EMPLOYEE DRUG TESTING: SOME BUSINESS GUIDELINES†

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Drug abuse costs American industry and the public an estimated $100 billion a year. As a result, workplace drug testing programs have become a serious option for many companies. Federal guidelines regarding testing and laboratories are in place. The feasibility of designing a corporate drug testing program that is in compliance with these guidelines is the subject of this paper. Essential features of a corporate workplace drug testing program, viz., the policy, the testing process, and the laboratory contracted to test employees, are detailed from designs suggested in the current literature, and in compliance with federal guidelines. Developing a cost-effective corporate program that meets federal guidelines, stands up to court scrutiny, and is universally accepted by all employees is the objective of a drug testing program. The challenge can be met by building consensus, spelling out policy, maintaining high testing standards, and above all making rehabilitation of employees who test positive the ultimate goal of a drug-free workforce/workplace.

Each year, American businesses sustain substantial losses in the form of decreased productivity, absenteeism, accidents in the workplace, additional health care, loss of trained personnel, and theft. Many of these losses have been attributed to employee drug abuse. According to 1990 estimates, drug abuse accounts for annual losses of about $50 billion to $100 billion in U.S. companies (Finkle et al., 1990). Though direct evidence for links between many aspects of job performance and drug use

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are scanty, several empirical studies have confirmed a relationship between employee turnover and drug use (Normand et al., 1990; Zwerling et al., 1990, Kandel and Yamaguchi, 1987). Until 1986, however, when President Ronald Reagan signed Executive Order No. 12564 requiring random drug testing of selected personnel in federal agencies, many companies made no provisions for employee substance abuse prevention, detection, or treatment (Hawks, 1986).

The President's executive order was intended to make the federal workforce a model for a safe, drug free work environment that could be transferred to the private sector. Within a few years, Congress followed suit. In November 1988, the Drug-Free Workplace Act was signed into law, requiring all federal contractors to maintain drug-free workplaces, and making employee convictions on even minor drug-related charges a sufficient reason for termination of federal contracts (Axel, 1990b). Though the law did not mandate drug testing, it increased the potential cost of employee substance use substantially for a large number of major firms. Additional regulations designed to ensure enforcement of the law were promulgated by federal agencies, and by December 1989, the Department of Transportation required its contractors to develop mandatory drug testing programs. Since then, an estimated 90 percent of the Fortune 1000 companies have instituted some type of drug-testing program (Petersen, 1990).

An assessment of the prevalence of workplace drug testing based on the Fortune 1000 alone would be misleading. The likelihood that a company will have a drug-testing program increases with the size of the company (Hayghe, 1990), and with the presence of a union (Irwin, 1990). Since the bulk of the nation's business establishments are small, non-unionized businesses, survey results from the Fortune 1000 probably cannot be generalized to the private sector as a whole. It has been suggested that, while larger companies tend to combat personnel problems systematically, smaller firms tend to use an ad hoc, individualized approach, and that this explains the resistance of small firms to drug testing programs (Axel, 1990b). The cost of drug testing has been offered as an alternative

explanation. The average urinalysis test costs $43 per person (Battagliola, 1993), which many small businesses believe they cannot afford (MacDonald, Wells, and Fry, 1993).

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However, regulations stemming from the Drug-Free Workplace Act of 1988 mean that potential corporate losses due to employee substance use can no longer be evaluated by productivity, employee turnover, and safety measures alone. For small and mid-sized companies who expect to do business with the federal government, the costs of illicit substance use by employees include the potential loss of business due to failure to comply with "drug-free workplace" guidelines. For some small firms, economic pressure to develop programmatic responses to employee substance use will result from direct dealings with federal agencies. Since the federal guidelines function as a symbolic model as well as a pragmatic intervention (Thompson, Riccuci, and Ban, 1991), it is also likely that clients who are themselves government contractors will exert pressure on business partners. As this pressure "trickles down" from the federal government, more and more small and mid-size companies will probably adopt formal employee drug testing procedures, regardless of their own assessment of the benefits of employee drug testing. There is some evidence that this is already occurring. In 1992, the rate of increase of drug testing was greatest among companies with fewer than 500 employees (Battagliola, 1993).

