

HB

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file 2

WHO USES OUR URINE TESTING PROGRAM?

- Individuals
- Parents
- Employers
- Spouses
- Social Workers
- Parole/Probation Officers
- School Personnel
- Health Professionals

We provide results within 48 hours. All information is provided under guidelines of special consent forms to satisfy legal requirements.

URINE TESTING PROGRAM

*Community Health Projects
Inc.*

CLINIC ADDRESSES AND PHONE NUMBERS

General Medical Clinics

- | | |
|--|----------------------------------|
| <input type="checkbox"/> 354 E. Ervilia St., Pomona, CA 91787 | (714) 623-0530 |
| <input type="checkbox"/> 1050 N. Garey, Pomona, CA 91767 | (714) 623-6391 |
| <input type="checkbox"/> 26 N. Raymond Ave., Pasadena, CA 91103 | (818) 795-8088 |
| <input type="checkbox"/> 425 N. Lake Ave., Pasadena, CA 91101 | (818) 796-8888 |
| <input type="checkbox"/> 324 N. Laurel St., Ontario, CA 91762 | (714) 986-4550 |
| <input type="checkbox"/> 756 N. Euclid Ave., Ste. B-C, Ontario, CA 91764 | (714) 391-1568
(714) 988-6541 |
| <input type="checkbox"/> 14418 E. Pacific Ave., Baldwin Pk., CA 91706 | (818) 962-8797 |
| <input type="checkbox"/> 11041 Valley Blvd., El Monte, CA 91731 | (818) 442-4177 |
| <input type="checkbox"/> 1175 Unruh, La Puente, CA 91744 | (818) 917-0676 |
| <input type="checkbox"/> 11738 Valley View, Ste. A-B, Whittier, CA 90604 | (213) 946-1587 |
| <input type="checkbox"/> 338 1/2 S. Glendora Ave., W. Covina, CA 91790 | (818) 919-5807 |
| <input type="checkbox"/> 116-120 N. Lang Ave., W. Covina, CA 91790 | (818) 962-6697
960-3064 |
| <input type="checkbox"/> 620 S. "D" St., Oxnard, CA 93030 | (805) 486-4876
(800) 441-4897 |
| <input type="checkbox"/> 3777 Phelan Road, Phelan, CA 92371 | (619) 868-4418 |
| <input type="checkbox"/> 4313 E. Tulare Ave., Fresno, CA 93702 | (209) 453-1751 |

Substance Abuse Clinics

- | | |
|---|----------------|
| <input type="checkbox"/> 1825 E. Theilborn St., W. Covina CA 91791 | (818) 915-3844 |
| <input type="checkbox"/> 152 W. Artesia, Pomona, CA 91768 | (714) 629-1959 |
| <input type="checkbox"/> 34 E. Minarets Ave., Pinedale, CA 93650 | (209) 431-6070 |
| <input type="checkbox"/> 217 Camino del Remedio,
Santa Barbara, CA 93110 | (805) 964-4795 |
| <input type="checkbox"/> 500 W. Foster Rd., Santa Maria, CA 93455 | (805) 937-8461 |
| <input type="checkbox"/> 2055 Saviers Rd., Suite 10, Oxnard, CA 93030 | (805) 483-2253 |

Counseling Centers

- | | |
|--|----------------|
| <input type="checkbox"/> 330 S. Glendora Ave., W. Covina, CA 91790 | (818) 919-5800 |
| <input type="checkbox"/> 427 N. Lake Ave., Pasadena, CA 91101 | (818) 796-8888 |
| <input type="checkbox"/> 122 N. Lang Ave., W. Covina, CA 91790 | (818) 960-2895 |

Physical Therapy and Sports Medicine

- | | |
|---|----------------|
| <input type="checkbox"/> 750 W. Alosta Ave., Ste. W, Glendora, CA 91740 | (818) 335-4077 |
|---|----------------|

For Further Information Contact:

WHAT IS URINE TESTING FOR DRUGS OF ABUSE?

This involves specific laboratory procedures which are carried out by specially trained technicians for the purpose of detecting drugs of abuse in the urine.

WHO CAN BE URINE TESTED?

Any client who requests testing.

Anyone who is referred from their employer, school, social welfare, or other organization.

All clients must sign a urine test consent form which allows the results to be forwarded to the referring party.

WHY URINE TEST?

There are many reasons to urine test. Some of these reasons are:

1. To identify drug use in the early stages
2. To determine need for treatment
3. To monitor treatment results
4. To prevent continued drug use
5. To monitor aftercare
6. To monitor compliance with court orders, conditions of probation
7. To screen for employment
8. To assure safe/secure working/school environment
9. Assists counseling and helps change behavior
10. To help achieve recovery

KINDS OF TESTS?

There are basically two kinds of urine tests, general and specific. General tests test for many drugs at one time. Specific tests test for a specific drug. Both types of tests have their advantages in a urine testing program. Our clinic staff will help you decide which type of test will be most appropriate in any given situation.

WHAT IS THE RELIABILITY OF THE TESTS?

The reliability of urine testing is very high when done by technicians who specialize in urine testing. Equipment used to test has become much more sophisticated in the past several years. Further, all positive tests are confirmed by a second, different method of testing. This results in the error factor being almost non-existent.

WHAT IS THE PROCEDURE FOR REQUESTING A URINE TEST?

A client can call our clinic during business hours and the staff will explain the process for collecting urine samples. It is a simple process and results are available within 48 hours of our receiving the sample.

COSTS

A test for one drug costs about \$15.00. A general screen, which tests for several drugs simultaneously, is more expensive.

SHOULD URINE TESTING BE REPEATED? IF SO, HOW OFTEN AND FOR HOW LONG?

Yes, urine testing should be repeated in the majority of cases. Depending on the result and the drug(s) being used, repeated testing is usually warranted.

As a general rule, if a person has been known to abuse drugs, they should be tested weekly for 90-120 days. In some cases, testing should be continued for a full year.

HOW LONG DRUGS STAY IN THE URINE

Drug	Approximate Length of Time in the Urine
Heroin	48 to 72 hours
Cocaine	24 to 36 hours
Amphetamines	48 to 72 hours
Benzodiazepines +	48 to 96 hours
Phencyclidine (PCP)	48 to 78 hours
Marijuana	10 to 35 days
Phenylpropanolamine*	24 to 48 hours
Nicotine	24 to 48 hours

+ Includes Valium[®], Librium[®], Ativan[®], Dalmane[®], Xanax[®], Halcion[®]

*This is the most common over-the-counter drug which is abused. It is found in many weight-reducing, pain, and decongestant medicines.

Identifying Drug Users in the Workplace

**Fitness-For-Duty
Examination and Urine
Testing**

by
Forest S. Tennant, Jr., M.D., Dr. P.H.



Veract, Inc.

Identifying Drug Users in the Workplace

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NOTE FROM THE AUTHOR

This is one of a series of manuals on drug abuse. Much of it is based on observations made on my patients who have drug problems and from personal research studies. Since research on drug abuse is a relatively new field of endeavor, one can expect future changes in some of the information presented here. I have attempted to give the reader the most current information. As new information becomes available these manuals will be updated.

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NEED TO IDENTIFY DRUG USE IN THE WORKPLACE

There are multiple reasons for a company to identify drug-abusing employees. Some are directly related to the economic viability of the organization, and some are primarily directed at helping an employee to overcome the serious health problem of drug abuse. Today, drug abuse can be so widespread in an organization that it has the potential to be the difference between profit and loss. Data collected by the author between 1984 and 1986 from various private companies clearly reveals the need to identify employees who use drugs.

- Pre-employment urine testing shows 15 to 25% positive on the average. Some companies may run as high as 50 to 75%.
- Unscheduled and unannounced urine testing or eye screening examinations of employees in most companies usually show 10 to 40% positive for illegal drug use.

ADVERSE ECONOMIC IMPACT ON COMPANIES

Drug abuse in the workplace will affect many companies' profits in a variety of ways. Each company should review how drugs can hurt profits and specifically how they might be affecting them. I recommend that a company's drug control program be directed at one or more of the below-listed, specific effects of drug abuse among workers.

- High absenteeism
- Tardiness
- High injury and accident rate
- High health costs
- Thefts of equipment, money, merchandise
- Poor workmanship
- Low productivity
- High workers' compensation rate
- High unemployment insurance rate
- Low morale of workers
- Errors and mistakes

REASONS TO IDENTIFY DRUG USERS IN THE WORKPLACE

- Identify impaired workers
- Identify persons who are tolerant and dependent on drugs and who need treatment
- Protect other workers and general public from accidents and injuries that drug users may cause
- Reduce absenteeism, health costs, thefts, workers' compensation and unemployment claims, accidents, and injuries
- Raise productivity of workers
- Maintain a safe, healthful work environment free of illegal activities
- Deterrent

MAJOR DRUGS OF ABUSE WHICH CAUSE IMPAIRMENT IN THE WORKPLACE

Although caffeine, nicotine, and non-prescription drugs such as aspirin are the most used drugs during working hours, they rarely cause direct impairment to a person's job. Long-term nicotine dependence will likely produce the greatest health costs to most companies, but it does not usually produce the type of impairment that will produce accidents, injuries, or interfere with a worker's mental capability.

The three drugs that most commonly cause impairment on the job are:

Marijuana
Cocaine
Alcohol

Heroin ranks fourth. It can be a particular problem in organizations that employ unskilled labor. In some locales in the U.S.A., phencyclidine (PCP) and amphetamines may pose a significant problem.

PATTERNS OF DRUG USE BY WORKERS

There are three basic patterns of drug use which may produce varying types of impairment on the job and which may require different approaches to detect. The three patterns may overlap.

Pattern	Characteristic	Frequency	Impairment On the Job
1.	Occasional Use: "Social," "Casual" "Low Dose"	Infrequent	Variable
2.	Binge - Uses high dosages in short time periods	Daily to few times per week	Accidents, injuries, intoxication, reduction in mental capacity
3.	Dependence or Addiction	Daily to several times per day	May be tolerant and show little or no signs until late stages

ADVERSE EFFECTS AND IMPAIRMENTS ON THE JOB

Adverse effects and impairments are usually classified as acute or short-term and chronic or long-term. The acute or short-term effects result from a drug being in the blood stream and exerting a direct effect on the nervous system. There may be effects that persist after the drug leaves the bloodstream, because it may produce biochemical changes which take the nervous system several hours to a few days to correct, e.g., a hang-over. Long-term or chronic effects are produced by repetitive use of a drug which produces biochemical changes in the nervous system and/or alteration in receptor sites which are the spots in the nervous tissue where drugs attach. The more potent a drug, the more likely there will be impairment. For example, cocaine will likely cause more impairment than alcohol and marijuana. High dosages of the drug will produce more impairment than low dosages. Potency of a given drug as well as route of administration will affect impairment. For example, smoking or injecting a drug as opposed to sniffing or orally ingesting it will usually cause more impairment.

A third category of impairment which may affect a worker is the toxic reaction. This usually results from taking a very high dosage or suddenly becoming sensitized, i.e., an allergy type reaction, even though a person has previously used the drug. Toxic reactions may be particularly

dangerous to a worker as well as to co-workers and the general public who may be close to the individual. A severe reaction may result in sudden death. A most serious and common category of long-term impairment relative to business and industry is a condition called, "Post-Drug Impairment Syndrome" (PDIS). This condition usually results from multiple drug use over a period of time, and it may be particularly detrimental to workers with extraordinary talents. The symptoms may persist and be permanent even if all drug use has ceased.

COMMON ACUTE EFFECTS AND IMPAIRMENTS

- Decreased vision, hearing, pain and reflex ability
- Causes accidents, injuries, and errors on the job

COMMON CHRONIC EFFECTS AND IMPAIRMENTS

- Frequent absences from school or work
- Time distortion, including tardiness, unusual meal times
- Frequent missed appointments
- Abnormal sleep pattern such as staying up after midnight or daytime sleeping
- Repetitive forgetfulness or broken promises
- Frequent accidents, injuries, and/or traffic violations
- Loss of interest or motivation towards job
- Deterioration of work performance
- Careless hygiene and grooming habits, e.g., females stop polishing their nails, wearing lipstick and make-up; males skip shaving, fail to brush teeth
- Recurrent respiratory infections
- Poor pain and stress tolerance
- Hygiene deteriorates, acne worsens
- Personality changes, e.g., becomes dull, bland, and humorless
- Binge eating of sweets and snacks between meals

COMMON TOXIC REACTIONS

- Hallucinations
- Violence
- Disorientation
- Heart Arrhythmia
- Seizure
- Loss of mental ability
- Fainting
- Amnesia
- Death

POST-DRUG IMPAIRMENT SYNDROME (PDIS)

Common symptoms are:

- Inability to cope with much stress
- Can't do complex reasoning which requires assimilation of more than two or three facts
- Poor motivation and lack of energy
- Can't complete complex tasks
- Bland personality
- Limited attention span

ABILITY OF COMPANIES TO IDENTIFY DRUG ABUSE ON THE JOB

The average manager or supervisor who does not have special training, will only be able to identify drug use in an employee who has acute, gross impairments such as staggering, slurred speech, or toxic reaction. Impairment by drugs in the workplace doesn't usually produce grossly overt signs. The common impairments on the job are related to vision, hearing, attention span, muscle coordination, alertness, and mental acuity. Some persons who are tolerant and dependent on drugs such as marijuana, alcohol and cocaine may show little or no overt evidence of impairment with the possible exception of eye signs which require a trained person to detect. Unfortunately, the usual impairments, while not obvious to an untrained supervisor or fellow employee, easily and frequently lead to accidents, injuries, and mental lapses while on duty.

Due to the relative lack of obvious signs, special testing is required to identify drug use among employees. There are two effective, practical ways to do this.

1. Urine testing
2. Physical examination, principally by a "Rapid Eye Exam."

TYPES OF URINE TESTING AND THEIR CAPABILITIES

Urine testing is now the most common method to test for drugs in the workplace. It is used in several different ways with different, fundamental capabilities.

Type	Capability
1. Pre-employment	Will detect drug use prior to employment.
2. Scheduled/Periodic	Will detect dependent persons since they can't quit even with a warning. Particularly useful with regular physical examinations.

3. **Unscheduled/Random** Will detect intermittent and binge users. Acts as a deterrent. Usually restricted to occupations in which a worker can hurt someone else, e.g. vehicle driver, nuclear plant workers, contact sports, airplane personnel, etc.
4. **Confirmatory or "For Cause"** Will confirm suspicions of drug use when suggested by physical signs, behavior, accident, injury, or indications of impairment.
5. **Monitoring** Will detect an employee who is being regularly tested after previous identification or post-treatment.

URINE TESTING METHODS

There are six common, technological methods to detect drug use today:

Radioimmunoassay (RIA)

Immunoassay (EMIT)

Thin Layer Chromatography (TLC)

Gas Chromatography (GC)

Gas Chromatography/Mass Spectrometry (GC/MS)

High Performance Liquid Chromatography (HPLC)

Today the EMIT, RIA, or TLC are usually used as initial detection methods and, if the test result is positive, results are confirmed by one of the other methods. When urine is tested by two different technological methods, an experienced and proficient laboratory will have less than 1% error.

