Random Drug Testing: The Connecticut Transit Experience

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Connecticut Transit (CTTRANSIT) implemented random drug and alcohol testing of its nearly 700 safety-sensitive bus operators and mechanics in September 1990. The CTTRANSIT experience to date is summarized with particular reference to the accuracy and reliability of test results. During the first 17 months of this program, the rate of positive results was 1.91 percent. Significantly, zero false-positive results have occurred among the more than 500 random tests to date at CTTRANSIT. This performance is attributed in large measure to several critical quality-control measures, including confirmation of all initial positive tests using state-of-the-art gas chromatography/mass spectrometry technology, use of a National Institute of Drug Abuse-certified laboratory, and validation of test results by a medical review officer. Other key features of the CTTRANSIT program are detailed. Three important underpinnings of the program at CTTRANSIT include legal authority under a state random testing statute, the company's long-standing drug and alcohol policies, and a nationally recognized employee assistance program. Random testing at CTTRANSIT was specifically upheld in a landmark grievance arbitration award.

In September 1990, Connecticut Transit (CTTRANSIT) became the first public transit system in New England, and one of the largest systems nationwide, to implement random drug and alcohol testing of its safety-sensitive employees. The CTTRANSIT experience during the first 17 months of testing, especially with regard to the accuracy and reliability of random test results is documented.

BACKGROUND

CTTRANSIT is the state-owned operator of public bus transit service in the Hartford, New Haven, and Stamford urbanized areas. CTTRANSIT is the largest all-bus transit system in New England, and employs approximately 535 full-time operators, 175 hourly rate maintenance personnel, and 125 salaried staff in three divisions. The system operates more than 300 peak-hour buses every business day and carries more than 26 million passengers a year.

CTTRANSIT has a strong and long-standing policy regarding drugs and alcohol. At least since 1985, the policy has explicitly prohibited employees from reporting to work, performing work, or being on company property with any detectable level of alcohol or controlled substances in their blood or urine. The only exception is medications that the prescribing physician certifies will not affect the employee's safety performance.

In 1987 the Connecticut Legislature passed An Act Concerning Drug Testing in the Work Place, which defined employers' authority in three important areas. This legislation at the time was considered to be pro-labor because it restricted employers' rights to impose random testing for all employees (1, p. B5).

- 1. The statute establishes an employer's right to conduct preemployment and reasonable suspicion testing of all employees. However, the latter is specifically limited to reasonable suspicion of current impairment. Thus, some indicators used by employers in other states to warrant for-cause testing—such as deteriorating job performance, the occurrence of an accident, or possession of drug paraphernalia—would not permit a reasonable suspicion test in Connecticut. Under the state statute, a urinalysis test is permitted only when an employee's observed and documented actions, appearance, or behavior, or all three, support reasonable suspicion of current impairment.
- 2. Random testing is permitted, but only for employees in safety-sensitive occupations as defined by the state commissioner of labor.
- 3. The statute requires various quality controls to ensure the accuracy and reliability of test results with a mandatory confirmation of all positive tests. The statute also guarantees employees' privacy while providing urine specimens and the right to have specimens retested at another laboratory.

The 1987 statute had little immediate effect on existing CTTRANSIT policy or procedures. In summer 1988, the State Department of Labor initiated a rule-making process for the designation of safety-sensitive occupations. The designation procedures were still being developed in November 1988, when the former UMTA (now Federal Transit Administration or FTA) issued final rules mandating random (as well as certain other) urinalysis testing of safety-sensitive transit workers nationwide.

The deadline for certifying compliance with the UMTA regulations was December 22, 1989. Less than 4 weeks later, however, a federal appeals court struck down the UMTA mandate, citing the agency's lack of regulatory authority [Amalgamated Transit Union et al. v. Skinner, No. 89-5380 (U.S. App. D.C., Jan. 19, 1990)]. Meanwhile, the process for designating safety-sensitive occupations in Connecticut continued, and on February 6, 1990, the state labor commissioner determined that bus operators and mechanics could be subject to random testing under the state statute.