For all firms, federally mandated drug testing programs must be conducted within the bounds of both federal and state laws. Failure to address the legal and ethical issues surrounding drug testing may undermine drug testing programs, and may expose the company to litigation. However, the frequent changes in drug testing laws, their often hasty development in reaction to particular events, and their tendency to vary from state to state pose a problem for management. Another problem is the absence of a single clear model of a successful drug testing program. This does not mean that such programs are universally unsuccessful; rather, differences in evaluation methodology, program content, and industry type make "success" difficult to identify with precision (MacDonald, Wells, and Fry, 1993).

To sort through this maze, managers must proceed carefully. A drug testing program that is fair, effective, and economical entails a great deal of work, and initial expenditures may be daunting. Shortcuts, though tempting, can expose an organization to infringement of privacy, lack of consent, breach of confidentiality, or defamation claims. Despite these caveats, the past ten years of corporate experience with drug testing programs has yielded some broad guidelines, which are offered below.

PROGRAM AND POLICIES

Companies that utilize drug testing have come to recognize that testing is not a panacea for employee substance abuse (Harris and Heft, 1993). The effectiveness of drug testing depends on the quality of the prevention and treatment program to which it is attached. This may be one of the reasons why firms that test employees have a consistently greater overall involvement with substance abuse prevention and control than firms that do not employ drug testing (Axel, 1990b). Employee attitudes toward drug testing are mediated by concerns regarding privacy and rehabilitation (Stone and Kotch, 1989). These are best addressed through a combination of coordinated measures designed to control or reduce the impact of

employee substance use. According to Petersen (1990), a minimal employee drug testing program should include the following:

- Comprehensive policies governing the testing process;
- Adequate notice and educational programs for supervisors and all other employees;
- Chain-of-custody procedures to ensure tamper-proof samples and correctly matched results;
- Proven test methods;
- Strict confidentiality of test results; and
- An Employee Assistance Program (EAP), to provide counseling and rehabilitation.

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A successful drug testing program begins with a carefully crafted policy. Staff members of major departments, employees at every level in the organization, and legal counsel should be involved at every stage of policy development. Assuring adequate employee representation in the formation of drug testing policy may ameliorate ethical concerns regarding the legitimate limits of employer manipulation raised by some opponents of drug testing, since such manipulation is presumably more justifiable when it is mediated by the election of those subjected to it (Caste, 1992). According to Finkle and colleagues (1990), a written corporate policy may be simple or complex, but should contain the following:

- A statement reflecting the company's views on drug abuse;

- A statement of need documenting any past occurrences and the company's desire to prevent such incidents in the future;
- A list of the company's responsibilities to employees, and designated departments implementing the drug testing program;
- A list of employee's responsibilities, such as showing up for work, being fit for duty (drug free), and willing to be tested for drugs;
- A list of procedures that will be implemented to reach company's policy goals; and
- A statement of penalties for violating the policy.

The development of a written policy, along with its dissemination throughout the firm prior to testing, reduces the legal risks cited by some smaller employers in opposition to testing programs. Courts usually interpret an organization's drug policy as an implied contract between employer and employee. The Drug-Free Workplace Act of 1988 also requires companies receiving federal contracts to file a written policy regarding drugs in the workplace. These factors and others underline the importance of a written policy in all cases where an employer seeks to intervene in employee drug abuse. Since the policy is often interpreted as an implied contract, the employer must closely follow the policy and ensure that it is understood by all employees. When employees are made fully aware of company policy, the risks of legal disputes or unnecessary attempts to overturn disciplinary actions are reduced.