HOW LONG DRUGS STAY IN THE URINE

Drug	Approximate Length of Time in the Urine
Heroin	48 to 72 hours
Cocaine	24 to 48 hours
Amphetamines	48 to 72 hours
Benzodiazepines +	48 to 96 hours
Phencyclidine (PCP)	48 to 96 hours
Phenylpropanolamine*	24 to 48 hours
Nicotine	24 to 48 hours
Alcohol**	12 to 24 hours

+ Includes Valium®, Librium®, Ativan®, Dalmane®, and Xanax®

* This is the most commonly abused over-the-counter drug. It is found in many weight-reducing, pain, and decongestant medicines.

** At a level of about .05mg% which approximates 50% of the legal level.

LENGTH OF TIME THAT MARIJUANA CAN BE DETECTED IN URINE

A great deal of publicity has been generated as to how long marijuana metabolites may remain in urine. Metabolites remain detectable in plasma and urine for many days due to the fact they are fat-soluble. When smoked, marijuana metabolites enter the fat, lodge there, and then leak slowly out over a period of time. It is important to point out that it is only the regular, chronic user or addict that keeps marijuana in urine for more than a few days. The length of time that marijuana metabolites can usually be detected in blood is much shorter than in urine because the kidney concentrates drugs in the urine about 100 to 1000 times than that found in plasma. In other words, marijuana can be detected in urine much longer than blood due to the kidney's ability to concentrate drugs.

APPROXIMATE URINE RETENTION FOR MARIJUANA

Approximate Frequency of Use	Approximate Length of Time in Urine
Once per week	2 to 20 days
Twice per week	5 to 30 days
Daily	15 to 45 days

FITNESS-FOR-DUTY EXAMINATION AS AN ALTERNATIVE TO URINE TESTING

There are some objections to urine testing due to its cost and perceived invasion of privacy. As an alternative, some organizations and companies, particularly in California, are beginning to use Rapid, Fitness-For-Duty examination of which the major component is a "Rapid Eye Examination" to screen for possible drug/alcohol impairment. A trained "Drug Identification Specialist" (DIS) who is usually a licensed medical person (physician or nurse) can perform a one-minute exam of the mouth and eye since these organs are very sensitive to drug effects. If eye or mouth abnormalities are found, they are considered adequate to meet the medical and legal definition of "reasonable cause or suspicion," and a urine test is then taken to confirm drug use. Of paramount importance is the fact that abnormal eye function is the impairment that probably causes most of the accidents and injuries on the job.

SUMMARY OF ADVANTAGES OF RAPID, FITNESS-FOR-DUTY EXAMINATION

- Great acceptance by employees
- Avoids litigation
- Less expensive than urine testing all employees
- Can be unscheduled and/or randomized
- Focuses attention on how drugs and alcohol produce impairment, and reduce job performance.

ROLE OF EDUCATION

Education and training on substance abuse in business and industry has not been systematically studied and evaluated. It probably will not be because business and industry normally set specific goals, e.g., decrease accidents; health costs; etc. to accomplish relative to substance abuse. When these goals are accomplished there is no need for further evaluation. In the experience of the author, education and training of management, supervisors, and employees can be a very effective tool in accomplishing specific company goals relative to drug use. In particular, education has been most effective when it is accompanied by a drug identification program, because a combined program gives employees the clear message that the company is serious about accomplishing its goals.

OTHER BOOKS AND MONOGRAPHS AUTHORED BY

FOREST S. TENNANT, JR., M.D., Dr. PH

Primer on Neurochemistry of Drug Dependence

Identifying the Heroin User

Identifying the Marijuana User

Identifying the Cocaine User

**Identifying the PCP User
(Phencyclidine)**

**Parents' Guide to Urine Testing
For Drugs of Abuse**

Post-Drug Impairment Syndrome (PDIS)

**How To Identify, Prevent and Guide Treatment
of Drug Abuse by Youth**

Phencyclidine (PCP) Addiction

**Medical Withdrawal from
Cocaine Dependence with
Amantadine and Other
Parkinsonian Drugs**

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COMMITTEES OF CORRESPONDENCE, INC.

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DRUG TESTING IN THE WORKPLACE

*Dan Haigh
2130 No. 11 Mile Road
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"Drug tests? --- Sure, I guess they're OK for people in critical jobs, but I work on an assembly line."

"Why should I be forced to take a drug test? I don't use dope, and I object to my employer suspecting me!"

"Drug tests are an invasion of my privacy! What I do on my own time is my own business!"

"Drug testing violates my constitutional guarantees against unreasonable search!"

"Drug tests are inaccurate. If my test shows a false positive, I'll be fired without cause!"

I'm sure you've heard these comments and many others like them, time and time again. Our employers have begun to use new, sophisticated tools to deal with the absenteeism, accidents, lowered product quality and diminished productivity that result from drug use. Drug use is a problem that costs our economy an estimated 60 billion dollars per year!

One of the sophisticated methods of dealing with the problem is the use of urinalysis to detect illicit drug use by both new applicants for employment, and by those already in the workforce. Confusion regarding the need for urinalysis, its legality and the accuracy of the tests has resulted in a great deal of controversy about its use. In this news-

letter we hope to clear up some of that confusion, and help you to become more comfortable with this new, effective weapon in our nation's war against drugs.

First, let's look at the need. Do we really need drug testing in the workplace? To understand the need, we first have to understand a few items that are basic to making a free-enterprise society tick. Those basic ingredients are PRODUCTIVITY, WORKMANSHIP & COMPETITION. PRODUCTIVITY is simply the quantity of goods or services produced by an employee paid a given wage during a given period. The QUALITY of those goods or services --- the thing that makes them desirable to customers --- we call WORKMANSHIP. It is the combination of high PRODUCTIVITY and excellent WORKMANSHIP that allows a product or service to be COMPETITIVE.

Anything that negatively affects productivity and workmanship also negatively affects the competitive edge, as profitability suffers. When profitability suffers, wages decline, resulting in a decreased incentive. That, in turn, causes productivity and workmanship to suffer even more. Your industry gets trapped in a downward spiral that continues to worsen unless you take strong, positive action to pull it out of the mired state.

Drug use by workers negatively affects both productivity and workmanship. Drug

users have higher accident rates than non-users. This results in higher liability insurance costs for the employer. They make more medical insurance claims, resulting in higher medical insurance costs. They are absent from work more often than non-users, and get into disciplinary problems more often. Additionally, drug users produce more inferior products, and are more likely to steal from their employers. All of these factors negatively affect productivity and workmanship, and, as we mentioned earlier, they affect it to the tune of about 60 billion dollars per year.

If we do nothing to reverse this trend, our downward spiral will become tighter and steeper, and our economy will continue to get poorer and poorer. As Dr. Carlton Turner, Director of the White House Office of Drug Abuse states:

"America is the most drug-pervaded nation in the developed world. No area of the workplace can consider itself immune. If our country does not wake up and address the disastrous and wide-ranging effects of drugs in the workplace, the United States is doomed to become a second-rate power."

People in the age group of 18-25 years of age represent prime candidates for hire by our nation's employers. However, over 27% of this age group regularly use drugs! Employers need efficient tools to prevent those drug-using applicants from destroying the competitive edge. Additionally, they need an efficient method to prevent employees from beginning drug use. Urinalysis can answer both of these needs. Its value as a deterrent is perhaps best displayed by the experience of the United States Armed Forces. In 1980, 48% of enlisted personnel were using drugs on a monthly basis. Widespread urinalysis was implemented, and in 1986, the figure was down to 4%! In a U.S. Navy survey, urinalysis was identified as the single most effective deterrent to drug use. Do we need drug testing in the workplace? YOU BET WE DO!!

But, what about those employees who

aren't on "critical" jobs? And, what about employees who have never (and would never) use drugs? Isn't it unfair to require urinalysis of these people? ---- No, it really isn't! You see, in a free enterprise economy such as we enjoy in the United States, EVERY employee is critical. Every employee is in a position to add to or detract from the success and safety of the workplace. The janitor is as critical as the assembly line worker or floor supervisor --- The baggage handler is as critical as the flight mechanic or pilot. Truth of the matter is --- we're all in this economy together --- employer and employee alike. We all have the right to expect a safe and drug-free workplace. We all have the responsibility of contributing to a successful workplace. We all have the responsibility of contributing to a successful economy. Encouraging and participating in workplace drug testing is just another way for drug-free workers to display a high degree of responsibility and concern. It's another vote for a safe and productive workplace.

A few words about privacy --- What you do in your own home, or on your own time is indeed your business, and nobody else's --- PROVIDED, THAT IS, IT'S LEGAL, AND DOESN'T ADVERSELY AFFECT THE LIVES, SAFETY, OR RIGHTS OF OTHERS! Drug use has those negative effects. You see, drugs (and their effects) aren't necessarily gone from the body just because the user no longer feels "high." For example, THC, the psychoactive ingredient in marijuana, is stored in fatty tissues and is released over long periods of time. Its metabolites are detectable for days --- even weeks after use. A 1986 study at the VA medical center in Palo Alto, California, was carried out to determine the effects of marijuana after the "high" was gone. Eight experienced pilots volunteered to use marijuana, and were tested twenty-four hours later on flight simulators. Results showed that certain important components of standard landing maneuvers were seriously impaired, even though all eight pilots thought they had done well. If this hadn't been a test, what those pilots smoked "privately" the day before, could have affected --- even destroyed --- the lives of HUNDREDS of other people!

And, by the way, drug testing DOESN'T violate your constitutional rights. Your constitution guarantees you against unreasonable search and seizure by the GOVERNMENT. Drug testing in a private workplace, however, is a matter between employer and employee. The government isn't involved. Your employer does, however, have the responsibility to provide you with a safe workplace and safe working conditions. The use of urinalysis to ensure a drug-free workplace is just one more way your employer will help ensure safer working conditions for all employees. Since maintaining a safe workplace is REQUIRED of your employer, it's really not a negotiable item.

We need to talk at some length about accuracy, because this seems to be the most controversial question surrounding urinalysis. Let us assure you --- right up front --- that urine testing for drugs IS accurate. Matter of fact, it's EXTREMELY accurate, and we hope to help you better understand why it has such a high degree of reliability.

First, let's understand that there isn't a SINGLE urinalysis test used in any responsible testing program. There are several tests, each of which uses a different, reliable scientific procedure to reinforce the information received from the test that preceded it. A urine specimen that tests positive for drug metabolites on the first screening test, must also show positive on the tests that follow in order to be used as evidence of drug use. This procedure effectively eliminates the possibility for "false positives" and unwarranted incrimination.

The first test that is usually performed on a urine specimen is a IMMUNOASSAY. Syva Company developed an immunoassay which they call EMIT (Enzyme Multiplied Immunoassay Technique), and the Biomedical Division of Hoffman-La Roche developed one which they call ABUSCREEN. Although each of these tests uses a slightly different method to measure results, they both depend upon the same technology to detect drug metabolites. That technology is the use of antibodies. Antibodies are VERY specific detectors of compounds or classes of compounds. A particular antibody will only react with

and bind to a compound or class of compounds for which that antibody is specifically designed. It's a lot like a lock and key arrangement. Once the antibody is "locked on" to the drug metabolite, its presence is detected and measured by very accurate and precise scientific methods using either enzymes or radioisotopes. With these techniques, one can reliably screen for the presence of cocaine, the cannabinoids (from marijuana), amphetamines, the hallucinogens, barbiturates, opiates, PCP, benzodiazepines (such as Valium), etc. You'll notice that we said SCREEN.

That's exactly what this first test does, and it does it extremely well. It can detect the presence of drug metabolites at from 97% to 99% accuracy when set up to produce detection limits normally used for workplace drug testing. If a specimen tests "clean" by this method, no additional testing is required --- the employee is assumed to be drug-free. But what happens if the presence of drugs IS detected in the specimen? If that's the case, the specimen goes on to:

STEP TWO

As we mentioned earlier, the immunoassay is an excellent detector for the presence of drugs, and it can be very specific for drugs like marijuana and cocaine. And, although it will detect the presence of barbiturates, amphetamines, benzodiazepines, etc., it can't properly determine which SPECIFIC barbiturate, etc. might have been used. That's where GC (Gas Chromatography) comes into play. In GC, the sample is injected into a machine that contains a very narrow, very long, hollow column. The inside of the column is coated with special materials that help to separate chemical mixtures into their individual components. As the sample is swept along this column by a gas such as helium (the carrier gas), the individual chemicals in the mixture separate, and exit the column at specific times called the ELUTION time. The presence of these individual chemicals is detected by a special detector which notes both their elution time and concentration on a recorder. When the result is compared to a standardized GC record containing known drug metabolites, individual

drugs in the urine specimen can be accurately identified and measured. You might be interested to know that GC is one of the techniques used to measure water quality, and it can reliably measure and identify some pollutants in levels as low as one part per billion parts of water!

Satisfied? Well, many drug-testing companies still aren't at this point! Even though there is, virtually NO chance for error when a specimen tests positive by both immunoassay and GC (and in most reputable urine testing programs it MUST show positive in both tests to be considered "dirty"), there is one final test that can be used to confirm the results.

STEP THREE

The step three test is called Mass Spectrometry (MS). Remember the pure compounds that exited from the GC machine in step two? Well, those compounds can be individually and automatically fed into a mass spectrometer for a final identity check.

Inside the mass spectrometer, the compounds are broken down into charged particles called IONS. The machine then sorts and identifies those ions according to their mass. The MASS SPECTRUM that is produced is a record of the numbers of different kinds of ions -- the relative numbers of which are characteristic and specific for each compound. The mass spectrum is essentially another identifying "fingerprint" of the compound.

You can certainly see that with a series of sophisticated tests like this in the hands of highly qualified analytical scientists, the chance for error and erroneous incrimination are essentially nil! The myth of drug test inaccuracy is just that -- A MYTH!

One important factor to keep in mind when you are asked to submit a sample for urinalysis. Although urinalysis tests are very accurate, they can't tell the difference between a particular drug obtained by prescription, and that same drug taken illegally. So, if you have taken ANY medication within a reasonable period prior to submitting the sample, be sure to

let your employer know what you have taken. Your employer will make note of the medications, and may ask to see prescriptions. Your employer will appreciate and respect your honesty and cooperation.

We certainly hope that this newsletter has helped you to better understand the need for drug testing in the workplace, and to better appreciate the reliability of those tests. Please don't consider urinalysis an accusation, it isn't! Instead, consider it a minor inconvenience -- your contribution to a safer, more productive workplace. We undergo such inconveniences daily for the good of our society and our way of life. We happily submit to baggage searches in airports to ensure safe air travel. We take blood tests before marriage to confirm that we are free of venereal disease. We are tested for, and vaccinated against many dangerous diseases. The blood that we donate is screened to ensure that it is safe and free from the deadly AIDS virus.

We submit to these tests, searches and screens without serious complaint because we know that they benefit us and benefit our society as well. Drug testing in the workplace is another contribution to a safe and productive society. Cooperate with your employer and encourage participation in an accurate, comprehensive drug testing program for YOUR workplace. It's another positive contribution to safety, productivity and workmanship.

U.S. SEEKS DRUG TESTS FOR RAILROAD EMPLOYEES

Taken from the INTERNATIONAL DRUG REPORT Volume 28, No. 4 - April, 1987.

