

THE LAZAR INSTITUTE
McLean, Virginia

ASSESSMENT OF DRUG-FREE
WORKPLACE PROGRAMS IN
STATE AND LOCAL GOVERNMENTS

FINAL REPORT

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**ASSESSMENT OF DRUG-FREE WORKPLACE PROGRAMS
IN STATE AND LOCAL GOVERNMENTS**

Prepared for

**National Institute of Justice
U.S. Department of Justice**

and

**National Institute on Drug Abuse
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ABSTRACT

Major findings resulting from Lazar's survey to determine the characteristics of State and local government drug testing programs included:

- Drug testing in the public sector workplace has become widespread. Fifty-three percent of all jurisdictions surveyed reported conducting some form of applicant/employee testing, while 26 percent of all jurisdictions are contemplating institution of a drug program within twelve months. Jurisdictions were more likely to test police officers, whether applicants or employees.
- Employees testing positive for drug use are generally given at least a second chance before being terminated. Almost three-quarters of jurisdictions offer employee assistance programs to which first-time abusers are referred. Based on evidence from other sources, it appears that this practice does not hold for personnel in certain agencies (e.g., police), who are less likely to be given another chance.

On the basis of these and other survey findings, Lazar reached the following conclusions.

- Although there are critics of drug testing by public employers, the overwhelming trend to establish such programs is evidence of a consensus that they are worthwhile. This consensus exists despite the absence of conclusive data regarding their effectiveness.
- The prevalence of drug use, as measured by drug testing, seems not to vary by an employee's "estate" (i.e., private versus public). There is, however, evidence that drug use among city employees may be higher than among their counterparts in States and counties.
- Given the relatively low positive rate for employee drug tests and the apparently widespread practice of testing primarily on the basis of reasonable suspicion, the accuracy of the processes used to determine that a "just cause" exists for drug testing is questionable.

In light of the increasing use of drug testing programs in the public sector, the scarcity of public resources, and the lack of information on the impacts of such programs, Lazar strongly recommends that a cost-benefit analysis of such programs be undertaken as soon as possible. Studies of the criteria used to determine "reasonable suspicion" and of the scope and impacts of Employee Assistance Programs are also recommended as means of identifying ways to increase the effectiveness of drug-free workplace programs.

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PREFACE

This report details The Lazar Institute's study of applicant/employee drug testing programs in the State and local public sector workplace. The study consisted of a survey of 250 jurisdictions, the results of which were analyzed via a number of quantitative and statistical methods. Lazar's research was conducted between October 1989 and August 1990 as part of the National Institute of Justice's Drugs, Alcohol and Crime Program. Funding for the project was provided by the National Institute on Drug Abuse via an interagency transfer agreement.

In accordance with the study's objectives, this report presents an overview of jurisdictions' choice of subjects for testing, as well as reasons for and results of testing. Jurisdictions' responses to positive tests and encounters with challenges to their programs, as well as the history of jurisdictions' drug testing programs, are also considered. Although some general insights about the quality of the programs are offered, the report does not present a definitive evaluation of State and local drug testing practices. Rather, it establishes the foundation for such a study.

Several individuals furnished valuable assistance to Lazar during the course of this study. In particular, the authors would like to express gratitude to Dr. Bernard Gropper, Director of the Drugs, Alcohol and Crime Program of the National Institute of Justice; Dr. Steven Gust, Special Assistant to the Director, National Institute on Drug Abuse; and Dr. Jerome Jaffe, Associate Director of the Office of Treatment Improvement, Department of Health and Human Services. A number of other specialists with expertise in the field of drug testing made valuable suggestions regarding Lazar's initial survey design. These persons included Dr. Robert DuPont, President of the Institute for Behavior and Health; Mr. Bruce Mendelson, Director of Planning and Evaluation, Alcohol and Drug Abuse Division, State of Colorado; and Mr. Stephen Rickman, Director of the Statistical Analyses Center, Office of Criminal Justice Plans and Analyses, City of Washington, DC. We are also appreciative of advice given by Ms. Christine Boyle, Chief of Research and Evaluation, Division of Criminal Justice, State of New Jersey; Ms. Frances Donahoo, Acting Chief of the Employer/Employee Relations Unit, State of Maryland; Mr. Richard Porter, Statistical Analyst, Arizona Criminal Justice Commission; and Ms. Mary Toborg, President of Toborg Associates. Finally, we would like to thank State and local officials who completed our pilot survey. Their answers and comments contributed substantially to the final revision process.