Written substance abuse policies should clearly specify the span of control the company wishes to exercise over employee behavior. Traditionally, policies have covered only circumstances or behavior occurring during working hours or while employees are utilizing company property (Axel, 1990b). But the most popular forms of drug testing imply an interest in behavior outside these parameters, and this interest is the focus of much controversy (Caste, 1992). To alleviate such controversy, reasons for this interest should be clearly stated in the policy. The policy must also specify who will be tested, and when they will be tested. Criteria for testing selection should be as objective as possible, in order to avoid even a hint of discrimination. Typically, this should include staff at

all levels in the organization, and if some employees or applicants are exempt, reasons for exemption must be specified and documented. Unfortunately, these fairness issues are not always sufficiently appreciated by the drafters of corporate drug testing policies. An ethnographic study of personnel involved in the development of drug policies for power, broadcasting, phone, and railroad companies and unions found that a two-tiered system had developed, in which blue-collar employees were subject to random tests, while management was not (Irwin, 1990). In these companies, inconsistencies regarding the "who" and "when" of drug testing exacerbated tensions between blue-collar workers and senior staff.

Once the policy has been written, employees should be educated regarding the policy's purpose, and the details of its implementation. This is best approached through scheduled education sessions. Unlike written materials, education sessions are difficult for employees to ignore, especially when attendance is required. Education sessions serve a number of purposes. The sessions give management a forum in which to argue for worksite control of substance use. When this information is presented in a non-judgmental, scientific manner, it can be most effective (Ogborne, 1988). The sessions allow management to gain allies among employees who are themselves concerned about the consequences of substance use, and to "warn" substance-using employees of the consequences of continued use, without compromising these employees' anonymity. Education sessions also offer employers an opportunity to present treatment options as employee benefits, again without the risk of exposing those employees who may require treatment services. Finally, supervisor and employee questions regarding legal, ethical, or technical aspects of the drug testing policy may be answered in the education sessions.

After a "waiting period" wherein employees may prepare for implementation of the program, testing should begin. After an embarrassing series of police drug raids involving employees, Tropicana Products initiated a drug testing program with a 60-day window period prior to testing, during which employees could seek rehabilitation services at no cost to themselves. Evaluators have concluded that this waiting

period contributed to the program's success (Battagliola, 1993). Some evaluators recommend an anonymous "dry run" test, during which the extent of employee abuse may be determined, and employees may become accustomed to the process of testing (Hayghe, 1990). However, for many small firms, the cost of such a run may be prohibitive, and if clear written policies are effectively communicated, a "dry run" is probably unnecessary.

Once testing begins, employers may schedule drug tests at one or more of the following times:

- Pre-employment;
- When there is reasonable cause; and
- At random (Stennett-Brewer, 1988).

Pre-employment testing is the simplest program, and is the one used most frequently. Compared to an employee, a job applicant has fewer grounds upon which to base an unfair practice claim; a refusal to hire is easier to defend than a contested disciplinary action. Pre-employment testing may be the most cost-effective way to schedule drug testing. Statistics show that despite forewarnings about the company's drug testing policy, twelve percent of the job applicants still test positive (Finkle et al., 1990). An evaluation of drug detection procedures at Utah Power and Light revealed that pre-employment testing had saved that company $300,000 in employee turnover costs during the first year of its existence (Crouch et al., 1990). Pre-employment testing succeeds in eliminating at least some of the loss associated with employee addictions, and incurs almost no legal liability.

However, it does raise questions regarding the diffusion effects of drug testing on society. Managers concerned about the effects of their decisions on the world outside the workplace should think carefully before implementing pre-employment testing. By the late 1980s, over three-quarters of private sector employers utilized pre-employment screening rather than screening of current employees (U.S. Department of Labor, 1989). Most applicants testing positive on pre-employment tests are not

hired (MacDonald, Wells, and Fry, 1993). Particularly in many blue-collar jobs wherein a majority of applicants are young, male, and without a college education, pre-employment testing may seem like a desirable alternative, but it could backfire in the long run for the same reasons it seems successful in the short run. By placing a group already at substantial economic and social risk out of the labor market, it may actually encourage a criminal career rather than treatment and rehabilitation (Thompson, Riccuci, and Ban, 1991). On the other hand, pre-employment screening programs do exist which allow the prospective applicant to re-apply after a period of treatment. It has been suggested that these may actually encourage users to seek treatment (Harris and Heft, 1993), though no hard data exist to support this.