Following confirmation that two crew members involved in Conrail freight locomotive crash near Baltimore tested positive for drugs Elizabeth Dole, Secretary of the U.S. Department of Transportation announced that she will ask Congress for legislation to allow random drug testing of railroad employees. The locomotive crashed into a passenger train resulting in the death of 16 passengers and injury to 175 others. "Our responsibility to

the traveling public is unequivocal," she said in a prepared statement. "We must insure there is no room for drugs in the transportation workplace."

In addition as part of a sweeping new program that would lead to the testing in the aviation industry Mrs. Dole said she will order pre-employment, post-accident and random testing of commercial airline pilots, crews and others involved in flight operations through the Federal Aviation Administration, which has the authority to require those tests. She said she will also require drug and alcohol tests as part of annual physical examinations.

In the crash which occurred on January 4 a string of three Conrail locomotives barreled through two signals telling it to slow down and stop before the engineer threw on the emergency brake. The locomotive then jumped a closed switch where the tracks narrowed from four to two and skidded in front of an oncoming passenger train. Traces of marijuana showed up in the blood and urine samples of the crew.

Current Federal Railroad Administration regulations call for drug tests of crews involved in an accident and of crew members whose supervisors have "probable cause" to believe may be abusing drugs or alcohol. Airlines also may test for drugs or alcohol if impairment is suspected, but the FAA has issued no specific drug-testing regulations.

The chairman of Amtrak W. Graham Clayton supported the drug-testing program for railroad employees urging random drug tests to be administered on an annual basis. In his statement of support he said that current testing practices are inadequate because they only allow testing after an accident or if an employee's behavior raises suspicion. "With many drugs you can't tell that someone is impaired." Labor unions traditionally have opposed random testing, calling instead for drug counseling and prevention programs. Don Lindsey, vice-president of the Brotherhood of Railroad Engineers, told a Senate subcommittee the union opposes random testing "on constitutional grounds" arguing that it violates privacy rights.

Henry Duffy, president of Air Line Pilots Association that represents 34,000 commercial pilots, announced new efforts to head off drug use among pilots but said the union would fight attempts to impose a random-testing requirement. Random testing requirements for certain safety-related occupation were included initially in the comprehensive drug bill enacted by congress last year, but the testing provisions were dropped before the bill was finally approved. The Transportation Department program would cover about 26,500 department employees involved in safety or security, including FAA inspectors, air traffic controllers, aviation security specialists, firefighters, railroad safety inspectors, motor carrier safety specialists and hazardous materials inspectors.

Drug Testing

Legal Challenges Clarify Policies

by Mark S. Gold, M.D.



Drug testing is the legal, medical, economic, and political issue of the next decade. Random, periodic, or other testing programs to assess compliance with company anti-drug policies have generated much debate.

While controversial, drug testing is not unpopular. Polls have shown that more than eighty percent of all Americans favor drug testing for certain industries (but not necessarily for themselves). Politically, it's also a popular idea.

Despite the popularity, however, court challenges to drug testing have centered around five areas: the right to privacy; the right to be free from unreasonable searches; the right to due process, negligence law; and labor law. In addition, some workers have claimed that testing is a violation of federal or state rehabilitation acts that protect handicapped individuals.

The Right to Privacy: There is a common belief that we all have a "right to privacy" that protects all aspects of our private life from being involuntarily subjected to outside intrusion. "It's not my boss' business what I do on Saturday night" is a statement made by many people who object to drug testing. In reality, there is no specific provision in the federal Constitution guaranteeing a right to privacy.

Freedom from Unreasonable Searches: The Fourth Amendment protects the "right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures." Plaintiffs are asserting that urine testing intrudes so far into an employee's privacy that it constitutes an unreasonable search in violation

of the Fourth Amendment.

Workers raise this argument not only against government employers, but also against private employers. Once again, however, the Fourth Amendment protection against unreasonable searches protects only against unreasonable governmental actions. A private-business screening against drugs involves no

Americans favor drug testing for certain industries, but not necessarily for themselves.

governmental action, therefore no violation of the Fourth Amendment occurs.

The issue of random drug testing of governmental employees has been settled clearly by the courts. In 1985 a federal court, while allowing pre-employment and "for cause" testing, rejected a random screening program for state correctional officers. Another federal court has ruled that random drug testing may be reasonable in situations where public employees, such as school bus drivers and mechanics, directly affect public safety.

Due Process: The Fifth and Fourteenth Amendments of the Constitution require the government to provide a person with due process before depriving that person "of life, liberty, or property." This is a requirement that the government engage in a fair decision-making process before taking measures that affect an in-

dividual's basic rights.

The courts have held that the actions a government takes towards its employees must be reasonably related to their jobs. When the government plans to penalize employees, it generally must notify them in advance and provide them with an opportunity to defend themselves.

Accuracy and Reliability: Several courts that have passed on government employees' challenges to urine testing have confirmed the accuracy and reliability of the tests. Mobil's clinical toxicologist, David Logan, M.P.H., Ph.D., states that a single EMIT test is 95 percent accurate. A second EMIT test is then 97 percent accurate. And using the GC/MS test over and above the two EMIT tests is 99 percent valid.

Court cases have also upheld the validity of the GC/MS test. The GC/MS confirmatory test "was recognized by all authorities as 100 percent reliable" in *Higgins v. Wilson* (616 F. Supp. 226, D.C. KY., 1985).

And in *Peranzo v. Coughlin* (608 F. Supp. 1504 S.D.N.Y., 1985), the court accepted the results of two independent studies in which the Centers for Disease Control found the double EMIT test to have a four percent error rate, and the Substance Abuse Service Testing and Research Laboratory found it to have a 2.3 percent error rate. The court then declared the double EMIT test to be accurate "beyond reasonable doubt."

Opportunity to Contest Results: The due process guarantee of fair decision making also means that a government employer must provide an employee with a reasonable op-

portunity to contest charges against him before he is punished. For example, a federal court has held that it is a violation of a government employee's right to due process of law to terminate that person's employment on the basis of a positive urine test without allowing the employee the opportunity to have an independent analysis of the sample.

Negligence Law: Unlike the constitutional claims just discussed, negligence claims can be brought against the private employer as well as government entities. Employee-negligence actions against employers are generally of three types.

First, an employer may be liable for negligence in hiring a substance abuser who harms another employee.

Second, an employer may be liable for negligence if he or she fails to conduct the drug-screening procedure with due care.

Third, while an employer has a qualified privilege to communicate test results to those in the company who need to know about them, an employer who maliciously spreads untrue or exaggerated reports of positive test results will not be protected from an employee's charges of libel and slander.

Labor Law: An employer who plans to institute a drug-screening program, or other means of detecting illegal drug use, should determine whether the plan complies with employment or union contracts, and, if it does not, first renegotiate those contracts.

Rehabilitation Act: The Drug Abuse Prevention, Treatment and Rehabilitation Act of 1972 prohibits denial of federal civilian employment, except for certain sensitive positions, to anyone on the basis of prior drug use, unless that person cannot properly function in his or her employment. It is clear that the Rehabilitation Act protects alcoholics and drug users from discrimination in employment.

Mark S. Gold, M.D., and Peter B. Bensinger are the editors of "The Complete Guide to Drug Testing," a Random House Professional Book, New York, 1987.

Assault on Smoking

Newsweek Editorial Uses Kid Gloves

by Bob Hammond

The assault on smoking: It's become a moral crusade that may distort health risks and lead to bad public policies."

With this provocative lead-in, Robert Samuelson began his editorial in a recent issue of *Newsweek* magazine.

While admitting that cigarette smoking kills and that even he has been guilty of an occasional "obnoxious" attack on those puffing in his presence, Samuelson argues that society's sanctions against smokers and tobacco companies have gone too far.

He first questions the validity of various studies that have associated passive smoking with a variety of health problems. Indeed, the Marlboro man may be playing Russian Roulette, but to say his smoke endangers the health of others is going a bit too far, according to Samuelson.

By banning cigarette advertising, Congressman Henry Waxman of California says we could dramatically reduce the incidence of smoking among our children. Not so, says Samuelson as he points to the growth of marijuana use between 1960 and 1979, all without the benefit of any advertising whatsoever. And, in spite of all the cigarette advertising, smoking among adults has actually decreased since 1965 from 43 percent to 30 percent.

There should be no ad restrictions on legal products and services, according to Samuelson. Since cigarettes are still legal, there should be no advertising limitations. If we ever got to restricting the advertising of "harmful" products and services that are legal, one could only guess where this might lead.

Samuelson wondered aloud:

"Abolishing cigarette ads would loosen this self-restraint. Would alcohol be next? High cholesterol foods? Salt? Who knows?"

The *Newsweek* editor holds that cigarette advertising mainly affects brand competition. For example, Marlboro's brand share has risen from 9.8 percent to 22.6 percent over the last decade.

But Samuelson's argument needs to be challenged. All advertising has three purposes, and market share (brand selection) is one. But, in addition, advertising serves to recruit new users and encourage current users to increase the number of occasions they may use a particular product or service.

No question that the main thrust of some cigarette ads is brand selection. For example, notice the Carlton ad on the outside back cover of that issue of *Newsweek*: "If you smoke, please try Carlton."

Mr. Samuelson's editorial needs to be challenged on the basis of his limited perception of the nature and effect of the \$2 billion worth of cigarette advertising that appeared in the print media last year.

Also, it wouldn't hurt to get *Newsweek's* dependence on advertising in perspective. As it is with most major magazines today, subscriptions fall far short of paying for the publication. Advertising revenue is important to the survival of *Newsweek*, and in the first three months of 1987, the magazine ran 41 full pages of cigarette ads worth an estimated \$3.8 million in revenue.

Bob Hammond is the executive director of the Alcohol Research Information Service.

Outboard maker probes products power Iran

WAUKEGAN, Ill. (AP) - The leading U.S. outboard motor manufacturer is under investigation for possible export violations over reports that armed Iranian speedboats are powered by its products, federal and company officials said Thursday.

"If the engines made it to Iran, they made it without our knowledge or without our condoning it," Outboard Marine Corp. spokesman Laurin Baker said from the company's suburban Chicago headquarters. "We do not make shipments to Iran, we do not allow them to be re-directed to Iran."

"We have a strong interest in any

investigation which may reveal our products improperly have been sent to prohibited destinations. At this point, we have no indication that OMC or any third party connected to the company helped facilitate ... these engines' making their way to Iran," he added.

Possible export violations

Baker said the company was notified by Customs agents Wednesday it was being investigated for possible violations of the Export Administration Act.

Customs Service spokesman Edward Kittredge confirmed Thurs-

day that agents had taken documents from Outboard Marine, but declined to discuss the investigation further. Under the Export Administration Act, the shipment of outboard motors of 45 horsepower or more to Iran would be illegal, Baker said, but the company does not ship smaller motors to Iran.

"The motors being discussed are at the top end of the size range and we make them up to 150 horsepower," he said.

Baker said Outboard Marine has a number of foreign subsidiaries and purchasers of the engines are required to certify they intend for distribution to Iran, where sales of U.S. products are restricted by the export act.

Video, photo evidence

Federal authorities in Tehran learned the American-made engines were being used in the Persian Gulf from Iranian television footage that nation's forces.

National highlights

Alleged computer plot foiled

SAN JOSE, Calif. (AP) - An alleged plot to sell supercomputer technology with military applications to the Soviet Union was broken up Thursday when U.S. Customs officials arrested three men and recovered stolen computer designs.

The designs stolen from Sunnyvale's Saxxy Computer Corp. and recovered by the FBI could be used to build one of the most powerful supercomputers in the world, capable of 1 billion computations per second, company officials said.

Ivan Batinic, 29, of Fremont, a former Saxxy engineer; his brother, Stevan; and Kevin E. Anderson, 36, a software designer also from Fremont, were arrested.

Greenpeace protesters nabbed

MOUNT RUSHMORE NATIONAL MEMORIAL, S.D. (AP) - Five protesters with the environmental group Greenpeace were arrested Thursday as they tried to display a giant banner across Mount Rushmore opposing acid rain, authorities said.

The 160-by-50-foot white banner said, "We the people say no to acid rain," in blue letters and "Greenpeace" in green letters. But authorities arrested the climbers before the two-section banner could be put in place on the granite carvings.

The environmental group has been frustrated because Congressional bills to regulate industrial emissions that contribute to acid rain have been blocked consistently by auto and coal interests, Eileen Price of Greenpeace said.

Andy, of Far Hills, N.J., was named by the president Thursday to a three-member task force called in response to Monday's devastating decline in stock prices.

The panel will have 30 to 60 days to examine the stock market procedures and make recommendations on any necessary changes," Reagan said.

Engineer's doping alleged

BALTIMORE (AP) - A former Conrail brakeman told a grand jury that he and an engineer smoked marijuana before their locomotives slid into the path of an Amtrak passenger train in January, causing the worst crash in Amtrak history, according to published reports.

Sixteen people were killed and 175 others were injured when the Conrail train skidded through a closed switch and into the path of the high-speed passenger train.

The engineer, Ricky L. Gates, was indicted in May on 16 counts of manslaughter by locomotive stemming from the crash near Chase. His trial is scheduled to begin in February.

Gutenberg Bible gets record

NEW YORK (AP) - A Gutenberg Bible was sold at auction Thursday for \$5.39 million, more than double the previous record for a printed book, Christie's auction house said.

The Bible, printed in 1455 in Mainz, Germany, is one of 48 surviving of the 185 believed to have been printed at least in part by Johannes Gutenberg. The Bibles, the first books printed by movable type,

Dioxin v

BELLEVILLE, Ill. (AP) - Monsanto has determined that Monsanto failed to warn a Missouri town of the risks of a 1979 spill of dioxin, less than a teaspoon of dioxin ordered the giant chemical company to pay \$16.2 million in damages.

Monsanto said it would appeal Thursday's verdict, which is one of the nation's longest jury verdicts.

The finding of misconduct resulted in compensatory awards of \$14,500 each to the town and son who owned land near the Sturgeon, Mo., spill site, as well as punitive damages were to be equally among all plaintiffs.

The lawsuit in St. Clair County Circuit Court accused St. Clair County of a 19,000-gallon rail spill.

Colo. gu

BRIGHTON, Colo. (AP) - A 34-year-old gunman who shot three neighbors in a shooting Thursday was acquitted of second-degree murder counts of assault.

David Guenther, 34, of Brighton had once based his



gan, first lady Nancy Reagan, made a jazzy, joyful return to the White House five days after breast cancer surgery. She was seen in a very, very happy mood in a wavering voice as she walked by her side. The first lady was escorted and lifted her left arm by White House staff members. She had drug programs and been invited to the White House Band's jazz music.

seek to -CIO

AFL-CIO officials on the sidelines earlier. "It's my understanding that there has been a dialogue on for some time, extending several months," he said. "I don't know if there are any reasons

POLICY REGARDING DRUG AND ALCOHOL ABUSE

Ketchikan Pulp Company prohibits the use, sale, possession, purchase or transfer of illegal and/or illicit drugs on Company premises or while on Company business. It also prohibits employees from being under the influence of drugs, alcohol or other substances during working time where such substances can impair the fitness of an employee to perform his or her work. Commission of these actions will subject the employee to disciplinary action up to and including discharge. For purposes of applying this policy, being under the influence of drugs or alcohol means being impaired in any way from fully and proficiently performing job duties and/or having a detectible amount of illicit drugs in one's body.