All of the above individuals made it possible for Lazar to develop what we hope is an accurate and useful study. If we succeeded, it is in large part due to their efforts. Any remaining errors of fact or judgment are, of course, solely our responsibility.

HIGHLIGHTS

In recent years, State and local governments have joined other employers in voicing concern about the negative impact of drug abuse on productivity, public safety, and health in the workplace. Many of these governments have developed strategies to combat drug abuse among their employees, including the implementation of drug testing programs. At this time, however, no program exists to monitor or provide guidance to State and local drug-free workplace efforts.

In order to determine characteristics of State and local government drug testing programs and help provide an empirical basis for recommending improvements in the structure and content of such programs, The Lazar Institute conducted a survey research project that addressed such questions as:

- Which State and local governments have implemented drug testing procedures, and what led them to initiate such programs?
- Which employees, or prospective employees, are tested, and how are test results verified?
- What types of actions are taken by State and local governments in response to positive test results?
- What do State and local officials perceive as the benefits of drug testing programs?

Lazar's survey instrument was implemented in 250 jurisdictions including:

- the 50 States;
- the 50 most populous cities;
- a random sample of 50 other cities with populations greater than 25,000;
- the 50 most populous counties; and
- a random sample of 50 other counties with populations greater than 25,000.

The response rate to the survey was 80 percent.

Data collected in the survey, which was designed to document the nature and scope of State and local efforts, revealed the following.

- Drug testing in the public sector workplace has become widespread. Fifty-three percent of all jurisdictions surveyed reported conducting some form of applicant/employee testing, while 26 percent of all jurisdictions are contemplating institution of a drug program within twelve months. Nearly 47 percent of jurisdictions with a testing program initiated their drug testing programs as recently as 1989.

- Overall, government employers were found to have instituted anti-drug programs (including testing, employee assistance, and written directives) with roughly the same frequency as private sector employers.
- Reducing drug use in the workplace and responding to Federal encouragement and mandates were the reasons most frequently cited by program managers to explain why testing programs had been initiated.
- Cities were the most likely jurisdiction to operate a testing program, with nearly 69 percent of jurisdictions reporting testing. Counties were least likely to test, with only 37 percent reporting operating a program. The State figure fell in between those of the other two jurisdictions, with over 56 percent reporting testing.
- As a jurisdiction's size increases, so does its likelihood of conducting applicant/employee drug testing. (This conclusion does not apply to States; only cities and counties were analyzed by size.)
- Jurisdictions were more likely to test police officers, whether applicants or employees, than they were to test any other employee group.
- While nearly 100 percent of jurisdictions with a drug testing program test applicants, two-thirds test employees.
- Jurisdictions testing employees appear to be testing primarily on the basis of reasonable suspicion.
- Jurisdictions overwhelmingly employ Federally approved methods of drug testing, using one of three standard immunoassays, as well as a confirmatory assay.
- Overall percentages of positive rates for public sector applicants were similar to, although slightly lower than equivalent figures for the private sector. Although public sector employees appeared to be more likely to test positive than their private sector counterparts, the small numbers involved made this finding questionable.
- Employees testing positive for drug use are generally given at least a second chance before being terminated. Almost three-quarters of jurisdictions offer employee assistance programs to which first-time abusers are referred. Based on evidence from other sources, it appears that this practice does not hold for personnel in certain agencies (e.g., police), who are less likely to be given another chance.
- Jurisdictions are not keeping records on the types of drugs being used by employees or, except for specimen collection and analysis, on the costs of treatment, other EAP activities, or employee downtime during treatment and testing.