"Reasonable cause" testing is a second alternative. Inappropriate behavior or unexplained variations in job performance levels are examples of "reasonable causes" for drug testing. Employers considering this approach should be aware that employees often interpret reasonable cause testing as a way of "singling out" or harassing particular individuals (Hayghe, 1990). Unless proceeding with great care, employers opting for reasonable cause testing run the risk of inadvertently stigmatizing individuals suspected of drug use, as a result of the gossip ensuing when such individuals are "called in" for testing. Should an employee testing positive choose to file a legal challenge to a reasonable cause policy, management must be prepared with more than the memory of a "reasonable cause." All behaviors leading to "reasonable cause" testing should be stated in writing and communicated to all staff. Incidents involving such behavior should be fully documented, with reports signed by the employee in question.

Many employers opt for reasonable cause tests due to the perception that employees will favor this method over random testing. However, this may not be the case. Employees in one Fortune 500 company division endorsed random testing over reasonable cause testing, on the grounds that the latter eliminated the potential for supervisor harassment (Axel, 1990a).

Random testing is the third and most controversial testing alternative. Of all the testing alternatives, it is random testing that runs the greatest risk of incurring initial employee dissatisfaction. Although two 1989 Supreme Court decisions, *Skinner vs. Railway Labor Executives Association* (489 *U.S.* 602) and *National Treasury Employee's Union vs. Von Raab* (489 *U.S.* 656), upheld the use of random tests for government workers in safety-sensitive positions (Aalberts and Rubin, 1991), the legal issues surrounding random testing are far from resolved (Hodkin, 1991), especially where a "compelling public interest" has not been demonstrated. Random testing raises questions regarding the scope of an employer's legitimate right to determine employee behavior. It also raises questions regarding an employee's responsibility to avoid self-destructive behavior, not for his or her own sake only, but also for the sake of the company. Both of these questions are potentially divisive.

Ironically, random testing may be the fairest of the strategies reviewed here. Universal random testing does not discriminate between applicants and current workers, or between status levels within the company. Employees may not initially embrace this view, but the pre-testing measures discussed above, which include employee input in policy development and employee education regarding the reasons for testing, should ameliorate some of the potential antagonism surrounding privacy issues, which are the target of most random testing litigation (Harris and Heft, 1993). In situations where a corporate need for some kind of testing has already been communicated and accepted, an explanation of random testing which stresses its fairness in relationship to other testing strategies may balance employee concerns regarding invasiveness.

The primary legal issue in random testing is the separation of "public" and "private" spheres, and the relationship between that dichotomy and one between the corporate and the personal private sectors. While courts have upheld random testing, California law has held private employers to personal privacy standards that the federal Constitution only explicitly attaches to public institutions. All aspects of testing are limited by state laws in Iowa, Connecticut, and Montana; while Hawaii, Louisiana, and

Utah limit procedural aspects of testing (Harris and Heft, 1993). To be on the safe side, management should ensure that random testing programs meet constitutional tests for fairness, reasonableness, and due process. A significant minority of executives still tend to favor random testing only for employees in safety-sensitive jobs (Bureau of National Affairs, 1989), but this approach may prove to be a double-edged sword where safety-sensitive positions overlap with low-status ones.

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Fears of legal liability are periodically reinforced by business media, which refer to drug testing as a "corporate mine field" and a "legal crapshoot" (*Wall Street Journal*, 1989). However, the tendency for most courts to rule in favor of companies employing testing has encouraged private sector employers. As a result, periodic and random testing has increased 1,200 percent since 1987, according to the American Management Association (Anonymous, 1993). Since random testing is the focus of most drug testing litigation, the pros and cons of such a program must be carefully weighed. But the limitations of the other two approaches have probably also contributed to its increasing popularity.

THE CLINICAL LABORATORY

Even when test results are protected by strict confidentiality procedures, employees often react unfavorably to the real or implied accusation that they are drug abusers. If positive test results are faulty, they can lead to an undesirable breakdown in trust between employer and employee. If

positive test results are accurate, an employee may still decide to challenge them. In order to reduce the chances of the former occurrence, every employee of an organization must feel confident that testing detects abusers and protects the innocent. In order to instill such confidence, a reliable drug testing laboratory must be selected that is equipped to face tough legal challenges filed by employees who test positive but do not acknowledge illicit drug use. Clinical laboratories should meet stringent standards, and the criteria used to judge their performance should include certifications, staff qualifications, quality control procedures, and technical assistance.