The prohibition concerning drug and alcohol abuse is based upon a number of concerns including the physical safety of all employees, potential damage to plant and equipment, mental and physical health of employees, productivity and product quality, medical insurance costs, and the harm done to employees and their families by drug and alcohol abuse.

Employees who acknowledge that they have a drug or alcohol addiction or dependency, and who seek to overcome such addiction or dependency, will be afforded guidance and cooperation by Ketchikan Pulp Company in dealing with their problem. Voluntary acknowledgment of such addiction or dependency revealed prior to a detected use on the job will be held confidential and will not be used as a basis for disciplinary action or termination. Such acknowledgment will not, however, relieve an employee of the obligation to remain free from the influence and involvement with drugs and alcohol during working hours.

In order to assure that prohibitions against drug and alcohol involvement are not violated, various means of detection and investigation may be employed by Ketchikan Pulp Company including testing when reasonable suspicion exists, searches, covert investigations, surveillance, employee interviews and other forms of fact gathering. All employees are required, as a condition of employment, to cooperate fully in the carrying out of these detection and investigation procedures.

June 1, 1987

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In order to assure employees of a drug and alcohol free environment, and to assure that prohibition against drugs and alcohol involvement are not violated, various means of detection and investigation may be employed by Ketchikan Pulp Company, including testing when reasonable suspicion exists, searches, undercover investigations, surveillance, employee interviews and other forms of fact gathering. All employees are required, as a condition of employment, to cooperate fully in the carrying out of these detection and investigation procedures.



LONG ISLAND DEVELOPMENT, INC.

P.O. Box 5960 • Ketchikan, Alaska 99901 • 907-225-2675

October 20, 1987

To Whom it May Concern:

During the early part of 1987, representatives from Klukwan, Inc. and Long Island Development, Inc. presented testimony relating to House Bill #283 while the Senate Committee on Labor and Commerce was in session. At that time it was indicated that Klukwan, Inc. and its subsidiaries opposed House Bill #283.

First, we wish to reiterate our active opposition to House Bill #283. Second, we would like to explain in some detail why we oppose this piece of legislation. During 1984 and 1985, it became obvious to us that our company had a serious drug problem at our isolated camp locations. In one instance, we had an employee overdose on cocaine and nearly die. We knew that we had to implement some kind of comprehensive program to protect our employees. After a considerable amount of research on the topic, we drew up and implemented a comprehensive program for the 1986 season.

The Drug and Alcohol Policy for Klukwan, Inc. and its subsidiaries has several key elements. First, prohibited items under the policy include illegal drugs, controlled substances, marijuana, and all mood or mind altering substances. Second, our employees have been tested for drugs as part of the pre-employment procedure, after returning to active employment while on seasonal lay-off, and following an on-the-job accident requiring transport to a medical facility. Third, all urine samples are sent to the American Institute for Drug Detection, Inc. in Rosemont, Illinois. This institute is one of the most respected laboratories in the country. We wish to emphasize that this lab performs sophisticated confirmation tests on all initially positive drug tests. In particular, it goes through an elaborate procedure involving gas chromatography, and mass spectrometry. This laboratory

claims that through this process it can detect drugs or controlled substances with virtually absolute certainty. Fourth, our drug program contains a procedure whereby an employee testing positive on a drug test can retest after thirty days. If he/she tests negative this time around, he will once again be eligible for employment. If an employee tests positive again on his second test, he must wait ninety days before taking a third test. During the last two years, we have rehired many employees who have tested positive for drugs, cleaned up their acts and then subsequently tested negative on future tests. Fifth, the results of our comprehensive Drug and Alcohol Policy have been extremely successful. Serious on-the-job injuries have been reduced drastically. In 1987 alone, the company may save over one million dollars in reduced workers' compensation claim costs.

In short, Klukwan, Inc. and its subsidiaries work in one of the most hazardous industries. We feel that each of our employees has the right to work alongside other employees who are not under the influence of drugs or alcohol. For these reasons, we feel that House Bill #283 is a step backward, and we oppose it as presently drafted.

The management of Klukwan, Inc. and its subsidiaries would be more than willing to sit down with the drafters of House Bill #283 and re-write the bill so that the concerns of the committee are addressed as well as the concerns of the Timber Industry.

Sincerely,



Donald I. Mellison
President/General Manager
Long Island Development, Inc.

DIM/sf



Ketchikan Pulp Company

A subsidiary of
Louisiana-Pacific Corporation

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Ketchikan Pulp Company's testimony on House Bill #283

Past Governors have tried, and the present Governor is trying to broaden the business base of the State by attracting new business. This would be good for everyone.

One of the things that we Alaskans can do to help the Governor in his quest is to be able to give comfort to these prospective employers that we will be able to provide a workforce that will be at work, fit for work and able to work safely. The employer will want to know that he (or she) will not have to have a larger than normal supervisory force to look for "loss of performance". He will want to know that he will not face undue losses because of absent employees. He will want to know that theft losses will be controllable. He will want to know that his product will be a quality product. He will want to know that his productivity will be good. He will need to know that he can compete in the market place.

Assistant Attorney General Richard Willard has said: "Illegal drug use drains our nation's productivity, strangles the economy and hinders our ability to compete internationally against an ever more disciplined foreign workforce.

Drug users in the workforce are three times more likely to be involved in on-the-job accidents, are absent from work twice as often, incur three times the average level of sickness costs, and are only two thirds as productive. On the average, compared with their non-addicted counterparts, substance abusers consume three times the medical benefits, are five times as likely to file Workers' Compensation Claims, experience seven times as many garnishments and are repeatedly involved in grievance procedures."

Mr. Willard is not alone in his alarm. Charles R. Schuster, Ph.D., Director of the National Institute on Drug Abuse in a letter to business leaders states: "Drug abuse is a significant public health problem. Approximately 19 percent of Americans over age 12 have used illicit drugs sometime during the last year. Among 18 to 25 year olds, representing young adults just entering the work force, 65 percent have experience with illicit drugs, 42 percent within the last year. The abuse of alcohol and drugs costs society nearly 100 billion dollars in lost productivity each year. Clearly, the human costs to society and the social, economic, and legal costs to business have created a

new awareness of the multifaceted problems that result from substance abuse. This awareness has resulted in consensus among Government and business that action must be taken to reduce these costs."

From the American Legislative Exchange Council May 1987: "Drug abuse is a present and growing threat to American society -- its families, communities, and economy. Twenty years ago, 96% of Americans had never used any illegal drug and drug use on the job was virtually unheard of. By contrast today, in the age group currently entering the workforce, the numbers are staggering -- a 1985 survey revealed that 65% of 18 to 25 year-olds had used illicit drugs, and 42% had used illicit drugs within the previous month. Overall, 70.4 million Americans age 12 and over (37% of the population) have used marijuana, cocaine or other illicit drugs at least once in their lifetime; 36.8 million (19% of the population) were users at least once in the past year. Between 1964 and 1984 marijuana use alone has increased thirty fold. In the workplace today, one in six Americans is using marijuana monthly and one in twenty is using cocaine monthly.

Powerfully addictive drugs have never been more accessible to such a cross section of American society than they are today. While the national infatuation with drugs seems to have waned since the 1960's, drug experts warn that "exposure to addictive substances now begins earlier in life and cuts across a more diverse slice of the population than ever before." A 1986

study by Straight, Inc. showed that almost half of the nation's teen drug abusers got involved before the age of 12. As Edward Kayfman, Chairman of the American Psychiatric Association's drug abuse panel said, "(t)he kid who used to have to spend \$250. for a gram of coke can now buy a vial of crack for 10 bucks. Two kids can go to a movie or they can split a vial of crack." Since NIDA began monitoring marijuana potency in 1975, the potency of TCH, the psychoactive ingredient in marijuana, has increased, on average, 900%. Sensimilla, a type of marijuana, is ten times more potent than marijuana was just ten years ago."

Alaskan businesses will not stay competitive if they are unable to control their costs, their quality and their productivity. Present employers in Alaska will constantly reassess their positions here. It is only good business practice to do so.

Ketchikan Pulp Company made such a re-evaluation. We determined that there were drugs and the effect of drugs in our work environment. Our employees also began to show concern about drugs in the work environment. Drug use affected the safety of our employees, it affected the quality of our product and our productivity. We became aware of the concern about drugs being shown by others in our industry.

We knew that we had to do something. We formulated a policy regarding drug and alcohol abuse. We decided to start a prehire screen of new applicants. We started an education program for our supervisors. Supervisors are ill equipped to handle drug problems

along with all their other responsibilities. The sophisticated drug user can fool a lot of people. Even though we had employees that were concerned about drug use they were reluctant to step forward, sometimes because of fear of retaliation.

We wanted employees who had drug or alcohol problems to come forward and get treatment. None of these were done lightly or without prior thought. The question of drug testing accuracy came up. Certainly there were concerns. It was found that drug testing today is suffering from a reputation of yesterday. To quote from one source, Alcoholism and Addiction -September/October 1987 - article by Mark G. Gold -articles; Legal Challenges Clarify Policies:

"Accuracy and Reliability: Several courts that have passed on government employees' challenges to urine testing have confirmed the accuracy and reliability of the tests. Mobil's clinical Toxicologist, David Logan, M.P.H., Ph.D., states that a single EMIT test is 95% accurate. A second EMIT test is then 97% accurate. And using the GC/MS test over and above the two EMIT tests is 99% valid."

"Court cases have also upheld the validity of the GC/MS test. The GC/MS confirmatory test "was recognized as 100% reliable in Higgins vs. Wilson (616 F. Supp. 226, D.C. KY, 1985.)

All of Ketchikan Pulp Company's positive tests have a confirmation test, and by another method. This assures that people are not falsely denied job

opportunities. We do not test for substances that are not work related. We do not share these test results with others so that confidentiality is assured. We code names so that the laboratory does not know the name of the person being tested.

What did our efforts gain for us? We know that our efforts made a significant contribution to a better safety record. We know that our absenteeism is down. We know that our product quality is up. We know that our productivity is up.

Our company has equipment that, if handled improperly, can be dangerous. We have chemicals that need to be handled properly. Each of us depends upon another for our safety as he depends on us for his.

If the State wishes to help in these times House Bill #283 is not the vehicle to do it. As a company that pays taxes and provides employment for persons that pay taxes and live here we fail to understand a bill that gives comfort to an industry that doesn't even have a business license in this state. The industry that I speak of is the illicit drug industry, an industry that pays no taxes but causes this state to spend an ever increasing amount of an ever decreasing state budget.

COCAINE IN THE WORKPLACE:

THE TICKING TIME BOMB

Chapter in COCAINE ABUSE

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Cocaine is a bomb ticking in the American workplace. Roughly one in five American workers have tried cocaine, the most compulsively reinforcing drug in widespread use. Drugs in general pose a grave threat in the workplace -- to health, productivity, safety, morale, costs, and to quality of work experience -- for both users and for non-users. In this dismal context, cocaine is uniquely dangerous.

The first step to defusing the cocaine bomb is to see it clearly. This exploration of cocaine at work, while still preliminary, has three parts. The first is a general context of the problem based on my 20 years of clinical experience. The second part, the heart of the matter, outlines nine ways in which cocaine is different as a drug problem in the workplace. The final part describes four steps to deal with the cocaine problem in the workplace.

The cocaine problem is part of the drug abuse epidemic that began in the early 1960s and became a national threat during the 1970s. This epidemic, although no longer limited to the United States, involves all of American society and continues today. In looking at the drug epidemic from the mid-1960s to the present, three drugs are unique: alcohol, marijuana, and cocaine. These drugs are called the Gateway Drugs (1). While drug use typically begins with alcohol and proceeds through marijuana to cocaine, the drug abuse treatment field initially emphasized the "end of the line" -- the heroin problem. The incidence of heroin use in the United States peaked in 1971. There are still people

newly addicted to heroin, but the epidemic rise of heroin use came in the late 1960s and early 1970s. This heroin problem catalyzed the federal government's involvement in drug abuse, particularly in drug abuse treatment. It had a significant effect on our national response to the Vietnam War. Of course, it was also intimately connected with the problems of inner-city life, and particularly the problems of crime, which were, and still are, important political issues. One unexplained paradox of drug epidemiology is why the heroin problem peaked so early in the overall national drug abuse epidemic.

While heroin played an initiating role in governmental response to drug abuse, it was alcohol, the most commonly used intoxicant in the U.S., that created the foundation for the drug epidemic itself. The lowering of the drinking age from 21 to 18 in the early 1970s contributed to the massive increase of exposure of especially vulnerable teenagers to the use of a chemical to feel good -- to "get by by getting high." Unlike the more visible, but much smaller heroin problem, alcohol use by youth during the 1970s was all but overlooked. After rising steadily from the time of the repeal of Prohibition in 1933, per capita alcohol consumption in the U.S. peaked in the 1980s. That was the good news. The bad news is that adolescent alcohol use continues at unprecedentedly high levels.

Most of us think about the drug epidemic as all but synonymous with the marijuana problem. Marijuana incidence rose rapidly after 1965 and appeared to peak in about 1978 in the

United States. It is surprising to many Americans that the marijuana epidemic was primarily a phenomenon of the '70s, not the '60s, even though the "pot" image was a '60s issue. The marijuana epidemic both reflected and caused the rise of non-traditional values, the "youth culture." It was in part a middle class drop-out phenomenon, a rebellious rejection of adult, traditional values. Marijuana use is associated with the people who listened to the Pied Piper of this cult, Timothy Leary, with his "Tune In, Turn On, Drop Out" mentality.

The third step in the typical drug pattern, after alcohol and marijuana, was cocaine. Cocaine has an epidemiology different from heroin, alcohol, or marijuana. The peak of cocaine use in the U.S. has apparently not yet occurred. In this cocaine stands in clear contrast to both alcohol and marijuana. Cocaine use is unique because it is not involved with the ghetto, as is heroin, and it is not particularly involved with youth, at least not primarily with teenage drop-outs, the way marijuana is. All of these characteristics distinguish the cocaine epidemic and make comparisons with other drugs perilous.

Here are my estimates based on the best available data, a national survey completed in 1982 (2). Later this year new survey data will be available. I estimate that about 30 million Americans have tried cocaine and about six million have used it within the last month. Ninety percent of these people are between the ages of 18 and 35 and 50% are between the ages of 18 and 25. Cocaine use, while concentrated in the under-35 age group, is not

limited to any geographic area, race, or social class. In the workforce today about 20 million workers have tried cocaine and about four million have used it at least once within the last month. That 20 million is about one in every five workers in the United States. Those numbers do not begin to tell the cocaine story because of the unique age gender concentration of cocaine use. If we look at males between the ages of 18 and 25, we see that about 50% in the workforce has used cocaine. Thirty percent of females at work, aged 18 to 25, have used cocaine. The numbers in the 26-34 age group are only slightly lower -- about 35% for males and 25% for females. Within this age group of 18 to 35 in the workforce, there is an enormous number of people who have experimented with cocaine. For millions of these people the experimentation has gone on to, or will go on to, severe problems. Because of the powerful, seductive nature of cocaine use, every one of these 20 million workers is at risk of a serious problem with cocaine. The more they use the drug the more they like it, and the greater the risk to them, their coworkers, their employers, their families, and their communities.