- Approximately one-third of jurisdictions with a testing program reported receiving challenges to their program. Challenges were principally leveled by employee unions and individual employees.
- Approximately 80 percent of jurisdictions with drug testing programs cited positive results, with cities holding the most positive view and counties the least.
- Approximately one-third of jurisdictions either testing or contemplating testing stated that increased Federal technical assistance would be useful.

On the basis of these and other survey findings, Lazar reached the following conclusions.

- In spite of a lack of Federal or other centralized guidance for public sector employers, State and local jurisdictions seem to have evolved similar testing programs, with regard to physical testing procedures as well as subjects of testing. These programs also have much in common with those instituted at the Federal level.
- The public sector has lagged somewhat behind the private sector in instituting drug testing, but may surpass industry in this regard within the next year. Although there are critics of drug testing by public employers, the overwhelming trend to establish such programs is evidence of a consensus that they are worthwhile. This consensus exists despite the absence of conclusive data regarding their effectiveness.
- The prevalence of drug use, as measured by drug testing, seems not to vary by an employee's "estate" (i.e., private versus public). There is, however, evidence that drug use among city employees may be higher than among their counterparts in States and counties.
- Employee assistance programs appear to be viewed by most jurisdictions as a useful tool for helping personnel with drug problems.
- Given the relatively low positive rate for employee drug tests and the apparently widespread practice of testing primarily on the basis of reasonable suspicion, the accuracy of the processes used to determine that a "just cause" exists for drug testing is questionable.

The results of Lazar's survey have shed considerable light on the extent of drug testing in the State and local public sector workplace, revealing similarities between efforts at the Federal level and in the private sector. In each case, it is clear that drug testing is becoming more prevalent for both applicants and employees, particularly those working in sensitive positions. The survey did not provide evidence, however, that those responsible for establishing drug testing programs are doing so on the basis of solid information on the relative costs and benefits of such procedures. In fact, given the relatively short history of such programs, it would have been extremely difficult, if not

impossible, to conduct such cost-benefit analyses prior to the present time.

Now, however, enough jurisdictions have been engaged in drug testing for a sufficient time to make a cost-benefit analysis feasible. Such an analysis could use data collected by governments as a partial basis for determining the relative costs and benefits of drug-free workplace programs and for providing quantitative evidence of the impacts of such efforts. Critics who argue that costs of testing to identify the small percentage of employees abusing drugs are too high in an era of scarce resources would have their position validated or refuted. Similarly, the common sense assumption that drug tests result in increases in safety and productivity could be tested. Most important, the resulting knowledge of the costs and benefits of various drug testing program approaches would provide a basis upon which public officials could make sound future decisions on whether to initiate, terminate, or modify such programs. Impact information acquired through the analysis would also enable officials to demonstrate to their electorates whether the goals of drug testing programs are being met.

In light of the increasing use of drug testing programs in the public sector, the scarcity of public resources, and the lack of information on the impacts of such programs, Lazar strongly recommends that a cost-benefit analysis of the efficacy of such programs be undertaken as soon as possible. Studies of the criteria used to determine "reasonable suspicion" and of the scope and impacts of Employee Assistance Programs are also recommended as means of identifying ways to increase the effectiveness of drug-free workplace programs. Increased Federal technical assistance to help State and local governments establish and implement drug programs is yet another step recommended by Lazar as a result of the insights acquired through this study.

1.0 BACKGROUND AND PROBLEM STATEMENT

1.1 Background

The use of illegal drugs in the workplace is increasingly seen by employers as a hazard to productivity and health. "Abuse of controlled substances in the private sector has threatened employee health and reduced productivity and profits."¹ In response to the threat posed by employee drug abuse, management has devised solutions ranging from employee assistance programs² to termination.

In order to detect drug abuse on the part of an employee, some employers no longer rely on a supervisor's judgment, or wait for a workplace accident to occur. Instead, they are increasingly turning to chemical (urinalysis) drug testing procedures, which enable them to accurately direct anti-drug measures, whether punitive or treatment-oriented, toward the appropriate employees.

