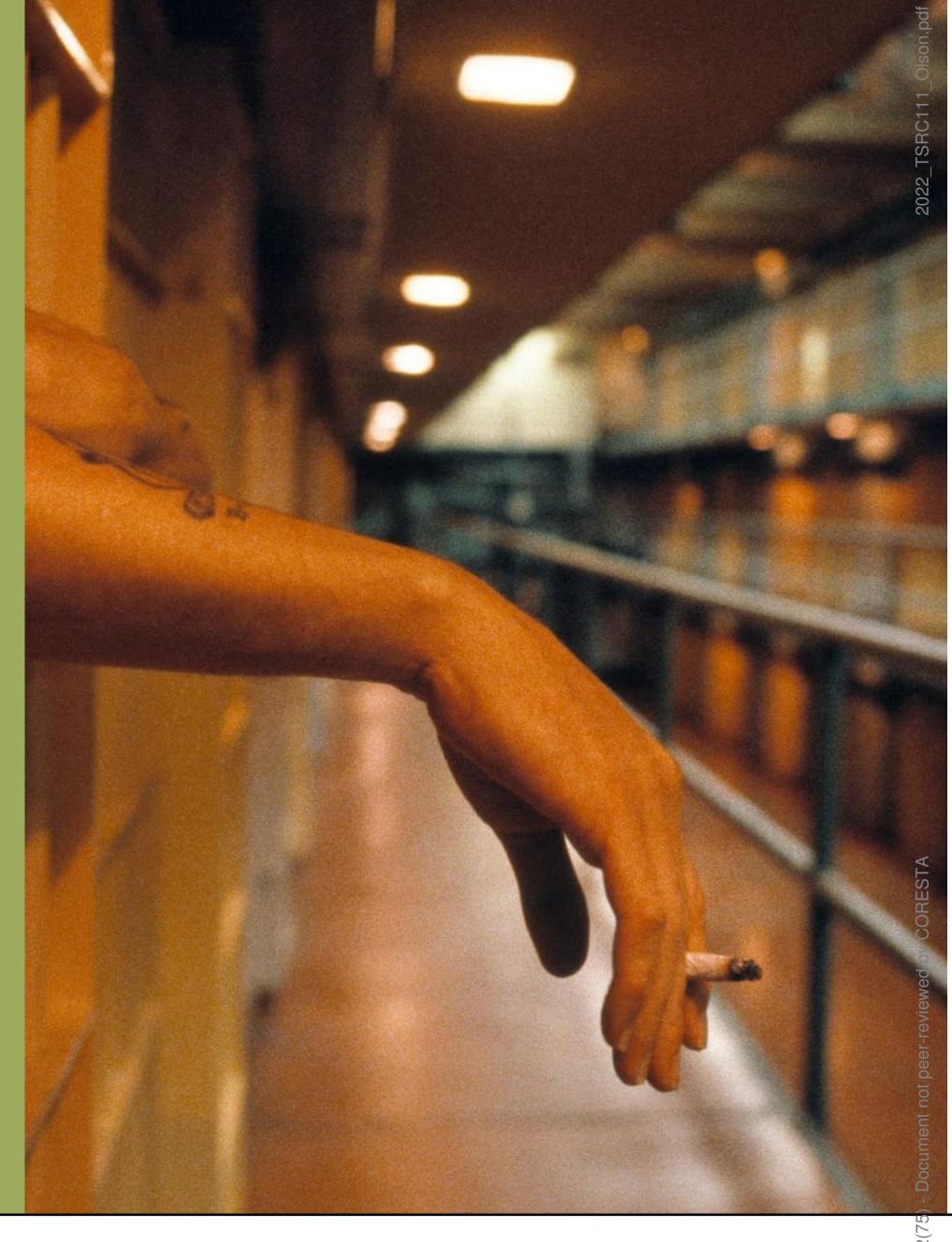
A VULNERABLE POPULATION

Incarcerated people have:

- High rates of smoking and substance use
- Lower education and income
- History of trauma
- Higher rates of mental and physical illness

"Tobacco use is completely entangled in prison life where it helps to cope with boredom, deprivation or stress, relieve anxiety and tension, and function as a source of pleasure or monetary value in an environment without currency."