That is by way of background about the drug epidemic with a special focus on cocaine. This leads to a review of the Drug Dependence Syndrome. There are two related myths that create serious handicaps in dealing with the cocaine problem. The first myth is the concept of "controlled" or "responsible" use. We are used to this idea from the experience of alcohol use. It has a devastating impact on our ability to understand and respond to

all drug problems, particularly cocaine. Another myth is the concept that there are "non-addictive" drugs. Labeling cocaine as non-addictive, which is the way most young people have been educated about cocaine, has contributed to the epidemic of cocaine use. "Responsible" cocaine use makes as much sense, based on scientific understanding of cocaine's pharmacology, as does "responsible" Russian Roulette: if you do not pull the trigger too often some who play the game will survive! To call cocaine "non-addictive" flies in the face of modern pharmacology. One hundred percent of monkeys allowed to self-administer cocaine die of the drug's effect within five days. Is that a "non-addictive" drug?

There are three stages of the Drug Dependence Syndrome. The first stage is experimentation. This is the most important stage. It involves going from never using the drug to trying out the drug. The second stage is the stage I call fooling around with -- dabbling in -- the drug. This is often the honeymoon stage when the user may have the confident feeling that he can control the experience and that it is a harmless "fun" part of his "lifestyle." The third stage is the stage of dependence or being hooked. The best way to understand this stage is to see it as falling in love with the drug and the drug experience.

Several features of this syndrome need to be highlighted in the workplace context. All drug users deny both the extent and consequences of their drug use, especially to anyone who might come between them and their "lover" -- their drug. Other people

-- employers, coworkers, family -- enable drug use to continue. Finally drug dependence leads to lying and moral corruption among all users. The user generally feels entitled to say or do whatever he thinks is necessary to keep using the drug.

It is important to realize that these three stages are all part of one process. The three stages are not different phenomena. This progression is out of the drug user's control. The concept that it is a matter of willpower for a person to manage cocaine use is devastatingly wrong. The vulnerability to dependence, to falling in love with cocaine, is a universal mammalian vulnerability. It is not restricted to some qualities of character, genetics, gender, race, social class, or anything else. The vulnerability does appear to be somewhat different in degree -- greater for some and less for others -- but anyone who is willing to use cocaine frequently at intoxicating doses is going to fall in love with it and lose control of his or her use of cocaine.

The alcohol analogy is dangerously misleading if we talk about the Disease Concept implying that there are some people who can "handle" cocaine, as some people appear to be sensible social drinkers. No one can handle cocaine. The idea that some people are invulnerable for genetic or other reasons is a deadly misconception.

Having looked at cocaine epidemiology and the Drug Dependence Syndrome, our survey leads to treatment of cocaine users. A remarkable thing has happened to drug abuse treatment in the last

five years. The drug abuse treatment experience is different now than it ever was before. In fact we have, in a sense, rehabilitated much of drug abuse treatment. It has come about in an interesting way. The old treatment ideas when I was a medical student, were based on two assumptions: First that drug problems were symptoms of an underlying primary disorder. The treatment was psychotherapy to help understand that problem and once that understanding was accomplished, the drug "symptom," being secondary, would disappear. The second idea was that the clinical problem was addiction -- "The Man With the Golden Arm" phenomenon. Just get over the addiction and everything will be okay. People, in this view, used drugs because they got sick when they stopped.

The logical conclusion from these two erroneous assumptions was that drug dependent people needed psychotherapy and detoxification. If you could just put drug abusers in psychotherapy and get them drug-free for a few days in a hospital they would be fine because their problem would be eliminated. The fact that this approach did not help many people in the 40 or 50 years it was used did not discourage doctors and others from continuing to use it over and over again. In fact, this was the primary model for treatment for cocaine and other drug problems until a few years ago.

The key ideas for contemporary treatment came from Minnesota where they developed the idea of a longer period of inpatient care, not 7 to 10 days but 28 or 30 days. This time was not so much used to get the patient drug-free as to plug him into a self-help group -- Alcoholics Anonymous or Narcotics Anonymous -- for a lifetime of recovery. The drug user's family was part of treatment, being plugged into Al Anon also for life. That simple two-step process led to a dramatic improvement in drug abuse treatment.

Cocaine was important in this process of change because cocaine for the first time revealed just how foolish some of the old ideas were. The cocaine experience showed that serious drug abusers were not "addicted" in the traditional sense, because they were using a "non-addictive" drug. Yet they could not "control" their use of the drug. It also showed that "druggies" were not necessarily either drop-out teenage potheads or middle-aged alcoholics.

Earlier we noted that an estimated 20 million American workers have used cocaine and that four million have used it within the last month. There is a common assumption that the 16 million who have not used cocaine within the last month are safe. Nothing could be further from the truth. Those 16 million people are vulnerable to cocaine dependence. It is curious that in the drug field ideas that would be considered ludicrous in any other field of intellectual endeavor are thought of as profound. There is a concept in the drug field, for example, that there are "safe"

drug users and "sick" drug users. Many experts separate the drug continuum on the basis of whether drug users have a problem or not, i.e.: These people do not have cocaine problems and those do, therefore these are okay and those are not. This leads to supporting the people who do not have a problem in what they are doing (using drugs like cocaine) because they are okay, while treating those people over there because they are sick. These experts fail to see that the way you get to be a "sick" cocaine user is to go through the stage of being a "healthy" cocaine user. This is like talking about speeding and saying: "You can drive 90 miles an hour. Some people have a problem and some do not have a problem. So we will divide up the population of those who drive 90 miles an hour into the healthy speeders and the sick speeders. The sick speeders have a disease -- speeding sickness -- but the other speeders are okay." Speeding in this misguided line of reasoning is not the problem, it is getting into trouble with speeding that is the problem. While this reasoning may seem ridiculous, it is the devastating delusion that has afflicted the drug field when looking at the people using cocaine at work. It has led to enormous confusion and a reinforcement of the concept of the "normality" of fooling around with cocaine.

The Nine Ways Cocaine Is Special At Work

There are nine ways cocaine is special in the workplace:

1. First, and perhaps most obviously, is the special image of cocaine. Cocaine is chic. It is called the "champagne drug" or the "rich man's drug." Recent epidemiologic evidence suggests

that there is something (but not much) to this perception, perhaps a self-fulfilling prophecy. For example, here are some interesting numbers culled from household surveys. Education: among those people who had less than a high school education, 5% reported ever having used cocaine; among those who had had some college graduates, 19% had used cocaine. Family income: of those who reported a family income of \$10,000 or less, 11% had used cocaine; among those who reported a family income of \$50,000 or more, 16% had used cocaine. Job category: among laborers, 14% reported using cocaine; among managers, 27%. There is some basis for the "rich man's drug" image of cocaine. However, these percentages are deceiving since most cocaine users are not rich and many are "poor." Most are "average."

2. Cocaine is a stimulant drug. The other drugs that have become widely used have all been depressant drugs -- alcohol, heroin, and marijuana. The concept that alcohol is a depressant drug is seen now in its advertising: "Miller Time" is when you finish work. But what about the image of a stimulant drug? A stimulant drug holds out the hope that it promotes work and efficiency, that it fights fatigue with a pro-work pharmacology. Of course it is not true for cocaine or any other stimulant but that does not discourage people from using cocaine on this basis. This idea makes cocaine use on the job itself far more likely than use of depressants such as alcohol and marijuana. It is usually the end stage, strung-out user of pot or booze who consumes the drug at work. Not so cocaine, the stimulant.

3. Cocaine is a short-acting drug. This characteristic differentiates it from most of the other commonly used drugs and gives the illusion that you can get in and get out quickly from cocaine use, that use can be isolated and limited much more than with marijuana or alcohol use. Cocaine promises no disabling hangover or "long term" effect to interfere with work.

4. Cocaine is the only drug that shows rising incidence of first use among people in their 20s. This is a striking fact that is not easily explained. With every other drug, including cigarettes, alcohol, heroin, and marijuana, there is a sharp peaking of first use in the teenage years -- usually the mid-teenage years. But with cocaine there is an increasing incidence as people get older, at least in their early 20s. Whether this fact reflects that we are in the early stages of the evolution of the cocaine epidemic or whether there is something special about cocaine I am not sure, but the pattern is important because it means that initial use of cocaine is going on later in many peoples' lives. This means that initial cocaine use goes on not only in school years but also in the later years, specifically at work.

5. Cocaine use is special because of its cost. Think for a minute about alcohol or pot. One can stay stoned on pot all day, every day, for \$5 or \$10 a day. To really get wasted it might take \$20 a day. But pot use is cheap, even with today's inflated prices. You can stay totally intoxicated on alcohol, marijuana and other drugs for relatively little money. It is cheap to

destroy your life on pot or booze. The only exceptions among widely used drugs are two: heroin and cocaine. To stay high on cocaine or heroin costs hundreds of dollars a day. That economic reality does not come from the image of the drugs, but from the pharmacology. These two are short-acting drugs, not taken orally, which produce high levels of tolerance. Thus the person who is intoxicated on cocaine or heroin uses large amounts of the drug. The higher cost of these two habits is also because cocaine and heroin are relatively expensive for a pharmacologically effective dose. This reflects more intense prohibition than is true for alcohol, of course, but also for marijuana. Relatively successful enforcement pushes the prices up for cocaine and heroin.

Previously, when heroin was the only high-cost drug in the workplace, the problem of "needing money to supply your habit" was located in the lowest socio-economic group of workers. The problems of drug-caused theft and other income-generating activities were limited. Think a minute about what the epidemic of cocaine use at work means. Now we have an income-demanding drug at all levels, including the highest levels, of the organization. This puts the business itself at risk in a way that it has never been at risk before. This leads not only to theft of typewriters or goods out of the warehouse, but to threats at the core of the corporation. Business information and money which are the lifeblood of the organization are now at risk because of people whose moral values have been corroded by cocaine use and whose demand for money to buy cocaine is enormous. That has never

happened before. The potential for destruction in the workplace has enormously increased. Cocaine users are in the executive suites and in the most trusted roles of business life. They can steal not only purses and word processors but corporate information highly valued by competitors and even the IRS! This new breed of drug users can lead to corporate plundering beyond anything a stock clerk or maintenance worker ever dreamed of.

6. The typical pattern of cocaine use is binge use, whereas with other commonly used drugs the typical pattern of heavy use is continuous drug use. Cocaine is a drug for which continuous use, day in and day out at more or less the same level, is uncommon while episodic high-level use -- a spree or run -- is the typical pattern. That changes the way one thinks about the problem at work and makes survey data less helpful because surveys discount episodic use. We are accustomed to thinking of the daily user/regular user as the "problem user." A person can get into a lot of trouble with cocaine without ever being a daily user.

7. Cocaine uniquely causes paranoia and aggressiveness. This is important in functioning everywhere, especially at work. There is a tendency to violence, suspiciousness, and paranoia among cocaine users. This disorganization of thinking in an explosive way is a special and dangerous result of cocaine use. At work the most common cocaine-caused problems are unreliability and theft but hostility and aggression are serious, common problems.

8. Once a worker gets into a pattern of binge use of

cocaine, it has an effect which is unlike any other drug. Cocaine at high doses takes users down like a stone falling into a pond. Many people crippled by cocaine have used other drugs off and on, and sometimes at high levels of use, for many years. Once they start high-dose use of cocaine, they fall apart. I do not know any other drug that does that. It literally catapults users into treatment. They often arrive in treatment like stunned people because of the effects of cocaine. They may have fooled around with cocaine for years, but suddenly had a friend who was a dealer or they had increased access to a supply or they had more money or they had some change in their lifestyle that put them into contact with more cocaine and, like a stone in a pond, they went down.

9. Cocaine, the stimulant, has a unique way of growing out of and reinforcing the use of other drugs, particularly depressant drugs, such as alcohol, tranquilizers, and even heroin. In fact, new users of heroin in the U.S. are primarily being recruited to heroin through the cocaine door. They are going through that door for several reasons. Many of them have been introduced to intravenous drug use through the IV use of cocaine. They also turn to mind-numbing depressant drugs to deal with either the overstimulation or the devastating depression following their cocaine use. Cocaine use also gets "normal" drug abusers over the hurdle into the "junkie" role as the compulsion to use swamps even long-standing barriers to the "addict" lifestyle. With cocaine use, at high doses, anything goes -- including IV heroin, for many users.

The final section of this chapter focuses on how to deal with the problems of cocaine use at work. There is only one standard that can be the basis for approaching the problems of cocaine in the workplace: Zero Tolerance. It is imperative for anyone dealing with any drug problem in the workplace to start by drawing the line at any drug use. Once one shifts to the goal of identifying drug-caused impairment as opposed to drug use, he has lost the capacity to deal effectively with the problem. Even worse is to get caught up in the goal of identifying specific job-related impairments. There are no jobs which will let one meet that standard. The only standard that will succeed: when a person comes to work, he or she comes drug-free. This I call Zero Tolerance for drugs at work.

These are the four steps to solving the cocaine problem in the workplace:

1. We must educate. Most people at work still do not know the facts about cocaine use as they are documented in this book. Too many people think they can use cocaine and get away with it. They think cocaine use is harmless. They do not know about the reinforcing potential, they do not know that cocaine use is out of the user's control, or about the inevitable escalation of the Drug Dependence Syndrome. They do not know cocaine can kill, even when used intranasally. They do not know the basic facts about cocaine and they are misled into thinking that it is relatively harmless, and easily controlled. They think of cocaine use as a benign "personal" decision without realizing the tremendous stake

non-users, at work and elsewhere, have in that decision. We need to have clear education at the worksite about the hazards of cocaine use. We also need to undercut the current widespread tolerance for cocaine use through education. Everybody at the worksite should understand that all share the vulnerability. Drug problems are not limited to the drug user. Whether one uses cocaine or not, cocaine at work is adversely affecting everyone. The second-hand smoke issue at the worksite is a useful precedent in the legitimization of the interests of non-smokers. The same process can happen with other drugs, most notably cocaine. Most workers do not use cocaine. They need to be enlisted in the battle against cocaine use.

This is not a battle against cocaine users as people, but against their use of the drug. The cocaine user, along with the non-user, will benefit from reduced tolerance to cocaine use at work. This must be rooted in a thoroughgoing, honest, factual education of everyone at work about the dangers of cocaine use.

2. The second step is the most controversial. Action must be taken to say "no" to cocaine. There is only one way to achieve this goal: to implement regular urine testing to identify cocaine use. Any halfway measure is just waiting until disaster has befallen the individual cocaine user, his family, and the organization. It is sad to see some representatives of the workers -- unions and others -- fight drug testing. They are fighting it because they do not understand the drug problem and they do not understand the solution. The people who are most

likely to benefit from an aggressive testing program are the workers themselves. Users and non-users need a compelling reason not to use cocaine in the first place and if a person is using cocaine, he needs a reason not to continue use. If he is continuing to use cocaine at work, he needs to be caught so he can be helped.

I have worked with many, many people for whom the person who said "no" was the person who saved their lives. It is important not to get confused about this. If one approaches cocaine use as a matter of personal preference, as a civil right, or as a privacy matter, he is not doing any favors to anybody — the stockholders, the managers, the employees, the families, or even the drug users. What one is doing by adopting these attitudes is enabling the cocaine problem to continue. We need to have a system that can say "no" and make that system work. Of course, at work one must deal with all drug use, not just cocaine use (3). The prevention issues are the same. Economics, pharmacology and fairness all require an even-handed "no drugs at work" policy.