Laboratories involved in federal testing programs are certified by the National Institute on Drug Abuse (NIDA). NIDA certification assures that test results are backed by the federal government. However, NIDA certification is expensive and complicated, and only about forty U.S. laboratories are NIDA-certified. Most laboratories are certified by private accrediting agencies, such as the College of American Pathologists (CAP) or the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). Accreditation by one of these organizations will help management determine if the laboratory being considered meets generally accepted standards.

Laboratories should also be evaluated for accountability in the areas of specimen collection, transport, and handling. Laboratories should document every step of the process from receipt of sample to completion of the test, using special handling procedures. Documentation is particularly important for drug testing, since it is central to the "chain of custody" matching specimen to employee. If possible, firms considering drug testing should employ a competent consultant to review laboratory procedures. Where this is not possible, senior staff should themselves carefully review the chain of custody, with the assistance of legal advisors.

The laboratory staff must meet certain qualifications. The director should possess an advanced degree (i.e., M.D., Ph.D.) in medicine, biology, or a related field. All technical personnel should have had formal

hands-on training in drug testing procedures, and should be certified. Educational qualifications should be accompanied by rigorous quality control procedures. In addition to samples received from employers, specimens with known concentrations of drugs, and "unknowns" from an outside source, must be regularly tested.

The laboratory should be able to advise management regarding drug testing, and should also provide expert testimony in case of a lawsuit. It should be well-stocked with supplies necessary for specimen collection. If drug testing is to be an effective feedback mechanism for employees, they must be provided with quick, reliable results. Thus, laboratory efficiency is of paramount concern. The laboratory should be able to document and to maintain fast turn-around times from receipt of specimen to completion of testing.

Of course, the manager charged with choosing a laboratory cannot be expected to anticipate all potential laboratory-related problems, especially without prior experience in this policy area. Nor can a laboratory be accurately evaluated simply on the basis of claims, formal certification, or trial performance. Problems may not begin to form a pattern for some time, and by then the organizational investment in a questionable laboratory may have become quite substantial. Talking to colleagues in organizations that have already implemented a drug testing program may be the best means of avoiding such a Catch-22. Companies with a proven track record in managing employee drug testing programs may be a good source of laboratory-related information, especially as regards the performance of laboratories they have used.

The laboratory selection process may appear to be intimidating, but with a little research, the most common oversights can be avoided and a reasonable degree of security attained without consulting a pathologist or clinical laboratory scientist. In most cases, a certifying/accrediting agency will ensure that laboratory practices meet industry standards. An employer need only ascertain whether the laboratory selected is accredited, and inquire as to the reputation of the accrediting agency.

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THE TESTING

There are three fundamental steps involved in standard drug testing procedures:

- Sample collection;
- Preliminary screening; and
- Confirmation testing (Petersen A., 1990).

Sample collection is critical, since most legal disputes focus on sample collection procedures. The Department of Health and Human Services (HHS) has issued specific guidelines to ensure the identity of samples collected, and to protect their integrity. According to the guidelines, samples must be collected in a secure, private location. Employees must present photo identification at the time of collection, and must also sign a statement confirming that the sample provided is their own. In order to reduce the chances of adulteration, the temperature of the urine specimen should be routinely checked.

The most controversial step in the specimen collection process recommended by HHS is direct observation of the evacuation process. Despite HHS approval, many legal counselors do not recommend the use of direct observation methods, arguing that they could attract invasion-of-privacy litigation. It has been observed that this places employers in a

double-bind, wherein a real reduction of the risk of employee tampering automatically entails an unjustifiably intrusive procedure (MacDonald, Wells, and Fry, 1993). However, other, less intrusive measures can be taken to discourage employee tampering. Organizations can reduce the chances that employees will tamper with samples by prohibiting unnecessary personal items (i.e., bulky coats and purses) in the collection area. Management can add bluing agents to toilets, and may turn off the taps in order to further reduce the chances of adulteration.

