Drug Testing in the Workplace: The Challenge to Employment Relations and Employment Law

Mark A. Rothstein

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# DRUG TESTING IN THE WORKPLACE: THE CHALLENGE TO EMPLOYMENT RELATIONS AND EMPLOYMENT LAW

**Mark A. Rothstein**

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I. INTRODUCTION

The controversy surrounding drug testing in the workplace epitomizes many of the contemporary clashes between labor and management. Drug testing of employees is an effort to deal with the workplace effects of a larger societal problem of drug abuse; drug testing uses new technology in attempting to control a human problem; and drug testing creates conflicts between employee interests in autonomy and privacy and employer interests in health, safety, and productivity.

From a legal standpoint, drug testing also raises a wide range of recurring issues. There are the differing rights of public and private employees, the conflict between federal policy (requiring or encouraging testing) and state policy (increasingly restricting testing), and the efforts to expand the reach of various statutes (such as handicap discrimination laws) and the common law to challenge drug testing.

This article begins by analyzing the problem of drug abuse in America and on the job, the efficacy and accuracy of various drug tests, and the extent to which drug testing is used. The article next explores the myriad constitutional, statutory, common law, and policy issues raised by drug testing. It concludes that much of the drug testing currently performed or contemplated in the public and private sectors is unwarranted and unnecessary. Drug testing to protect public health and safety may be legitimate and justified, but only if certain enumerated prerequisites and safeguards are satisfied.

II. DRUGS IN AMERICA, DRUGS ON THE JOB

A. The Problem of Drug Abuse

Drug abuse is one of America's most pervasive, serious, tragic, and seemingly intractable social problems. According to the National Institute on Drug Abuse (NIDA), over seventy million Americans have experimented with illegal drugs and twenty-three million Americans are currently using some type of illegal substance.1 Over twenty-two million Americans have experimented with cocaine and ten million are cocaine-

1. PRESS OFFICE, NATIONAL INSTITUTE ON DRUG ABUSE, Highlights of the 1985 National Household Survey on Drug Abuse, NIDA CAPSULES (Nov. 1986 rev.) [hereinafter NIDA HIGHLIGHTS].
dependent. In the last ten years there has been a 200% increase in cocaine-related deaths and a 500% increase in admissions to drug abuse treatment programs.

The abuse of legal drugs, especially alcohol, also is a source for great concern. Over 100 million Americans use alcohol and there may be as many as eighteen million adult alcoholics in the United States. Alcohol is involved in nearly half of all automobile accidents and homicides, one-fourth of all suicides, and four-fifths of all family court cases.

Although the greatly increased attention given to drug abuse by politicians and the media imply the problem is worsening, recent studies suggest that drug abuse may have stabilized or decreased for most substances. The following table compares drug use rates from 1982 with drug use rates for 1985.

2. Id.
3. Smith & Silberman, Treatment Resources for Chemical Dependency, 1 SEMINARS IN OCCUP. MED. 265 (1986) (citing the National Institute on Alcohol Abuse and Alcoholism (NIAAA), Fifth Special Report to Congress on Alcohol and Health (1984)).
4. NIDA HIGHLIGHTS, supra note 1.
Table 1
Drug Use in 1982, 1985

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Young</td>
<td>Older</td>
<td>Older</td>
<td>Young/Older</td>
</tr>
<tr>
<td></td>
<td>Adults</td>
<td>Adults</td>
<td>Adults</td>
<td>Adults</td>
<td></td>
</tr>
<tr>
<td>marijuana and hashish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hallucinogens</td>
<td>1.7</td>
<td>1.6</td>
<td>***</td>
<td>***</td>
<td>-0.1/***</td>
</tr>
<tr>
<td></td>
<td>6.9</td>
<td>3.7</td>
<td>0.8</td>
<td>1.0</td>
<td>-3.2/+0.2</td>
</tr>
<tr>
<td>cocaine</td>
<td>6.8</td>
<td>7.7</td>
<td>1.2</td>
<td>2.1</td>
<td>+0.9/+0.9</td>
</tr>
<tr>
<td>stimulants</td>
<td>18.8</td>
<td>16.4</td>
<td>3.8</td>
<td>4.2</td>
<td>-2.4/+0.4</td>
</tr>
<tr>
<td>sedatives</td>
<td>2.6</td>
<td>1.7</td>
<td>***</td>
<td>0.7</td>
<td>-0.9/+0.3</td>
</tr>
<tr>
<td>tranquilizers</td>
<td>8.7</td>
<td>5.4</td>
<td>1.4</td>
<td>2.0</td>
<td>-3.3/+0.6</td>
</tr>
<tr>
<td>analgesics</td>
<td>5.9</td>
<td>6.7</td>
<td>1.1</td>
<td>2.9</td>
<td>+0.8/+1.8</td>
</tr>
<tr>
<td>alcohol</td>
<td>1.0</td>
<td>2.1</td>
<td>***</td>
<td>0.9</td>
<td>+1.1/+0.5</td>
</tr>
<tr>
<td></td>
<td>4.4</td>
<td>6.7</td>
<td>1.0</td>
<td>3.1</td>
<td>+2.3/+2.1</td>
</tr>
<tr>
<td></td>
<td>83.4</td>
<td>87.4</td>
<td>68.3</td>
<td>73.6</td>
<td>+4.0/+5.3</td>
</tr>
</tbody>
</table>

*current = used at least once within month prior to survey
**annual = used at least once within year prior to survey
*** = percentage below one-half of one percent (0.4 used to compare in "CHANGE" column)

The figures in Table 1 are significant in at least three respects. First, the largest declines in drug use were in young casual (annual) and regular (current) users of marijuana and hashish, young casual users of cocaine, and young casual users of sedatives. Overall, young casual users dropped by 5.6%. Second, the largest increases in drug use were in legal drugs, both prescription drugs (tranquilizers and analgesics) and alcohol. Third, marijuana and hashish use declined for both age groups. Many experts consider marijuana use the best predictor of the future use of other drugs.9

With regard to illicit drug use, more educated and affluent people had a significant decline in drug use, while less educated and poor people had little or no decline in drug use.10 With the exception of heroin and

8. NIDA HIGHLIGHTS, supra note 1.
crack (a smokable form of cocaine) used by the poor, the use of illegal drugs, although still high, seems to have peaked.\textsuperscript{11}

Two other categories of drugs are essential to note. First, "designer drugs" are synthetically produced narcotics that may be hundreds or thousands of times stronger than plant-based narcotics.\textsuperscript{12} These drugs are easily formulated, often impossible to detect or identify, and are legal until specifically criminalized.\textsuperscript{13} In 1982 more than six million Americans used synthetic drugs such as methamphetamine and phencyclidine (PCP).\textsuperscript{14} The result has been hundreds of deaths and thousands of hospitalizations.\textsuperscript{15}

Second, prescription and over-the-counter medications are widely abused. Americans are the most over-medicated people in history. In terms of numbers alone, this may be our number one drug abuse problem. Analgesics, barbiturates, benzodiazepines, antihistamines, and other common medications are often misused, frequently resulting in serious illness or injury.

B. Drugs and the Workplace

Drug abuse exacts a heavy toll from society: from the health care system,\textsuperscript{16} from the criminal justice system,\textsuperscript{17} and from drug abusers and their families.\textsuperscript{18} Drug abuse is also very costly to employers. According to one estimate, ninety percent of drug and alcohol abusers work\textsuperscript{19} and a significant number of employees use drugs on the job.\textsuperscript{20}

\begin{itemize}
  \item \textsuperscript{11} Id.
  \item \textsuperscript{12} President's Commission on Organized Crime, America's Habit: Drug Abuse, Drug Trafficking, and Organized Crime 67 (1986) [hereinafter President's Commission]. For example, one synthetic drug, 3-methyl fentanyl is up to 1000 times more potent than morphine. Id.
  \item \textsuperscript{13} Id.
  \item \textsuperscript{14} Id. at 60.
  \item \textsuperscript{15} Id. at 61-68.
  \item \textsuperscript{16} See Ross & Walsh, supra note 6.
  \item \textsuperscript{17} P. Bensinger, Drugs in the Workplace: Employers' Rights and Responsibilities 1 (1984). Federal, state, and local governments spend over $5 billion annually for police, courts, and prisons to deal with drug-related crimes and drug abusers. Taking Drugs on the Job, Newsweek, Aug. 22, 1983, 52. See generally President's Commission, supra note 12.
  \item \textsuperscript{18} Although the human costs may not be as readily quantifiable, drug abusers suffer health and financial problems, have domestic difficulties, and suffer job losses and incarceration. See P. Bensinger, supra note 17; BNA Special Report, Alcohol & Drugs in the Workplace: Costs, Controls, and Controversies 7 (1986) [hereinafter BNA Special Report].
  \item \textsuperscript{19} See Russo & Sparadeo, Substance Abuse and Impairment in the Workplace: A Labor Perspective, 1 Seminars in Occup. Med. 301 (1986). The national cocaine helpline, a telephone treatment and referral service, averages 1000 calls a day, with the "average" caller being white, male, 30 years old, and employed. Fifty percent of the callers report using cocaine daily. L. Dogoloff & R. Angarola, Urine Testing in the Workplace 8 (1985).
  \item \textsuperscript{20} Walsh & Gust, Drug Abuse in the Workplace: Issues, Policy Decisions, and Corporate Re-
Different occupations often tend to have a particular type of drug problem. For instance, marijuana use on the job is most prevalent in the entertainment/recreation industry (17%), construction industry (13%), personal services (11%), and manufacturing of durable goods (10%).

On the other hand, alcohol abuse is most prevalent among "blue collar" workers. Undoubtedly, age, education, income, and other characteristics of the work force are responsible for these trends.

Regardless of the drug involved, it is clear that employee drug abuse is very costly to employers. The costs of employee drug abuse borne by employers can be divided into six categories: (1) lost productivity; (2) accidents and injuries; (3) insurance; (4) theft and other crimes; (5) employee relations; and (6) legal liability.

1. Lost Productivity

Several studies have attempted to measure whether the use of drugs by employees adversely affects their performance on the job. Using verbal, written, physiological, and physical testing, the studies concluded that drug abusers were functioning at only fifty to sixty-seven percent capacity. Specifically, drug abusers demonstrated poor work quality, failure to follow up or complete assignments, inadequate preparation, impaired memory, lethargy, reduced coordination, carelessness, mistakes, and slowdowns.

A second measure of lost productivity attributed to drug abuse is absenteeism. Drug-abusing employees have a higher rate of absenteeism, with estimates ranging from 2.5 to 16 times higher than employees who do not use drugs. Thus, employers are faced with increased costs for additional sick leave and medical insurance.

Finally, drug abusers have a higher turnover rate. According to

21. Id. at 237-38.
22. Ross & Walsh, supra note 6, at 285.
24. P. BENSINGER, supra note 17, at 1.
25. Dogoloff, supra note 23, at 645 (2.5 times); Imwinkelried, supra note 23, at 565 (16 times).
27. P. BENSINGER, supra note 17, at 1; NATIONAL INSTITUTE ON DRUG ABUSE, DEVELOPING AN OCCUPATIONAL DRUG ABUSE PROGRAM 10 (1978) [hereinafter DRUG ABUSE PROGRAM]; Smith & Silberman, supra note 3.
28. Walsh & Gust, supra note 20, at 237.
one study, illicit drug users (particularly marijuana users who also use alcohol or other drugs) had average termination dates ten months earlier for males and sixteen months earlier for females.29

Estimates of the total financial impact of lost productivity from drugs borne by American business vary widely. The most frequently cited estimates are those of the Research Triangle Institute, which estimates that lost productivity totals $99 billion annually, with two-thirds attributable to alcohol.30

2. Accidents and Injuries

In 1984 American business lost an estimated $81 billion due to accidents, and many people believe that drug abuse is responsible for a significant share of the losses.31 In the last ten years there have been a number of highly publicized accidents where employee drug abuse was a factor,32 including thirty-seven deaths in the railroad industry.33 Overall, it has been reported that drug users have three to four times as many accidents as nonusers.34

There has been little scientific study, however, of the relationship between drugs and accidents. In a study by the National Institute for Occupational Safety and Health (NIOSH), out of 2,979 workplace injuries in the chemical industry in 1984 and 1985, drugs were a primary factor in only two injuries and a partial factor in only six more.35 Similarly, a study by the Mine Safety and Health Administration (MSHA), found only ten accidents in four years involved drugs.36

Despite any doubts raised by these contradictory studies, there is a perception that many workplace accidents are caused by drugs, and there is certainly the potential for drug-related accidents. Thus, many policies appear to be based on the assumption of a causal relationship between drugs and accidents.

29. Id. (citing study by Kandel & Yamaguchi).
30. BNA SPECIAL REPORT, supra note 18, at 7.
31. Id. at 7 (quoting P. Bensinger).
33. See BNA SPECIAL REPORT, supra note 18, at 9 (citing information provided by the Federal Railroad Administration).
34. P. Bensinger, supra note 17, at 1 (3.5 times); BNA SPECIAL REPORT, supra note 18, at 8 (3 to 4 times) (quoting P. Bensinger); Dogoloff, supra note 23, at 645 (3.6 times); Montreal Session, supra note 23, at 93 (4 times) (quoting an industrial hygienist for the Department of Agriculture).
3. Insurance

Drug and alcohol abuse may increase insurance costs by as much as $50 billion annually. Employers that provide employees with insurance coverage as a part of the employee benefits package pay a substantial part of these increased costs. For example, employees with drug problems are more likely to use medical insurance and file workers' compensation claims.

4. Theft and Other Crimes

A common concern about the employment of people who use drugs is that to support their drug habit they are likely to steal from their employer, embezzle money, sell company products or trade secrets without authorization, steal from coworkers or customers, and sell drugs on company premises. Although these concerns have not been proven empirically, there is anectodal evidence, and many employer policies appear to be based on the assumption that these concerns are valid.

5. Employee Relations

Another cost associated with drug abuse that is difficult to quantify is the negative impact of drugs on employee relations. Lost productivity, safety risks, and "work shifting" (nonusers being forced to do more than their share of work) can lower employee morale. Employees who use drugs also may try to sell drugs to coworkers or to spread the use of drugs to coworkers. Consequently, management must resolve intra-employee frictions and disputes. Meanwhile, management energies also must be committed to drug detection, crime prevention, drug education, quality control, accident prevention, and rehabilitation—all without invading employee privacy or undermining labor-management relations.

