Compliance With Youth Access Regulations for Indoor UV Tanning

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Objectives: To describe youth access to indoor UV tanning and youth discount pricing incentives in 4 states with different age restrictions: Colorado (no age restrictions), Texas (age 13 years), Illinois (age 14 years), and Wisconsin (age 16 years).

Design: Cross-sectional telephone survey conducted in October 2003 using a standardized script to assess the practices of randomly selected UV tanning operators.

Participants: Randomly selected licensed indoor UV tanning facility operators in Colorado, Texas, Illinois, and Wisconsin.

Main Outcome Measures: Number of facilities (1) complying with indoor UV tanning minimum age regulations for a 12-year-old potential patron and a 15-year-old potential patron and (2) offering youth discounts.

Results: For a 12-year-old potential patron, 62% of facilities in states with minimum age restrictions prohibiting 12-year-olds had an operator report that they would not permit indoor tanning (Texas, 23%; Illinois, 74%; and Wisconsin, 89%) compared with 18% in Colorado, a state without youth access regulations. For a 15-year-old patron, most facilities in Wisconsin, the only state with a minimum age restriction for 15-year-olds, prohibited access (77%). Overall, 15% of operators offered youth discounts: Texas, 23%; Illinois, 14%; Wisconsin, 11%; and Colorado, 11%.

Conclusions: Tanning facilities in 4 states offered price incentives directed at youths. State youth access regulations were associated with decreased youth access to indoor tanning. High compliance levels in states with long-standing youth access regulations (Illinois and Wisconsin) demonstrate the potential for successful tanning industry youth access regulation.

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Multiple studies confirm widespread indoor UV tanning use by US adolescents. Although youths may seek indoor tanning owing to the portrayal of tanned skin as healthy and attractive, UV is classified as a carcinogen and is associated with numerous short- and long-term effects, including skin cancer. The use of tanning devices is associated with squamous and basal cell carcinomas and has been implicated in increased melanoma risk. Because adolescence represents a critical period during which UV radiation increases skin cancer risk, altering the tanning behavior of minors is a target for skin cancer prevention efforts.

In 2003, only 3 states had set age limits for indoor tanning patrons: Texas at age 13 years (instituted in 2002), Illinois at age 14 years (1992), and Wisconsin at age 16 years (1992). Further youth access requirements in these states include guardian accompaniment for 13- to 15-year-olds in Texas, guardian consent for 16- to 17-year-olds in Texas, and guardian consent for 14- to 17-year-olds in Illinois (Table). Most states, including Colorado, do not set age limits on access to indoor tanning. Two previous studies examining compliance with youth access laws for indoor tanning described poor operator compliance: 43% of indoor tanning facilities were compliant with parental consent regulations in San Diego, Calif, and 13% of North Carolina facilities complied with a required guardian consent form for youths.

Another issue in adolescent use of tanning facilities is the marketing directed toward teens. Although price incentives for the general public have encouraged frequent tanning, discounts specifically available to adolescents have not been well described.

See also pages 963 and 1028
METHODS

Comprehensive lists of licensed tanning facility contact information were obtained from state health departments (February to May 2003): Texas, 2332 facilities; Illinois, 1905 facilities; Wisconsin, 1447 facilities; and, Colorado, 580 facilities. Colorado was chosen as the fourth state in this study for several reasons: (1) in 2003, Colorado was 1 of 36 states without any age or guardian requirements for UV tanning services; (2) surveying Colorado tanning facilities was most relevant for our public health professional endeavors; and (3) of all states without regulations, telecommunications charges for surveying Colorado were the most economical.

One hundred facilities from each state were randomly selected using a random number generator (http://www.random.org) and were surveyed by telephone (October 2003). If a facility representative was unavailable after 3 calls, or if the telephone number was disconnected, another facility from the same state was randomly selected from the remaining facilities.
ties. The survey consisted of a standardized script asking whether potential patrons aged 12 and 15 years would be allowed to receive indoor UV tanning treatments. If patronage was allowed, the tanning facility operator was asked whether guardian (including parent or legal guardian) or adult accompaniment was required, whether guardian or adult consent was required, and whether any price discounts for youth were available. To maximize response rates, minimize social acceptability response bias, and avoid deviation from information currently given to potential customers, facility representatives were not informed that they were participating in a study. This study received Colorado institutional review board approval.