-Baybutt, Ritter & Stöver in **Prisons and Health**, 2014 W.H.O. report



LOW QUIT RATES AMONG DISADVANTAGED

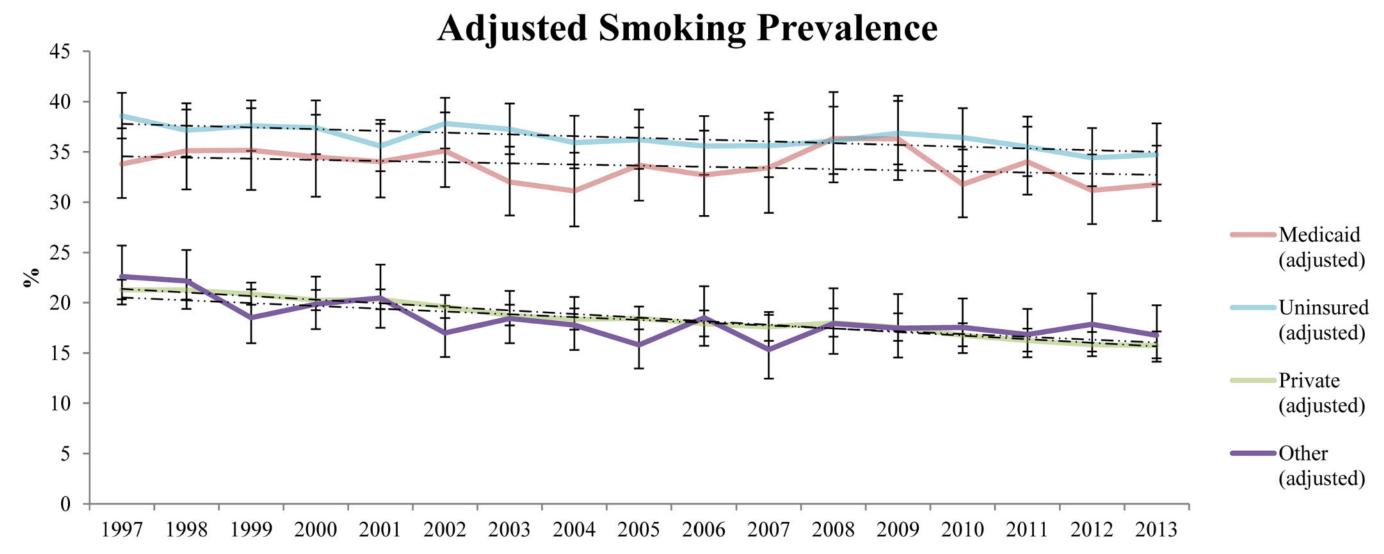


Fig 2. Smoking prevalence of US adults by insurance coverage. The top panel: Error bars represent the 99.7% confidence intervals, used to adjust for multiple comparisons (retaining an overall 95% family-wise error for the 17 surveys from 1997 to 2013). The bottom panel: Error bars represent the 99.7% confidence intervals, used to adjust for multiple comparisons (retaining an overall 95% family-wise error rate for the 17 surveys from 1997 to 2013). Data from the 1998 and the later surveys were also re-weighted to the demographic composition (i.e. gender, age, education, race/ethnicity) of the 1997 survey.

https://doi.org/10.1371/journal.pone.0178279.g002



RESEARCH ARTICLE

Smoking prevalence in Medicaid has been declining at a negligible rate

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Abstract

Background

In recent decades the overall smoking prevalence in the US has fallen steadily. This study examines whether the same trend is seen in the Medicaid population.

Methods and findings

National Health Interview Survey (NHIS) data from 17 consecutive annual surveys from 1997 to 2013 (combined N = 514,043) were used to compare smoking trends for 4 insurance groups: Medicaid, the Uninsured, Private Insurance, and Other Coverage. Rates of chronic disease and psychological distress were also compared.