6. Legal Liability

Employer policies dealing with drugs in the workplace also must consider the issue of legal liability. Every injured person, damaged piece of property, defective product, breached contract, or other wrongful act attributable to employee drug usage has the potential for substantial em-

37. Study: $50 Billion Wasted Annually from Abuse of Drugs and Alcohol, 4 EMPLOYEE REL. WEEKLY (BNA) 1554 (1986) (citing a study by the Comprehensive Care Corp.).
38. See BNA SPECIAL REPORT, supra note 18, at 7; Dogoloff, supra note 23, at 645 (citing a study by S. Cohen).
39. DRUG ABUSE PROGRAM, supra note 27, at 10.
40. BNA SPECIAL REPORT, supra note 18, at 7; Dogoloff, supra note 23, at 645.
41. BNA SPECIAL REPORT, supra note 18, at 19; Dogoloff, supra note 23, at 135.
employer liability. On the other hand, overzealous efforts to combat drug abuse in the workplace also have the potential for liability.\(^42\) Thus, employers must navigate a careful course between insouciance and overreaction to the threat of drugs in the workplace.

### III. Drug Testing—How It Works and What It Measures

#### A. Drug Testing Technology

In the last decade, technological advances in drug testing and the commercial exploitation of these advances have made workplace drug testing commonplace. Despite the frequency of drug testing, however, there remains widespread misunderstanding about how the tests work, what they measure, and how their accuracy is determined.

Drug tests analyze a body specimen for the presence of drugs or their by-products, metabolites. The most commonly used specimen for workplace testing is urine,\(^43\) although blood, breath, saliva, hair, and other specimens have been used in settings other than the workplace.\(^44\) Blood testing by employers is mostly limited to retrospective testing after the occurrence of an accident.\(^45\)

Scientifically valid drug testing is a two-step process.\(^46\) In the initial step, a “screening” test eliminates from further testing those specimens with negative results, indicating either the absence of targeted substances or the presence of levels below a designated threshold or “cut-off” point. A result which reveals substance levels at or above the cut-off is considered positive. All positive specimens are then retested using a “confirmatory” test. According to the Toxicology Section of the American Academy of Forensic Sciences, the confirmatory test must be “based

\(^{42}\) See infra text accompanying notes 286-301.

\(^{43}\) Urine is considered the best specimen for analysis for the following reasons: (1) its collection is noninvasive; (2) large volumes can be collected easily; (3) drugs and metabolites are generally present in higher concentrations in urine than in other specimens; (4) urine is easier to analyze than blood or other specimens; and (5) drugs and metabolites are usually very stable in urine, allowing long-term storage. Council on Scientific Affairs, American Medical Association, \textit{Scientific Issues in Drug Testing}, 257 J.A.M.A. 3110, 3111 (1987); Schnoll & Lewis, \textit{Drug Screening in the Workplace: Pros and Cons}, 1 SEMINARS IN OCCUP. MED. 243, 245 (1986).

\(^{44}\) For a further discussion of these other drug tests, see Dubowski, \textit{Drug-Use Testing: Scientific Perspectives}, 11 NOVA L. REV. 415, 428-33 (1987).

\(^{45}\) A blood test is considered more useful in this context because detection of a drug in the blood often indicates more recent use than does the presence of metabolites in urine. \textit{Id.}; See also L. DOGOLOFF & R. ANGAROLA, supra note 19, at 30; Denenberg & Denenberg, \textit{Drug Testing from The Arbitrator’s Perspective}, 11 NOVA L. REV. 371, 402 (1987).

upon different chemical or physical principles than the initial analysis method(s)."\textsuperscript{47} Confirmatory testing is essential to establish both the identity and quantity of the substances in the specimen.\textsuperscript{48}

There are three main types of initial screening tests: color or spot tests,\textsuperscript{49} thin layer chromatography\textsuperscript{50} and immunoassays. The most widely used are the immunoassays, which are of three types, enzyme, radio, and fluorescence. All of these latter tests are based on immunological principles. A known quantity of the tested-for drug is bound to an enzyme or radioactive iodine and is added to the urine. If the urine contains the drug, the added, "labeled" drug competes with the drug in the specimen and cannot bind to the antibodies. As a result, the enzyme or radioactive iodine remains active. By measuring enzyme activity or radioactivity, the presence and amount of the drug can be determined.\textsuperscript{51}

The most commonly used immunoassay is the enzyme multiplied immunoassay technique or EMIT.\textsuperscript{52} An advantage of EMIT is that it tests for a broad spectrum of drugs and their metabolites, including opiates, barbiturates, amphetamines, cocaine and its metabolite,

\textsuperscript{47} Dubowski, \textit{supra} note 44, at 437.

\textsuperscript{48} \textit{Id. Accord Council on Scientific Affairs, \textit{supra} note 43, at 3114; Imwinkelreid, \textit{supra} note 23, at 569; Miike, \textit{supra} note 46, at 19.

\textsuperscript{49} Color or spot tests were among the first screening tests developed. The procedure involves adding a small amount of urine to a reagent, which turns a specific color if the suspect drug is detected. The test is most useful in detecting drugs not detected by a broad spectrum technique, such as the immunoassays. The test is easy to perform, uses no elaborate technology, its results are immediate and visible, and it is inexpensive. The main disadvantage of this technique is its low sensitivity and specificity, which results in both false negatives and false positives. See Council on Scientific Affairs, \textit{supra} note 43, at 3112; Schnoll & Lewis, \textit{supra} note 43, at 246.

\textsuperscript{50} Thin layer chromatography (TLC) requires the urine sample to be treated before testing, so that the metabolites or drugs are of sufficient concentration to be detected. Once the sample is prepared, it is spotted on a glass (thin layer chromatographic) plate, which is placed in a solution of solvents. The solvents migrate up the plate carrying the drugs or metabolites with them. The plate is then sprayed with substances that cause color changes in any drugs or metabolites. Many drugs can be identified by their different rates of migration, color reactions, and fluorescent properties. Although TLC is still used for workplace drug testing, it has numerous drawbacks: (1) as with the spot tests, the results are qualitative only and do not reveal the dosage detected in the specimen; (2) TLC is labor-intensive and requires trained technicians; (3) the results are subjective, based on reading colors that fade quickly, are difficult to identify precisely, and are difficult to preserve photographically; and (4) the sensitivity and specificity of the test have been subject to question. See Hansen, Caudill, & Boone, \textit{Crisis in Drug Testing}, 253 J.A.M.A. 2382 (1985) (error rates at 13 laboratories using TLC showed false positives from 0% to 66% and false negatives from 0% to 100%). For a general discussion of TLC procedures, see Council on Scientific Affairs, \textit{supra} note 43, at 3112; Miike, \textit{supra} note 46, at 3; Schnoll & Lewis, \textit{supra} note 43, at 246.

\textsuperscript{51} Council on Scientific Affairs, \textit{supra} note 43, at 3112-13; Dubowski, \textit{supra} note 44, at 453-54; Miike, \textit{supra} note 46, at 2; Schnoll & Lewis, \textit{supra} note 43, at 248-49.

\textsuperscript{52} The EMIT test uses the procedure described earlier. If the tested-for drug is not present, the labeled drug will bind to the antibody and the enzyme will remain inactive. If the specimen contains the drug, the labeled drug remains free and the enzyme reacts with bacteria in the sample. This reaction causes turbidity (cloudiness) that can be measured. The amount of enzyme activity correlates with the amount of drug present in the sample. \textit{Id.}
benzodiazepines, methaqualone, methadone, phencyclidine, and cannabinoids. It is also fast and cheap. A single test may cost about five dollars. In addition, portable kits starting at $300 are sold for on-site use by individuals with minimal training.

The radioimmunoassay (RIA)\textsuperscript{53} can measure only one drug at a time, but has broad-spectrum detection capabilities similar to EMIT. RIA is more expensive than EMIT, however, and requires a more highly trained technician.\textsuperscript{54} The fluorescence polarization immunoassay (FPIA) is a relatively new technique and, as yet, not widely used.\textsuperscript{55}

The most widely used confirmatory test is gas chromatography/mass spectrometry (GC/MS). In GC the sample is pretreated to extract drugs from the urine. The drugs are converted to a gaseous form and transported through a long glass column of helium gas. By application of varying temperatures to the column the compounds are separated according to their unique properties, such as molecular weight and rate of reaction. These particular properties are used to identify the compound. Although GC can be used alone, the superior method combines it with a mass spectrometer (MS), which breaks down the compound molecules into electrically charged ion fragments. Each drug or metabolite produces a unique fragment pattern, which can be detected by comparison with known fragment patterns.\textsuperscript{56} GC/MS requires expensive equipment\textsuperscript{57} and highly trained technicians to prepare the sample and interpret test results. The process is also time-consuming because only one sample and one drug per sample may be tested at a time. High performance liquid chromatography (HPLC) is also used as a confirmatory test,\textsuperscript{58} but GC/MS has become the standard confirmatory test.

\textsuperscript{53} In RIA the labeled drug is linked to radioactive iodine. The labeled drug competes with the tested-for drug in the specimen. The more drug present in the sample, the less the labeled drug can bind to the antibodies. After all reagents are mixed, the drug-antibody complex is precipitated. The level of radioactivity remaining is then measured to indicate the amount of the drug in the original sample. Council on Scientific Affairs, \textit{supra} note 43, at 3112; Schnoll & Lewis, \textit{supra} note 43, at 248.

\textsuperscript{54} \textit{Id.}

\textsuperscript{55} A fluorescent substance is linked to the drug and then added to the specimen. The same competition for antibodies occurs as with EMIT and RIA. Measurement of the degree of polarization of light determines the quantity of drug present in the sample. Council on Scientific Affairs, \textit{supra} note 43, at 3113; Dubowski, \textit{supra} note 44, at 460-62.

\textsuperscript{56} Council on Scientific Affairs, \textit{supra} note 43, at 3113; Dubowski, \textit{supra} note 44, at 470-72; Miike, \textit{supra} note 46, at 6-7; Schnoll & Lewis, \textit{supra} note 43, at 249.

\textsuperscript{57} GC/MS equipment costs between $50,000 and $200,000. Schnoll & Lewis, \textit{supra} note 43, at 247.

\textsuperscript{58} HPLC requires pretest preparation of the sample to increase the detectability of the substances. Liquid is used as the medium to transport the substance through a column, under a constant temperature and pressure. Ultraviolet detectors capture the ultraviolet-visible spectrum of each drug tested. Council on Scientific Affairs, \textit{supra} note 43, at 3114; Dubowski, \textit{supra} note 44, at 475-77; Schnoll & Lewis, \textit{supra} note 43, at 249.
The pricing structures for drug tests vary widely. Some laboratories charge customers a flat fee per specimen tested; others divide the fee so that those samples requiring a confirmatory test incur an additional charge.\(^5\) Other factors affecting price are the type of analysis used, the number of specimens tested, and the types of drugs tested for. In general, laboratory charges for single-procedure methods range from $5 to $20; GC/MS confirmation costs from $30 to $100.\(^6\)

**B. What the Tests Measure**

It is essential to understand that a positive result on a drug test does not indicate impairment of the subject.\(^6\) Drug metabolites detected in urine are the inert, inactive by-products of drugs and cannot be used to determine impairment. Although a blood test can reveal the presence of drugs in the blood in their active state, with the exception of ethanol, there is no known correlation between the detection of metabolites in urine and blood concentrations.\(^6\) Moreover, there is no agreement among experts on what level of drug indicates impairment.\(^6\)

Many variables influence how a drug will affect an individual user, including the type of drug, dose, time lapse from administration, duration of effect and use, and interactions with other drugs. The individual's age, weight, sex, general health state, emotional state, and drug tolerance also are important factors.\(^6\) Consequently, the wide individual variations make generalizing extremely speculative. According to one expert:

> Testing does only one thing. It detects what is being tested. It does not tell us anything about the recency of use. It does not tell us anything about how the person was exposed to the drug. It doesn't even tell us whether it affected performance.\(^6\)

A final factor that complicates interpretation of a positive result is the often-considerable duration of detectability of drugs in urine. As in-


\(^{61}\) Council on Scientific Affairs, supra note 43, at 3111; Schnoll & Lewis, supra note 43, at 246.

\(^{62}\) Council on Scientific Affairs, supra note 43, at 3111; McBry, supra note 60, at 649.

\(^{63}\) Kerns & Schnoll, Effects of Drugs on Occupational Performance, 1 SEMINARS IN OCCUP. MED. 229, 230 (1986); Walsh & Gust, supra note 20, at 238-39.

\(^{64}\) Kerns & Schnoll, supra note 63, at 229-30; Walsh & Gust, supra note 20, at 238.

\(^{65}\) Professor Ronald K. Seigel of UCLA Medical School, forensic psychopharmacologist, quoted in Denenberg & Denenberg, supra note 45, at 399.
dicated in the following table, drug metabolites can be detected in urine from one day to several weeks following exposure.

Table 2
Approximate Duration of Detectability of Selected Drugs in Urine

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Approximate Duration of Detectability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines</td>
<td>2 days</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>1-7 days</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>3 days</td>
</tr>
<tr>
<td>Cocaine metabolites</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Methadone</td>
<td>3 days</td>
</tr>
<tr>
<td>Codeine</td>
<td>2 days</td>
</tr>
<tr>
<td>PCP</td>
<td>8 days</td>
</tr>
<tr>
<td>Cannabinoids</td>
<td></td>
</tr>
<tr>
<td>single use</td>
<td>3 days</td>
</tr>
<tr>
<td>moderate smoker (4 times/week)</td>
<td>5 days</td>
</tr>
<tr>
<td>heavy smoker (daily)</td>
<td>10 days</td>
</tr>
<tr>
<td>chronic heavy smoker</td>
<td>21 days</td>
</tr>
</tbody>
</table>

The usual effects of most drugs persist for only a few hours after use. Therefore, drugs are detectable long after their effects have subsided and any correlations between a positive test and impairment are impossible.

C. How Accurate are the Tests?

Before discussing the accuracy of drug tests, it is important to review how accuracy in medical tests is measured. The key concepts are “sensitivity” and “specificity.” The sensitivity of a test is a measure of its ability to identify persons with the tested-for condition. It is the percentage of persons with the condition who register a positive test result:

\[
\text{Sensitivity} = \frac{\text{true positive test results}}{\text{persons with condition (true positives + false negatives)}} \times 100 \text{ percent}
\]

Therefore, if 100 persons have a condition and the test is able to identify 90 of them, the test would be 90% sensitive.