3. We need to overcome the myths that are preventing action. We need to overcome the concept of "safe" and "controlled" use of cocaine. We need to deal with the barriers that have been developed that keep us from effective action.

4. We need to follow up on what Alcoholics Anonymous calls Twelfth Step Work. We need to help the people who have confronted their cocaine problem to help others. I have found this about people who have used cocaine even more than people who have used

other drugs: when they recover, they are missionaries. They have been to Hell. They know what loss of control of one's life is and they know how dangerous cocaine is. Many are highly motivated to recycle their knowledge and experience; to do Twelfth Step work. We need to encourage that because there is a lot of good that can come from their missionary zeal.

SUMMARY

In case there is any doubt, I am not writing in this chapter about hurting people, I am writing about helping people. You help people by helping them understand the facts and by saying "no" to cocaine use. You hurt people by letting their cocaine problem continue.

Cocaine use in the workplace is a ticking time bomb. The 16 million people who have used cocaine and who are not current users are the ticking time bomb almost as much as are the four million who are actually using the drug. Every one of them is vulnerable and many of the 85 million workers who have not yet used cocaine are vulnerable also to cocaine use.

The question is, have we learned enough in the last 20 years to defuse the bomb or are we going to have to wait until it explodes? The dangers of cocaine at the workplace are unique and the consequences of not acting are terrifying. On the other hand, the potential for dealing with the issue not only concerns the cocaine user but also all other aspects of drug use including other drug use in the workplace.

As a general observation the current rapidly rising tide of

public concern about drug use -- especially cocaine use -- is the most positive development during the past 20 years of our national experience with drug abuse. If we can say "no" to drugs at work we will not only help the 105 million working Americans, we will send a powerful signal to our youth: when you show up for work, you show up drug-free. That simple-sounding, but profound, goal offers the best hope we have of ending the drug epidemic, of seeing to it that cocaine, the current epidemic drug, is the last one.

References

1. DuPont, Robert L. Getting Tough on Gateway Drugs: A Guide for the Family. Washington, D.C., American Psychiatric Press, 1984.
2. Annual Household Survey, National Institute on Drug Abuse, Rockville, Maryland, 1982.
3. Dogoloff, Lee I. and Angarola, Robert T. Urine Testing in the Workplace. American Council for Drug Education, 1985.

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SUBSTANCE ABUSE IN THE CONSTRUCTION INDUSTRY:
THE PROBLEM AND ITS IDENTIFICATION

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As a physician and a psychiatrist I have worked to prevent drug abuse for 20 years, often directly with people suffering from drug and alcohol problems. I have seen pain beyond bearing in drug dependent individuals and their families. I have also seen the hope in lasting recovery, one of the great joys of my professional life.

My message today: drug abuse is a terribly serious problem. Modern biological research has made the drug abuse problem understandable. Drug abuse is a solvable problem. Finally, and perhaps most surprising to many of you, drug abuse is a positive problem. Approaching the problem of drug abuse and resolving it is a positive experience. Too often we perceive drug abuse as incomprehensible, trivial, hopeless, and negative. I believe that it is serious, understandable, solvable, and potentially positive.

The recent national concern about drug use in the workplace is the most positive development that I have seen in my 20 years in this field. There has been more change in both attitude and action about drugs at work in the last 12 months than I have ever seen in any single aspect of drug abuse. This intense interest is illustrated by the fact that last week I appeared on two network news shows -- the NBC Nightly News with Tom Brokaw and ABC's World News Tonight with Peter Jennings. That is the only time that I ever appeared on two network news shows in one week when I was not in trouble!

There are some useful statistics about the drug problem in

the United States, however, since there has never been a survey of drug use in the workplace, we do not have some critical data. We do have two sets of national surveys from which to extrapolate information about drug use in the workplace. High school seniors have been studied annually since 1975. This is the most sophisticated and the most important drug abuse data base. We can see the changes over time in each senior high school class. We can also follow each cohort. For example, the class of 1975 has been followed up nine years after graduation allowing us to see changes both within each cohort and between cohorts during the drug epidemic in the United States, including entry into the workforce. The other national survey is of Americans over the age of 12 living in households. We now need a national survey of drug use at work to better understand the dimensions of the specific problem, including such important questions as the relative rates of drug problems in various industries and job types. Such a workplace survey would complement the existing high school and household surveys.

The most recent high school survey showed that 61% of the youth graduating in 1985 had used one or more illegal drugs prior to graduation, and 40% had used one or more illegal drugs in addition to marijuana. The percentages of the class of 1985 having used each of the following drugs once or more in the 30 days previous to the survey were: alcohol, 66%; marijuana, 26%; cocaine, 7%; stimulants such as amphetamines, 7%; LSD, 2%; PCP, 2%; and heroin, 0.3%. Based on past research these percentages

will rise as this cohort ages, peaking between the ages of 21 and 25 with gradual declines in subsequent years. We also know that youth who do not graduate from high school have higher rates of drug use than those who do graduate.

Using the household survey I estimate that in 1986 30 million Americans have tried cocaine at least once, with about 6 million using it within the previous 30 days. Ninety percent of those current users are between the ages of 18 and 35 and 50% are between the ages of 18 and 25. For males in the workforce 50% of those aged 18 to 25 have used cocaine and 35% of those aged 26 to 35 have used cocaine. Among females in these two age groups 30% and 25% have used cocaine. At any time about 30% of young workers are using marijuana and 10% are using cocaine.

There are several aspects of the drug use problem that are particularly important to the construction industry. In general, males use drugs more than females do, particularly illegal drugs. Furthermore, the more illegal the drug is, in the sense that heroin is more illegal in terms of our attitude toward it than is marijuana, the more likely there is to be male predominance.

The heavier the drug use is, the more likely males are to predominate also. In answer to the question, "Have you ever used a drug?" the male-female ratio will not be very different. But statistics about daily use of a drug show a preponderance of males. This fact is consistent for use of all intoxicating drugs, except amphetamines which suppress the appetite and which are used more by women than by men.

The second key point from existing surveys is that drug use among youth is greater than among older workers. People get started using drugs during their teenage years. The drug epidemic in the United States began about 1970. Who was a teenager after 1970? The 35-and-under population has been exposed to all the illegal drugs in a much more intense way than older people. People over the age of 35 are predominantly alcohol-using. People under the age of 35 show polydrug use.

The third factor of importance to the construction industry is the high level of use of the "Gateway Drugs": alcohol, marijuana, and cocaine. These three drugs account for about 80% of the drug and alcohol problems in the United States. They are also the gateways to all other drug use. Alcohol, marijuana, and cocaine are the mass-consumed, troublesome drugs in this country today including at the workplace.

The fourth aspect of drug use which applies especially to the construction industry is the blue collar factor. When the drug epidemic first began in the 1960s, the public focus was on students, particularly college students, children of the upper middle class. The drug abuse problem has now shifted from that population. College students have much lower rates of drug use than non-college youth of the same age. Drug use has become much more of a blue collar problem. The NBC Nightly News show on which I appeared last week emphasized the tremendous increase of cocaine use among college students. Use of cocaine among college kids now equals cocaine use rates of their non-college age-matched peers.

The fact that cocaine use in colleg. equals that of non-college kids was considered an epidemic by NBC News.

A fifth factor that distinguishes the construction industry is the danger of construction work. That puts the industry at a special risk, along with industries such as transportation, nuclear power, and the medical profession.

Sixth, the construction industry has a long history of tolerance for alcohol and drug use which is, if not unique, at least notable in contrast to many other work environments. All of these factors indicate a high drug risk in this industry.

I strongly advise you to educate yourselves about drug abuse. There are some good books on this topic, but reading will not give you the complete picture. You can, however, become thoroughly educated and confident about drugs by talking to the real experts in the field. I do not mean people like me -- I mean drug users themselves. Spend a few hours at a treatment center near your worksite, preferably one to which your company sends people who have drug problems. Talk privately and confidentially to ordinary people in treatment about their experiences on the worksite and the impact of drug and alcohol use on their work performance. Talking to drug users will do more to educate you about the problem and more to galvanize you to action than all the conferences you could possibly attend.

Several years ago a high school coach from outside of Chicago attended an education program for coaches at the Hazelden Foundation in Minnesota. He talked to young athletes in treatment

about their experience with drugs. He was so horrified by what he heard that he went back and changed the whole drug abuse prevention program at his high school. I heard him announce to the student body that from that day forward there was going to be no drug or alcohol use by any athlete on any team in that high school. He said that if he had any evidence of drug or alcohol use whatsoever, that student was going to be off the team. He meant drinking or drug use, period, at any time during their high school years. "We have to maintain a higher standard among athletes," was his argument. It was a dramatic change for that high school. It had a beneficial effect on the entire student body. The recent tragic death of Len Bias underscores that coach's point.

You should know something about the inner experience of a drug user. There are three distinct stages of the Drug Dependence Syndrome. The first stage is experimentation, when a person tries a drug for the first time. The most striking aspect of experimentation is that first use of a drug is concentrated in the ages of 12-20, with the exception of cocaine where there is some first use by people in their 20s. There is a "window" in the human lifecycle when a person is open to trying drugs. That window is roughly the teenage years. The important point here is that if a person gets to be about 20 years of age and has not tried a particular drug, with some exceptions, he or she will never try that drug. This fact is dramatically illustrated by cigarette smoking. Ninety percent of smokers began before the age

of 20. Somebody starting cigarette smoking for the first time at the age of 35 is unusual. That is equally true for alcohol, heroin, and all other drugs. Beginning drug use is a phenomenon of youth. That reflects the effect of puberty, particularly the impact on the pleasure systems of the brain, which is central to the drug experience.

The second stage of the Drug Dependence Syndrome is fooling around. We are familiar with this stage from the social drinking associated with alcohol use. In this stage a person uses a drug or does not use a drug and it is not terribly important in a person's life. There is a conviction of mastery and control, an "I can handle it" quality, in this stage of drug use.

The third stage is the dependence or the "hooked" stage. There is a simple analogy to explain how a person gets hooked on drugs. He or she falls in love with the drug. A person goes through the stage of fooling around, which may be a long or a short time, and then falls in love, turning the Addiction Switch in the brain to "on." Once the Addiction Switch is thrown to "on," drug use becomes the center of a person's life. Like a person who is in love, everything else in life turns to black and white and the object of the love is technicolor. This is not quite the same as being physically dependent in the sense that the physically dependent person will have withdrawal symptoms when stopping drug use. One of the greatest mistakes the medical field made over the last few decades was to focus on physical dependency as the key to the drug problem. The real problem is

"falling in love" with the drug, making drug use the most important thing in a person's life. Both the age aspect and the biological aspect of drug use are important to understanding the issue. A person is much more likely to fall in love and to lose control when he starts using a drug at a younger age than at an older age. The more intensely a person uses a drug, the heavier the dose used, and the greater the frequency of use, the higher the risk of falling in love or losing control of drug use.

There are some characteristic problems that appear at these three stages of drug use. Even at the stage of experimentation there are many problems. One example is a panic reaction which can occur when a person first tries marijuana. There can be a tremendous rush of panic which can trigger the onset of panic disorder, leading to an emotionally crippling syndrome called agoraphobia. This panic reaction can be caused by a single use of marijuana.

The work-related problems characteristic of the second, fooling around, stage can be equally destructive. This is the stage when drug users become proselytizers. They are having a good time with the drug and appear to be in control of its use. The drug use is contagious, spreading to other people.

In the third stage, the stage of being hooked, come the most serious health problems characteristic of chronic drug use.

At any stage of the Drug Dependence Syndrome there are two common problems: the loss of control during acute intoxication and decreased motivation. Both of these conditions lead to accidents and low productivity. The drug-intoxicated person does not care as much about job performance and cannot do a good job.

There are some specific problems with the gateway drugs which you are likely to see in the workplace. The effects of alcohol are fairly familiar, including intoxication, accidents, decreased productivity, absenteeism, and health problems.

The effects of marijuana are different. They can be hard to spot because most people over the age of 35 are not familiar with them. The most important thing to know about marijuana is that the active chemical that causes intoxication is called THC. Unlike alcohol, which is quickly metabolized to water and carbon dioxide by the body, THC stays in the brain for a long time. It can be detected in the brain even 30 days after a single use, and an ordinary urine test for marijuana use may be positive for several days after use of the drug. The fact that THC stays in the brain so long explains something that marijuana users often mention: the lack of a hangover after its use in contrast to the common hangover after using alcohol. The reason there is no hangover from marijuana is that the marijuana chemical, THC, is still in the brain in the morning and for days after use. This is not a sign that marijuana is better or less destructive, it is a sign that THC is still present in the body. In fact, the hangover from alcohol use is a withdrawal syndrome which occurs after the

elimination of the alcohol from the body.

What does THC do? Because it does not leave the body quickly, the effects of marijuana tend to be more subtle than the effects of alcohol. There is less staggering or slurred speech.

Several years ago I was on PBS Latenight with Dennis Wholey. The subject was marijuana. I was interested in the response of the marijuana-using listeners to the negative things I had to say about marijuana. One of them said: "Marijuana makes you stupid and lazy." That is exactly what marijuana does. It decreases motivation and memory. It is a drug that produces the "care-less" phenomenon. The effects of marijuana are more subtle than the effects of alcohol and much longer lasting. One recent study, using objective tests to detect marijuana's effects, showed impairment 24 hours after a person had smoked a single marijuana joint. The study did not measure impairment beyond that length of time because the researchers did not expect to find any effect as long as 24 hours after use. I suspect, however, that measurable impairment would have been found even 48 or 72 hours later. As the study is extended for longer periods of time we will learn more about these carry-over effects of marijuana use. Marijuana remains in the body a long time. It makes users stupid and lazy.

The effects of cocaine are entirely different from either those of alcohol or marijuana. Marijuana is long-acting and has a number of subtle effects, while cocaine is short-lived and intense in its effects. The total intoxication, the high, from a single use of cocaine lasts about 20-30 minutes. Cocaine use is a

chaotic experience. Cocaine users tend to use the drug repeatedly in bursts, called "runs." They often use it five or six times in 20-minute intervals and then stop. Sometimes they use cocaine only once, but runs lasting hours or even days are more typical. A one- or two-day run is somewhat like an alcoholic binge. During a run the coke user cannot sleep and eats little if anything. Usually the runs end when a person is out of money to buy more cocaine. The depression that follows a cocaine high is awesome. The sense of loss of hope, loss of energy, and demoralization that occurs at the end of a cocaine run are horrible.

Another aspect of the cocaine problem that is unique is the cost of the drug. You can use marijuana or alcohol to stay intoxicated all the time for next to nothing. You could stay drunk on alcohol night and day for about \$10 a day and you could stay stoned on marijuana for roughly \$10-\$20 a day. Even a heavy alcohol or marijuana habit is not expensive in the United States. Not so with cocaine. A single use of the drug may cost from \$5 to \$20. Compulsive use of cocaine can extend to several hundred dollars, or even to thousands of dollars, a day. The reason: cocaine has a short duration of action producing a high tolerance level. As a result of those characteristics, the cocaine user rapidly escalates the dose so that the limiting factor becomes the availability of money. That fact is important to those concerned about drug use in the workplace because a cocaine user becomes obsessed with obtaining money to buy cocaine. This fuels the problem of theft, crime, drug sales, and other criminal

activities. Such criminal activities at work were previously limited to heroin use, but they are now also associated with cocaine use. Heroin use is concentrated in the lowest economic levels of society among those people who are unemployed or who work in fairly menial jobs. The use of cocaine extends throughout the economic hierarchy, from the highest levels to the lowest levels. Crime among all levels of workers is an important part of the cocaine problem.

