

Internet Sales of Cigarettes to Minors

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THERE IS GROWING CONCERN THAT the Internet might become a source of tobacco products for minors.¹⁻³ Recent studies suggest that 2% to 3% of adolescent smokers report purchasing cigarettes through the Internet.⁴⁻⁶ Minors appear to have easy access to tobacco via the Internet because most vendors do not have adequate age verification methods.⁷ The most common age verification method is self-report, whereby online buyers click a box stating that they are of legal age to purchase tobacco products (48.9%) or type in a birth date (14.8%). These methods are unlikely to deter adolescents who might lie about their age. Only 6.8% of Internet cigarette vendors claimed on their Web sites that they would require recipients to show photographic age identification at the point of delivery.⁷

To date, there are no published, peer-reviewed studies that assess whether minors can successfully purchase cigarettes online. The goals of this study were to determine whether minors can successfully purchase cigarettes from Internet vendors and to examine age verification procedures at the point of delivery.

METHODS

Sample

Internet vendors were identified from an earlier study (January 2000) of the sales practices of Internet cigarette vendors.⁸ Because no comprehensive list of Internet cigarette vendors is available, for that study, 4 search terms (eg, discount cigarettes) were entered into 4 search engines and the first 100 hits were examined, along with all sites

Context There is growing concern that the Internet might become a source of tobacco products for minors. Although researchers have studied tobacco sales to minors at retail outlets for more than a decade, there are no published studies of tobacco sales to minors via the Internet.

Objective To determine the proportion of Internet cigarette vendors that will sell cigarettes to minors.

Design, Setting, and Participants Cross-sectional study conducted in April-July 2001. Under adult supervision, 4 adolescents aged 11 to 15 years attempted to purchase cigarettes via 55 Internet cigarette vendors located in 12 states. These minors made a total of 83 purchase attempts, paying by credit card (n=47) and by money order (n=36).

Main Outcome Measure Proportion of Internet cigarette vendors that sold cigarettes to minors.

Results Minors successfully received cigarettes for 93.6% of credit card purchase attempts and for 88.9% of money order purchase attempts. Age was never verified for any of these deliveries. Internet vendors sent a total of 1650 packs of cigarettes to the underage adolescents in this study.

Conclusion Minors appear to have easy access to cigarettes via the Internet because many Internet vendors have weak or nonexistent age verification procedures.

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listed on an Internet search catalog and mentioned in a news article. Altogether, 1808 Web sites were screened to identify 88 unique sites in the United States. All of these 88 Web sites were revisited in March 2001 to verify that the Web site was still active, sold cigarettes either by money order or credit card, sold outside of their home state, and was not part of a buyer's club that required membership for purchasing. Of the original 88 Web sites, 22 were inactive, 6 did not allow money order or credit card purchasing, 2 did not sell outside of their home state, and 3 were buyer's clubs, leaving 55 Internet vendors eligible for this study. We compared the percentages of the 33 excluded sites and the 55 included sites that were based at an Indian reservation, had a retail shop, featured an age warning on their Web site, verified age with a check box, and stated that age would be verified at delivery. The included sites were significantly more

likely than excluded sites to have an age warning ($P=.004$).

The lead author (K.M.R.) recruited 4 North Carolina adolescents through personal contact with parents. Research staff held an information and training session with the adolescents and their parents. Two adolescents were male, 2 were female, and all ranged in age from 11 to 15 years. None were smokers.

Protocol for Ordering Cigarettes

All compliance checks were conducted between April and July 2001. Each adolescent worked with a member of the research staff (R.S.W. or A.E.K.) for each

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purchase attempt. Staff provided the adolescent with the Web site address or uniform resource locator of each Internet vendor. Adolescents then purchased Marlboro cigarettes, the leading brand among adolescents,⁹ or the cheapest brand available if the site did not sell Marlboro. The adolescent buyers ordered the minimum number of cartons required by the Internet vendor.