The process of chemical drug testing leaves little to chance. By performing various chemical tests, known as immunoassays, on a urine sample, clinicians can determine with a reasonable degree of accuracy whether the employee has used illegal drugs in the recent past. Positive results can be confirmed through more detailed (gas chromatography/mass spectrometry) procedures, which provide an extremely high degree of accuracy in assessing whether an employee has used illegal drugs recently. The combination of immunoassay and confirmatory assay renders the chance of a "false positive" drug test remote.

1 Allan Robert Adler, ACLU Legislative Counsel, "Civil Liberties and Ethical Concerns" (Workplace Drug Abuse Policy: Considerations and Experience in the Business Community, Department of Health and Human Services, 1989), p. 39.

2 These are programs which provide mental and physical therapy for employees with drug problems, either in-house or through a contractor or public care provider.

There are a number of situations in which an employer may decide that an employee drug test is an acceptable response. Typically, an employer may test:

- applicants;
- on the basis of reasonable suspicion or "probable cause;"
- because of an accident or unsafe practice;
- on a voluntary basis;
- during or after treatment/rehabilitation; and
- at random.³

These reasons for testing vary in controversiality, with random testing being least accepted and accident or other "cause-related testing" most accepted.⁴

Among private-sector employers, drug testing is growing in popularity. Large firms are most likely to adopt drug testing programs, as was shown in a recent Bureau of Labor Statistics (BLS) study. In the BLS study, 59.8 percent of the 400 largest employers surveyed (those with over 5,000 employees) reported operating an applicant or employee drug testing program, as opposed to approximately 3.2 percent of all nonagricultural private firms.⁵

According to a representative of one large corporation, "The corporation must act to encourage and support better choices by all employees and

3 List taken from Model Plan for a Comprehensive Drug-Free Workplace Program (National Institute on Drug Abuse, Department of Health and Human Services, 1989), p. 3.

4 John M. Mason, "Control of Drug Abuse in the Workplace: Individual Expectations, Private Contracts, and Constitutional Values," (Workplace Drug Abuse Policy), p. 28.

5 This figure can be misleading, as firms with as little as one employee are included. In general, the BLS survey found that the likelihood of a firm's conducting some type of drug testing increased positively with the firm's size.

to redirect and rehabilitate abusers before they become unemployable."⁶ It appears that large employers have both the technology and the desire to detect employee drug use before an accident or fall in productivity occurs.

Since 1986, the country's largest employer, the Federal Government, has joined its private sector analogs--indeed, has been in the forefront--in operating an applicant/employee drug testing program. Its posture is that "As the largest employer in the Nation, the Federal Government has a compelling proprietary interest in establishing reasonable conditions of employment. Prohibiting employee drug use is one such condition."⁷ The Government takes the position that "The use of illegal drugs, on or off duty, by Federal employees is inconsistent not only with the law-abiding behavior expected of all citizens, but also with the special trust placed in such employees as servants of the public."⁸

The Federal Government has a mandate to test a wide range of candidates and potential candidates for Federal service, viewing drug testing as a "focal point of significant activities to decrease drug use and its adverse consequences."⁹ The following Federal personnel are eligible for drug testing:

- any applicants;
- employees in sensitive positions;¹⁰

6 E.C. Curtis, "Drug Abuse: a Westinghouse Corporate Perspective" (Workplace Drug Abuse Policy), p. 83.

7 Model Plan for a Comprehensive Drug-Free Workplace Program (National Institute on Drug Abuse, U.S. Department of Health and Human Services, 1989), p. 1.

8 "Drug-Free Federal Workplace," Executive Order 12564 of September 15, 1986.)

9 Steven W. Gust, Ph.D and J. Michael Walsh, Ph.D, "Research on the Prevalence, Impact, and Treatment of Drug Abuse in the Workplace" (Drugs in the Workplace: Research and Evaluation Data, U.S. Department of Health and Human Services, 1989), p. 3.