It is interesting to note that the labor department did not accept the UMTA definition of safety-sensitive occupations,

which would have included transportation supervisors, dispatchers, and maintenance foremen. In Connecticut, only occupations that operate a revenue service vehicle, whether or not such vehicle is in revenue service, and that maintain revenue service vehicles or equipment used in revenue service were designated. At CTTRANSIT, this definition includes all bus operators (CTTRANSIT does not employ part-time operators) and all hourly rate maintenance department employees except building maintainers, building cleaners, and parts clerks.

At CTTRANSIT, negotiations for a new union contract began March 1, 1990, and plans to implement random testing were discussed between the parties during several of the bargaining sessions (CTTRANSIT bus operators and hourly rate maintenance employees are represented by three local divisions of the Amalgamated Transit Union). Although agreement on an overall program to include random drug and alcohol testing was not reached, several changes to the company's initial proposal were made in response to union comments:

- 1. A breathscan technique (confirmed, if positive, with a blood test) was substituted for urinalysis to detect blood alcohol content (BAC).
- 2. Under the original proposal, employees testing positive would be ineligible to use sick leave while disqualified and their company-paid insurance benefits would cease. For an initial 6-month period, this was changed to provide continuation of medical insurance and to permit sick leave if the employee's clinical assessment recommended treatment for an illness.
- 3. Although CTTRANSIT's long-standing policy provides zero tolerance for controlled substances, the company agreed to specify the drugs covered by urinalysis testing and to use the industry-standard cutoff levels for determining a positive result.
- 4. Consistent with the U.S. Department of Transportation (DOT) protocols, the company originally proposed that employees reinstated after a positive random test would be subject to periodic, unannounced testing for 60 months. The union objected, stating that 60 months was unreasonable, and the company agreed to reduce the period for unannounced testing to 36 months.
- 5. Other changes in the proposal included overtime pay for employees tested outside their normal working hours and an agreement was made to pay the cost of the periodic, unannounced tests performed after the employee returns to work.

Despite these changes, agreement on a random drug and alcohol testing program was not reached. Notwithstanding the union's basic objection in principle to random testing under any circumstances, the major impasse was whether employees must be afforded a right of access to rehabilitation and reinstatement (i.e., a guaranteed second chance). The company informed the union of its intention to impose random testing unilaterally under the authority of state statute and the management rights provision of the union contract.

On July 12, 1990, the company's long-standing Rules Regarding Alcohol and Controlled Substances were reissued, including a new provision for random testing of all safety-sensitive employees. Significantly, the commencement of ran-

dom testing was delayed approximately 6 weeks until September 1 in order to provide an additional opportunity for employees whose alcohol or drug use may have resulted in a positive test to seek help voluntarily through the company's employee assistance program (EAP).

A union grievance was filed immediately after the program was announced, challenging management's basic right to impose random testing. The grievance was still pending when random testing commenced on September 1, 1990, and testing proceeded for more than a year before the final arbitrator's award was received in November 1991. In a decision that may have a significant implications for other employees, arbitrator George Schatzki, a former dean of the University of Connecticut School of Law, denied the union's grievance in all particulars, except for two procedural issues involving vacation pay and sick leave for disqualified employees and payment of the cost of "return to work" tests (2). Specific issues addressed in the arbitrator's award include the following:

- 1. Is random drug testing an unconstitutional waiver of employees' privacy rights? No. There is ample legal precedent to establish that employees in safety-sensitive occupations have a diminished expectation of privacy.
- 2. Did CTTRANSIT violate the National Labor Relations Act (NLRA) by imposing random testing unilaterally? No. The company did negotiate elements of the program and repeatedly expressed a desire to reach agreement. In effect, the parties reached a stalemate on key issues of principle and, therefore, agreed to disagree. The union had other remedies available under the NLRA that it did not pursue.
- 3. Is random testing an unreasonable-rule under the terms of the management rights clause of the union contract? No. Public safety is a paramount concern for transit management that warrants special measures to detect and deter violations of drug and alcohol rules. It is not necessary to prove wide-spread, ongoing drug and alcohol abuse by safety-sensitive employees to warrant random testing.
- 4. Must employees who fail a random test be guaranteed a right to rehabilitation and reinstatement? No. It is not inherently unreasonable for management to retain discretion to deny employees a second chance on the basis of individual circumstances. However, the exercise of management discretion in individual cases is subject to appeal through the grievance process.