Results

Adjusted smoking prevalence showed no detectable decline in the Medicaid population (from 33.8% in 1997 to 31.8% in 2013, trend test P = 0.13), while prevalence in the other insurance groups showed significant declines (38.6%-34.7% for the Uninsured, 21.3%-15.8% for Private Insurance, and 22.6%-16.8% for Other Coverage; all P's<0.005). Among individuals who have ever smoked, Medicaid recipients were less likely to have quit (38.8%) than those in Private Insurance (62.3%) or Other Coverage (69.8%; both P's<0.001). Smokers in Medicaid were more likely than those in Private Insurance and the Uninsured to have chronic disease (55.0% vs 37.3% and 32.4%, respectively; both P's<0.01). Smokers in Medicaid were also more likely to experience severe psychological distress (16.2% for Medicaid vs 3.2% for Private Insurance and 7.6% for the Uninsured; both P's<0.001).

Conclusions

The high and relatively unchanging smoking prevalence in the Medicaid population, low quit ratio, and high rates of chronic disease and severe psychological distress highlight the need



FLORIDA SMOKING BAN SCALED BACK AS BLACK-MARKET FOR CIGARETTES GROWS BY DAVID REUTTER - OCTOBER. 16, 2015 - WWW.PRISONLEGALNEWS.ORG

PRISON BLACK MARKET THRIVES WITH CIGARETTE BAN
BY ASSOCIATED PRESS - FEBRUARY 19, 2007 - WWW.MERCURYNEWS.COM

SMOKING BAN CREATES CIGARETTE BLACK MARKET AT MISSOURI PRISON NOVEMBER 21, 2018 - HTTPS://WWW.YAHOO.COM/NOW/SMOKING-BAN-CREATES-CIGARETTE-BLACK-212442526.HTML

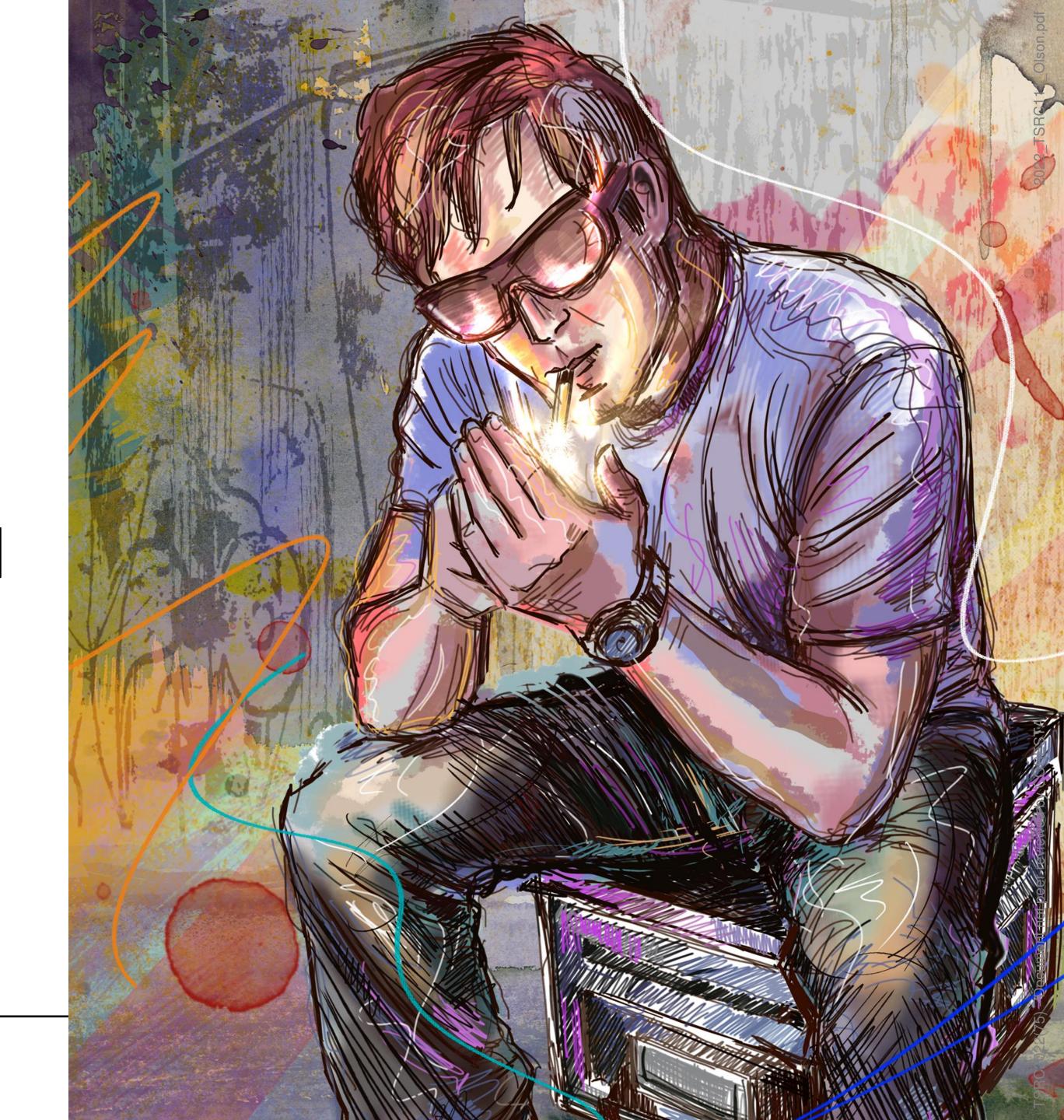
CIGARETTE BANS AT CITY JAILS FUEL \$200-A-PACK BLACK MARKET, SURGE IN ARRESTS BY REUVEN BLAU – MAY 6, 2013 - HTTPS://WWW.NYDAILYNEWS.COM/