The specificity of a test is a measure of its ability to identify persons

68. See id.
who do not have a condition. It is the percentage of persons free of the condition who register a negative test result:

\[
\text{true negative test results} \times 100\% \over \text{persons free of condition (true negatives + false positives)}
\]

Therefore, if 100 persons are free of a condition and the test is able to identify 90 of them, the test would be 90% specific.

The "positive predictive value" of a test refers to the value of a positive test result in identifying the presence of a condition. It is the percentage of persons whose test results are positive who actually have the condition:

\[
\text{persons with condition (true positives)} \times 100\% \over \text{positive test results (true positives + false positives)}
\]

According to independent studies, the EMIT test has a sensitivity of about 99% and a specificity of about 90%. The positive predictive value of the test, however, varies greatly depending on the prevalence of drug usage in the tested population. The following tables illustrate how important prevalence is to the predictive value of a test.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Predictive Value of EMIT Test with 99% Sensitivity, 90% Specificity, 50% Prevalence, and 10,000 Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>True Positives</td>
</tr>
<tr>
<td>5000+</td>
<td>4950</td>
</tr>
<tr>
<td>5000-</td>
<td>500</td>
</tr>
</tbody>
</table>

Table 3 assumes a 50% prevalence—perhaps individuals in a drug treatment program or, in a workplace setting, individuals selected for testing based upon reasonable suspicion. The test correctly identifies 4950 of the 5000 true positives, with 50 false negatives. It correctly identifies 4500 of the 5000 true negatives, with 500 false positives. Therefore,


70. False positive rates vary based on the substance tested for and the test procedure used. The EMIT test false positive rates are: cocaine—10%; opiates—5.6%; barbiturates—5.1%; amphetamines—12.5%; and marijuana—19%. Id. The average is about 10%, for a specificity of 90%.
of the 5450 positives, 4950 are true positives. The positive predictive value of the test is 4950/5450 or 90.8%.

Table 4
Predictive Value of EMIT Test with 99% Sensitivity, 90% Specificity, 5% Prevalence, and 10,000 Subjects

<table>
<thead>
<tr>
<th>Subjects</th>
<th>True Positives</th>
<th>False Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>500+</td>
<td>495</td>
<td>5</td>
</tr>
<tr>
<td>9500-</td>
<td>8550</td>
<td>950</td>
</tr>
</tbody>
</table>

Table 4 assumes a 5% prevalence—a reasonable estimate of the prevalence of recent drug users among job applicants.71 The test correctly identifies 495 of the 500 true positives, with 5 false negatives. It correctly identifies 8550 of the 9500 true negatives, with 950 false positives. Therefore, of the 1445 positives, 495 are true positives. The positive predictive value of the test is 495/1445 or 34.3%.

Table 4 demonstrates why it is essential to use confirmatory tests. Two out of three positives identified by the test will be false positives. Unfortunately, pre-employment drug tests, where the prevalence and predictive values are low, are also the tests least likely to be confirmed due to cost considerations.

Because drug tests detect metabolites of drugs rather than the drugs themselves, commonly used screening tests (and to a lesser extent confirmatory tests as well) sometimes incorrectly identify as metabolites of illicit drugs the metabolites of other substances72 or normal human enzymes such as lysozyme and malate dehydrogenase.73 Table 5 indicates some of the substances for which this effect, cross-reactivity, has been documented.

71. About 5% to 10% of applicants at major corporations test positively for one or more drugs. The prevalence for any single substance may well be lower than the assumed 5%. A lower prevalence would result in an even lower positive predictive value. For example, with a 1% prevalence, the positive predictive value of an unconfirmed EMIT test would be 9%.
### Table 5

Some Commonly Available Substances That Cross-React with Widely Tested-For Drugs

<table>
<thead>
<tr>
<th>Type of Drug</th>
<th>Cross-Reactants</th>
</tr>
</thead>
<tbody>
<tr>
<td>amphetamines</td>
<td>1. over-the-counter cold medications (decongestants)(^{74})</td>
</tr>
<tr>
<td></td>
<td>2. over-the-counter and prescription dietary aids(^{75})</td>
</tr>
<tr>
<td></td>
<td>3. asthma medications(^{76})</td>
</tr>
<tr>
<td></td>
<td>4. anti-inflammatory agents(^{77})</td>
</tr>
<tr>
<td>barbiturates</td>
<td>1. anti-inflammatory agents(^{78})</td>
</tr>
<tr>
<td></td>
<td>2. phenobarbital (used to treat epilepsy)(^{79})</td>
</tr>
<tr>
<td>cocaine</td>
<td>1. herbal teas (made from coca leaves)(^{80})</td>
</tr>
<tr>
<td>marijuana (cannabinoids)</td>
<td>1. nonsteroidal anti-inflammatory agents(^{81})</td>
</tr>
<tr>
<td></td>
<td>2. Ibuprofen (Advil, Motrin, Nuprin)(^{82})</td>
</tr>
<tr>
<td>morphine, opiates</td>
<td>1. codeine(^{83})</td>
</tr>
<tr>
<td></td>
<td>2. prescription analgesics and antitussives(^{84})</td>
</tr>
<tr>
<td></td>
<td>3. poppy seeds(^{85})</td>
</tr>
<tr>
<td></td>
<td>4. over-the-counter cough remedies(^{86})</td>
</tr>
<tr>
<td>Phencyclidine (PCP)</td>
<td>1. prescription cough medicines(^{87})</td>
</tr>
<tr>
<td></td>
<td>2. Valium(^{88})</td>
</tr>
</tbody>
</table>

The problem of cross-reactivity is one important reason why it is important to use pretest questionnaires inquiring about medications and other cross-reactants and to give individuals an opportunity to explain a positive result. A related concern is that a drug test will be positive be-

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74. Miike, supra note 46, at 20.
75. Id.
76. Id.
78. Id.
83. Miike, supra note 46, at 21.
84. Id.
85. Hanson, supra note 81, at 10; Solo Urine Tests, supra note 80, at 93.
86. L. DOGOLOFF & R. ANGAROLA, supra note 19, at 22.
87. Miike, supra note 46, at 22.
88. Id.
cause of "passive inhalation." There is disputed evidence about whether a marijuana test using a cutoff of 20 nanograms per milliliter of urine will test positive if the subject was exposed to the marijuana smoke of other people.\textsuperscript{89} Using a higher cutoff, however, such as 100 nanograms per milliliter of urine, will eliminate this problem.\textsuperscript{90}

The accuracy of drug tests also may be affected by several other factors. Alteration of the specimen, such as by substitution or dilution,\textsuperscript{91} improper calibration of equipment or cleaning of equipment (the so-called "carry-over effect"), mislabeling, contamination, or technician error all may undermine test accuracy. Indeed, even the best methodologies will yield valid results only to the extent that the testing laboratory adheres to rigid standards of quality control. Laboratory proficiency criteria, however, have been extremely inadequate.\textsuperscript{92}

\textbf{IV. Drug Testing—Who Is Doing It and Why}

\textit{A. Public Employers}

A limited amount of drug testing long has been used in the private sector, but the major impetus for widespread testing has come from the federal government. Drug testing was begun in the military in 1981 and by 1985 over three million drug tests were performed annually\textsuperscript{93} at a cost of over one-half billion dollars.\textsuperscript{94} The Department of Defense credits the drug testing program for a decline in drug usage.\textsuperscript{95}

In July 1983, President Reagan established the President's Commission on Organized Crime. In its March 1986 report on drug abuse the Commission recommended drug testing for public and private sector employers.

The President should direct the heads of all Federal agencies to formulate immediately clear policy statements, with implementing guidelines, including suitable drug testing programs, expressing the utter unacceptability of drug abuse by Federal employees. State and local


\textsuperscript{90} \textit{Id.}


\textsuperscript{93} Sims, \textit{Boom in Drug Tests Expected}, N.Y. Times, Sept. 8, 1986, at 1, col. 1.

\textsuperscript{94} McBay, \textit{supra} note 60, at 648.

\textsuperscript{95} L. Do戈oloff & R. Angarola, \textit{supra} note 19, at 30.
governments and leaders in the private sector should support unequivocally a similar policy that any and all use of drugs is unacceptable. Government contracts should not be awarded to companies that fail to implement drug programs, including suitable drug testing.96

In July 1986 the Office of Personnel Management proposed that drug tests be required of all federal employees, that dismissal occur after a second positive drug test, and that the law allowing dismissal only upon a finding of drug-related impairment be repealed. The White House rejected this proposal.97 The following month the White House Domestic Policy Council recommended that drug testing be conducted on federal employees in sensitive positions, those creating reasonable suspicion of drug use, and all job applicants. The Council also proposed random testing of workers in critical positions.98 On September 15, 1986, President Reagan issued Executive Order 12,564.99 Based largely on the Council's recommendations, the Order requires the head of each Executive agency to establish a program to test for illegal drug use by employees in sensitive positions. "Sensitive positions" is defined as: those handling classified information, those serving as Presidential appointees, those in positions related to national security, law enforcement officers, those charged with the protection of life, property, and public health and safety, and those in jobs requiring a high degree of trust and confidence.100 This extremely broad definition authorizes the testing of 1.1 million of the nation's 2.1 million federal employees.101

The Executive Order specifically authorizes testing under four circumstances: (1) where there is reasonable suspicion of illegal drug use; (2) in conjunction with the investigation of an accident; (3) as a part of an employee's counseling or rehabilitation for drug use through an employee assistance program (EAP); and (4) to screen any job applicant for illegal drug use.102 The Order mandates confirmatory testing and allows the employee to provide a urine specimen in private unless there is reason to believe adulteration will occur.103

The Executive Order also prescribes the action agencies must take when an employee's test is positive. Employees will be referred to an

96. President's Commission, supra note 12, at 483.
98. Id.
100. Id. at 32,892-93.
103. Id. at 32,891.
EAP and refusal to participate in the EAP will result in dismissal. Employees in sensitive positions are removed from duty pending successful completion of rehabilitation through the EAP. Agencies must initiate disciplinary action against any employee found to use illegal drugs unless the employee satisfies three criteria: (1) the employee must voluntarily identify himself or herself as a drug user before being identified through other means; (2) the employee must seek EAP rehabilitation; and (3) the employee must refrain from illegal drug use in the future. The employee must be dismissed if he or she is found continuing to use illegal drugs after initial identification.104

Although the Executive Order has been challenged in court,105 Congress passed an appropriations bill in 1987106 that permitted implementation of the Order for the federal employees subject to drug testing.107 While legislation to require drug testing of transportation workers has been introduced in Congress,108 many of these workers are already being tested pursuant to federal regulations.109 For example, the Federal Railroad Administration regulations,110 effective in 1986, require preemployment testing for alcohol, opiates, cocaine, barbiturates, amphetamines, cannabinoids, hallucinogens, and other drugs in frequent use in the locality. Drug tests also are required after serious accidents and upon "reasonable cause."

The Department of Transportation (DOT) was the first agency to adopt a drug testing program under the Executive Order. On June 29, 1987, DOT announced that it was beginning the random testing of 30,000 civilian employees, mostly within the Federal Aviation Administration.111

The Department of Health and Human Services (HHS) is charged with promulgating scientific and technical guidelines for the federal drug

104. Id.
108. See infra text accompanying notes 206-207.
109. At the time the Executive Order was issued, about 20% of all federal agencies had a drug testing program in place or were implementing a program. Staff of the Subcommittee on Civil Service, House Committee on Post Office and Civil Service, Drug Testing in the Federal Government, 100th Cong., 1st Sess., 155-56 (1986).
111. Included in the testing program are employees with top security clearances and those with "safety-sensitive responsibilities": air traffic controllers, flight test pilots, electronic technicians, fire fighters, civil aviation security specialists, civilian Coast Guard drug enforcement personnel, vessel traffic controllers, and motor vehicle operators. In American Fed'n of Gov't Employees, AFL-CIO v. Dole, No. 87-1815 (D.D.C. Sept. 30, 1987), the testing program was upheld.
testing program. The Guidelines, issued in August 1987,\footnote{112. 52 Fed. Reg. 30,638 (1987).} detail the scientific and technical requirements, including collection of specimens, laboratory analysis, and transmittal and interpretation of test results. The Guidelines require testing for marijuana and cocaine and permit testing for any drug listed in Schedule I or II of the Controlled Substances Act.\footnote{113. \textit{Id.} at 30,639. The Controlled Substances Act, Pub. L. No. 99-646 (1986) (codified in scattered sections of 18 and 21 U.S.C.).} The Guidelines also include specific information on other drugs “most likely to be included in agency drug testing programs”—opiates, amphetamines, and PCP.\footnote{114. 52 Fed. Reg. at 30,639.} Significantly, the Guidelines contain no specific mention of testing for alcohol or other legal drugs of abuse. This fact tends to refute official claims that the testing program is an attempt to assure safety and productivity rather than a law enforcement measure.