About the Random Testing Program

CTTRANSIT and 20 other publicly funded operators participate in a statewide drug testing consortium that was originally formed by the smaller operators in Connecticut to comply with the UMTA rule. The consortium, in turn, has contracted with a private firm to administer the testing program. Specific services of the contractor include maintaining the computerized employee data base and performing the random selections each month; arranging for local collection sites and chain of custody procedures; providing a National Institute on Drug Abuse (NIDA)-certified laboratory; and providing a qualified medical review officer (MRO). CTTRANSIT initiated random testing ahead of the other consortium members. However, since May 1991, all safety-sensitive employees

of consortium members have been subject to random testing. Individual employer policies and procedures for employees who test positive may differ substantially from those used at CTTRANSIT.

Random testing is performed at the 50 percent level (i.e., a number of tests equal to one-twelfth of 50 percent of all safety-sensitive employees in the data base is scheduled each month). The program at CTTRANSIT conforms to all of the DOT drug testing protocols that would have governed testing under the UMTA rules (3), including use of a NIDA-certified laboratory and medical review officer. In three areas, the CTTRANSIT program actually goes beyond the minimum federal requirements as follows:

- 1. CTTRANSIT tests for 10 controlled substances plus alcohol, not just the "federal five" illegal drugs. These substances include cannabinoids, cocaine, amphetamines, opiates, phencyclidine, barbiturates, benzodiazepines, methadone, methaqualone, and propoxyphene. Industry-standard cutoff levels are used to detect drugs in urinalysis. A breathscan technique for alcohol is administered at the same time urine is collected for drug testing. If the breathscan is positive, a blood sample is collected for confirmatory testing and to quantify the BAC.
- 2. CTTRANSIT further randomizes the monthly list of employees selected for testing by week of the month, day of the employee's workweek, and hour of the workday. For random testing to provide an effective deterrent to prohibited use of alcohol or drugs, CTTRANSIT believes employees must recognize that they are subject to a random test any time they are on duty.
- 3. State statute requires two confirmations of a positive initial urinalysis screen. As with the DOT protocols, the final confirmation must use the gas chromatography/mass spectrometry (GC/MS) methodology.

Accuracy in Transit Drug Testing

Presentations by Barnum and Gleason at the 1990 and 1991 Transportation Research Board annual meetings have raised serious questions about the potential for inaccuracy in transit drug testing (4,5). Most disturbing is their conclusion that testing is likely to produce a significant number of false-positive results. In fact, as evidence that random testing is unreasonable and unwarranted, the following quotation from their 1990 paper was cited in the union's grievance at CTTRANSIT (the union did not pursue this issue further during the arbitration. However, the neutral arbitrator did take note that testing procedures used by CTTRANSIT conform in all respects to federal and state requirements) (4):

Thus, almost two out of every five workers testing positive will truly be drug free! With probabilities such as these, it is highly unlikely that a positive drug test would provide a preponderance of evidence that an individual was taking drugs, let alone meet higher levels of proof . . . Not only would employers lose arbitration or court cases with such meager evidence, it would scem illogical, from the standpoint of good personnel practice, to dismiss or discipline employees with such unreliable evidence (5).

In their published closure to a DOT rebuttal of their 1990 paper, Barnum and Gleason demurred: "We were very care-

ful not to claim that drug testing will result in high percentages of those testing positive being falsely identified." Instead, the authors emphasize that their estimated rates of false-positive test results "are ones that could occur in some circumstances" (4).

The Barnum and Gleason papers have developed important hypothetical data about transit drug testing by applying analytical techniques to baseline data originally published in 1985 and 1988 in the *Journal of the American Medical Association* (JAMA) (6,7). Significantly, however, their conclusions appear not to have been tested against the actual experience of transit systems. The experience of CTTRAN-SIT documented in the following should help to illuminate the overall issue of accuracy in transit drug testing.