Can vaping be better?

Telephone Interviews and Surveys of Recently Incarcerated Persons





QUALITATIVE STUDY METHODS

- Telephone interviews with sample of recently incarcerated adults (low literacy population)
- 30 subjects, 22 men, 8 women
- Had opportunity to purchase one or more brands of vaping devices when incarcerated
- Focused on eCig4Inmate™ brand (for FDA application)

QUANTITATIVE STUDY METHODS

- Online survey, tested for ease of comprehension
- Recruited recently incarcerated adults via Craigslist and Facebook nationwide in Aug./Sept. 2021
- "Exposed" sample: must have had opportunity to purchase eCig4Inmate™ during recent incarceration (some experienced a transition from legal cigarette sales)
- "Non-Exposed" sample: held where no cigarettes or e-cigarettes were legally sold



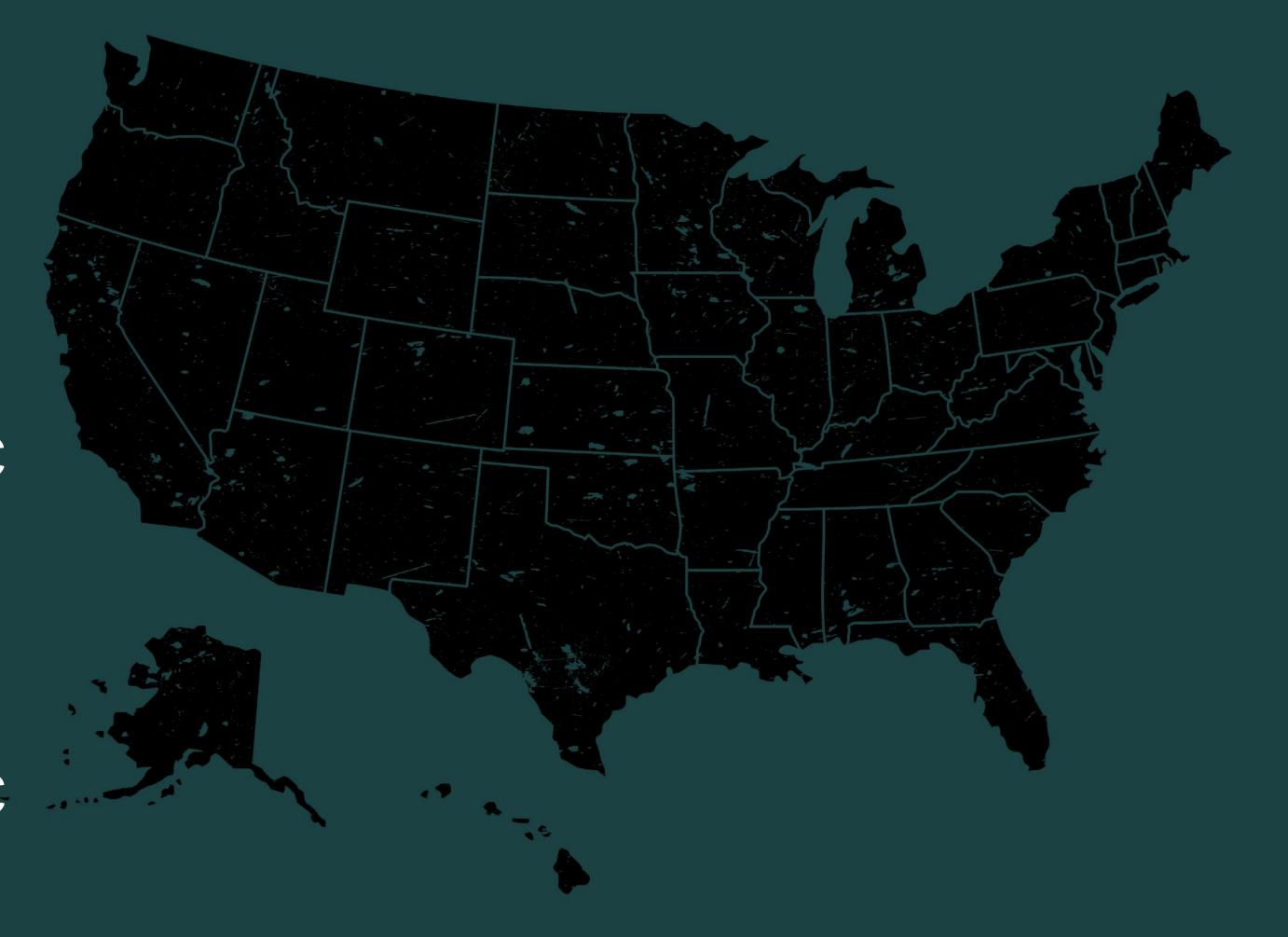
STUDY SAMPLE

Exposed sample:

- N=578 (91% male)
- Incarcerated in 46 states plus DC

Non-Exposed sample:

- N=1009 (90.4% male)
- Incarcerated in 48 states plus DC



Total 19% black, 72.5% white, 9.8% Hispanic

STUDY SAMPLE

Difficult to recruit tobacco nonusers.

Majority of both samples used at least two products daily.

Current daily smokers: 84.1% of Exposed, 69.3% of Non-Exposed

Smokes "not at all": 1% of Exposed, 9.3% of Non-Exposed

Daily vaping: 76.8% of Exposed, 13.9% of Non-Exposed (1/3 of Non-Exposed had never vaped. Nearly all vapers also use cigarettes.)



USE OF VAPING DEVICES IN CUSTODY

Of those who could purchase an eCig4Inmate™ device:

- 95.1% of pre-incarceration daily smokers tried it; 99% of those bought more than 1
- 86.0% of non-smokers tried; all but 1 bought more than 1.

Of those who could <u>not</u> purchase legal vapes or cigarettes (Non-Exposed sample):

- 2 of 3 daily smokers were "very likely to" or "definitely would" try vaping eCig4Inmate™ if re-incarcerated
- Just 1.5% of daily smokers were "very unlikely to" or "definitely would not" try vaping
- 40.0% of tobacco nonusers said they "definitely would not try" vaping if re-incarcerated.



ent not peer-reviewed by CORESTA

SMOKER SATISFACTION WITH VAPING

Qualitative Study comments:

#20: "That's the only choice, it's either going to be do that, or do nothing forward. That's really the main thing, is you don't have a choice. Beggars can't be choosers."