The specimen collection procedures detailed in the Guidelines have generated considerable controversy.\footnote{115. The Guidelines have been challenged in American Fed’n of Gov’t Employees v. Bowen, No. 87-0779 (E.D. La., filed Feb. 23, 1987).} The employee may urinate in privacy “unless there is reason to believe that a particular individual may alter or substitute the specimen to be provided.”\footnote{116. \textit{Id.} at 30,639.} “To ensure that unadulterated specimens are obtained,”\footnote{117. \textit{Id.} at 30,639-40.} the Guidelines also detail the “minimum precautions” to be taken in the collection of urine specimens: (1) toilet bluing agents must be placed in the toilet bowl (presumably to prevent dilution of the sample); (2) there is to be no other source of water available in the area where the sample is given; (3) the person must present photo identification upon arrival; (4) the person must remove any unnecessary outer garments that could conceal items used to adulterate the sample; (5) the person must wash his or her hands upon arrival but may not wash again until after the sample collection has been completed; (6) immediately after collection the sample must be inspected for color and signs of contaminants and, within four minutes of urination, its temperature must be measured; and (7) if the temperature of the specimen gives rise to reasonable suspicion of adulteration or if other cause for suspicion is established, a second specimen must be obtained under direct observation.\footnote{118. \textit{Id.} at 30,640.}

The Guidelines provide procedures to verify the chain of custody\footnote{119. \textit{Id.}} and also detail the required analytical procedures. The initial screen must
be an immunoassay with confirmation using GC/MS.\textsuperscript{120} The Guidelines also set forth the necessary quality assurance measures, including laboratory proficiency testing.\textsuperscript{121}

\section*{B. Private Employers}

Although drug testing began in the private sector, it was not until public employers began testing that private sector drug testing became so widespread.\textsuperscript{122} For the most part, it is the large companies that have embraced drug testing. Among \textit{Fortune} 500 corporations, only ten percent performed urinalysis in 1982; by 1985 the figure had reached twenty-five percent;\textsuperscript{123} and by 1987 nearly fifty percent of the largest corporations performed drug testing.\textsuperscript{124}

As the size of the company declines, so too does the prevalence of drug testing. In a 1987 survey of companies with more than 500 employees, seventeen percent of the companies tested current workers for drugs and twenty-three percent tested applicants.\textsuperscript{125} Smaller companies reported less testing.\textsuperscript{126} Transportation and manufacturing companies were most likely to test, electronics/communications and insurance/finance companies were least likely to test.\textsuperscript{127} The specifics of drug testing also vary by size of the company, geography, industry, and other factors. Larger companies are more likely to use confirmatory testing and refer those testing positive to an employee assistance program; smaller companies are more likely to use only screening tests and to respond to a positive test with summary dismissal.\textsuperscript{128}

According to one study, almost all of the companies (94.5\%) that perform urinalysis test job applicants and nearly three-fourths of the companies (73\%) test current employees on a "for cause" basis.\textsuperscript{129} Only fourteen percent conducted random tests and those companies tended to

\begin{itemize}
  \item \textsuperscript{120} Id.
  \item \textsuperscript{121} Id. at 30,641-52.
  \item \textsuperscript{122} Ironically, government testing programs have been justified because of testing in the private sector. Then, governmental testing programs and advocacy of testing have been cited as the basis for increased testing in the private sector.
  \item \textsuperscript{123} Chapman, \textit{The Ruckus Over Medical Testing}, \textit{FORTUNE}, Aug. 19, 1985, at 57, 58.
  \item \textsuperscript{125} \textit{Drug Testing Popular}, \textit{OCCUP. HEALTH & SAFETY}, Aug. 1987, at 12 (based on survey by Business and Legal Reports).
  \item \textsuperscript{126} Id. at 13.
  \item \textsuperscript{127} Id.
  \item \textsuperscript{128} \textit{See Statements on Drug/Alcohol Abuse in the Workplace before House Labor Subcommittee on Health and Safety}, \textit{DAILY LAB. REP. (BNA)}, Dec. 15, 1985, at D-2.
  \item \textsuperscript{129} \textit{Survey Shows Little Use of Random Test Programs}, \textit{1 NAT'Y. REP. ON SUBSTANCE ABUSE (BNA)}, Sept. 16, 1987, at 2 (citing study by Executive Knowledgeworks).
\end{itemize}
be smaller, with a significant number of them testing people in jobs of a "sensitive or high risk nature." The most widely cited reason for testing (37%) was health and safety. Other reasons for testing were the identification of a workplace substance abuse problem (21%), the awareness of drugs as a national problem (11%), and the high-risk nature of the job (9%).

It is also valuable to consider why the companies without drug testing programs have declined to engage in testing. According to the American Management Association, the most common reasons for not performing drug testing are as follows: moral issues or privacy (68%); inaccuracy of tests (63%); negative impact on morale (53%); tests show use, not abuse (43%); employee opposition (16%); and union opposition (7%). Interestingly, fear of litigation was not mentioned, but it certainly may be an increasingly significant consideration.

V. LEGAL ISSUES
A. Constitutional Law
1. The Theories

A number of constitutional arguments have been raised to challenge the legality of employee drug testing. Because of the governmental action requirement, federal constitutional protections are limited to public employees and private employees where drug testing is mandated by federal, state, or local governments.

The most frequently raised argument is that drug testing constitutes an unreasonable search and seizure in violation of the fourth amendment. In Schmerber v. California, the Supreme Court held that taking a blood sample from a criminal defendant to determine whether he was intoxicated was a search within the meaning of the fourth amendment. Lower court decisions after Schmerber have recognized that requiring a urine sample is far less intrusive than extracting blood, but have

130. Id.
131. Id.
132. Id.
134. See Lilly, Liability Worries Curb Drug Testing, Columbus, Ohio Business First, Jan. 12, 1987, at 1, 12.
136. "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated. . . ." U.S. CONST. amend. IV.
nonetheless concluded that a mandatory urine screen also is a search for purposes of the fourth amendment.\textsuperscript{138} The limited nature of the intrusion, however, may be important in determining the validity of the search.

The fourth amendment does not bar all searches, only unreasonable ones. Therefore, it must be determined whether the drug test is unreasonable. This in turn often depends on the nature of the search: who is searched, when the search is made, how it is made, and what is done with the results.\textsuperscript{139} Courts balance the degree of intrusion of the search on the person’s fourth amendment right of privacy against the need for the search to promote some legitimate governmental interest.\textsuperscript{140}

One essential factor is whether the individual has a reasonable expectation of privacy relative to the circumstances of the search. Government employees have a reasonable expectation of privacy at work and “do not surrender their fourth amendment rights merely because they go to work for the government.”\textsuperscript{141} Yet, government employers maintain rights in conducting warrantless searches “for the proprietary purpose of preventing future damage to the agency’s ability to discharge effectively its statutory responsibilities.”\textsuperscript{142}

Three distinct privacy interests have been identified in urinalysis. First is the expectation of privacy as to the urine itself. According to one court, “[a]n individual cannot retain a privacy interest in a waste product that, once released, is flushed down the drain.”\textsuperscript{143} Another court, however, has observed that “[t]he urine excreted for a drug test . . . is not expected to be a waste product, flushed down a toilet. Indeed, precautions are taken in the test procedure to prevent the sample from being thus disposed of.”\textsuperscript{144} Second is the expectation of privacy in the information contained in the urine. “Obviously, one does not expect that he will be made to discharge urine so that it can be analyzed in order to discover the personal physiological secrets it may hold. Thus, as with blood, there is an expectation of privacy concerning the ‘information’ body fluids may


\textsuperscript{139} See infra Part VI.


\textsuperscript{142} Id.

\textsuperscript{143} Turner v. Fraternal Order of Police, 500 A.2d 1005, 1011 (D.C. 1985).

\textsuperscript{144} National Treasury Employees Union v. Von Raab, 816 F.2d 170, 175 (5th Cir. 1987).
hold.”145 Third is the expectation of privacy in the process of urination. “[T]he act of urination is a private one and, if interfered with, protected by the Fourth Amendment.”146 Therefore, policies requiring direct observation of an individual urinating would be more difficult to sustain.147

An interesting issue is whether the fourth amendment protects an individual’s refusal to submit to a mandatory urinalysis. In Everest v. Napper,148 the Atlanta Bureau of Fire Services was conducting an investigation into drug trafficking by fire fighters and one of the subjects of the investigation listed the plaintiff as one of the fire fighters who had purchased drugs from him. The plaintiff denied the allegation and refused to submit to a urinalysis. After his discharge for refusal to cooperate with the investigation, he sued claiming, among other things, a violation of his fourth amendment rights. The Eleventh Circuit, in upholding the discharge, held that “since Everest did not submit to the urinalysis, there was no ‘search’ and therefore no possible fourth amendment violation.”149

The court’s reasoning in Everest is disturbing. Although the court could have sustained the discharge on the ground that the intended search was reasonable, it is questionable whether the court could flatly state that because he refused to take the drug test there was no search and therefore no fourth amendment violation. It is unlikely that the court would want to embrace the notion that one must acquiesce in an illegal search in order to have standing to challenge the search when negative consequences already have attached to the refusal. At the least, it would seem to violate substantive due process to discharge a public employee for refusal to consent to an unlawful act.150

Other courts to consider this issue, unlike the Everest court, have not focused on whether the refusal negated the search, but whether it was lawful for the government to require consent to the search. For example, in McDonell v. Hunter,151 the Eighth Circuit stated: “If a search is unreasonable, a government employer cannot require that its employees consent to that search as a condition of employment.”152

146. Turner, 500 A.2d at 1011.
147. See National Treasury Employees Union, 816 F.2d at 177.
148. 825 F.2d 341 (11th Cir. 1987).
149. Id. at 345.
150. The court rejected the plaintiff’s substantive due process claim without linking the due process claim to the fourth amendment claim. Id. at 347. Judge Kravitch, who concurred in part and dissented in part, believed that there was a search. Id. at 348.
151. 809 F.2d 1302 (8th Cir. 1987).
152. Id. at 1310. Accord National Fed’n of Fed. Employees, 818 F.2d at 943.
A related but distinct constitutional protection has been established to protect the "right of privacy." Although this right is not explicit in the Constitution, the Supreme Court has found that it includes the individual's interest in avoiding disclosure of personal matters and independence in making certain kinds of important decisions, such as marriage, procreation, and family relationships. This privacy interest, however, is not absolute and must be balanced against legitimate governmental interests in disclosure.

In the context of drug testing, the courts have been reluctant to apply privacy principles distinct from those recognized under the fourth amendment.

The "privacy" rights of the public employees have been vindicated under the Fourth Amendment by this court's determination that [the transit agency's] random program is unreasonable. To find that the testing procedure implicates a further, separate protection would require an expansive reading of the Fourteenth Amendment that this court is unwilling to undertake.

Another constitutional argument often raised in drug testing cases is procedural due process. The argument has been used to challenge both test procedures and employee termination procedures. As to the former, it has been held that termination of employment on the basis of an unconfirmed EMIT test violated due process and that it violated due process when voluntarily-submitted urine samples were destroyed before they could be sent out for independent testing. Even the addition of confirmatory testing may not satisfy due process concerns about the proper handling of the specimen and cleaning and calibration of test equipment. As to the latter, employee termination procedures, the termination of an individual's employment must be preceded by notice and opportunity for a hearing appropriate to the nature of the case, although a full, predischarge hearing is not required.

Several other federal constitutional theories have been advanced to challenge drug testing. It has been asserted that drug testing violates the first amendment freedom of religion, fifth amendment ban on self-in-

156. Banks v. FAA, 687 F.2d 92 (5th Cir. 1982).
crimination,\textsuperscript{159} ninth amendment protection of liberty,\textsuperscript{160} and fourteenth amendment substantive due process\textsuperscript{161} and equal protection.\textsuperscript{162} None of these theories have met with much success.

State constitutional law also may be relevant to drug testing in one of two ways. First, the drug testing of government employees may violate a state constitution that prohibits unreasonable searches and seizures.\textsuperscript{163} Second, unlike the United States Constitution, there is no governmental action requirement under certain state constitutions. In seven states,\textsuperscript{164} the state constitution contains a protection for the right of privacy that may be violated by the mandatory drug testing of private sector employees.\textsuperscript{165}

2. Trends in the Cases

Although there are a few older cases,\textsuperscript{166} the main body of drug testing cases has been decided since 1985. Four decisions on the merits have been reached by four different circuits of the United States Court of Appeals.\textsuperscript{167} The drug testing program was upheld in each case. Nevertheless, a brief look at the cases should dispel the notion that the courts have given a broad endorsement to drug testing in the workplace.

In \textit{Shoemaker v. Handel},\textsuperscript{168} the Third Circuit upheld a regulation of the New Jersey Racing Commission\textsuperscript{169} which provided, among other things, for daily breathalyzer testing and random urinalysis of jockeys. The court based its decision on the pervasively regulated nature of horse

\textsuperscript{159} National Treasury Employees Union v. Von Raab, 649 F. Supp. 380, 388 (E.D. La. 1986), rev'd, 816 F.2d 170, 181 (5th Cir. 1987).
\textsuperscript{160} Rushton, 653 F. Supp. at 1528.
\textsuperscript{161} Everett, 825 F.2d at 347.
\textsuperscript{162} \textit{Id.} at 348.
\textsuperscript{166} E.g., Banks v. FAA, 687 F.2d 92 (5th Cir. 1982) (setting aside discharges of air traffic controllers because the urine samples had been destroyed before they could be retested by an independent laboratory); Division 241, Amalgamated Transit Union v. Suscy, 538 F.2d 1264 (7th Cir.), \textit{cert. denied}, 429 U.S. 1029 (1976) (upholding mandatory drug testing for bus drivers involved in a serious accident or suspected of being intoxicated).
racing and the need to maintain the integrity of the sport. An argument could be made that drug testing is justified because of the need to ensure safety, but pervasive regulation of an industry has never justified an intrusive bodily search and seizure\textsuperscript{170} and it is difficult to see how drug testing is essential to promote the integrity of horse racing. A breach of the sport's integrity is more likely to be related to gambling; evidence of the influence of drugs in horse racing is more likely to be found in the urine of the horses.

In \textit{National Treasury Employees Union v. Von Raab},\textsuperscript{171} the Fifth Circuit upheld the drug testing program of the Customs Service. According to the court, the drug testing was reasonable because it was scheduled in advance, was not observed, it used state of the art confirmatory procedures, it was limited to employees who voluntarily sought a transfer to a sensitive position, and was essential because Customs Service employees are law enforcement officers who can carry firearms and are responsible for stopping the flow of illegal drugs. In dissent, Judge Hill doubted the effectiveness of the program in achieving its goals and therefore found the drug testing to be unreasonable.

In \textit{McDonell v. Hunter},\textsuperscript{172} the Eighth Circuit upheld the drug testing of employees of the Iowa Department of Corrections. The testing was done on the basis of reasonable suspicion as well as "systematic random selection.”

In our opinion the use of drugs by employees who come into contact with the inmates in medium or maximum security facilities on a regular day-to-day basis poses a real threat to the security of the prison. . . . [E]mployees who use the drugs, and who come into contact with the prisoners, are more likely to supply drugs to the inmates. . . .\textsuperscript{173}

In \textit{Everett v. Napper},\textsuperscript{174} the Eleventh Circuit upheld the discharge of an Atlanta fire fighter suspected of dealing in illegal drugs who refused to submit to urinalysis. Although departmental rules prohibited drug use, it is not clear what probative value a positive or negative drug test would have had on the issue of drug dealing.

Each of the decisions of the courts of appeals is subject to criticism, but even the drug testing that they upheld is carefully limited in nature and scope. District court cases decided during the same time period indicate a similar approach. Drug testing has been upheld only for job cate-

\begin{footnotes}
\item \textsuperscript{171} 816 F.2d 170 (5th Cir. 1987).
\item \textsuperscript{172} 809 F.2d 1302 (8th Cir. 1987).
\item \textsuperscript{173} \textit{Id.} at 1308.
\item \textsuperscript{174} 825 F.2d 341 (11th Cir. 1987).
\end{footnotes}
categories where there was a substantial public safety concern. Of the cases upholding drug testing, two involved employees of nuclear power plants; the other cases involved the employee of a utility who worked with high voltage electricity, air traffic employees, Defense Department civilian employees in "critical" jobs, and transportation workers.