It is also important to note that the baseline data published in JAMA did not specifically address several key quality-control measures that are integral to the DOT and CTTRAN-SIT drug testing procedures. Thus, the CTTRANSIT experience underscores the importance of maintaining high-quality standards to maximize the accuracy and reliability of results. In particular, four measures have been found to be most important:

- 1. Confirmation of all positive test results—At least some initially positive drug screens reported in JAMA were not confirmed. After reviewing the results of their study, the 1988 JAMA authors concluded, "It is clear that mandatory confirmation of initial screening tests must be required" (7). As indicated earlier, DOT protocols specifically require confirmation of all positive tests; in fact, the Connecticut statute requires two confirmations.
- 2. Confirmation with GC/MS methodology—The state-of-the-art methodology for urinalysis drug testing is GC/MS. GC/MS has been proven to be far more accurate than simpler and less expensive techniques such as thin-layer chromatography and immunoassays (8). Again, both DOT protocols and Connecticut statute specifically require confirmation of positive results using GC/MS. By contrast, some of the laboratories cited in the JAMA articles did not have GC/MS capability. Many positive test results were apparently confirmed with less accurate and less reliable techniques.
- 3. NIDA-certified laboratory—Drug testing results documented in the JAMA articles were gathered from a wide range of laboratories that "was not intended to be a representative sampling, nor was any attempt made to choose laboratories of any particular size or presumed reliability." A particular concern expressed by the 1988 JAMA authors was a lack of certification standards for drug-testing laboratories. Responding to what they called sorely needed standards and means for improving laboratory quality, the authors cited an ongoing effort by NIDA to develop standards of laboratory accreditation (7). This effort resulted in extremely rigorous national certification standards that fewer than 75 laboratory sites nationwide had met by mid–1991. It is again significant that both DOT protocol and CTTRANSIT policy require drug testing to be performed only by a NIDA-certified lab.
- 4. Medical review officer (MRO)—Laboratory test results are not reported to the employer until they have been reviewed by a specially qualified physician who acts as the MRO. In turn, the MRO will not report a positive test until he or she has personally discussed the result with the employee in question and determined that the laboratory result is valid.

The MRO follows a detailed *Medical Review Officer Manual* produced by NIDA that guides the evaluation of laboratory urinalysis results (9). During the first 17 months of testing at CTTRANSIT, three employees' tests that were confirmed positive by the laboratory were reported negative after MRO review. One involved a prescription drug and two involved poppy seeds. Our experience strongly supports the integral role of an MRO in the urinalysis testing process, especially if testing is performed for substances that may be contained in prescription medications.

Results of Testing at CTTRANSIT

From September 1990 through January 1992, 509 random drug and alcohol tests were performed at CTTRANSIT. This number includes 375 tests of bus operators, 96 tests of hourly rate maintenance department employees, and 38 tests of salaried managerial and supervisory employees who voluntarily participated in a separate random-selection pool. None of the salaried employee tests was reported positive.

Of the 471 random tests of safety-sensitive employees to date, 9 or 1.91 percent, were reported positive. Of the nine positive results, four were for marijuana and five were for cocaine. Six of the individuals testing positive were bus operators (1.60 percent of all random tests of operators), and three were maintenance employees (3.13 percent).

An employee whose random test result is positive is disqualified from employment at CTTRANSIT and may then apply for reinstatement. The first step in this process is examination by a professional assessment clinician engaged by the company. The clinician's assessment report specifies the nature of the employee's alcohol and drug use, recommends specific rehabilitation or treatment that the employee should be required to complete before reinstatement, and comments on the probability of successful rehabilitation.

Significantly, in all nine positive random test cases to date at CTTRANSIT, the employees involved admitted using drugs in violation of the company's policy. Given the vigorous union representation of employees disqualified at CTTRANSIT because of drug testing, it is inconceivable that a truly drug-free individual confronted with a positive test result would not immediately and vociferously protest. State statute also guarantees employees the right to have their urine specimen retested at another laboratory.

The potential problem of false-positive drug test results is self-policing to the extent that no false-positive result would go unchallenged. We can state unequivocally that at CTTRANSIT, out of more than 500 random tests performed to date, no false-positive results have occurred.