#22: "It wasn't a matter of trying to deciding, it was a matter that I had to. No matter what they had, even if they had anything that's even remotely related to smoking or vaping or chewing tobacco or cigars...I wasn't being picky."

#24: "It's just like a little treat. While you're in jail, there's nothing good. The only things good are visitation and phone calls.

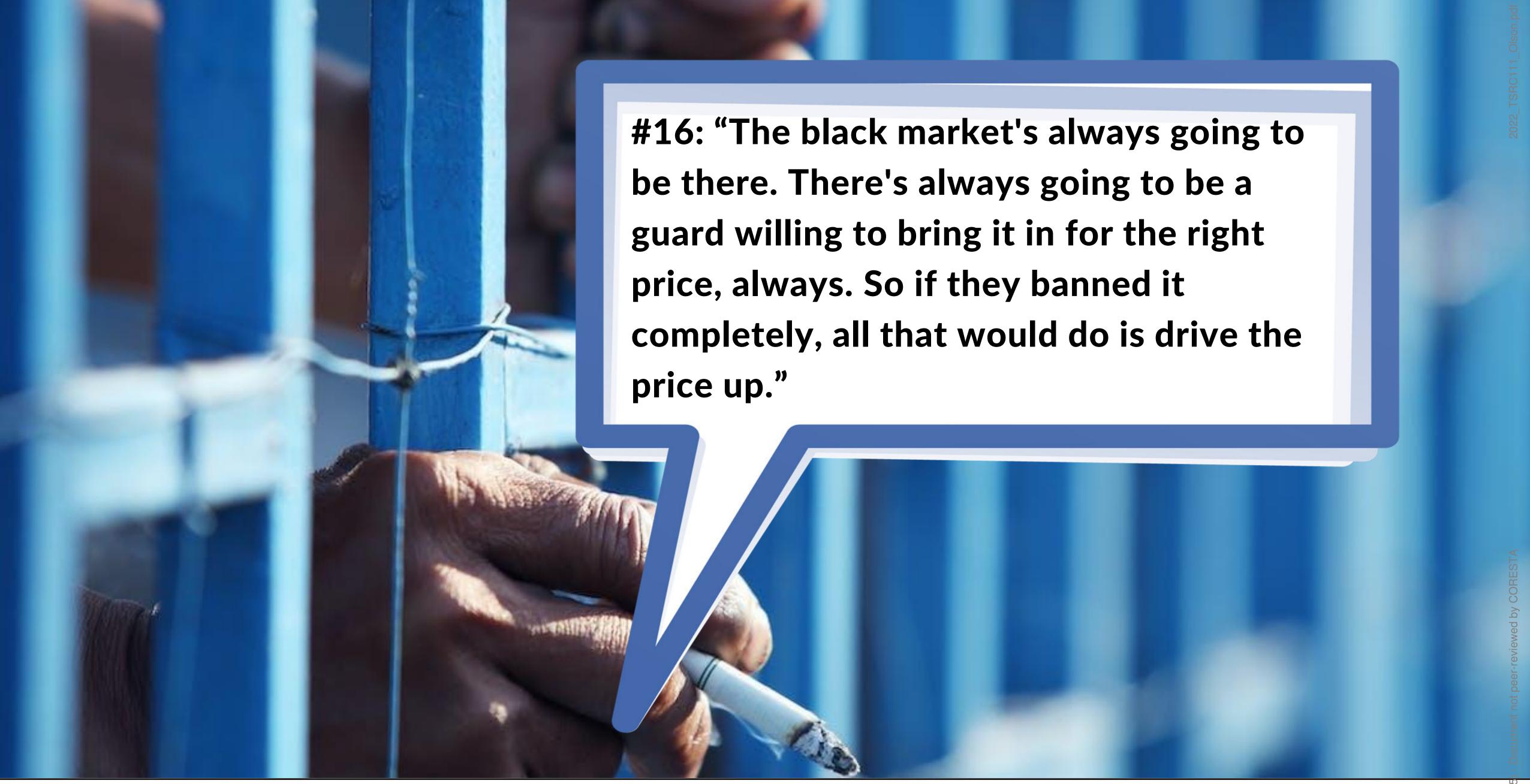
#10: "I needed to relax because it helps me quiet down and calm down."