District court cases striking down drug testing fall into three categories. First, they involved jobs that were not safety-specific, such as court clerk and school bus attendant. Second, they include a case where the employer was unable to point to any objective facts leading to a reasonable suspicion of an individual or class-wide drug abuse problem needed to justify testing fire fighters or police. Third, they consist of cases where the testing was performed on a random or mass "round-up" basis. Random testing of transit workers was struck down in two cases. Other cases striking down random testing involved police cadets and Army employees. The surprise mass testing of all fire fighters in a city was also held to be unconstitutional.

Finally, state court decisions based on federal constitutional law have reached results similar to the federal court decisions. While the testing of corrections officers was upheld in one case, other cases have struck down the testing of school teachers, police, and fire fighters.

189. Caruso, 133 Misc. 2d 544. But see Turner, 500 A.2d 1005 (reasonable suspicion found to test individual).
B. Drug Testing Legislation

With federal constitutional protections inapplicable to most private sector employees and uncertain for even public sector employees, opponents of drug testing have turned to the legislatures. Bills to limit or prohibit drug testing have been introduced at the local, state, and national level and several laws have been enacted. Proponents of drug testing have countered with bills to require or permit drug testing, although such efforts have been less successful.

1. Local Laws

The most important local drug testing law yet enacted is San Francisco's ordinance,191 which applies to any person working in San Francisco except uniformed police, fire fighters, police dispatchers, and emergency vehicle operators. The ordinance prohibits employee drug testing unless "the employer has reasonable grounds to believe that an employee's faculties are impaired on the job; and . . . the employee is in a position where such impairment presents a clear and present danger to the physical safety of the employee, another employee or to a member of the public."

The ordinance, which took effect on December 29, 1985, became law without the signature of Mayor Feinstein, who refused to sign the ordinance because she considered the measure too stringent. In her view, "clear and present danger" is too difficult to satisfy and gives protected status to persons under the influence of drugs.192

The ordinance also may be questioned because the key provisions are written in the conjunctive. This means that, to be tested, an individual must be in a safety-related job and the employer must have a reasonable belief that the employee is impaired. For an employee who works alone, such as a truck driver, it would be very difficult for an employer to form a reasonable belief of impairment before the occurrence of an accident.

2. State Laws

At least seven states have enacted drug testing laws and many new laws are likely to be enacted in the next few years.193 The laws passed in

Connecticut,\textsuperscript{194} Iowa,\textsuperscript{195} Minnesota,\textsuperscript{196} Montana,\textsuperscript{197} Rhode Island,\textsuperscript{198} and Vermont\textsuperscript{199} are similar in the following respects: (1) all of the laws seek to limit drug testing, but do not prohibit testing completely; (2) all of the laws permit the preemployment testing of applicants and some permit the periodic testing of employees if advance notice is given; (3) exceptions are often made for public safety officers and employees in safety-sensitive jobs; (4) "for cause" testing is generally allowed if there is "probable cause," "reasonable cause," or "reasonable suspicion" that an employee is impaired; (5) most of the laws require that the sample collection be performed in private; (6) all of the laws require confirmatory testing; and (7) most of the laws specifically require drug testing records to be kept confidential.

Utah's Drug and Alcohol Testing Act\textsuperscript{200} differs significantly from the other laws. The Utah law permits drug testing as a condition of hiring or continued employment so long as employers and managers also submit to testing periodically. In encouraging drug testing, the statute requires that employers performing drug testing have a written testing policy and that confirmatory tests be used. If an employer satisfies these requirements, the law immunizes the employer from liability for defamation or other torts based on the drug testing. It also prohibits any action based on the failure to conduct a drug test.

The enactment of state laws restricting private sector drug testing raises the issue of whether such state laws are preempted to the extent that they conflict with federal regulations mandating the drug testing of certain private sector workers. In French v. Pan American Express, Inc.,\textsuperscript{201} an airline pilot was fired after he refused to take a drug test following a tip that the pilot was seen smoking marijuana while off duty. The pilot brought an action in state court under Rhode Island's drug testing law and the case was removed to federal court. The district court will have to decide whether FAA regulations preempt the Rhode Island statute.\textsuperscript{202}

\begin{itemize}
\item \textsuperscript{194} Pub. Act No. 87-551 (1987).
\item \textsuperscript{195} IOWA H.F. 469 (1987).
\item \textsuperscript{196} MINN. STAT. ANN. §§ 181.93 to .995 (West 1987).
\item \textsuperscript{197} MONT. CODE ANN. § 39-2-304 (1987).
\item \textsuperscript{198} R.I. GEN. LAWS §§ 28-6.5-1 to -2 (1987).
\item \textsuperscript{199} Vt. STAT. ANN. tit. 21, Ch. 5, §§ 511-520 (1987).
\item \textsuperscript{200} UTAH CODE ANN. §§ 34-38-1 to -15 (1987).
\item \textsuperscript{201} No. 87-517 (D.R.I., filed Oct. 10, 1987), cited in 1 NAT'L REP. ON SUBSTANCE ABUSE (BNA), Oct. 14, 1987, at 8.
\item \textsuperscript{202} If state laws are held not to be preempted, employers will be tempted to require drug tests when employees are working in a state without a drug testing law—either during their regular duties or after being transported to the state for the purpose of drug testing. A similar controversy sur-
DRUG TESTING IN THE WORKPLACE

If state laws are held not to be preempted, employers will be tempted to require drug tests when employees are working in states without a drug testing law. Such evasions undermine state laws and increase the pressure for federal legislation.

3. Federal Laws

Not surprisingly, bills introduced into Congress have reflected a wide range of opinions on the efficacy of drug testing for federal employees. Some bills would require testing, others would restrict or prohibit it. The only measure actually enacted dealing with drug testing so far has been a supplemental appropriations bill that permitted the testing contemplated by Executive Order 12564.

The most important piece of legislation considered by Congress, the Transportation Employee Safety and Rehabilitation Act of 1987, would establish drug testing (preemployment, periodic, random, reasonable suspicion, and post-accident) for persons in safety-sensitive positions in the aviation, rail, and motor carrier industries. The legislation would cover 2.5 million truck and bus drivers, 300,000 railroad workers, and 200,000 aviation workers.

C. Rehabilitation Act and State Handicap Discrimination Laws

1. Coverage under the Rehabilitation Act

The Rehabilitation Act of 1973 is the primary federal law prohibiting employment discrimination against handicapped individuals. The law applies to the federal government (section 501), government contractors with contracts in excess of $2500 (section 503), and recipients of federal financial assistance (section 504). Section 501 requires each federal agency or department to adopt an affirmative action plan for the hiring, placement, and advancement of handicapped individuals. Surrounding polygraphs led one jurisdiction, the District of Columbia, to prohibit employers from administering polygraphs and from using polygraph results. D.C. CODE ANN. § 36-901 (1981).

209. Id. § 791.
tion 503 requires federal contractors to take affirmative action to employ and advance in employment "qualified handicapped individuals." Section 504 prohibits recipients of federal financial assistance from discriminating against an "otherwise qualified handicapped individual."

The 1978 amendment to the Act specifically provides that the denial of employment opportunities on the basis of alcohol or drug use is justified only under limited circumstances. "[The term handicapped individual] does not include any individual who is an alcoholic or drug abuser whose current use of alcohol or drug abuse . . . would constitute a direct threat to property or the safety of others."

The 1978 amendment is limited to employment and applies only to federal contractors and recipients of federal financial assistance. It does not apply to federal agency employers. As discussed below, however, the exclusion of section 501 in the amendment should not be read to mean that alcoholics and drugs are not protected under section 501. Although there are no reported section 501 drug cases, discrimination against alcoholics under section 501 has been held to violate the Rehabilitation Act.

There is little legislative history surrounding the 1978 amendment. The amendment was sponsored by conservative members of Congress to correct a perceived flaw in the Act, whereby affirmative action plans seemingly would mandate the hiring of "active" alcoholics and drug abusers, resulting in a threat to public safety. Viewed as a narrow, clarifying exception (and the provision is written in the negative), it merely excludes some alcoholics and drug abusers—those not currently capable of performing the job. Other alcoholics and drug abusers (those not posing a direct threat) would be covered if they met the statutory definition of "handicapped individual": "any person who (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (ii) has a record of such an impairment, or (iii) is regarded as having such an impairment."

In School Board v. Arline, the Supreme Court noted that Congress did not intend to ban completely the hiring of alcoholics or drug abusers.

Congress recognized that employers and other grantees might have le-

210. Id. § 793.
211. Id. § 794.
212. Id. § 706(7)(B).
DRUG TESTING IN THE WORKPLACE

217. Id. at 1130 n.14.

218. The courts generally have rejected the argument that, because working is a major life activity, the denial of employment because of a physical or mental condition automatically makes such a disqualifying condition an impairment. For example, in Tudyman v. United Airlines, 608 F. Supp. 739 (C.D. Cal. 1984), an applicant was rejected for the position of flight attendant because his weight exceeded the airline’s maximum weight permitted for a man of his height. The applicant was a body builder and he claimed that his rejection based on physique was handicap discrimination prohibited by § 504. The court rejected the plaintiff’s claim and held that he was not a handicapped individual.


221. The plaintiffs also proceeded under the Civil Rights Act of 1871, 42 U.S.C. § 1983 (1982), alleging violations of the due process and equal protection clauses of the fourteenth amendment.
Drug addiction is a serious public problem. It is therefore not surprising that Congress would wish to provide assistance for those who have overcome their addiction and give some support and incentive for those who are attempting to overcome it... [P]ersons with histories of drug use, including present participants in methadone maintenance programs, are "handicapped individuals" within the meaning of the statutory and regulatory language.\footnote{222}

The 1978 amendment supports rather than undercuts this interpretation.

An example of a case from the second category, which concerns current drug abusers, is \textit{Heron v. McGuire}.\footnote{223} A police officer was dismissed because of his addiction to heroin. The Second Circuit held that the dismissal did not violate section 504. The court reasoned that since Heron’s heroin addiction made him unfit for duty, the plaintiff was not a "handicapped individual" under the Act. It was therefore unnecessary to reach the issue of whether the plaintiff was "otherwise qualified."\footnote{224}

In terms of the size of the employment pool, the third category, current or former casual drug users, is the most important. It is also the most difficult conceptually. For example, in \textit{McCleod v. City of Detroit},\footnote{225} fire fighter applicants were rejected from employment on the basis of positive tests for marijuana. They brought an action under section 504 claiming discrimination on the basis of handicap. The action was dismissed on the ground that the plaintiffs were not "handicapped individuals" within the meaning of the Rehabilitation Act. The court reasoned that, under section 706(7)(B), the plaintiff must show that the impairment "substantially limits one or more of such person’s major life activities." The regulations under the Rehabilitation Act interpret "major life activities" to include such activities as "caring for one’s self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working."\footnote{226} Nevertheless, simply because the defendant refused to hire an individual on the basis of an impairment does not mean there has been...
a substantial limitation of the individual's ability to work. An impairment "substantially limits" working only if the individual would be disqualified from all or a significant number of similar jobs. 227

The court's reasoning in *McCleod* raises the question of whether it is logical to extend the protections of the Rehabilitation Act to former (and some current) drug addicts, but to deny coverage to occasional drug users, former occasional drug users, or those regarded as occasional drug users. The answer is that the Rehabilitation Act was not intended to prohibit all unfairness in employment or even all unfairness in employment related to physical or medical conditions. It was designed to prevent discrimination against the *severely* handicapped. 228 Consequently, the courts have refused to extend the Act's coverage based on strabismus (crossed-eyes), 229 left-handedness, 230 varicose veins, 231 and similar conditions. Although alcoholics are specifically covered by the Rehabilitation Act, it is unlikely that Congress also sought to cover every casual drinker, even though it may be more logical for an employer to want to discharge an alcoholic instead of a casual drinker.

In *Forrisi v. Bowen*, 232 the Fourth Circuit held that a telephone company employee, whose job required him to climb utility poles, was not a "handicapped individual" under the Rehabilitation Act because he suffered from acrophobia.

The Rehabilitation Act assures that truly disabled, but genuinely capable, individuals will not face discrimination in employment because of stereotypes about the insurmountability of their handicaps. It would debase this high purpose if the statutory protections available to those truly handicapped could be claimed by anyone whose disability was minor and whose relative severity of impairment was widely shared. Indeed, the very concept of an impairment implies a characteristic that is not commonplace and that poses for the particular individual a more general disadvantage in his or her search for satisfactory employment. 233

To determine whether a particular impairment is a handicap to an individual, the courts have considered whether the impairment is a significant barrier to employment. This, in turn, depends on "the number and type of jobs from which the impaired individual is disqualified, the geographical area to which the individual has reasonable access, and the

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231. Oesterling v. Walters, 760 F.2d 859 (8th Cir. 1985).
232. 794 F.2d 931 (4th Cir. 1986).
233. Id. at 934.
individual's job expectations and training." 234 These principles, however, have yet to be developed fully. Thus, for example, it is not clear how wide a range of jobs should be considered in analyzing whether an impairment is a significant barrier to employment.

The limited view of the coverage of the Rehabilitation Act set out in the preceding cases is certain to be challenged in cases involving marijuana. A variety of arguments may be raised, including the following two. First, because of the widespread use of drug testing, casual marijuana use is detected by many employers and therefore is a significant barrier to employment. Second, disqualification of applicants and employees based on casual marijuana use is often based on a misconception that such an individual is so impaired by the substance that the individual is a drug abuser. Therefore, regardless of the inadequacy of the factual basis, the individual is "regarded" as a drug abuser much as if the individual were addicted to heroin or some "hard drug."

A number of other questions need to be resolved before there is any clarity on the issue of the coverage of casual drug users. For example, should marijuana use be a handicap for some jobs but not others? Should the same criteria apply to individuals addicted to marijuana (psychologically or otherwise) as opposed to irregular casual users? What standard should apply to abuse of prescription drugs on a casual basis? To further complicate matters, as discussed below, different standards are developing under the various state handicap discrimination laws.

2. Coverage under State Laws

All fifty states and the District of Columbia have laws prohibiting discrimination in employment on the basis of handicap. Some of the laws specifically include alcoholics and drug abusers; others specifically exclude them from coverage. Some other states have resolved the issue through case law. A breakdown of each of these state laws follows. It reveals that the issue of coverage is unresolved in most states.