It is essential to understand the overall process of drug dependence. It is progressive and it is out of the user's control. The user has the perception of being in control of drug use but that is an illusion.

The second characteristic of drug dependence is illustrated by two words you frequently hear from people working in the drug abuse field: denial and enabling. Denial means that the drug user, as well as those people associated with the drug user, often deny both the extent and the consequences of drug use. Enabling describes the way people around the drug user permit and even encourage, often unwittingly, the drug use to continue for a wide variety of reasons. This is characteristic of family interaction around a drug habit. Denial and enabling play a major role in the Drug Dependence Syndrome.

Another malignant aspect of the drug problem which is often overlooked is the moral corruption which results from drug use. A drug habit makes people liars and cheats. It makes people dishonest. People who were ordinarily honest and reliable become

extrordnarily dishonest because of their drug use. Drug users in treatment who no longer have anything to hide will tell you what happened to their moral values as a result of drug use.

The role of others around a drug user is striking, particularly when someone stops a drug habit. It is almost unheard of for an individual to stop drug use on his or her own. It is always the case that somebody else intervenes. When someone comes to my office and says, "I have a drug problem and I want help," I look out the door to see who is out there, because there is always somebody. It might be an employer, a spouse, a doctor, or a judge, but someone is fed up and has said to the drug user, "You have to stop." The fact that a drug user cannot stop the habit by himself is not because of a character defect of that person, it is the nature of the Drug Dependence Syndrome.

Another key factor involved in this syndrome is that anyone who is using drugs is a potential spreader of that behavior to other people. That is important in the workplace, particularly when people work together in crews. The person using drugs on the job is not only a menace in terms of what he does to himself, but he is likely to spread drug-using behavior, and the associated negative values, to other people. Drug use is a contagious behavior spread directly from the user to other people sharing the same environment.

The most exciting aspect of this whole field is that within the last few years we have learned, for the first time, how drug dependence works. There has been tremendous confusion over the

years about what the real enemy is. The basic question behind the biological discoveries of the nature of drug dependence was this: Why is it that the sap from the lovely poppy pod, when dried into opium or morphine or heroin, causes so much mischief? It did not make any sense that the sap from a flower could become such an attractive and lethal chemical. It was discovered in 1973 that there are receptors in the brain that perfectly fit the morphine molecule. The morphine molecules, from those poppies, fit into these receptors like keys fit into locks.

The discovery of these specific receptors in the brain led to the question of their biological purpose. We subsequently learned that these receptor sites, which are located in the mid-brain area, are the pleasure centers of the mammalian brain. Man has, in his exploration of the environment, discovered a chemical passkey that unlocks the feeling of pleasure in the brain! What are the biologically normal keys that fit those receptor sites? The normal keys are endogenous morphine-like substances, or endorphins, the neurotransmitters which control the experience of pleasure and pain under normal circumstances. Their release is controlled by normal biological mechanisms such as sexual activity or eating. There is a whole range of perfectly normal biological ways that people can make themselves feel good. We now know that all dependence-producing chemicals operate on the same essential area, the pleasure centers of the brain. They are all "Feel Good" chemicals.

As a result of these scientific discoveries, we have learned

why people use drugs. It is simple. It is because drugs produce feelings that people like. People do not use drugs because they are bored, or poor, or rich, or old. People use drugs because drugs work at a fundamental biological level. Drugs work on the pleasure centers of the brain for anyone who uses them. To the question of why other people do not use drugs, there are a number of answers including accidents of history, moral and religious values, and a highly developed sense of the possible negative consequences of drug use.

The point is that drugs work. You cannot solve a drug problem by giving people more money, or promotions, or a workout center on the job site, for example. Drug use has to do with using chemicals to feel good. The user believes, because of denial as well as ignorance, that he or she can have the drug-caused fun without paying the price. A good example is the tragedy of Len Bias' recent death from cocaine use. To say that he did not have money or opportunity is stunningly and obviously wrong. Drug use has nothing to do with those factors. It has to do with stimulating the brain's pleasure centers through the use of chemicals in a social environment where the user thinks he or she can get away with it. That is the foundation of the drug abuse problem.

The American drug epidemic began in approximately 1970 and is continuing to this day. The current trends of use are slightly down or leveling off for most drugs. The epidemic continues. Two million Americans will first use marijuana this year and about 1.8

million will first use cocaine. This epidemic is unprecedented in American history. Those who graduated from high school before 1970 are in the pre-epidemic generation. Those who graduated in 1970 or later are in the epidemic generation. Not everyone in the epidemic generation uses drugs, but they have been exposed to drugs in a much more intense and powerful way than people in the pre-epidemic population.

There is only one solution to the drug abuse problem and that is to say "no" to drug use and make it stick. That has become difficult to do because we in America are only now beginning to end a 20-year era of looking the other way about the use of drugs. There is a positive side to all of this. We have discovered that alcohol is a drug and, for the first time in our national history, we are beginning to look at drinking in a new, more realistic, way. Per capita alcohol consumption, after rising every year since the repeal of Prohibition, peaked in 1983 and is now starting to decline.

There is another positive to be highlighted at this point: just as drug use spreads like a contagious disease, so does cure. The culture of recovery is now widespread and deeply rooted in America today. It offers great hope for the future.

There are barriers to action in drug abuse prevention that have to be overcome. The first barrier is the idea that drug use is a trivial problem and that only a few people are involved in it. That belief is tragically wrong. A second barrier to solving the drug problem is the idea that drug use is a personal matter. No one can use drugs without affecting other people. A third erroneous concept that is confusing is the idea that drug use is somehow a "civil right." That is a ridiculous argument because an illegal act cannot be a civil right. A fourth major barrier is the idea that the drug abuse problem is hopeless and that nothing can be done about it. Talk to recovered drug addicts and alcoholics and it will be clear that a drug habit can be overcome. It is hard, a lifelong project, but it is possible.

There are specific barriers relating to drug abuse in the workplace that need to be addressed. One is the argument that one must demonstrate that drug or alcohol use has impaired an individual before taking action to stop drug use. If you buy this argument about impairment, your drug abuse program is dead. Trying to demonstrate impairment is chasing a mirage. It is always just over the next hill. You have to base your drug abuse program on the premise that any use of drugs is prohibited. My advice is that you, as an association, define an objective standard for "impairment" much as is now done for drinking on the highway where the standard for impairment is variously defined as being between 0.05 and 0.10 Blood Alcohol Content (BAC). I encourage you to do this not so as to define a lower limit that is

"acceptable," but to define a line you can defend. Such a standard is, like the alcohol standard, not a matter of science. It is an arbitrary standard which can be clearly communicated and understood. Do not underestimate the importance of this definition. You need an operational, objective definition of Zero Tolerance for drug and alcohol use and that means defining "impairment" in terms of "tissue levels" just as we now do for alcohol.

Another barrier for the workplace is the idea that urine tests for drug use are unreliable. The tests are extremely reliable if they are done right. Positive tests need to be confirmed using an alternative method. There is a simple way to handle conflicts about urine testing and that is to retain a portion of the urine sample for later testing if a protest arises. The tests themselves are reliable and they do work, but urine testing is only a part of the solution to the problem of drugs at work.

The pro-drug forces in our society have decided to focus on the issue of the reliability of urine tests for drugs. To see how cynical this concern is, think about tests for alcohol on the highways. Yesterday, today, and tomorrow in every county in the nation drivers are tested by police for Blood Alcohol Content. These tests are not done by trained technicians. They are not confirmed by alternative methods. No samples are retained for later testing in case of protests. The roadside BAC tests have been approved all the way to the Supreme Court. People not only

lose their licenses to drive and their jobs, but they are sent to jail as a result of positive BAC tests which use a technology far less reliable than that used now for drugs. Who is protesting these tests? Why the double standard?

Besides reliability, another red herring associated with urine testing is the defense of passive inhalation producing a positive test. If you were in a phone booth with no ventilation with four people who smoked marijuana for four hours, you might trigger a positive urine test for marijuana at the lowest level. You might. Under those circumstances, however, you would probably die of asphyxiation before you were able to give your urine for testing. To demonstrate that positive tests could be produced in such a phone booth, researchers had to give the subjects goggles because they could not stand the eye irritation from the dense smoke! You do not get positive tests from passive inhalation except in the most extreme situations, certainly not in a room at a party or a concert.

The battlegrounds in the U.S. today to prevent drug abuse are in three areas: schools, highways, and at work. We must establish a national commitment to zero tolerance in these three areas. When you go to school, you go drug-free. When you drive on the highway, you drive drug-free. When you go to work, you go drug-free. Any standard other than zero tolerance is doomed. We are presently moving rapidly toward a national consensus on this issue.

There are five areas which should be emphasized in

establishing a drug abuse prevention program at work. The first is that the company drug use policy must be clear, fair, and based on the legitimate concerns of the enterprise as well as concerns for the welfare of the workers. The fairness issue is especially important. The policy must apply to all levels of the company and must include the use of alcohol as well as illegal drugs. In fact, you should be more worried about managers using drugs and alcohol than you are about drug use in the lower levels of the workforce.

The second area of concern is education and training. The facts about drug use and its consequences need to be widely distributed to the entire workforce. The company policy, its purpose, and the consequences of violating the policy must be understood by everyone. That goal requires a major effort of education because people will not know the facts automatically. The climate of opinion about drugs, especially in the mass media, is so muddled that employees will not know drugs are prohibited and that use, as well as sale, will be punished unless they are clearly and repeatedly told.

A third area is company security. You must be clear about security issues such as possible police involvement, searches, the use of sniffer dogs, or undercover investigations. Security is a powerful tool to discourage drug use and it ought to be used in a straightforward way.

The fourth area is identification and referral. Urine testing for drug use is part of the identification process which

is often misunderstood. The main reason for testing is not to catch the bad guys, it is to prevent the use of drugs at work. Testing gives workers a compelling reason not to use drugs. The biggest beneficiaries of testing are not those you catch, but those you deter.

Within the company, I suggest that there be two separate roles: one role is "Mr. Tough Guy" and the other is "Mr. Nice Guy." The first role is the more important and the more often overlooked, but both are vital to a successful drug abuse prevention program. The Tough Guy can be in the medical field, or in personnel or management. He has to be the keeper of the company standard: "Joe, you are not meeting the standard now. We can help you, but you cannot stay here unless you meet the standard drug-free good performance." Mr. Tough Guy can refer the worker to treatment inside or outside the company but he must insist on, and enforce, the standard. Too often companies overlook this role by simply referring drug problems to treatment. Treatment is most often successful when teamed with such a "tough, but fair" standard enforcer. Urine testing is part of the program of enforcement of zero tolerance.

The referral of drug users for appropriate treatment is an important component of a drug abuse program. A treatment program should be concerned about long-term rehabilitation. The Hazelden Foundation here and other treatment centers in the State of Minnesota have been leaders in drug abuse treatment in this country in the last 10 years. Important elements of their

treatment efforts include 30-day inpatient care and getting the drug user hooked into Alcoholics Anonymous or Narcotics Anonymous. These treatment concepts are commonplace today, but they were revolutionary 10 years ago when Hazelden and other treatment programs here in the State of Minnesota helped to rehabilitate a moribund drug abuse treatment effort in this country.

The fifth and final component in a company drug abuse program is evaluation and audit to assess and improve the program as you go along. Feedback and improvement are vital. Companies need to learn from their own experience, and this learning needs to be built in from the beginning.

I have avoided what is for me, as a physician, the most difficult question of all: why not just fire the drug- or alcohol-abusing worker? It is painful to admit that there is much to recommend this harsh response. It gives everyone a clear and unambiguous signal, including the drug user, the non-drug user, the shareholder, and the public. If such a policy is clearly announced in advance and consistently applied it is, in my view, fair.

Let me make the case, however, for a more generous response. When drug problems are identified they are not an excuse for any bad behavior and not a defense against any punishment. For example, poor work performance, for any reason, should lead to an adverse action whether or not it is caused by drug use. On the other hand, employees who volunteer for treatment or who have not committed infractions may be referred to treatment. Such an

approach, however, must be carefully managed to avoid the appearance or the substance of condoning drug and alcohol abuse. If applied consistently such a "rehabilitation" approach can help gain support within the workforce for strong antidrug policies. While I find the "fire first" approach defensible, I prefer the approach that makes it clear that drug and alcohol use at work will not be tolerated, but which first gives treatment a chance to work.

There are, however, circumstances which do not permit second chances. Sale of drugs and drug-caused accidents top my short list of such circumstances. Whatever approach you adopt will involve difficult decisions. The policy you select needs to be clear and fairly implemented.

There are complex calculations to be made in formulating a policy. Let me outline a few critical points in a policy to prevent drug and alcohol problems at work. Some drug users will seek treatment without any adverse action or identified problems at work. Others will be identified by various screening procedures, such as random testing, without having been identified as causing any work-related problems. Still other drug users at work will be found out because of problems their drug use causes: poor work performance, excessive health claims or absenteeism, accidents, or because of disciplinary problems. Where along that continuum does the company switch from a no-fault rehabilitation approach to a punitive response, from referral to treatment without adverse action to firing?

My own preference is to draw three lines. Those who seek treatment without problems of any kind deserve help without punishment. Those found by random testing, without adverse incidents, should have the option of treatment but with a punishment short of firing -- for example, 30 days suspension without pay -- with the ability to return to work conditional on the demonstration that they are drug-free and subject to frequent testing on return. Those identified as drug users as a result of any work-related cause could reasonably be fired outright. Such a three-part approach maintains a clear antidrug signal and the incentive for self-referral.

I began my talk by saying that drug abuse prevention is positive and now I am talking about treatment and firing. That seems paradoxical to many of you who do not have close contact with drug dependent people. I know, based on my years of clinical work, that those who say "no" to drug use are the drug-user's true friends. The caring thing to do is "whatever it takes to get the user to stop drug use." Even firing, which could be considered punitive, is often the turning point for recovery as the cost of continued drug use becomes too high to bear, no matter how strong the love of the drug-induced high. Equally compelling is the positive effect on non-drug using employees and family members when drug use is prevented or overcome. Life, including life at work, is truly better when it is drug-free. Pride, health, teamwork, and hope thrive in a drug-free environment. They are destroyed by drugs.

The construction industry is to be commended for holding this conference. When I worked with the Edison Electric Institute of the utility industry, I learned the importance of an industry-wide drug abuse policy. You are much more likely to achieve your goals over the long run if you work in concert as an industry to develop drug abuse policies. Industry unity is important in situations such as labor negotiations, legal appeals, or possible adverse community reactions. An industry-wide drug policy is more acceptable and understandable to everyone and has the tremendous advantage of developing a unified and coherent collegial process. It may be satisfying for a company to be the Lone Ranger in drug abuse prevention efforts, but it is often lonely and you may end up with a silver bullet in your own heart in the process. It is important for an industry to stick together and to think through drug and alcohol policies together. There are complex and controversial issues that can often be dealt with better collectively, devoting the necessary staff resources to the problem. You can also learn from other industry associations which have faced this problem.