Nevertheless, no procedure, however invasive, can eliminate the possibility that employees will "cheat" on the test. A number of methods, from the use of diuretics, to the flushing of the system with water, to the adulteration of urine with salt, have all been reported to produce false negatives (Potter and Orfali, 1990), which has led some to suggest that casual users are more likely to be detected than hardcore users who have learned how to beat tests (Weiss and Millman, 1989). In most standard collection protocols, employees are required to list all prescription drugs and over-the-counter medications taken during the past seven days, thus enabling the testing laboratory to detect cross-drug reactions and to account for traces of drugs taken under doctor's orders.

Once the sample is collected, the container is sealed, labeled, and dated by the collection personnel. It is also initialed by the employee providing the sample, as corroboration of it's authenticity. The legal record of the sample from collection to testing, (i.e., the chain-of-custody), begins here.

Preliminary screening is the most efficient and inexpensive method available for eliminating samples that do not test positive for the drugs the company wants detected. Each company provides the laboratory with a specific panel of drugs it wants to be detected. The Federal Government focuses its tests on the following five classes of drugs:

- The marijuana metabolite;
- The cocaine metabolite;
- The opiates (morphine and codeine);

- Phencyclidine (PCP); and
- Amphetamines.

NIDA has established concentration levels and limits that define positive and negative samples. These levels have resulted in standardized drug testing guidelines used by all laboratories. They ensure that when drug levels remain below the NIDA levels, the results are reported as negative.

Despite established standards, preliminary screening does not eliminate the problem of cross-reactivity. When a sample tests positive during preliminary screening, a more sensitive confirmatory test should follow, using Gas Chromatography/Mass Spectrometry (GC-MS). GC-MS reduces the chemical compound to its constituent ions. Ions provide the compound with its unique set of fingerprints. Although considered extremely reliable, even the GC-MS test is not foolproof. Results can vary, depending on the specific techniques used. Some laboratories use the Selective Ion Monitoring (SIM) technique, which limits its examination to three unique ions. Others perform a full scan, which is almost foolproof, since it scans the entire compound (Petersen, 1990).

Management should consider the appointment of a medical officer as a final step in designing a fail-safe drug testing program. The medical officer should review results, establish an employee counseling and rehabilitation program, and monitor that program. A single positive drug test does not necessarily mean that an employee is permanently impaired, but could be the reflection of an emergent problem. Employee termination following a positive drug screen may be a tempting solution, but it is ultimately a short-sighted policy. In some circumstances, it may be illegal. By terminating an employee who abuses drugs, the company stands to lose its investment in the employee and may incur future recruitment and training costs of $7,000 to $10,000. A combination of well-defined policies and procedures, effective communication of these, and flexibility in their application, should accompany drug testing. A trained medical officer would know how to assess individual cases, and how to tailor

solutions to the circumstances under which an employee tests positive, without regard to the employee's status in the company.

CONCLUSION

Drug testing is not in itself a solution to employee drug abuse. Even when coupled with a comprehensive intervention program, it is not perfect. The institutionalization of drug testing in the private sector is barely past its infancy, and suffers from the absence of proven standards of success. Evaluation of drug testing programs is still rare, although NIDA has sponsored program evaluations in military, industrial, and transportation sectors. The implementation of a legally, ethically, and economically sound drug testing program stretches management's scientific and creative abilities to their limits. However, a successful drug abuse control program involving drug testing offers a number of advantages in a business environment troubled by disturbing substance abuse trends. Such a program skirts the adversarial relations between management and worker which characterized the classic "industrial" phase of world commerce.

Although drug testing is often criticized as a cold and inadequate substitute for an inclusive employee health benefits program, this conclusion is not supported by the empirical data. Rather, companies that employ drug testing are more likely to offer counseling and treatment services, Employee Assistance Programs, and prevention training than are non-testing companies (Axel, 1990b). This is hardly surprising. Substance abuse is a condition which often requires feedback before it can be confronted. A good drug testing program, integrated into an adequate substance abuse strategy, thus helps both employer and employee. When responsibly implemented, drug testing causes no undue hardship to employees, and chronic abusers are the only people who need fear the testing program.

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