234. Id. at 933. See E.E. Black, Ltd., 497 F. Supp. 1088.
Table 6
The Coverage of Alcohols (A) and Drug Abusers (D) or Rehabilitees (R) Under State Handicap Discrimination Laws

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1. Law covers only public sector employees
2. Coverage based on state Executive Order
3. Drug Testing under Handicap Discrimination Laws

Regulations implementing section 501 of the Rehabilitation Act (applicable to federal agencies) prohibit the use of any employment test or selection criterion that screens out or tends to screen out handicapped persons unless the test or criterion is shown to be job related. Similar regulations apply to federal financial recipients and federal contractors. Although individuals testing positively may or may not be "screened out," they are certainly subject to different treatment. Therefore, at least as to some federal employees, it is arguable that drug testing is not job related. The Civil Service Reform Act also prohibits the consideration of an individual's off-work activities in employment matters. Because drug tests measure prior exposure and not impairment or intoxication, drug testing arguably invades the off-work lives of employees.

Some state handicap discrimination laws also could be used to prohibit drug testing. For example, regulations implementing California's Fair Employment Practice Law specifically limit pre-employment inquiries, medical examinations, and selection practices to job-related criteria.

4. Reasonable Accommodation

After a positive drug test, the Rehabilitation Act and other handicap discrimination laws may prohibit summary discharge or other adverse treatment. The federal law and many state laws require "reasonable accommodation." It is not settled what accommodations may be required in the case of a drug abuser. There are, however, several cases involving alcoholics in which reasonable accommodation was required where the employee was willing to undergo treatment. Therefore, an employer may be required to offer the employee rehabilitation instead of dismissal in the event that drug abuse is detected. (As to applicants, the employer probably would have to permit reapplication without prejudice after rehabilitation.)

236. 45 C.F.R. § 84.13(a) (1987).
239. CAL. ADMIN. CODE §§ 7293.5 to 7294.2 (1985).
It is not clear whether the expenses of rehabilitation must be borne by the employer. Reasonable accommodation generally is not required if it would cause undue hardship to the employer. Accordingly, the employer may only be required to provide a leave of absence for the purpose of rehabilitation or, if the employee is able to continue working during rehabilitation, a work schedule modification or other arrangement to facilitate treatment.

D. Title VII of the Civil Rights Act of 1964

Title VII of the Civil Rights Act of 1964 prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin. If an employer were to adopt a drug screening program that had a disparate impact along lines proscribed by Title VII, the employer would have to prove that the screening program was compelled by business necessity and was the least onerous means of achieving those ends.

In *New York City Transit Authority v. Beazer*, the New York City Transit Authority (TA) had a policy of not hiring drug users, including individuals undergoing methadone maintenance treatment for curing heroin addiction. The plaintiffs attempted to prove this rule's discriminatory effect by showing that eighty-one percent of employees referred to the TA's medical consultant for suspected drug violations were black or Hispanic, and that between sixty-two percent and sixty-five percent of all methadone-maintained persons in New York City were black or Hispanic. The United States Supreme Court rejected the plaintiffs' Title VII claim and held that, even if the statistics established a prima facie case of discrimination, "it is assuredly rebutted by TA's demonstration that its narcotics rule . . . is 'job related'". The Court also rejected a challenge to the rule based upon the equal protection clause of the fourteenth amendment. The Court said: "No matter how unwise it may be for TA to refuse employment to individual car cleaners, track repairmen, or bus drivers simply because they are receiving methadone treatment, the Constitution does not authorize a federal court to interfere in that policy.


242. The fact that an employer may not be required to pay for rehabilitation as a matter of law does not mean that provision of such services is not a sound business policy. Drug rehabilitation also may be included in the employee's health insurance plan.


245. Id. at 587.
Drug testing policies also could involve other categories of discrimination prohibited by Title VII, such as religion. In Toledo v. Nobel-Sysco, Inc., a restaurant supply company refused to hire as a truck driver a member of the Native American Church because he used peyote, a hallucinogen, during religious ceremonies. The services were not held at regular times and the company claimed that the plaintiff had to be available to drive seven days a week. The court held that the company was required to make the reasonable accommodation of simply not permitting the plaintiff to drive while under the influence of peyote. The company subsequently offered the job to the plaintiff.

E. Collective Bargaining Law

1. Duty to Bargain

An employer's ability to implement a drug testing program may be limited if the employees are represented by a labor union. Sections 8(a)(5), 8(b)(3), and 8(d) of the National Labor Relations Act (NLRA) require the employer and union to bargain in good faith with respect to wages, hours, and other terms and conditions of employment. A drug testing program would be considered a "condition of employment" and therefore a "mandatory" subject of bargaining. Thus, employers may not implement drug testing unilaterally without prior bargaining on the issue with the union. The Railway Labor Act (RLA), applicable to railroad and airline employees, contains similar language.

A union seeking to challenge an employer's unilateral implementation of drug testing may do so in one of three ways. It can file a charge

246. Id. at 594.
248. 29 U.S.C. §§ 158(a)(5), (b)(3), and (d) (1982).
249. The subjects of collective bargaining are divided into three categories: illegal, which may never be included in a collective bargaining agreement; nonmandatory or permissive, which may be lawfully included but about which neither party is obligated to bargain; and mandatory, which involve issues that vitally affect employees and about which both sides have a duty to bargain in good faith. See NLRB v. Wooster Div. of Borg-Warner Corp., 356 U.S. 342 (1958); R. GORMAN, BASIC TEXT ON LABOR LAW 498 (1976).
with the National Labor Relations Board (NLRB); file a grievance pursuant to the collective bargaining agreement, with arbitration often the final step in the grievance process; or it can seek to enjoin the employer from implementing the testing program pending the outcome of arbitration. Although an unfair labor practice proceeding before the NLRB or a grievance under a collective bargaining agreement is possible, an injunction offers the possibility of immediate relief. The union, however, must sustain a heavy burden of proof. To obtain an injunction the union must prove a likelihood of success on the merits, irreparable harm if an injunction is not issued, and, according to some courts, that the public interest favors granting the injunction.

Union attempts to enjoin drug testing have met with little success. Most courts deny injunctions because there is an inadequate showing of irreparable harm. If a new testing plan violates existing terms of a collective bargaining agreement, as opposed to the more abstract "duty to bargain," the courts may be more willing to grant an injunction. For example, in one case an employer was enjoined from unilaterally changing an existing drug testing program, adopted pursuant to collective bargaining, to permit random testing with little prior notice.

In cases where the parties are covered by the RLA, unions face an additional problem in attempting to obtain an injunction. If the employer's action is arguably comprehended by the collective bargaining agreement, the dispute will be considered "minor" under the RLA and no injunction will be issued. For example, where urinalysis had been

254. See infra notes 263-274 and accompanying text.
used as a part of routine medical examinations for twenty years, the addition of drug testing to the urinalysis was held to be a minor dispute.\textsuperscript{259} Similarly, the addition of post-accident and post-furlough drug testing was held to be a minor departure from existing practices.\textsuperscript{260}

2. Arbitration

As more collective bargaining agreements contain provisions covering drug policies and programs, including drug testing, arbitrators increasingly are being called upon to interpret these provisions and to determine whether an employer had the authority to implement a challenged program or to take a particular disciplinary action against an employee pursuant to the agreement. If the agreement is silent on the issue of drug testing, the arbitrator often must decide if the employer's unilateral implementation of drug testing is authorized by another contract provision, such as a "management function" clause, a medical testing for fitness clause, or a safety and health clause.\textsuperscript{261} If the agreement authorizes limited drug testing, the arbitrator often must determine if the employer has exceeded the limitations.\textsuperscript{262}

Many collective bargaining agreements permit drug testing if the employer has "probable" or "reasonable" cause.\textsuperscript{263} Although there has been some variability in the decisions, most arbitrators and courts have reached at least a partial consensus that reasonable cause to test requires some individualized suspicion based on management observation.\textsuperscript{264} In other words, there must be "overt behavior or conduct of the employee relative to his job that establishes probable cause that the employee is under the influence of alcohol or drugs."\textsuperscript{265} Mere statistical evidence of high absenteeism or tardiness may not establish reasonable cause to test.\textsuperscript{266}

The grievances of individual employees involving drug testing usually arise in the context of an employee who was discharged. In drug-

\textsuperscript{260} Brotherhood of Maintenance of Way Employees, Lodge 16, 802 F.2d 1016. See IAM v. Trans World Airlines, Inc., No. 87-0403 (D.D.C. Feb. 20, 1987) (new policy statement on drugs and alcohol was merely a "refinement" of existing rules).
\textsuperscript{261} See Denenberg & Denenberg, supra note 45, at 388-89.
\textsuperscript{262} Id.
\textsuperscript{263} Id. at 397-98.
\textsuperscript{264} Id. at 390-91.
\textsuperscript{266} Denenberg & Denenberg, supra note 45, at 391.
related discharge cases many arbitrators require a higher standard of proof than in other discharge cases—"clear and convincing" evidence instead of mere "preponderance" of the evidence. 267 The reason for this higher standard is that possession of a controlled substance is a crime and discharge for a drug offense will make it difficult for the employee to obtain another job. 268

In meeting this heightened burden of proof the employer often will need to prove the accuracy of the test, the chain of custody of the specimen, and the qualifications of the laboratory. 269 In addition to a positive drug test, to justify a discharge the employer may be required to prove that there was corroborating evidence of impairment on the job. 270 Similarly, arbitrators often require the employer to prove a connection between drug use and job performance, safety, customer relations, or corporate reputation. 271

As a general rule, arbitrators often consider the following to be prerequisites for valid employer discipline: (1) the employee must have had notice of the prohibition and of the corresponding penalty; (2) the rule must have been fairly applied; (3) management must have investigated the charges and given the employee a reasonable chance to answer them; and (4) the severity of the discipline must fit the offense. 272 These criteria have been applied in the context of an employee with a positive drug test. 273 If the employee refuses to submit to a drug test, some arbitrators will uphold a discharge based on insubordination, while others require corroborating evidence because refusal to submit to a test does not prove the use of drugs. 274

One final effect of grievance procedures under a collective agreement may be to preclude a discharged employee from bringing a common law


269. Denenberg & Denenberg, supra note 45, at 392-93, 404-05.


action. Lawsuits based on invasion of privacy and wrongful discharge have been held to be preempted by the federal labor law governing collective bargaining agreements.

F. Unemployment Insurance and Workers' Compensation

As drug testing becomes increasingly common, a number of other employment laws may be affected by the results of drug tests or by the refusal of employees to take drug tests. One such law involves unemployment insurance. Employees are ineligible for unemployment insurance benefits if they are discharged for misconduct. Intoxication or impairment from drugs would constitute misconduct, but it is not clear what evidentiary value will be accorded to drug testing results, inasmuch as the drug tests measure prior exposure and not impairment.

In *Glide Lumber Products Co. v. Employment Division*, an employee was dismissed after he tested positive for marijuana in a random drug test. The Oregon Court of Appeals held that he could not be denied unemployment compensation benefits absent evidence of on-the-job intoxication or impairment. Merely testing positive on a drug test was not "misconduct connected with work" which would justify denial of benefits pursuant to the Oregon Unemployment Compensation law.

A related issue is whether the refusal to take a drug test constitutes misconduct. There have been only a few drug testing cases, but in analogous cases involving employee refusals to take polygraphs, the courts have reached divergent results.

The unemployment compensation cases point out a basic inconsistency in our employment laws. If a drug test is irrelevant to job performance, then employers should not be permitted to test at all. On the other hand, if the absence of urinary metabolites of certain substances can be made a valid condition of employment (such as in certain safety-sensitive occupations) and the employee has prior notice of this policy, then an employee testing positive has engaged in "misconduct" warranting disqualification from benefits.

Workers' compensation laws also may be affected by drug testing.

276. Strachan v. Union Oil Co., 768 F.2d 703 (5th Cir. 1986).
Most state workers' compensation laws deny compensation to persons injured on the job while intoxicated.\textsuperscript{280} Virtually all of the cases have involved the use of alcohol, but intoxication may be based on other drugs as well.\textsuperscript{281} In fact, Ohio's law was amended in 1986 to include any "controlled substance not prescribed by a physician."\textsuperscript{282} As with unemployment insurance, it is not clear what evidentiary effect will be given to a positive drug test in attempting to prove intoxication, but it is an issue that has been noted by at least one state legislature. Iowa's 1987 law limiting employee drug tests exempts "drug tests conducted to determine if an employee is ineligible to receive workers' compensation."\textsuperscript{283} It is also not clear whether an employee's refusal to submit to a drug test will have an adverse effect on eligibility for benefits.

In \textit{Association of Western Pulp \\& Paper Workers v. Boise Cascade Corp.},\textsuperscript{284} a union brought an action against an employer claiming, among other things, that the employer's drug testing program violated a provision of the Oregon workers' compensation law prohibiting discrimination because a worker applied for benefits. The union argued that employees were discouraged from filing injury reports because of the employer's policy of requiring post-accident drug testing. The court dismissed the action. "Workers are disciplined not because they apply for benefits or fill out accident reports, but because they either refuse to take the test, or fail it."\textsuperscript{285}

\section*{G. Common Law}

At common law, employees working without an express contract, either written or oral, are deemed to be "at-will" employees. This means that they may be fired at-will for almost any reason by the employer at any time. In recent years, three main exceptions to the at-will doctrine have emerged to lessen the often harsh effects of that rule.\textsuperscript{286} First, contractual limitations on employer prerogatives may be implied from provisions in employee handbooks or personnel manuals.\textsuperscript{287} Second, discharges in violation of public policy, such as for serving on jury duty,
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are prohibited. Third, arbitrary and bad faith discharges may violate an employer's duty of good faith and fair dealing.

The exceptions to the at-will doctrine are a newly emerging area of law which vary greatly by jurisdiction. Where one or more exceptions are recognized, they operate only after a discharge has taken place to provide a remedy in tort or contract. Therefore, in the context of drug testing, employees who were discharged because of a refusal to take a test or because of a positive test may, at best, have a legal action. In terms of the public policy exception, the most widely recognized of the three exceptions, an action is most plausible where the employer required that the act of urination be observed. Arguably, this invasion of privacy would contravene public policy.

Thus far, there have been few common law wrongful discharge actions brought by private sector employees based on drug testing. In Satterfield v. Lockheed Missiles & Space Co., an employee was required to have a urine drug screen as a part of his annual physical. He was fired after an unconfirmed EMIT test showed positive for marijuana. In granting summary judgment for the company, the court rejected the various theories under which the plaintiff asserted that he was wrongfully discharged, as well as actions for intentional infliction of emotional distress and invasion of privacy.

