

Poor compliance with PACT Act shipping label requirements among online vaping retailers

INTRODUCTION

Discreet shipping—packaging that hides tobacco products from view—is an issue for delivery sales because of the potential for tobacco products to be sent without delivery personnel knowing. This could undermine enforcement by letting retailers evade age-verification checks, flavour and delivery-sale bans, and tax collection.^{1,2} To prevent discreet shipping, the 2009 Prevent All Cigarette Trafficking (PACT) Act³ required that all US shipments containing tobacco products (including vaping products since the passage of the 2020 Preventing Online Sales of E-Cigarettes to Children Act⁴) are clearly labelled as such. The extent to which online vaping retailers comply with these requirements remains unclear. To test compliance with PACT Act labelling requirements, we made purchases from online vaping retailers and examined packages and shipping labels for compliance to requirements to disclose that they contained tobacco products. Among non-compliant packages, we also examined whether the retailers made further attempts to disguise the contents by using alternate business names or labelling with fictitious products.

METHODS

Full details of the retailer sampling strategy are published.⁵ Briefly, adult (21+ years) buyers residing in San Diego, California, attempted purchasing e-liquid and/or disposable vaping products from $n=78$ online vaping retailers. Retailers were identified using an internet search strategy designed to identify websites that consumers in San Diego, California, would likely find when looking for products online. Buyers used their personal billing and shipping information to complete the transactions, with two buyers attempting purchases per retailer.

Delivered packages were reviewed by study staff to determine compliance with PACT Act labelling requirements by looking for labels indicating the packages contained tobacco products. Study staff also reviewed the packages to identify whether alternate business names were used on return addresses or whether any text misrepresented package contents by claiming the package contained something other than tobacco.

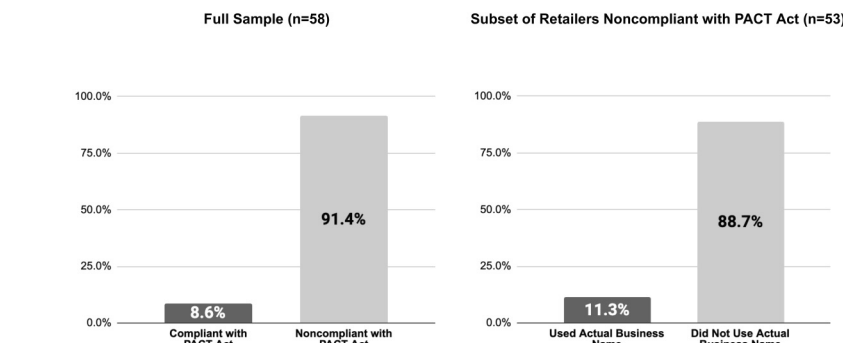


Figure 1 Retailer labelling among delivered vape shipments. PACT, Prevent All Cigarette Trafficking.

We calculated the percentage of retailers that correctly labelled the contents as tobacco. Among packages without tobacco labels, we calculated the percentage of shipping labels that did not use the actual business name or misrepresented the package contents.

RESULTS

Of the 78 retailers, 58 delivered a package to at least one buyer and 41 delivered packages to both buyers. The remaining 20 retailers did not have a successfully delivered package. Reasons for failed purchase attempts included website malfunctions, packages lost in transit and in a few cases retailers declined purchases to comply with local flavour restrictions. Of the 41 retailers who delivered packages to both buyers, all package pairs had identical business names and shipping labels. Among all retailers with at least one delivered shipment ($n=58$), only 8.6% labelled the package as containing tobacco as required by the PACT Act (figure 1). Among non-compliant retailers ($n=53$), only 11.3% used their actual business name on the shipping label, with the remaining 88.7% using either an alternate business or individual person's name. Two non-compliant retailers (3.8%) mischaracterised package contents: one labelled the contents as a phone case or a screen protector and another labelled contents as essential oils.

DISCUSSION

A substantial majority of the online tobacco retailers we purchased from did not comply with PACT Act labelling requirements, and many further concealed tobacco contents by omitting their business name or mischaracterising the true contents. These actions may allow retailers to conceal package contents and, in doing so, make it easier for youth to purchase tobacco and for retailers to evade other policies such as

age verification requirements, flavour and delivery sales restrictions, and tax collection as orders may be fulfilled without delivery personnel noticing. One approach to addressing issues with PACT Act labelling requirement compliance could be to conduct routine compliance inspections. Most jurisdictions already conduct undercover inspections of brick-and-mortar retailers through effective programmes like Synar,⁶ but few, if any, routinely inspect e-commerce retailers. Using methods similar to the ones we have demonstrated herein could be a way to bring compliance programmes into the digital age.⁷

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REFERENCES

- Mejorado T, Ellis S, Harati RM, *et al.* Online retailer noncompliance to e-cigarette excise tax and tobacco licensing laws. *Tob Control* 2025.
- Dobbs PD, Schisler ED, McCormick C. #Discreetshipping: Selling E-cigarettes on TikTok. *Nicotine Tob Res* 2025;27:748–52.
- Kohl H. 111th congress (2009-2010): PACT Act. 2010. Available: <https://www.congress.gov/bill/111th-congress/senate-bill/1147>
- Feinstein D. S.1253 - 116th congress (2019-2020): preventing online sales of e-cigarettes to children act. 2020. Available: <https://www.google.com/url?q=https://www.congress.gov/bill/116th-congress/senate-bill/1253&sa=D&source=docs&ust=1747242381668036&usg=AOvVaw0FA1xasNyZ9R7Mzeu044IY>
- Harati RM, Ellis SE, Satybaldiyeva N, *et al.* Online Retailer Nonadherence to Age Verification, Shipping, and Flavor Restrictions on E-Cigarettes. *JAMA* 2024;332:2113–4.
- Evidence of the synar program's success. 2024. Available: <https://www.samhsa.gov/substance-use/learn/tobacco-vaping/synar/synars-success>
- Leas EC. Need for improved regulation of tobacco e-commerce. *Tob Control* 2025;34:276–7.