EFFECTS AFTER INCARCERATION

- 1 in 10 pre-incarceration daily smokers who used eCig4Inmate™ while in custody no longer smoke daily. (Other research found smoking bans have no impact on post-prison smoking.)
- Of dual users who had been eCig4Inmate™ vapers when in custody, more intend to increase vaping or end up only vaping (40.7%) than to increase or end up only smoking (28.4%). Further, 14.7% intend to quit tobacco use.





CONTRABAND

 43.1% of Non-Exposed sample (no legal access to cigarettes or vapes) admitted to smoking at least one contraband cigarette. (Half of the daily smokers)

• 55.6% said contraband cigarettes had been available to buy or trade for in their jail/prison.









POST-IMPLEMENTATION PERSPECTIVES ON SMOKEFREE PRISON POLICY: A QUALITATIVE STUDY WITH STAFF AND PEOPLE IN CUSTODY (2022)

ASHLEY BROWN, DANIELLE MITCHELL, KATE HUNT EUROPEAN JOURNAL OF PUBLIC HEALTH, FEBRUARY 2022, HTTPS://DOI.ORG/10.1093/EURPUB/CKAB075

"These findings may be explained by high levels of vaping among PIC [people in custody] in Scotland as an alternative to tobacco, in contrast to other jurisdictions which have reported problems with illicit tobacco markets or NRT misuse."



From a public health perspective, the reality isn't that incarcerated people face a choice between vaping and not smoking; it's a choice between legal vaping and illicit tobacco.



HARM REDUCTION FOR PEOPLE IN CUSTODY

"The singular focus of US policies on decreasing youth vaping has been a distraction from the larger goal of tobacco control, namely reducing smoking and its harms."

"Overemphasis of the **risks** of vaping leads to cognitive bias that means we are inclined to reject the **benefits**...."



-Dockrell & Newton, American Journal of Public Health, 2021





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CITATIONS

- Baybutt, Ritter, & Stöver. (2014). Tobacco use in prison settings: a need for policy implementation. In S. M. Enggist, Lars; Galea, Gauden; Udesen, Caroline (Ed.), *Prisons and health* (pp. 138-147). Copenhagen: WHO Regional Office for Europe.
- Brown, Mitchell, & Hunt. (2022). Post-implementation perspectives on smokefree prison policy: a qualitative study with staff and people in custody. European Journal of Public Health. doi:10.1093/eurpub/ckab075
- Dockrell & Newton. (2021). Tobacco control leaders call for a balanced assessment of the risks and benefits of nicotine vaping. *American Journal of Public Health*, 111(9), https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2021.306458
- Hefler, Hopkins, & Thomas. (2016). Successes and unintended consequences of the Northern Territory's smoke-free prisons policy: results from a process evaluation. *Public Health Research & Practice, 26*(2). doi:10.17061/phrp2621619
- Maruschak, Bronson, & Alper. (2021). *Alcohol and Drug Use and Treatment Reported by Prisoners*. Bureau of Justice Statistics Retrieved from https://www.ojp.gov/library/publications/alcohol-and-drug-use-and-treatment-reported-prisoners-survey-prison-inmates
- Larmour. (2016). Getting a Hustle: How to Live Like a King Behind Bars. *Life Inside.* Retrieved from https://www.themarshallproject.org/2016/01/15/getting-a-hustle-how-to-live-like-a-king-behind-bars
- Zhu, Anderson, Zhuang, Gamst, & Kohatsu (2017). Smoking prevalence in Medicaid has been declining at a negligible rate. *PLoS One*, 12(5): e0178279.