As in Satterfield, tort actions for defamation, invasion of privacy, intentional infliction of emotional distress, or other theories are often brought in addition to, or in lieu of, an action for wrongful discharge. Although the courts have not been receptive to wrongful discharge claims, it is clear that the wrongful disclosure of sensitive drug testing

291. For a discussion of the use of state constitutional law by private sector employees, see supra notes 163-165 and accompanying text.
information may lead to common law tort liability. Employers are protected against liability for defamation by a limited privilege to disclose employee personnel records, but the privilege will be lost if the disclosure is made with reckless disregard for the truthfulness of the disclosure or if there is excessive publication of the defamatory information. In O'Brien v. Papa Gino's of America, Inc., a former employee was awarded $448,200 in damages for defamation and invasion of privacy where the employer falsely stated that the individual was discharged for using cocaine.

In Houston Belt & Terminal Railway v. Wherry, a railroad employee was tested for drugs after fainting following an accident on the job. The initial test result showed a "trace" of methadone, but a follow-up test showed the presence of a normal compound whose characteristics resemble methadone. The employee was later discharged for failure to report his accident in a timely manner. The railroad wrote a letter to the Department of Labor stating that the employee "passed out and fell" and that "traces of methadone" were present in his system. The Texas Court of Civil Appeals affirmed an award of $150,000 in compensatory damages and $50,000 in punitive damages based on this and other statements. The court stated, "We think the jury was entitled to conclude from the evidence that they made false statements in writing that he was a narcotics user when they knew better."

Tort actions based on employee drug testing are likely to extend beyond the actions brought by employees against their employers. For example, negligence actions may be brought by employees against drug testing laboratories and actions based on negligence and other theories may be brought by companies against drug laboratories.

The final type of tort action, the one most feared by employers and which has served as a justification for drug testing, is an action for damages brought by a third party who suffered injuries caused by a drug-

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296. 780 F.2d 1067 (1st Cir. 1986).
298. *Id.* at 752.
impaired employee of the defendant-company. The plaintiffs may argue, among other things, that the defendant negligently failed to perform drug testing and had it performed drug testing it would have discovered the employee's drug use and would not have permitted the employee to, for example, drive the defendant's truck. As of yet, there have been few such cases.301

VI. DETERMINING THE REASONABLENESS OF DRUG TESTING

Although the specific legal criteria vary with the source of the legal protection, essentially the courts seek to determine whether a challenged drug testing program is reasonable under the circumstances. One way of looking at the issue is to see whether reasonable grounds exist to suspect that the testing will turn up evidence of work-related drug use and whether the measures adopted are not excessively intrusive.302 Another way is to focus upon the following four factors: who is tested, when is the testing performed, how is the testing performed, and what is done with test results.

A. Who is Tested?

The starting point for determining whether any particular drug testing is reasonable is to look at the individual being tested. In other words, the job description and responsibilities of the person tested are very important. The courts have been more willing to sanction the use of drug testing where employees and co-workers may be endangered by drug impairment.303 Drug testing in other job classifications is less likely to be upheld.304

B. When is the Testing Performed?

Drug testing may be conducted at a variety of stages during the employment relationship, including pre-employment, periodic, upon return to work following a leave of absence, after an accident, based on suspicion of drug use, and randomly. The timing or circumstances of the test often affect the legality of the test.

Pre-employment testing is the most prevalent form of drug testing.


302. See Everett v. Napper, 825 F.2d 341, 345 (11th Cir. 1987); Lovvorn, 647 F. Supp. at 882.

303. See text accompanying notes 175-179.

304. See supra notes 180-186 and accompanying text.
It is also the most likely to be upheld. Applicants do not have any vested rights in their jobs and if they are denied a job because of a drug test they have only lost an expectancy as opposed to current employees whose loss probably would be considered more tangible.

Periodic testing, especially when used as part of an overall medical evaluation of fitness, also is likely to be upheld.\textsuperscript{305} For other types of testing, without a particularized or individualized need for testing, the courts are more inclined to find that testing is unnecessary and therefore unreasonable. Random testing, particularly unsystematic random testing, where the individuals to be tested are selected subjectively, has been looked upon with distrust by the courts who are fearful of abuses in selection.\textsuperscript{306} Similarly, surprise, mass testing has been held to be unlawful.\textsuperscript{307}

With specific evidence of the need to test, the courts are more inclined to uphold the testing. Drug testing of certain employees who were identified in reports as drug users has been upheld.\textsuperscript{308} Post-accident testing also has been upheld. In \textit{Division 241, Amalgamated Transit Union v. Suscy},\textsuperscript{309} the Seventh Circuit upheld the Chicago Transit Authority's rule mandating drug testing for bus drivers involved in a serious accident or suspected of being intoxicated.

The courts have not required "probable cause" before upholding an individual drug test. "Reasonable suspicion," a lesser standard, has been widely adopted.\textsuperscript{310} "The 'reasonable suspicion' test requires that to justify this intrusion, officials must point to specific, objective facts and rational inferences that they are entitled to draw from these facts in the light of their experience."\textsuperscript{311}

Reasonable suspicion goes to individual drug testing. An unresolved issue is whether evidence of widespread drug abuse in the community or a problem within a group of workers is needed to justify wider testing. In \textit{Lovvorn v. City of Chattanooga},\textsuperscript{312} the drug testing of fire fighters was struck down because of a lack of reasonable suspicion of the need to test:


\textsuperscript{306} See supra notes 183-185 and accompanying text.


\textsuperscript{309} 538 F.2d 1264 (7th Cir.), cert. denied, 429 U.S. 1029 (1976).

\textsuperscript{310} See, e.g., \textit{City of Palm Bay}, 475 So. 2d 1322; \textit{Caruso}, 133 Misc. 2d 544.

\textsuperscript{311} \textit{City of Palm Bay}, 475 So. 2d at 1326.

\textsuperscript{312} 647 F. Supp. 875 (E.D. Tenn. 1986).
The City has not pointed to any objective facts concerning deficient job performance or physical or mental deficiencies on the part of its fire fighters, either in general or with respect to specific personnel, which might lead to a reasonable suspicion upon which tests could be based. 313

C. How is the Testing Performed?

The testing procedures used may affect the legality of the testing. In Jones v. McKenzie, 314 the court held that the use of an unconfirmed EMIT test, which violated a specific regulation mandating confirmation, was arbitrary and capricious. 315 Confirmatory testing, such as the use of gas chromatography/mass spectrometry to confirm an initial immunoassay, will increase the accuracy of the test and the likelihood of legality. In National Treasury Employees Union v. Von Raab, 316 the Fifth Circuit upheld drug testing by the Customs Service in large part because of specific measures to ensure the reliability of test results. These measures included confirmatory testing, chain-of-custody procedures, allowing the employee to choose a laboratory for re-testing, and a quality assurance program. 317

Safeguarding the chain-of-custody of the specimen is necessary to eliminate the possibility of confusion, mishandling, or sabotage. In addition, it may be necessary to retain the sample to allow for independent confirmation of the results. In Banks v. FAA, 318 the discharges of air traffic controllers were set aside because the urine samples had been destroyed before they could be re-tested by an independent laboratory.

A final issue relates to sample collection. The courts have recognized a substantial privacy interest in urination. There are few activities in our society more personal or private than the passing of urine. Most people describe it by euphemisms if they talk about it at all. It is a function traditionally performed without public observation; indeed, its performance in public is generally prohibited by law as well as social custom. 319

Consequently, direct observation of urination is unlikely to be upheld. In Caruso v. Ward, 320 police officers were required to urinate in the presence of a superior officer of the same sex to ensure the regularity of the sam-

313. Id. at 882.
316. 816 F.2d 170 (5th Cir. 1987).
317. Id. at 181-82.
318. 687 F.2d 92 (5th Cir. 1982).
319. National Treasury Employees Union, 816 F.2d at 175.
ple. The court found this process especially troublesome. "[T]he subject officer would be required to perform before another person what is an otherwise very private bodily function which necessarily includes exposing one's private parts, an experience which even if courteously supervised can be humiliating and degrading . . . ."321

D. What is Done with Test Results

Workplace drug testing programs are more likely to be upheld if individuals who test positively are rehabilitated rather than discharged.322 This often relates closely with the duty to make reasonable accommodation to handicapped workers. For example, in Hazlett v. Martin Chevrolet, Inc.,323 an employer was found to have violated Ohio's handicap discrimination law by discharging an employee suffering from drug and alcohol addiction and refusing to grant a one month disability or sick leave so that the employee could obtain treatment. Employees with other illnesses previously had been given leaves.

VII. THE ELEMENTS OF A LEGAL, ETHICAL, AND EFFECTIVE DRUG TESTING PROGRAM

If there is one general criticism that can be leveled at managers in the public and private sectors regarding drug testing, it is that they have too eagerly embraced drug testing as the solution to the problem of workplace drug abuse. Before drug testing is implemented there must be a detailed and thoughtful consideration of whether there is a workplace drug abuse problem, whether drug testing is essential to combat the problem, whether the benefits of drug testing outweigh the costs to employers and employees, and whether drug testing can be undertaken in a way that will ensure accuracy, fairness, and privacy.

While some people have recommended unrestricted drug testing or no drug testing at all, there is a growing consensus—from the AFL-CIO324 to the AMA325—that limited drug testing is permissible. For example, the AMA's Council on Scientific Affairs recommended:

That the AMA take the position that urine drug and alcohol testing of employees should be limited to: (a) preemployment examinations of those persons whose jobs affect the health and safety of others,

321. Id. at 548, 506 N.Y.S.2d at 793.
323. 25 Ohio St. 3d 279, 496 N.E.2d 478 (1986).
(b) situations in which there is reasonable suspicion that an employee's job performance is impaired by drug and alcohol use, and (c) monitoring as part of a comprehensive program of treatment and rehabilitation of alcohol and drug abuse or dependence.\footnote{326}

Placing careful controls on drug testing is an attempt to accommodate the legitimate concerns about test accuracy and privacy with legitimate concerns about public health and safety. It is even more difficult to move beyond generalities to concrete guidelines on workplace drug testing. A legal, ethical, and effective drug testing program should satisfy each of the following requirements.

1. \textit{Reasonable suspicion exists to believe that there is at least some class-wide problem of drug abuse among the relevant group of employees.}

Drug testing is an extreme measure and it should not be undertaken lightly. The only compelling reason to test is to protect employee and public safety. Although drug testing should not be started only \textit{after a tragic accident}, there are sound reasons why it should not be initiated unless there is at least some evidence of a drug abuse problem in the locality, in a particular profession or job classification, or at a particular employer.\footnote{327} One way of determining whether there is a drug abuse problem at a particular workplace is for all employees to take a drug test anonymously. The results will indicate whether there is a problem and, if so, its nature and scope. This information also is valuable in designing education and rehabilitation programs.\footnote{328}

2. \textit{There are no feasible alternatives to detecting impairment, including supervision and simulation.}

The primary concern underlying drug testing is that drug-impaired employees will be impaired on the job. Drug testing, however, does not measure impairment. It measures prior exposure, which is used as a surrogate for impairment based on one of the two following theories. First, employees who use drugs off the job are more likely to use drugs on the job or to report to work under the influence of drugs.\footnote{329} Second, prior drug use may impede performance even though no impairment is notice-

\footnote{326. \textit{Id.} at 2095. In the interest of disclosure, it should be noted that the author was the legal consultant to the American Medical Association in the drafting of this recommendation.}
\footnote{327. This information may come in many forms, such as drug-related arrests of employees, direct observation of drug use or discovery of drugs in the workplace, drug-related accidents, reliable reports by employees and supervisors, and published studies.}
\footnote{328. I am indebted to Dr. E. Carroll Curtis, Corporate Medical Director of Westinghouse Electric Corporation, for this suggestion.}
\footnote{329. See \textsc{Bureau of National Affairs, Alcohol and Drugs in the Workplace} 15 (1986) (cocaine hotline survey showed 83\% of callers used some drug on the job); Note, \textit{Employee Drug Testing—Issues Facing Private Sector Employees}, 65 N.C.L. REV. 832 (1987) (citing National Institute of Drug Abuse survey showing 10-23\% of all workers use drugs at work; 90\% of cocaine users use it during work hours).}
If impairment or the effects of impairment are detectable, then there is no need for drug testing. One way to detect impairment is through regular, close supervision. Another way is for the employee to demonstrate fitness via simulation.

The drug testing program is limited to workers who, if working while impaired, would pose a substantial danger to themselves, other persons, or property.

Among the numerous asserted justifications for employee drug testing are the following: (1) drug use is illegal and therefore employers have a responsibility to discover employees who may be breaking the law; (2) drug abusing employees often need substantial sums of money to buy drugs and these employees are likely to steal from their employer or to accept bribes on the job; (3) employees using drugs are likely to have a reduction in their productivity; (4) maintaining a drug-free workplace is essential to an employer's public image; and (5) drug testing is essential to protect safety and health.

First, as to illegality, it is clear that employers are not concerned about illegality per se. If they were concerned simply about lawbreaking, measures other than drug testing are likely to be much more effective in detecting wrongdoing. For example, an employee (and management) federal income tax return screening every April 15th would undoubtedly be quite revealing. Of course, it is the province of the Internal Revenue Service and not the employer to detect tax irregularities. Similarly, it is the responsibility of law enforcement agencies and not employers to prevent illegal drug use.

Second, as to theft and bribery, the sudden need for more money to support a drug habit is only one reason why an employee might become dishonest. To be thorough, employers would need to know if an employee were gambling, suffering losses in the stock market, or even having an extra-marital affair. Pre-employment background and reference

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330. One controversial study of airline pilots showed that impairment from marijuana continued for 24 hours after exposure. Alcohol and Drugs in the Workplace, supra note 329, at 17. This study has been attacked on methodological grounds and seems to contradict prior studies. Glasser, Why Indiscriminate Urine Testing is a Bad Idea, 1 Seminars in Occup. Med. 253, 256 (Dec. 1986).

331. Supervision would not necessarily detect drug impairment, but would detect reduced efficiency. From an employer's perspective it should not matter whether the reduced efficiency is caused by drugs, lack of sleep, personal problems, or other factors. Only the treatment of the problem will be affected.

332. It has been suggested, for example, that rather than performing drug testing on airline pilots, the pilots should be required to demonstrate their fitness on a flight simulator periodically. Although the feasibility of such an approach may be questioned, the theory cannot be assailed.

333. For a further discussion of this point, see infra note 339 and accompanying text.
checks and post-hiring supervision and auditing are much more effective in preventing theft and bribery than urinalysis.