10 This term is defined in "Drug-Free Federal Workplace," Executive Order 12564 of September 15, 1986.

- employees with access to classified information;
- individuals serving under Presidential appointments;
- law enforcement officers; and
- public health or safety workers.¹¹

To ensure that all testing is conducted fairly, the Federal Department of Health and Human Services has issued a detailed set of guidelines covering the following areas:

- lab certification;
- drugs for which Federal Government entities are authorized to test;
- which clinical tests should be used;
- quality control and "chain of custody" (ensuring that the sample is definitively established as belonging to a particular employee); and
- procedures to be followed in case of an employee's testing positive.

1.2 Problem Statement

Except in a few cases,¹² the Federal Government has not mandated that drug testing be extended to employees of the fifty States and their subject jurisdictions. However, a number of States, cities and counties have acted on their own and begun to operate employee testing programs on an individual basis.

The lack of Federal involvement in these State and local employment-related drug testing programs is mirrored by the lack of a centralized database of information regarding local government drug testing practices. The resulting difficulty in accessing data has precluded Federal entities from offering technical assistance to local government drug testing

¹¹ Ibid.

¹² Some mass transit and interstate carrier personnel (overseen by the U.S. Department of Transportation) and National Guardsmen (overseen by the U.S. Armed Forces) must undergo drug testing to comply with Federal law.

programs or jurisdictions contemplating the institution of such programs, as well as inhibited evaluation of State and local programs.

In order to remedy this knowledge gap, the National Institute on Drug Abuse of the U.S. Department of Health and Human Services, through an interagency transfer to the National Institute of Justice of the U.S. Department of Justice, provided a grant to The Lazar Institute for the purpose of studying current trends and practices in State and local government workplace drug testing. This report represents the study's principal product.

1.3 Lazar Study Approach

During the course of its research, Lazar attempted to determine answers to the following overarching questions:

- Which State and local governments have implemented drug testing programs, and what led them to initiate these programs? What do State and local governments perceive as the benefits (if any) of drug testing programs?
- Which employees, or prospective employees, are tested, and how are test results verified? What types of actions are taken by State and local governments in response to positive test results? How have employees and the public responded?
- What types of Federal technical assistance (if any) are desired by State and local governments, either in contributing to an already-existing program's efficacy or in helping to implement a projected program?
- How do drug testing approaches in State and local governments compare to Federal practices? How do they compare to private-sector practices, as elucidated in the BLS survey mentioned earlier?

In order to shed light on the questions listed above, Lazar devised a study approach which involved the following elements:

- State of Knowledge Assessment
Lazar conducted a telephone survey of leading experts in the field of public sector workplace drug testing in order to gain their insights concerning the study's focus, as well as to isolate appropriate institutional respondents to the projected survey. In addition, a literature search was conducted.

- Survey of State and Local Jurisdictions
After isolating 250 State, county, and city respondents, Lazar designed and conducted a survey of personnel and employee relations officials in each of the 250 jurisdictions, including the 50 States and selected counties and cities, in order to learn about the nature and extent of jurisdictional employee drug testing programs.
- Statistical Analysis of Survey Results
After collecting and tabulating the survey responses, Lazar extensively examined the resulting data via a number of statistical testing methods.
- Report Preparation
This document reports on the results of Lazar's work. It contains a full description of the instrument construction and data gathering procedures, as well as the results elicited from conducting tests on the data.

2.0 SURVEY DESIGN

2.1 Overview

In order to develop a profile of drug testing activity and accompanying employee assistance programs in State and local governments, Lazar designed a survey instrument which allowed responding jurisdictions to describe the nature of their drug-free workplace initiatives. The survey instrument appears as the Appendix.

2.2 Respondent Selection and Recruiting

Lazar selected the following jurisdictions for participation in the survey:

- the 50 States;
- the 50 most populated cities;
- a random sample of 50 remaining cities with populations greater than 25,000;
- the 50 most populated counties; and
- a random sample of 50 remaining counties with populations greater than 25,000.

In order to attain a high response rate, the initial mail questionnaire was followed by a second mailing to unresponsive jurisdictions. In addition, Lazar followed up by telephone, approximately one month after the second mailing, to jurisdictions which still had not responded to the survey.