Health departments for each state were contacted by telephone to assess youth access to indoor tanning regulations, enforcement policies, penalties for noncompliance, and frequency of imposing sanctions on violating facilities (November 2003 to January 2004). Survey data were entered into a database management program (Microsoft Access; Microsoft Corp, Redmond, Wash) by 1 investigator (R.D.) and were verified by another investigator (L.F.H.). Using a statistical software program (SAS 8.0; SAS Institute Inc, Cary, NC), a comparison of another investigator (L.F.H.). Using a statistical software program (SAS 8.0; SAS Institute Inc, Cary, NC), a comparison of compliance with minimum age restrictions for indoor UV tanning by state was performed using the Fisher exact test.

RESULTS

Six hundred twenty-eight facilities were contacted by telephone to obtain 400 licensed indoor tanning facility survey responses (100 facilities in each state: Colorado, Illinois, Texas, and Wisconsin). Two hundred twenty-eight facilities were either unavailable after 3 calls or the telephone number was disconnected (78 in Texas, 29 in Illinois, 57 in Wisconsin, and 64 in Colorado). The Table summarizes the survey responses. Overall, 15% of the tanning facility operators reported that discounts were available for youths. For a 12-year-old potential patron, 62% of facilities in states with age restrictions had operators report that they would not permit indoor tanning (Texas, 23%; Illinois, 74%; and Wisconsin, 89%) compared with 18% in Colorado. The percentage of facilities prohibiting a 12-year-old from tanning among facilities offering and not offering youth discounts was similar (67% vs 58%; \( P = .32 \)). For a 15-year-old potential patron, rates of access without guardian accompaniment in noncompliance with respective state statutes were as follows: 83% of operators in Texas would allow access without guardian accompaniment, 20% in Illinois would allow access, and 17% in Wisconsin would allow access. Noncompliance for 15-year-olds was higher for facilities offering youth discounts compared with facilities not offering youth discounts (60% vs 46%; \( P = .08 \)). Youth access regulations, penalties, and enforcement varied by state (Table).

COMMENT

Skin cancer prevention strategies may include decreasing UV exposure by further educating our youth, increasing sun protection behaviors, taxing indoor tanning for youths, and adopting regulations limiting youth access to indoor tanning. Given the prevalence of indoor UV tanning, especially by adolescent girls, and the known risks of indoor tanning, public health efforts need to be directed at this underrecognized carcinogen exposure. Although the efficacy of youth access regulations for decreasing tobacco use has been debated, analogous regulations may be effective for limiting indoor tanning and merit consideration.

In this 4-state comparison, compliance with regulations for youth access to indoor tanning varied greatly by state, and many facilities encouraged young patrons by offering price discounts. Facilities in Illinois and Wisconsin reported closer adherence to regulations than those in Texas. Adolescents in Texas were largely required to have guardian consent but were frequently not compliant with minimum age regulations or guardian accompaniment regulations for 12- and 15-year-old potential patrons, respectively.

Differing rates of compliance with youth access laws may be due to differences in state enforcement, penalties for noncompliance, and the length of time a statute has been in place. Our results do not support a difference due to enforcement: Wisconsin showed the highest compliance for a 12-year-old potential patron but lacks rigorous enforcement compared with Texas, which has lower compliance and more systematic regulation enforcement. Texas state department officials described more lenient penalties than those in Illinois and Wisconsin. In addition, Texas youth access regulations were more recently enacted (2002) than those in Illinois and Wisconsin (1992), which may partly explain compliance rates.

Lower compliance in Texas might also be a result of Texas having the lowest age limit among the states with an age restriction. Better dissemination of current regulations in Texas may improve compliance. A recent electronic survey of tanning facility operators reports support for youth access regulations, suggesting that better education of facility operators with youth access regulations will result in improved compliance.

In addition to regulations for youth access, this study assessed the prevalence of tanning price incentives for youths. The tobacco industry previously promoted smoking in the United States by providing free cigarette samples that were often available to children despite voluntary codes prohibiting such access. Given that youth discounts may encourage teen tanning and promote youth access regulation violations, state health departments should consider promoting bans on youth discounts.

This study has several limitations: (1) The survey was conducted via telephone, assessing practices regarding potential adolescent patrons. Observed compliance may have differed if a youth approached the facility in person. (2) The telephone survey, although anonymous, was subject to social acceptability and self-reporting biases. (3) Information was not obtained on how or how often tanning operators verify the age of potential patrons. (4) Facility operators were not questioned regarding the range of ages for which youth discounts would be available. (5) The use of privately owned indoor tanning devices was not assessed by the study. (6) Findings from Colorado, the only state surveyed that did not have youth access restrictions, may not be generalizable to other states without restrictions.

Despite high noncompliance with youth access laws in Texas, higher compliance levels in states with longstanding youth access regulations (Illinois and Wiscon-
sin) suggest the potential for successful tanning industry youth access regulation.

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REFERENCES