Each adolescent attempted to purchase cigarettes from approximately one quarter of the sites. For the 28 Web sites that offered both credit card and money order payment options, one adolescent purchased with a credit card and another adolescent with a money order. For sites allowing money orders, minors printed out an order form from the Web site and filled out their ordering information. A research staff member gave each adolescent cash and then escorted him/her to purchase the money order at a post office or a grocery store. No adolescent was asked for age identification or the purpose of the money orders. The money orders were sold blank, and the adolescent filled in the name of the Internet vendor when they returned to the researcher's office. The order form and money order were then mailed to the Internet vendor.

For sites allowing credit card purchases, adolescents were given a pre-paid, reloadable Visa card marketed to teenagers. One adolescent was younger than 13 years, the required minimum age for this card, and used a parent's credit card for her 12 purchases. Adolescents typed in all of the ordering information on the Web site, including the credit card information.

If the Web site or mail order form asked purchasers whether they were of legal age to purchase tobacco products, adolescents indicated "yes." If asked for their birth date, adolescents used fake dates that would make them 18 to 21 years old. Adolescents were each given fake names for privacy but used their real mailing addresses. If a driver's license number was requested during ordering, a fake one was entered. If a copy of a photographic age identification card (eg, driver's li-

cense) was requested by fax or mail, none was submitted.

Many of the Internet vendors requested the buyer's e-mail address and telephone number. Research staff established and monitored temporary e-mail accounts for each adolescent and vendors were given the phone number of one of the adult research staff members.

Protocol for Receiving Cigarettes

The adolescents answered the door as much as possible during the study period, allowing them to receive the deliveries. If the delivery person gave the package of cigarettes to the adolescent, the adolescents were instructed to give it to their parents for safe storage. Printed stickers were given to each adolescent to affix to the packages and to record information about the delivery process, such as who received the package, the name of the delivery company, the date of delivery, and whether proof of age was requested by the delivery person. Research staff periodically visited each adolescent's home to retrieve the delivered tobacco products. Staff recorded whether each package was marked as containing tobacco products, whether the name on the return address label indicated that it was shipped from a tobacco vendor, whether the package was marked "Adult signature required for delivery," and whether it featured a bar code, which could be programmed to include a prompt for the delivery person to verify the age of the recipient.

Legal and Human Subjects Concerns

Research staff received a written letter guaranteeing immunity from prosecution from the local district attorney, who has enforcement authority over North Carolina's law 14-313, "Youth Access to Tobacco Products," which bans tobacco sales to minors and makes it a crime for adults to aid minors in purchasing tobacco products. It is also illegal in 20 states for minors to attempt to purchase tobacco products or to misrepresent their age when attempting to purchase tobacco products.¹⁰ To avoid having to seek immunity from states with

these legal requirements, an adult staff member consummated the purchase; research staff "officially" submitted all of the orders by either clicking the final "submit" button for online orders or by placing the order forms completed by the adolescent in a mailbox. Finally, the lead author notified the local police chief of the study in case there were problems with clerks when the adolescents purchased the money orders.

The study protocol received exempt status from the University of North Carolina School of Public Health Institutional Review Board on the basis that Internet cigarette vendors are not considered human subjects.

Analyses

Tobacco sales to minors was the primary outcome variable of the study. All successful deliveries of tobacco products to the minors' homes were considered sales. Descriptive statistics were computed for all of the ordering and receipt variables.

RESULTS

The 55 Internet cigarette vendors were located in 12 states. Nearly a quarter (27.3%) also operated a retail store, and 63.6% were based at Indian reservations. A warning that buyers need to be at least 18 years of age to purchase tobacco products was featured on 90.9% of Web sites. Minors made a total of 83 purchase attempts, 36 using money orders and 47 using credit cards. In all but 6 cases, they ordered Marlboro. The minimum order was 1 carton for slightly more than half of the purchase attempts, with a range of 1 to 5 cartons.