Arguably, the three cases for which positive laboratory results were reported negative by the MRO should be considered false positives. However, the MRO is as integral a part of the testing process as the laboratory itself. The chief concern about random testing expressed by Barnum and Gleason (4,5), among others, is that a truly drug-free individual might be falsely charged with violating company policy and subjected to discipline, even termination. As such, we believe our experience demonstrates the effectiveness of a drugtesting process that includes MRO review. The employer is not informed of which employees' test results were involved. Again, the only tests at CTTRANSIT that were confirmed

positive by the laboratory and reported as such by the MRO were, by the employees' own admissions, proven to be true-positive results.

The nature of drug abuse by individuals testing positive has been varied. However, in none of the nine cases was the employee assessed as having a drug addiction, and in none was hospitalization or other in-patient treatment for an illness recommended. In five cases, the individuals could be categorized as recreational drug users who, in the words of one's clinical assessment, "made a naive and thoughtless mistake with [cocaine]." In other cases, drug use appeared to be symptomatic of a complex of other personal and family problems. In all nine cases, counseling provided on an outpatient basis was recommended, and, in most cases, this counseling was to continue for some period as a condition of reinstatement.

Before reinstatement, a disqualified employee must enroll in the recommended rehabilitation program, provide evidence of satisfactory participation, pass a physical examination by a company-appointed doctor, and pass a new urinalysis and breathscan test. All nine employees who failed random drug tests subsequently met the conditions for reinstatement and returned to work.

A key condition of employees' reinstatement after a positive random drug test is periodic, unannounced testing at the company's discretion. As indicated earlier, although DOT provides periodic, unannounced testing for 60 months, CTTRANSIT agreed during negotiations with the union to reduce this period to 36 months.

Periodic, unannounced testing is more intensive during the first 6 months after reinstatement. For example, 10 unannounced tests during the first 6 months would be considered reasonable under the CTTRANSIT program. Thereafter, the frequency of unannounced testing would normally decrease. Tests are scheduled deliberately for maximum effectiveness in monitoring and deterring violations of company rules. Thus, special emphasis is given to scheduling some tests on the day after payday, the morning after an employee's regular days off, the day an employee returns to work from vacation or sick leave, and, on at least one occasion, on consecutive days.

Once an employee has been reinstated after a positive test for drugs or alcohol, he or she is subject to discharge without recourse to rehabilitation if any subsequent random, reasonable suspicion, or periodic unannounced test result is positive. At this writing, three of the nine reinstated individuals have failed unannounced tests (two for cocaine, one for marijuana) and have been discharged.

Keys to Successful Implementation

Even with the underpinning of state statute and public policy, random testing remains a controversial workplace issue. In large part, the successful implementation of random testing at CTTRANSIT was made possible by three important factors that should be considered by other operators contemplating similar programs.

Alcohol and Drug Policy

CTTRANSIT had a strong and long-standing policy prohibiting drugs and alcohol in place for many years before random

testing began. As indicated earlier, the basic rule prohibits employees from reporting for work, working, or simply being on company property with any level of alcohol or drugs detectable in their urine or blood. Thus, at CTTRANSIT, random testing did not constitute a change in the company's basic rule or set a new standard of employee conduct. Instead, random testing represented a new way to monitor compliance with an existing rule. Also, because the long-standing rule defining prohibited conduct had not been challenged, it was easier to represent random testing as a necessary measure to deter—as well as detect—violations of the basic company policy.

Employee Assistance Program

The EAP at CTTRANSIT has evolved over 15 years from what was originally a self-help and peer referral program that emphasized alcoholism recovery to a broad-brush, full-service program that is recognized as a model for other operators nationwide (10,11).

Employers and union groups sometimes mistakenly associated EAPs only with drug and alcohol treatment. CTTRAN-SIT was concerned that directly linking the EAP with drug testing would undermine two critical features of the program: strict confidentiality of voluntary contacts and broad-brush services to help individuals deal with virtually any type of personal or family problem. Thus, for example, the company deliberately engaged assessment clinicians from outside the EAP network.

However, having an effective and widely accepted EAP in place clearly helped to make random drug and alcohol testing more credible by ensuring help for employees before testing commenced. In effect, individuals who now test positive do so despite the company's best efforts to offer strictly confidential EAP services at no cost to employees who access the program voluntarily. The EAP also plays an important role in education and training programs to heighten all employees' awareness about drug and alcohol abuse, and it can provide aftercare monitoring and support for employees after reinstatement.