2.3 Survey Design

2.3.1 Preliminary Questions

The questionnaire solicited some preliminary information relating to a jurisdiction's employee population, whether a written drug policy existed, and whether an employee assistance program was available. A "path" mechanism was built into the questionnaire in order to distinguish

jurisdictions without testing programs from those with such programs. As can be seen in the Appendix, those jurisdictions operating testing programs were directed to skip some items and complete the detailed questionnaire, while those jurisdictions falling into the "no testing program" category were broken down into two groups: jurisdictions that were not planning on instituting a testing program in the next 12 months, and jurisdictions that were contemplating such a program. Jurisdictions contemplating drug testing were directed to explain which employee populations might be eligible for testing in the future, in addition to whether they envisioned a need for Federal technical assistance in instituting their program.

2.3.2 Origins and Focus of a Jurisdiction's Drug-Free Workplace Program (Part A)

Part A of the questionnaire requested the following data regarding the date of origin of, as well as the agencies involved in, a jurisdiction's drug testing program:

- when a jurisdiction's drug testing program was instituted;¹³
- which agencies in the jurisdiction operated programs or would do so within the next twelve months, and the number of persons currently employed within those agencies; and
- who (applicants and/or employees) was eligible for testing.

2.3.3 The Drug Testing Process (Part B)

In Part B of the instrument, respondents were asked to provide information concerning the drug testing process, including the type(s) of immunoassay used for evaluating test samples and whether positive results were confirmed through additional testing procedures. This information

¹³ Jurisdictions calling Lazar to report that they had no unified testing policy were instructed to provide the earliest date of introduction of any agency drug testing program in their area.

allowed a determination of whether jurisdictions were employing Federally approved methods of drug testing.

2.3.4 Number and Results of Urinalysis Tests Administered (Part C)

Part C of the instrument requested data concerning actual drug tests conducted and results obtained. The following data were requested:

- the number of applicants and employees¹⁴ eligible for testing;
- the number of applicants and employees tested; and
- the number of applicants and employees who tested positive with a confirmatory assay.

In addition to this information, respondents were asked how many applicants and employees had tested positive for specific substances (amphetamines, barbiturates, cocaine, marijuana, opiates, and PCP), if such detailed information were available in their jurisdiction. Finally, respondents were asked whether they kept a record of the number of employees tested for the following reasons:

- suspicion of use;
- accident or unsafe practice;
- at random;
- during treatment; and/or
- after treatment.

2.3.5 Responses to Positive Test Results (Part D)

In Part D of the instrument, a description of the nature of the response to positive employee test results was requested. Questions were asked regarding a jurisdiction's probable response to an employee's first positive test result (immediate termination or referral to an employee

¹⁴ Information regarding applicants and employees was requested separately.

assistance program for counseling/treatment) and the jurisdiction's policy with regard to employees who had tested positive more than twice.

2.3.6 Related Issues (Part E)

The final section of the questionnaire covered policy-related issues not addressed elsewhere. In this regard, respondents were asked about any challenges to their program that had been initiated. Both challenger groups (employee unions, non-union employee groups, individual employees, private citizens, or civil liberties groups) and types of challenges (lawsuits, negative comments or protests) were included.

A second item addressed whether records were kept related to costs of specimen collection and analysis, employee assistance program drug treatment-related activities or facilities, outside drug treatment-related activities or facilities, and work time lost by employees during testing or treatment.

Respondents were also asked to assess the results of their drug-free workplace program and provided with a list of possible impacts that included the following:

- lower absenteeism rates;
- lower turn-over rates;
- lower accident rates;
- higher overall productivity;
- decreased drug use;
- increased public confidence in government officials; and
- no positive results recorded.

This last item in this section of the instrument allowed respondents to indicate whether they perceived a need for Federal technical assistance as they expanded or further developed their drug-free workplace programs.

