Random Drug Testing in US Public School Districts

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We estimated the proportion of the nation’s public school districts that have high school grades in which random drug testing is conducted. We collected data in spring 2005 from 1343 drug prevention coordinators in a nationally representative sample of school districts with schools that have high school grades; of these districts, 14% conducted random drug testing. Almost all districts randomly tested athletes, and 65% randomly tested other students engaged in extracurricular activities; 28% randomly tested all students, exceeding the current sanction of the US Supreme Court. (Am J Public Health. 2008;98:826–828. doi:10.2105/AJPH.2007.123430)

Student drug testing on a suspicionless or random basis is currently sanctioned by the Supreme Court for students participating in
extracurricular activities\textsuperscript{1,2} and is supported by the Office of National Drug Control Policy.\textsuperscript{3,4} Although supporters of the strategy argue that it deters students’ initial use, has beneficial consequences for the early detection and treatment of drug use, and provides students with a rationale to decline use,\textsuperscript{3,4} the strategy has generated considerable controversy.\textsuperscript{5–11} The proportion of the nation’s high schools conducting random drug testing is not known. We estimated the national prevalence of random drug testing in public school districts that include high school grades and specified which populations of students were eligible for random drug testing.

\section*{METHODS}

The sample comprised school districts associated with a national random sample of middle schools that was drawn in 2 phases. The first phase used a 1998 sampling frame of all regular public schools that included middle school grades\textsuperscript{12} and yielded 2273 eligible public schools. The second phase applied the same criteria to a 2002 sampling frame designed to refresh the sample and yielded 210 additional schools.\textsuperscript{13} Both sampling frames were stratified by population density, school size, and school district poverty level, with equal probability within each stratum. We contacted sampled schools between October 2004 and January 2005 to confirm their eligibility status, yielding 2204 verified eligible schools in 1922 school districts. We further restricted our sample to districts that included schools with high school grades and deleted 6 cases with inconsistent results (analysis sample, N = 1337 school districts).

We collected data from January through July 2005 from each school district’s drug prevention coordinator via sequential data collection modes to maximize the response rate. All respondents initially were invited by letter to complete a 40- to 45-minute survey via a secure Web site and were provided a prepaid $10 cash incentive. Nonrespondents were mailed a paper copy of the questionnaire and a postage-paid return envelope, along with a letter of support from the US Department of Education. Persistent nonresponders were contacted for a brief telephone interview. These data collection strategies yielded a response rate of 84\%. More-detailed information about our data collection approach is available from C.R.\textsuperscript{14}

We defined random drug testing as drug testing conducted regardless of whether a student showed any signs of substance use. This included students involved in an extracurricular activity for which the school might require testing as a condition of participation. Respondents reported which of their district’s students were “subject to the possibility of suspicionless or random testing; that is, they know they might be tested at some point.”

Sample weights for school districts were constructed from original selection probabilities computed on the 1998 sample and probabilities of selecting new districts in the 2002 sample.\textsuperscript{15} Poststratification weights were then applied to the data to adjust proportions for the Orshansky Index, number of schools, and US census region to those of the 2004 to 2005 sampling frame.\textsuperscript{16}

\section*{RESULTS}

A total of 14\% (95\% confidence interval = 11.3, 16.6) of the nation’s school districts reported that at least 1 of their high schools conducted random drug testing in the 2004 to 2005 academic year. Nearly all school districts that implemented random drug testing administered it to their athletes, and two thirds tested students who participated in other extracurricular activities (Table 1). More than a quarter of the districts implementing random drug testing, however, subjected all students to testing.

\begin{table}[h]
\centering
\begin{tabular}{lcc}
\hline
 & \% (95\% CI) \\
\hline
All students & 28.4 (17.7, 39.1) \\
Athletes & 93.4 (88.5, 98.2) \\
Students in extracurricular activities other than athletics & 64.7 (55.1, 74.5) \\
Students who drive to school & 32.6 (21.9, 43.4) \\
Students on probation & 39.4 (28.7, 50.0) \\
\hline
\end{tabular}
\caption{Students Subjected to Random Drug Testing in US Public School Districts (N = 201): 2005}
\end{table}

\section*{DISCUSSION}

Our findings make clear that a substantial proportion of the nation’s public school districts have instituted random drug testing for students in high school. This estimate constitutes a benchmark against which any future growth of random drug testing in the nation’s school districts may be compared and thus of the success of efforts by the Office of National Drug Control Policy and the Department of Education to support its adoption. However, many of these districts may be conducting such testing beyond current Supreme Court sanctions, which limit testing to students involved in extracurricular activities. Thus, school districts that test all students or special populations (e.g., those on probation or who drive to school) may be placing themselves in a legally vulnerable position. Legal issues aside, districts that subject all students to random drug testing would appear to eliminate the risk that those who use illicit substances may simply decline to participate in extracurricular activities to avoid testing.

Our study had several limitations. The sampling frame was designed to select a random sample of school districts with middle school, not high school, grades; however, most districts include high school grades, and our large response rate mitigated effects on standard errors of estimates. Study respondents included school district–level personnel who may have been less knowledgeable than high school administrators about the specific populations eligible for random drug testing.

We found that respondents answering questions by the Web site were less likely to report random drug testing in their school districts (weighted proportion = 11\%) than were those responding by mail (23\%) or telephone (17\%). Because we offered the 3 modes in sequence, any
mode effects present may have been confounded with other differential characteristics of respondents’ school districts related to early or late responding. We believe mode effects per se were unlikely; if they were caused by social desirability bias related to reporting sensitive information, we would have expected proportions yielded by the telephone administration to have contrasted with responses via Web and mail. The letter of support from the Department of Education we included in the mailed questionnaire may have positively biased reporting, especially among districts with Department of Education grants supporting random drug testing.

Human Participant Protection

We received approval from Pacific Institute for Research and Evaluation’s institutional review board (FWA00003078) to proceed with our study. The institutional review board considers it to be exempt from human subjects review under 45 CFR Section 46.101(b).1

References

2. Board of Ed. of Pottawatomie County v Earls, 536 US 822 (2002).