Testing Procedures

In the absence of national standards for random drug testing by transit operators, there is justifiable concern that some local programs may compromise accuracy and reliability by cutting corners. Barnum and Gleason have warned, "Given the large number of small transit organizations operating under very diverse conditions, and with many agencies neither skilled nor truly concerned about drug testing, the potential for error is high" (5). In that regard, smaller operators in other states may find a helpful model in the Connecticut consortium approach.

Other Features of CTTRANSIT Program

Maintaining the highest standards to ensure accuracy and quality in transit drug testing has proved critical in the CTTRANSIT experience—particularly to make the program credible to employees and their union representatives. In addition to the four quality measures discussed earlier, three other features of the CTTRANSIT program bear mentioning.

Collection Sites

As a general policy, urine is collected and breathscan tests are administered off-site at a doctor's office, immediate medical care facility, or, if necessary, a hospital. We believe this improves quality control in the collection process and chainof-custody, provides greater confidentiality for employees being tested, and places drug testing in the environment of a professional medical facility. Also, because a positive breathscan must be confirmed with a blood test, using medical facilities for collection sites ensures that qualified personnel will be available to draw a blood sample if needed. Finally, employees using drugs or alcohol may attempt to feign sudden illness to avoid being tested. Because such employees are already being transported to a medical facility for their urine collection and breathscan, claiming sudden illness cannot excuse the employee from being tested. Rather, the employee is ensured that he or she can receive medical attention at the collection site. These issues should also be considered carefully by transit systems implementing postaccident testing.

Scheduling of Tests

To maximize the deterrent value of random testing, the program at CTTRANSIT is administered so that any safety-sensitive employee is potentially subject to a random test at any time he or she is reporting for work or on duty. This policy requires special arrangements in order to perform collections 24 hr a day, 365 days a year.

Transporting Employees to Collection Site

Employees selected for random testing are transported to and from the collection site by a supervisor. The supervisor remains with the employee from the time the employee is told he or she is being taken for a random test until the employee is turned over to collection site personnel. This practice is intended to prevent an employee from tampering or faking illness or injury en route.

These measures, along with the company's decision to test for 10 controlled substances plus alcohol, add a cost and administrative burden. In our view, the effectiveness of random testing, especially as a deterrent, generally depends partly on the commitment of management to ensure the most comprehensive, professional, accurate, and reliable program possible.

CONCLUSIONS

Random drug and alcohol testing of safety-sensitive employees has been implemented successfully at CTTRANSIT. A number of important quality-control measures that are integral to the overall program are emphasized. We credit these measures in large degree with maintaining a 0 percent rate of false-positive results over more than 500 random tests performed to date.

The overall rate of positive test results, 1.91 percent to date, was not unexpected (4). However, with random testing only at the 50 percent level, it is not believed that definitive conclusions about the overall rate of drug use among employees can be drawn with less than 2 full years of experience.

Given a public transit operator's overriding responsibility to maintain the highest standards of public and employee safety, we believe random drug and alcohol testing is warranted. It is arguable, however, once it became possible under state statute, the management of any safety-sensitive enterprise in Connecticut could not responsibly decline to implement random testing.

Clearly, the purpose of the program is to deter violations of a long-standing drug-free workplace policy and to detect violators. At this time, we have only anecdotal evidence to suggest that random testing has indeed achieved a deterrent effect within the workforce. This issue may provide a fruitful topic for further study elsewhere.

Finally, Congress has recently passed new legislation authorizing FTA to re-issue drug testing regulations, including a provision for alcohol testing. The federal mandate explicitly supersedes contrary provisions of state or local statute. It is unknown how such regulations will affect the CTTRANSIT program. However, some likely changes will include postaccident testing, a broader definition of safety-sensitive employees, alternative breath-testing methodologies for alcohol, and possible requirements for a separate urine collection in order to test drugs other than the "federal five." Otherwise, we believe that the existing program at CTTRANSIT provides, in many respects, a model for transit systems that are required to implement random testing.

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