Here is a phrase from the drug treatment field:

You alone can do it
But you cannot do it alone

I do not know of any area for which that is more true than for drugs in the workplace.

Thank you very much.

SUBSTANCE ABUSE IN THE WORKPLACE—III

No cost for the seminar

\$7.00 — lunch

Open to the public

September 9 9:30-11:30 (Adjourn for chamber luncheon)

Welcome.....**Grant Smith, Chairman**
Job Service Employer Committee

Drugs in the Workplace.....**Dr. Forest S. Tennant, Jr., M.D. Dr. P.H.**
Executive Director, Community Health Projects, Inc.
Associate Professor, UCLA School of Public Health
Drug Advisor for National Football League
Drug Abuse Consultant, Los Angeles Dodgers,
California Highway Patrol and California Department of Justice

— Break —

Questions and Answers

12:00-1:00 — Chamber of Commerce Luncheon.....**The Landing**
(Members and non-members)

Limited Seating
R.S.V.P. — 225-3181 or 225-3184

Ketchikan Itinerary — Dr. Forest Tennant, Jr.

Tuesday, September 8

Breakfast — Ketchikan Families in Action parent group

10:00 — Radio interview — KRBD

11:10 — First City Forum — KTKN

Noon — Rotary Lunch

1:30-3:30 — Department Heads-Ketchikan General Hospital

4:00-5:00 — Drugs identification training — Teachers, school nurses, counselors, social services, WISH.
Forum room — Ketchikan Community College

7:30-9:30 — Public presentation for parents & community — Forum Room-Ketchikan Community College

Wednesday, September 9

7:30 — Doctors staff at Ketchikan General Hospital

9:30 — Drugs in the Workplace (see above)

Noon — Chamber of Commerce luncheon meeting

2:00-4:00 — Police training (Police Headquarters) City Police, State Troopers, Coast Guard, Dept. of Corrections, Immigration Service, Alaska Peace Officers, Juvenile Probation Officer.

*You are invited to attend
the third and last in a series of
Informational Drug & Alcohol-related
Seminars for Employers*

SUBSTANCE ABUSE IN THE WORKPLACE—III

Wednesday, September 9, 1987

9:30 a.m.-1:00 p.m.

at

Forum Room

Ketchikan Community College

with

Lunch at the Landing

Sponsored by: Economic Development & Small Business resource
Center of Ketchikan Community College
Greater Ketchikan Chamber of Commerce
Ketchikan Job Service Employer Committee
National Federation of Parents for Drug-Free Youth



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Estimates for costs to U.S. Businesses
due to drug use in the workplace: from
16 billion to 60 billion
What is it costing you?

WHY DRUG TESTING IS A BAD IDEA

BY LEWIS L. MALTBY



STEVEN FAIK

Lewis L. Maltby is vice-president and general counsel at Drexelbrook Engineering Co., a 300-employee, closely held company based in Horsham, Pa.

The call keeps going out for mandatory drug testing of people in jobs ranging from truck driver to basketball player to investment banker. And nowhere is the call heard more often than in industries whose products or services affect the public's safety. My business, Drexelbrook Engineering Co., is one such company.

For 25 years we have designed and manufactured electronic systems that measure and control the levels of hazardous chemicals, and our equipment is installed in plants all over the world. If it doesn't work properly, toxic-chemical tanks can overflow—and people die. The tragedy in Bhopal, India, is an example of what can happen when this type of equipment malfunctions. A single Drexelbrook employee working under the influence of drugs could cause such a disaster.

But we don't do drug testing, and we're not going to. When our top management considered the idea, we concluded that drug testing was not in the best interests of the company, would not make the products any safer, and would actually hurt our performance and profits.

To our way of thinking, drug testing is not a serious workplace safety program. A sound program for dealing with the hazards posed by impaired workers would confront the most serious problem—alcohol abuse. Yet no one proposes that all employees be subjected to breathalyzer tests to keep their jobs.

Drug testing also suffers from accuracy problems. The most common type of testing, immunoassay, has been shown to have false positive results: "clean" samples are mistakenly labeled as "dirty" 20% to 30% of the time. While more accurate and more expensive tests are available, they don't solve the problem either. It's difficult to pin down estimates of the number of drug-impaired workers in an average company, but 5% is a generally accepted figure. Say you have 100 employees, and 5 are drug abusers. Even with a test that's 99% accurate, 6 people could be fired for drug abuse, one of whom is innocent. A serious program cannot afford to be wrong that often, especially when someone's job is at stake.

But the fundamental flaw with drug testing is that it tests for the wrong thing. A realistic program to detect workers whose condition puts the company or other people at risk would test for the condition that actually creates the danger. The reason drunk or stoned airline pilots and truck drivers are dangerous is their reflexes,

coordination, and timing are deficient. This impairment could come from many situations—drugs, alcohol, emotional problems—the list is almost endless. A serious program would recognize that the real problem is workers' impairment, and test for that. Pilots can be tested in flight simulators. People in other jobs can be tested by a trained technician in about 20 minutes—at the job site.

Instead of testing for what really matters—impairment—drug testing looks for the presence of drug metabolites in the employee's urine, which remain in the body for up to two months. So an employee who fails a drug test may not be impaired at all. Firing good, sober employees for something they might have done last

A single Drexelbrook employee working under the influence of drugs could cause a disaster as tragic as occurred in Bhopal. But we don't do drug testing.

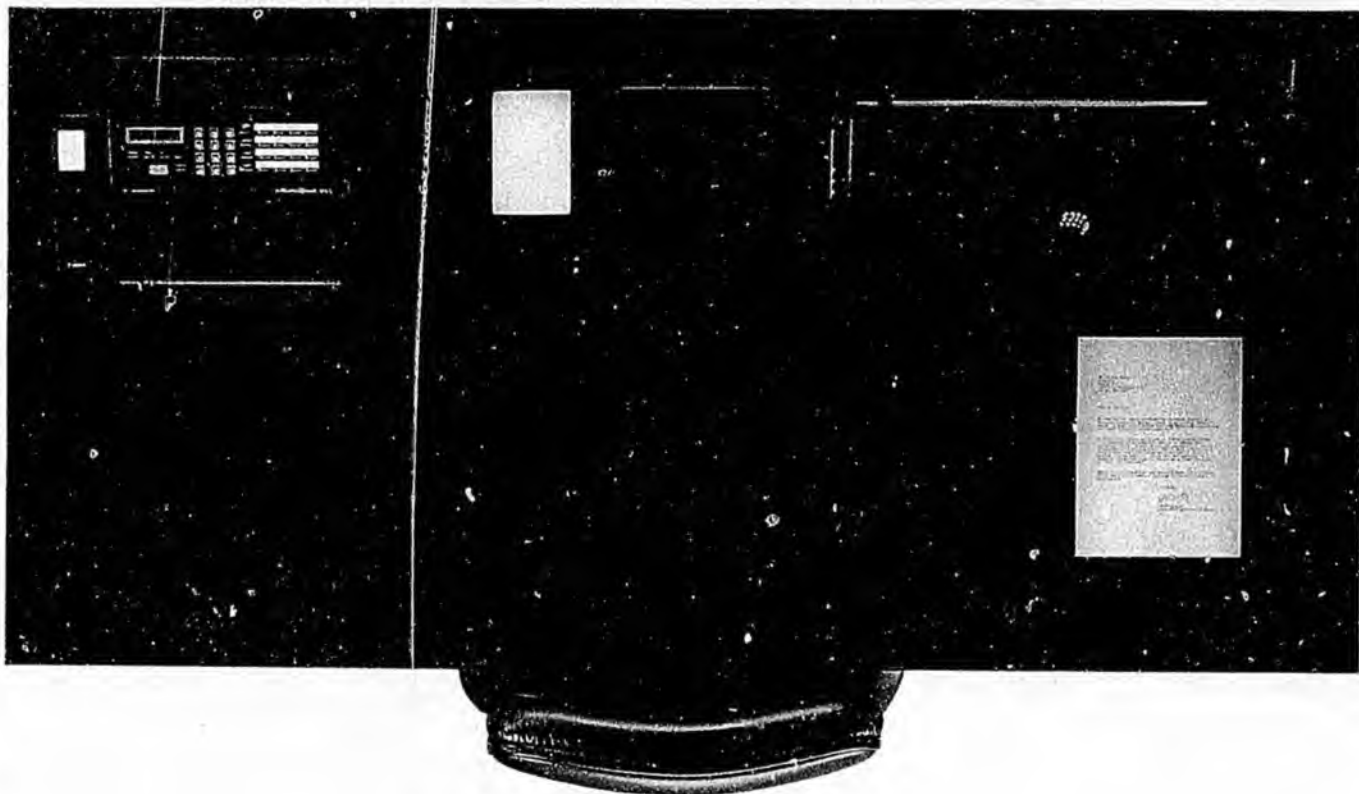
Saturday night does not increase safety.

Drug testing may even *decrease* safety. Any experienced manager knows that a safe quality product and a safe work environment do not come from a demoralized, unhappy work force. But this is exactly what drug testing produces.

To begin with, it's an act of distrust on the part of management. It requires the vast majority of employees to prove their innocence when there's no reason to suspect they've done anything wrong. It also violates their rights by reaching out from the employer's legitimate sphere of control at the workplace and telling employees what they can and can't do on their own time in their own homes.

Beyond this, experience has shown that the only way to prevent cheating on the tests is to make employees strip from the waist down and have someone watch at close range while they urinate into bottles. Drug-abusing employees who are not watched can substitute clean urine samples for their own, conceal small catheters of urine on their bodies, and dilute urine with tap water (to reduce drug concentration to below the cutoff point). The ultimate dodge, which no one knows how to prevent, is to slip a small amount of soap or salt into the sample. As Dr. William F. Hushion, medical director of Philadelphia Electric Co., put it after years of testing

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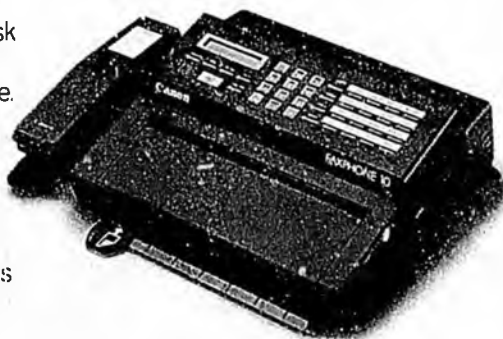
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experience, "Any drug-testing program that doesn't include close observation is a joke."

The effect of all this on employee morale is obvious. How would you feel about being subjected to a strip search to prove your innocence—even at home—and being fired if you objected? Would you want your life resting on the performance of an employee who felt that way?

The failure of drug testing can be seen in its rejection by those whose profession is helping addicted workers. I have spoken at numerous conferences on drug testing, and a representative from an employee-assistance program is always included among the speakers. These people have been helping employees with substance-abuse problems for years—and have done so very effectively. And many of them actively oppose testing. Some go so far as to refuse to accept referrals from testing programs. What kind of program is drug testing when it is opposed by those whose profession is helping abusing employees?

At this point, you may be saying, "I didn't realize there were all these problems with drug testing, but we have to do something." That's right, you do have to do something. Our company doesn't tolerate drug abuse, and I'm certainly not advocating that others tolerate it, either. Let me tell you about our program to combat workplace drug abuse.

We practice good management. We always say that people are our most important asset, and at Drexelbrook, we try to put that idea into practice.

We begin by trying to create a positive atmosphere. We want every employee to give us 100% every day. And we want each of them to make every decision with the best interest of the company at heart. By and large, we get that. But that kind of commitment doesn't come easily. We have to earn it.

One way we earn it is by treating our employees as adults. We trust them to do their jobs right and don't subject them to a lot of unnecessary rules. We trust our employees to know what working hours and style of dress are required for them to get their jobs done. Another way we earn that commitment is by respecting their rights. We scrupulously avoid prying into our employees' private lives. Finally, we care about them.

When they have problems at work or outside the workplace, we try to help. Sometimes we help by having our financial people arrange a personal loan at our bank. Sometimes we help by having our legal

department straighten out a problem with an employee's landlord. Mostly we help just by listening and caring.

This approach to employee relations is not philanthropy—it's good business. Our employees routinely go above and beyond the call of duty to help our customers. Our service manager, for example, installed a ship-to-shore radio in his sailboat at his own expense, so he could keep in touch with the company—and any problems—while he was on his vacation.

We are also very selective in our hiring. Even with applicants for entry-level jobs, we conduct at least two in-depth interviews with different interviewers. We check references—thoroughly. And often not with the personnel department—all

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of management.**

they ever give us is name, rank, and serial number—but with the candidate's previous supervisors. And we try to screen out the drug abusers. Not by anyone telling us directly, of course, but by learning about which applicants had chronic absenteeism, inconsistent quality, and bad work habits at their former jobs. And we find out with much more accuracy than we could with a hit-or-miss drug test.

After we hire people, we tell them what performance we expect from them—and then pay attention to their results. Most of our supervisors have taken a 36-week, intensive management-training course to help them in this. If an employee's performance consistently falls short of our expectations, then the supervisor sits down with him or her and discusses the problem. When employees are open with supervisors—as is often the case—and the problem is drugs or alcohol, we help get them into a treatment program.

That's our program—and it works. By doing good interviewing and reference checking, we almost never hire an employee with a drug or alcohol problem. We have had employees who developed such problems, but our supervisors noticed their declining job performance, confronted them, and got them into treatment.

Overall, estimate the rate of abuse at our company to be only about 1%. We

have installed more than a quarter of a million systems around the world, handling some of the most hazardous materials known, and have never been involved in an industrial accident.

Our experience is confirmed by a recent American Management Association survey of 1,000 companies that found the most effective program to fight workplace drug abuse combines employee education with trained supervisors who know how to identify and constructively confront employees who fail to meet performance standards.

The fact is, most companies don't do drug testing. And, according to the American Management Association study, a third of those who do think there is no value in it.

Why, then, is there so much talk about drug testing? The answer, I believe, lies largely in politics and the power of the media. Despite the fact that workplace drug abuse is far less prevalent than alcohol abuse—which industry has survived, if not solved, for years—the media have portrayed it as an epidemic that is sweeping the country and will destroy our economy unless immediate emergency measures are taken. In this emotional climate, is it any wonder that a manager who is already beleaguered, as we all are, can be convinced by a good salesperson who promises instant solutions with a simple, inexpensive test?

The truth, of course, is that managing people is never easy. Experienced managers for years have recognized that handling people is the most challenging part of their jobs, and that there are no shortcuts. And this, ultimately, is what drug testing is—a seductive gimmick that promises instant relief from the awesome responsibilities of management. The testing itself becomes a drug.

This is the choice managers face. They can fight workplace drug abuse with drug testing. It's easy, it's simple, and it's cheap. But it just doesn't work. Drug testing provides inaccurate and irrelevant information and alienates the vast majority of good employees, who resent being subjected to a strip search to keep their jobs. Or, they can fight substance abuse by choosing their people carefully, watching their performance, and getting involved when performance starts to slip. It's difficult, it's time-consuming, and it's expensive. But it does work. And not just in preventing workplace drug abuse, but in creating a safe and productive workplace.

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