Internet cigarette vendors sold to minors in 76 (91.6%) of the 83 purchase attempts. Fifty of the 55 Internet vendors sold cigarettes to minors. Successful purchases occurred in 32 (88.9%) of 36 money order purchase attempts and 44 (93.6%) of 47 credit card purchase attempts. Altogether, the Internet vendors sold a total of 1650 packs of cigarettes to the 4 minors. Eight vendors for the money order purchases and 1 vendor for the credit card purchases stated on their Web site that buyers must mail

Table. Characteristics of 76 Packages Containing Cartons of Cigarettes Successfully Received From Internet Cigarette Vendors

Characteristics	No. (%)	
	Money Order Shipments (n = 32)	Credit Card Shipments (n = 44)
Age verified at delivery	0	0
Receipt of order		
Left at door	31 (96.9)	34 (77.3)
Adolescent received	0	4 (9.1)
Parent received	1 (3.1)	6 (13.6)
Delivery company		
US Postal Service	13 (40.6)	14 (31.8)
United Parcel Service	18 (56.3)	29 (65.9)
Federal Express	1 (3.1)	0
Unknown	0	1 (2.3)
Exterior of package clearly labeled as tobacco products	0	1 (2.3)
Package marked "Adult signature required for delivery"	0	1 (2.3)
Name listed on return address indicates tobacco vendor	4 (12.5)	3 (6.8)
Shipping bar code on package	31 (96.9)	41 (93.2)

or fax a copy of their photo ID; however, only 3 of the money order purchases (8.3%) and 1 credit card purchase (2.1%) were refused because the buyer did not provide proof of age. For 1 of the money orders and 1 of the credit card attempts, the vendor never shipped the cigarettes. Despite numerous e-mail and telephone queries, the money was never refunded, and it appears that both of these Internet vendors went out of business because their Web sites became inactive. Finally, 1 credit card purchase was unsuccessful because of technical difficulties; the vendor could not process the order even though the credit card number was submitted 3 times.

The age of the recipient was never verified in any of the 76 successful deliveries. Of the packages that were received, 96.9% of money order packages and 77.3% of credit card packages were left on the recipient's doorstep without any contact with the recipient (TABLE). No money order packages and 4 credit card packages were received from the delivery person by adolescents and 1 money order package and 6 credit card packages were received by a parent. All but 2 packages were shipped by either the United Parcel Service (UPS) or the US Postal Service. One package was shipped by Federal Express; another shipped by an unknown courier arrived from the Brit-

ish Virgin Islands with a US Customs label on the outside of the package. This package was the only one that was clearly labeled as containing tobacco products because a description of the package contents was required on the US Customs shipping label. Only 1 package was labeled "Adult signature required for delivery," but because this package was received by a parent, we were unable to determine whether the delivery person would have actually verified age if the adolescent had received it. Based on the return address labels, it was only clear that 7 packages came from a tobacco vendor. Finally, bar codes were featured on 96.9% of money order packages and 93.2% of credit card packages.

Some vendors included complimentary packs of cigarettes or individual cigarette samples with the adolescents' orders. One vendor sent 6 free cartons of cigarettes to 2 different adolescents. These unsolicited cartons arrived several weeks after the original order without any explanation or request for payment. Many vendors included free promotional items, such as pens, ashtrays, or lighters that featured the vendor's logo and contact information. Others included business cards with contact and ordering information, which customers could distribute to their friends.

COMMENT

In the present study, approximately 90% of Internet vendors sold cigarettes to minors. These high rates of Internet cigarette sales to minors are reminiscent of rates observed at retail outlets more than a decade ago, when there was little enforcement of adolescent access laws.^{11,12} To prevent tobacco sales to minors, many retailers have implemented clerk training programs and installed devices to verify the age of potential buyers. Nevertheless, many Internet cigarette vendors appear to have weak or nonexistent age verification procedures. In fact, 65 of 76 packages containing cigarettes were simply left at the door without any age verification at the point of delivery. Although the majority of the Internet cigarette vendors posted an age warning on their Web site, there was no age verification for any of the deliveries.