Third, productivity is a legitimate concern of an employer. Productivity, however, is directly measurable and is done so on a continual basis by employers. A decline in productivity is an end point and it is irrelevant whether the decline is caused by boredom, personal problems, or drug abuse. Lack of productivity is a better measure of lack of productivity than urinalysis.

Fourth, from a legal and policy standpoint, public image is a deeply troubling rationale for employment policies. Historically, many forms of employment discrimination have been defended on grounds such as "customer preference."334 The law has correctly rejected such asserted defenses.335 Public image is not only so vague as to justify nearly any action,336 but in the case of drug testing, it is a two-edged sword. Drug abuse in the United States is a pervasive, intractable social problem and the fact that an employer has, among its employees, one or more individuals with a substance abuse problem is unlikely to generate public disdain. The way in which the employer deals with the problem, however, may directly affect a public image. Indiscriminate and heedless drug testing without regard for employee rights can influence the way in which the employer is regarded by current employees, potential employees, customers, and shareholders.

Fifth, safety is the only justifiable reason for employee drug testing. It is true that current drug tests do not measure impairment and only measure prior exposure. Nevertheless, there is ample evidence that individuals who use drugs often take them at work or report to work impaired.337 For employees in safety-sensitive positions, prudence demands that public safety considerations outweigh even the legitimate concerns

334. For example, the policy of many airlines in hiring only female flight attendants was based in large part on the airlines' assessment that its mostly male business travelers would prefer female flight attendants. See Diaz v. Pan Am. World Airways, 442 F.2d 385 (5th Cir.), cert. denied, 404 U.S. 950 (1971) (rejecting defense).
335. Id.
336. The American Occupational Medical Association's Guidelines on Drug Screening includes the following:
2. Any requirement for screening for drugs should be based on reasonable business necessity. Such necessity might involve safety for the individual, other employees, or the public, security needs, requirements related to job performance, or requirement for a particular public image.
American Occupational Medical Association, Drug Screening in the Workplace: Ethical Guidelines, 28 J. OccuP. Med. 1240 (1986). The "public image" language is so open-ended as to render the guidelines meaningless. For an opposite view from the medical community, opposing drug testing, see Lundberg, Mandatory Unindicated Urine Drug Screening: Still Chemical McCarthyism, 256 J.A.M.A. 3003 (1986).
337. See supra note 329.
of employees.\textsuperscript{338} For employees not in safety-sensitive positions, such as retail or clerical workers, there is no justification for drug testing. Reasonable supervision will ensure that satisfactory performance is not impeded for any reason, including drugs.

If safety is the only compelling reason for drug testing, the nature of this exception needs to be further defined. The danger posed by an impaired worker must be \textit{substantial}. This is based on the severity of the consequences, the likelihood of danger, and the immediacy of the harm. To justify drug testing, the risk of harm from an impaired worker also must be otherwise unpreventable (as by supervision, quality control, and work review) and the consequences irreparable. Nuclear power, chemical plant, and transportation workers are the best examples.\textsuperscript{339} Even as to these employees, however, the other elements still need to be satisfied.\textsuperscript{340}

4. \textit{Testing not based on individualized, reasonable suspicion is limited to pre-employment and periodic testing.}

Pre-employment and periodic testing (especially as part of a pre-employment or annual medical examination) are the least objectionable forms of testing. They permit the discovery of individuals who have a substance abuse problem within the context of a medical examination. There is no stigma attached to supplying a urine sample in this context. The medical setting also helps to encourage truthful disclosure by a substance-abusing employee, protects confidentiality, and facilitates treatment.

The other acceptable time for testing is when there is reasonable suspicion of impairment. This is a closer case. If an employee in a safety-sensitive job is observed to be drowsy, dizzy, disoriented, or otherwise is suspected of being impaired, regardless of the results of a drug test, the employee should not be permitted to continue work and should be referred to a physician. Thus, the need for a drug test under these

\textsuperscript{338} Some people have suggested that if any employees are tested, all employees be tested. I disagree. Drug testing is a sometimes-necessary evil that should be restricted to the fewest number of workers possible.

\textsuperscript{339} It is difficult to imagine a job in which there is a substantial risk to property but not to at least some person, where the employee is unsupervised, and where all of the other criteria set out in this article are met. Nevertheless, in such an event, a substantial danger to property would justify drug testing.

\textsuperscript{340} Testing airline pilots for illicit drug usage is widely recommended, but the testing probably will be valuable only in serving to reassure anxious passengers. According to the National Transportation Safety Board, since 1964 not a single pilot involved in the crash of a U.S. commercial aircraft tested positive for alcohol. Presumably, this would extend to other drugs as well. Accordingly, the American Medical Association does not recommend the testing of civilian flight crews. See Engelberg, Gibbons, & Doerge, \textit{A Review of the Medical Standards for Civilian Airmen: Synopsis of a Two-Year Study}, 255 J.A.M.A. 1589 (1986).
circumstances may be questioned because the behavior establishing reasonable cause also demands action immediately and cannot await the results of a drug test. The other issue raised by reasonable cause testing is that clear guidelines must be established for determining reasonable cause. Without such guidelines there is a danger of arbitrariness in selecting the employee for testing.

Despite the drawbacks of reasonable cause testing, employers should be provided with some basis for aperiodic or unprogrammed testing. Recreational as well as compulsive drug users may be able to forego the use of drugs for a short period of time each year to test negatively. In those job categories where drug testing is acceptable, it ought to be effective. Reasonable cause testing, including post-accident testing, should be permissible.

Some people have suggested (and some statutes have used the approach) that the only permissible drug testing is for reasonable cause. For employees working alone (such as truck drivers), it is hard to imagine that there ever would be reasonable cause until after a tragic accident occurred. Thus, reasonable cause testing should not be the only basis for drug testing.

Random testing and surprise, round-up testing are unacceptable. As noted earlier, these tests have been struck down in several public sector cases on constitutional grounds.

5. State of the art screening and confirmatory test procedures are performed by trained professionals, off-site, under laboratory conditions.

Employers that use "do-it-yourself" drug testing kits and unconfirmed screening tests are engaged in a false economy. Unless the best technology is used, drug test results are unreliable and likely to be challenged in court. Even the best analytical techniques are only as good as

341. A common justification for drug testing under these circumstances is to obtain proof of drug usage in order to have a discharge sustained by an arbitrator in the event of employee challenge. Most collective bargaining agreements, however, prohibit intoxication or impairment and a drug test would not prove anything except prior exposure. Thus, the best evidence to support a discharge would be the careful documentation of the employee's behavior. See Denenberg & Denenberg, supra note 45. See also supra notes 267-274 and accompanying text.

342. An employee who worked where there was reasonable cause testing recently sought my help with the following problem. He and his supervisor did not get along and on numerous occasions the supervisor made him submit to a drug test. Each time the test was negative. The employee was concerned, however, that his chances for promotion would be adversely affected if his personnel file showed numerous for-cause drug tests, even though they were all negative. Certainly, the possibility exists for even more invidious forms of discrimination besides personal animosity.


344. See supra notes 183-186 and accompanying text.
the people performing the tests. Careful laboratory selection and ongoing quality review are essential.

6. **Specimen collection is not observed.**

With the growth of employee drug testing there have been numerous reports of employees attempting to substitute "clean urine" or otherwise tampering with specimens. Some employers, in response, have taken to observing employees in the act of urination. For many employees, this aspect of drug testing is the most objectionable, degrading, and insensitive element. It is highly unlikely that the benefits of observation (preventing tampering by a few individuals whose drug problems were not otherwise detectable) outweigh the human relations, employment relations, and public relations costs of observation.

7. **Testing is performed for the presence of prescription drugs and alcohol as well as illicit drugs.**

If the underlying purpose of drug testing is safety, there is no reason why drug testing should be limited to illicit drugs. In terms of the number of people who abuse them and the fatalities, injuries, and property damage caused by their effects in the workplace, alcohol and prescription drugs (often in combination) pose a much greater threat than illicit drugs.

8. **There is valid employee consent before the testing and an opportunity to explain a positive test result.**

An argument could be made that consent to drug testing is never voluntary (or valid) when employees are likely to be discharged or applicants not hired if they refuse. Nevertheless, if drug testing is essential to protect public safety in the face of a drug abuse problem by certain employees, and if the other criteria for testing are met, an employer ought to be able to make consent to drug testing a condition of employment. Employers, however, should not perform drug testing surreptitiously, such as by simply testing all urine samples obtained as part of a pre-employment or periodic medical examination.

346. Id.
349. There is no physician-patient relationship established between an applicant or employee and an employer-retained physician who is merely assessing fitness to work. M. ROTHSTEIN, MEDICAL SCREENING OF WORKERS 4-8 (1984). Therefore, there is no legal duty to inform test subjects
A related issue is whether applicants and employees should be given advance notice that a pre-employment or periodic drug test will be performed. Some federal\textsuperscript{350} and state\textsuperscript{351} laws specifically mandate advance notice, but there is generally no such legal requirement. The obvious drawback to notice is that it permits individuals to abstain before being tested and then to resume drug use after the test. This drawback, however, may be outweighed by the following considerations. First, providing employees with notice improves employee acceptability of the program. It indicates that the purpose of the testing is to promote public safety and not to "catch" employees. Second, as to applicants, company resources will be saved because habitual drug users will not proceed further with their application. Third, individuals genuinely interested in obtaining or retaining employment may cease using drugs before the test, and surveillance, supervision, and re-testing may ensure that they do not resume drug use.

Finally, individuals should be given an opportunity to explain a positive test result. As noted earlier,\textsuperscript{352} even state of the art confirmatory testing may produce false positive results due to laboratory error or cross-reactivity with some medicines and foods.

9. Test results are kept confidential.

Drug test results should be regarded in the same way as other medical records. Specifically, the data should be stored in the medical department (assuming there is one) and access should be limited to medical personnel. Supervisory and managerial employees should only be notified of the consequences of the results (e.g., employee A is medically unfit for work), but not the specific results.\textsuperscript{353} Other information essential to personnel actions should be provided only on a "need-to-know" basis. When an initial drug screen is positive and a confirmatory test is scheduled, no results should be released until after the confirmatory test. The

\textsuperscript{350} Exec. Order No. 12,564, 51 Fed. Reg. 32,889, 32,890 (1986), requires federal agencies to give employees 60 days notice before implementing a drug testing program, but individual notice before testing is not required.


\textsuperscript{352} See supra notes 72-88 and accompanying text.

\textsuperscript{353} The Code of Ethics of the American Occupational Medical Association provides that "[p]hysicians... should recognize that employers are entitled to counsel about the medical fitness of individuals in relation to work, but are not entitled to diagnoses or details of a specific nature." American Occupational Medical Association Code of Ethical Conduct, Principle 7 (1976).
failure to maintain confidentiality may lead to liability based on invasion of privacy, defamation, intentional infliction of emotional distress, or other torts.\textsuperscript{354}

10. \textit{The test procedures or resulting personnel actions do not violate applicable legal rights of applicants and employees.}

As discussed previously,\textsuperscript{355} a wide range of constitutional, statutory, and common law doctrines may be implicated by drug testing. Both the testing itself and any personnel actions based on the testing must be in accordance with these legal requirements.

11. \textit{Drug testing is only part of an overall drug abuse program, including education and rehabilitation.}

Drug testing should be only one part, and indeed should be the least important part, of a comprehensive drug abuse program. The other two components of the program should be drug awareness and employee assistance.

Drug awareness programs are educational activities aimed at supervisors and employees. Supervisors need to be trained to recognize some of the "suspect changes in employee job performance and behavior that may portend a drug abuse problem."\textsuperscript{356} They also need to be trained in how to respond to employees suspected of having a drug abuse problem.

Employees also should be involved in a separate drug education program. Although there are several different models of programs, all programs teach employees to recognize the signs of drug abuse in themselves, family, friends, and co-workers. All programs also discuss the dangers of drug abuse and describe company and community services available for dealing with drug abuse.\textsuperscript{357}

The other essential part of a drug abuse program is an employee assistance program (EAP). There are 8,000\textsuperscript{358} to 10,000\textsuperscript{359} EAPs today, giving about twenty percent of the work force access to such a program.\textsuperscript{360} Most of the EAPs are in large companies.\textsuperscript{361} Some of the programs are run in-house, others are run on a contract basis. Both types of EAPs work the same way. An employee may voluntarily enter the pro-

\begin{itemize}
\item \textsuperscript{354} See supra notes 296-298 and accompanying text.
\item \textsuperscript{355} See supra Section V.
\item \textsuperscript{356} Nelson, \textit{Drug Abusers on the Job}, 23 J. OCCUP. MED. 403 (1981).
\item \textsuperscript{357} See McLatchie, Grey, Johns, & Lomp, \textit{A Component Analysis of an Alcohol and Drug Program: Employee Education}, 23 J. OCCUP. MED. 477 (1981).
\item \textsuperscript{358} Masi, \textit{Employee Assistance Programs}, 1 OCCUP. MED.: STATE OF THE ART REV'S 653 (1986).
\item \textsuperscript{359} BUREAU OF NATIONAL AFFAIRS, \textit{supra} note 329, at 39.
\item \textsuperscript{360} \textit{Id.} at 40.
\item \textsuperscript{361} \textit{Id.}
\end{itemize}
gram or may be referred by a supervisor. The employee contacts the EAP and works out an individual treatment program. Participation in an EAP is kept confidential. In some instances, employer discipline is waived on the condition that the employee complete the EAP.

VIII. CONCLUSION

Drug abuse in America and drug abuse in American workplaces are complicated problems. Drug abuse will not be eliminated or even brought under control simply through law enforcement, military action, public relations campaigns, rehabilitation, legalization of certain drugs, or prohibiting any current drug user from obtaining private or public employment. Similarly, a facile solution to the problem of workplace drug abuse will not be found in a specimen jar or a million specimen jars.

At best, drug testing is a sometimes-necessary evil that is part of a comprehensive program to insure the public health and safety. At worst, it is an unholy alliance of politics, profiteering, unrestrained technology, and heedless personnel policies.

The efficacy and desirability of drug testing in the workplace will continue to be weighed by judges, legislators, and policy makers in the public and private sectors. In making these decisions, it is essential to consider the limits of technology, the inability of drug testing to resolve the underlying problem of drug abuse, and the human and organizational costs of implementing drug testing programs. Drug testing must be considered in the light of established employment law principles, such as equal opportunity, job-related decisionmaking, and reasonable accommodation. Drug testing also must be viewed in the larger context of a society that is built on values of autonomy, privacy, and dignity.
CASE COMMENT