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## **Low Positive Drug Testing Rates in Random Student Drug Testing**

Everyone wants negative drug tests. Schools do and so do parents and school boards. Not only are negative tests good news for schools, students and parents but in simple dollar terms it costs less to get a negative test than a positive test. Third Party Administrators (TPAs) that often manage Random Student Drug Testing (RSDT) programs and laboratories that sell schools screening and confirming tests bundled together for one price, make more money when there is a low rate of positives because of the high costs of confirmation tests, which are not needed when the screening tests are negative.

There is a real danger that unscrupulous, or unwise, providers of drug tests will encourage schools to use tests that are ineffective in identifying drug users because the tests are insensitive to drugs in urine, oral fluids or hair. Today, this lack of sensitivity to recent drug use is especially true for on-site oral fluids kits. It is important that schools establish the effectiveness of the drug tests they have chosen by monitoring their results to be sure that the tests are working as promised.

Urine drug tests primarily identify drug use in the 1-3 days before a sample is collected. That means the test will be positive primarily if taken quite soon after the last drug use. This is important in understanding the probability of identifying students who use drugs at varying frequencies.

A study of the probability of identifying drug users with random testing estimated that the annual drug use rate is about 8 times the rate of positive random tests.<sup>1</sup> Assuming that after a well-functioning RSDT program has been in place for several years, using this study as a guideline, a school can be expected to have a self-reported annual rate of drug use of 33% for students in grades 9 through 12, as was the average of 8 schools using good RSDT programs, and a positive rate on random urine tests be about 4%.<sup>2</sup>

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<sup>1</sup> DuPont, R.L., Griffin, D.W., Siskin, B.R., Shiraki, S., & Katze, E. (1995). Random drug tests at work: The probability of identifying frequent and infrequent users of illicit drugs. *Journal of Addictive Disorders, 14*, 1-17.

<sup>2</sup> DuPont, R.L., Campbell, T., Campbell, M. US Dept. of Education Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program. *Final Report of a Demonstration Project: Enhancing and Assessing Student Drug Testing*, Rockville, MD: Institute for Behavior and Health, Inc., 2007.

If the school's positive testing rate on random tests falls below 2%, school personnel should be concerned and not reassured. A positive rate of 2% corresponds to only 16% of students in the testing pool having used an illegal drug in the past year which is a lower level of drug use than any recorded in schools using RSDT when they surveyed their students for self-reported illegal drug use. Given that about 22% of high school students in schools using RSDT have used illegal drugs within the prior 30 days and about 33% have used illegal drugs in the past year,<sup>2</sup> a positive test rate below 2% should be questioned.

A positive random drug test rate below 2% is less likely to mean that the school is “drug-free” than it is to mean that the drug tests are not working. We suggest that schools work closely with their test providers to ensure that the tests used reliably identify drug-using students. When the positive test rate is low, and certainly when it is less than 2%, there should be a concern about “false negative” test results. Under those circumstances schools should consider using alternative tests and/or providers to compare their rate of positives with the rate of the original tests and test providers.

There are two relatively simple ways to do this. The first is for the school to use two different tests, possibly from two different providers, for a period of time (at least 100 tests using each test) to compare the rates of positive test results. The second way to handle this is to split 100 or more samples and send one half to one laboratory and the other split sample to another laboratory. Schools can also compare on-site results to laboratory-based testing using either of these two approaches. In these two ways, on-site tests can be compared to laboratory-based tests, the tests of one specimen can be compared using two different providers (e.g. to different laboratories doing urine tests) or urine tests can be compared to oral fluid or hair tests. Of course double testing costs twice as much and the costs of such a procedure are not insignificant. A lower cost strategy is to send the first 100 tests to one laboratory and the next 100 to another. This is less convincing, however, than sending samples from the same group of students since the drug use in the second 100 students may be different from the drug use in the first 100 students.

However, despite the costs and complexities of assessing the effectiveness of tests, continuing to use and pay for drug tests that do not identify recent drug users are even more costly since they undermine the effectiveness of the RSDT program itself, both as a deterrent to drug use and as a way to identify drug using students so they can be helped.

Over time schools can try a variety of drug tests. Schools can also reach out to other nearby schools and workplaces using drug tests to find providers of tests that are reliably able to identify recent drug use. In these comparative tests if there is a large difference in the positive rate, the test with the higher rate is almost always preferred if the positives are confirmed.

There is great variability in the level of drug use from one school to another. It is useful for schools to compare their self-reported drug use rate of their students as captured on surveys with the national averages reported annually by the University of Michigan

Monitoring the Future study through a grant from the National Institute on Drug Abuse (NIDA). These national school drug use data come from surveys each May and new figures are usually reported in January for grades 8, 10 and 12.<sup>3</sup>

Many states and some counties also provide annual or biannual drug use survey results which are also useful for comparison. We encourage schools to identify their own drug use rates by regularly conducting surveys of their students. A school with a positive random drug test rate below 2% can validate that this low rate of positives on random drug tests is the result of unusually low drug use rates by the students and not the result of laboratory failures to identify positives by conducting surveys of their students. Based on the study described above, the students in a drug test pool would be expected to have an annual drug use rate below 16% if they produced less than 2% positives on random drug testing. IBH is interested in collecting data from schools that use RSDT and conduct anonymous drug surveys of their students. If you have data to provide or questions about RSDT contact us at (301)231-9010 or [contactibh@ibhinc.org](mailto:contactibh@ibhinc.org).

Additional strategies to improve random drug testing in schools are discussed in the paper “Smarter Drug Testing”.<sup>4</sup> A related paper entitled, “How Much Does a Random Student Drug Testing Program Cost?” discusses the specific costs of RSDT, especially focusing on the needs of schools considering starting RSDT as part of their comprehensive drug prevention program.<sup>5</sup> These papers are available on the IBH website [www.PreventionNotPunishment.org](http://www.PreventionNotPunishment.org).

A RSDT program that cannot effectively identify drug use is worse than useless. This failure will be quickly identified by drug using students who will tell their friends that they used drugs and still passed the drug tests. Worse yet, such an outcome falsely reassures the entire school community about the extent of teenage drug use in the school.

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<sup>3</sup> Monitoring the Future Study. National Institute on Drug Abuse. University of Michigan: Institute for Social Research. Available at: <http://www.MonitoringTheFuture.org>

<sup>4</sup> DuPont, R.L., Graves, H. *Smarter Student Drug Testing*, Rockville, MD: Institute for Behavior and Health, Inc., 2005.

<sup>5</sup> DuPont, R.L. *How Much Does a Random Student Drug Testing (RSDT) Program Cost?*, Rockville, MD: Institute for Behavior and Health, Inc., 2008.