To our knowledge, this is the first scientific study to document Internet cigarette sales to minors; however, there have been several anecdotal reports that minors can purchase cigarettes online. The New York City Department of Consumer Affairs reported that in 23 of 24 purchase attempts, Internet vendors sold to minors aged 7 to 17 years.¹³ Two teens aged 15 and 16 years working with the Plymouth, Minn, Police Department placed 10 orders for cigarettes from 5 Internet vendors.¹⁴ All 10 orders were accepted by the vendors without checking the buyers' ages, and 8 of the 10 packages of cigarettes were then delivered without age verification (for the remaining 2 orders, an adult signature was required). In a California study,¹⁵ 4 adult college students attempted to purchase cigarettes from Internet vendors without providing proof of age. Of 28 orders received by an Internet vendor, 20 were ultimately filled (4 were returned because they lacked proof of age and 4 were rejected for other reasons such as not meeting minimum purchase requirements).

Some Internet vendors claim that they will verify the buyer's age via their credit card. Even though the true ages of 3 of the minors were provided when applying for the credit card used in this study, no vendor refused a sale on the basis that

the buyers were underage according to their credit card information. The rate of sales to minors was slightly higher when the minor purchased with a prepaid credit card than with a money order. Visa even recently issued a statement that requiring credit cards for age-restricted products, such as cigarettes, is not an adequate safeguard.¹⁶

Several efforts to regulate Internet and mail order tobacco sales at the federal level have been attempted since 1995, but without success.¹⁷ The US Food and Drug Administration (FDA) claimed authority over Internet and mail order tobacco sales¹⁸; however, FDA authority on tobacco products was overturned by the US Supreme Court in March 2000. Bills banning Internet tobacco sales to minors have been introduced in 1999 (HR 2914), 2001 (HR 3456), and 2002 (HR 5724 and S 3035). Although Congress held first-ever hearings on the issue of Internet cigarette sales on May 1, 2003, to date, none of these bills has passed.¹⁹

There are state laws that specifically ban Internet and mail order deliveries of cigarettes to minors in California, Idaho, Maine, Nevada, and Rhode Island.²⁰ Laws in Alaska and New York ban Internet and mail order shipments of cigarettes to consumers.²⁰ Sante Fe Tobacco Company and Brown and Williamson sued New York State and argued that its state law was unconstitutional. Although the tobacco companies prevailed at the lower court, the law is now in effect because it was upheld at the appellate court level.²¹ New York, however, has recently met resistance from tribal sellers who claim exemption from the law because of sovereignty.^{22,23} Given that nearly 60% of Internet cigarette vendors are located on Indian reservations,⁸ this will present challenges. Nevertheless, the courts have generally confirmed that the federal government has the authority to regulate Native American tribes. Moreover, Alaska prohibits common carriers from shipping cigarettes to consumers—a policy that directly affects tribal and non-tribal sellers alike. In addition, several state attorneys general have attempted to enforce existing minor access and con-

sumer protection laws to crack down on online tobacco sales to minors.^{24,25}

This study had several limitations. Minors completed all order forms but did not actually consummate the orders because of legal concerns. However, having a minor instead of an adult staff member click the “submit” button for the online order or place the mail order envelope in the mailbox would probably not have altered the findings. Minors were not always present to receive the deliveries. This is unlikely to influence the findings, given that most packages were left at the door. Another limitation is that adolescents who attempt to purchase cigarettes online for their own consumption may face several additional barriers to purchasing, such as parental detection of purchase and delivery and the large cash outlay required to purchase multiple cartons.¹⁷ A final limitation is that minors purchased from 55 Internet cigarette vendors whose sales practices might not be generalizable to the broader population of Internet cigarette vendors.

Future studies should monitor whether minors are turning to the Internet to purchase cigarettes as retail availability becomes more restricted. New methods of verifying the age of consumers need to be identified and tested for effective prevention of online tobacco sales to minors. Programs will be needed to educate Internet cigarette vendors about state laws related to sales to minors. Finally, federal legislation banning Internet and mail order tobacco sales to minors may be the most effective policy strategy.

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