3.0 SURVEY RESULTS

3.1 Overview

Perhaps the most significant overall result of Lazar's investigation into public sector drug testing practices is that a clear majority of jurisdictions responding to the survey, regardless of type, reported operating or contemplating some type of applicant or employee drug testing program. Overall, 78 percent of the 200 responding jurisdictions fell in this category. While there were other commonalities among jurisdictions, differences also emerged. One cause for the variations in results appears to be a jurisdiction's size. States, large cities, and large counties were all significantly more likely to already be administering an applicant or drug testing program than were smaller cities and smaller counties. While this result invites further examination and classification of jurisdictional responses on the basis of size, some of the subgroups thus isolated--particularly the group comprised of small counties operating testing programs--were not large enough to permit satisfactory analysis of data.

Another aspect of Lazar's analysis that should be mentioned here is the use, for purposes of comparison, of data from a 1989 Bureau of Labor Statistics survey of private sector employee drug testing programs.¹⁵ In particular, information concerning the 400 largest firms surveyed, each with an employee population of 5,000 or more, was compared to parallel data gathered during the Lazar survey.¹⁶ This comparison showed that overall, government employers have instituted anti-drug programs with roughly the same frequency as private sector employers.

¹⁵ See Survey of Employer Anti-Drug Programs (Bureau of Labor Statistics, U.S. Department of Labor, 1989).

¹⁶ It was felt that this population would be most comparable to State and local government employment figures, given that the average jurisdictional employee population is 15,044 and the average private sector employee population of 5,000 or more is 9,580.

3.2 Response Rates

The total survey response rate was quite satisfactory, with 80 percent of jurisdictions returning questionnaires.¹⁷ The response rate was particularly high at the State level. In all, 92 percent of States (46 jurisdictions) returned responses to the questionnaire.¹⁸ The response rate for cities was 74 percent (74 jurisdictions), while the rate for counties reached 80 percent (80 jurisdictions).

As mentioned previously, Lazar conducted a three-step procedure aimed at eliciting responses from jurisdictions. After the first mailing of the questionnaire/information packet, a second copy of the packet was mailed to jurisdictions that had not responded after a month. After another month had passed, those jurisdictions that had still not responded were contacted by telephone and fax. Surveys returned as a result of telephone and fax follow-up constituted 11 percent of all State responses, 14 percent of all city responses¹⁹ and 9 percent of all county responses.

Figures 1, 2, and 3 list all jurisdictions targeted for response to the survey, as well as all jurisdictions that responded.

3.3 Testing Status of Jurisdictions

Through analysis of responses to the "Preliminary Questions" portion of the survey, some interesting facts were established. A large majority--81 percent--of responding jurisdictions have instituted written policies concerning drug use in the workplace. This figure is nearly identical to

¹⁷ Reflects data collected through June 20, 1990.

¹⁸ Georgia, Maine, Mississippi, and Wisconsin did not respond.

¹⁹ In general, surveys received as a result of telephone/fax follow-up were filled out by the respondent and mailed or faxed to Lazar. However, a small number of city respondents were interviewed by phone (an action necessitated by time constraints), with a researcher reading the survey instrument aloud and recording oral responses. These cities included Washington, DC; Portage, Michigan; and Tacoma, Washington.

**FIGURE 1
RESPONSES RECEIVED FROM STATES**

STATE	RESPONSE RECEIVED	STATE	RESPONSE RECEIVED
Alabama	X	Montana	X
Alaska	X	Nebraska	X
Arizona	X	Nevada	X
Arkansas	X	New Hampshire	X
California	X	New Jersey	X
Colorado	X	New Mexico	X
Connecticut	X	New York	X
Delaware	X	North Carolina	X
Florida	X	North Dakota	X
Georgia		Ohio	X
Hawaii	X	Oklahoma	X
Idaho	X	Oregon	X
Illinois	X	Pennsylvania	X
Indiana	X	Rhode Island	X
Iowa	X	South Carolina	X
Kansas	X	South Dakota	X
Kentucky	X	Tennessee	X
Louisiana	X	Texas	X
Maine		Utah	X
Maryland	X	Vermont	X
Massachusetts	X	Virginia	X
Michigan	X	Washington	X
Minnesota	X	West Virginia	X
Mississippi		Wisconsin	
Missouri	X	Wyoming	X

FIGURE 2
RESPONSES RECEIVED FROM CITIES

CITY	RESPONSE RECEIVED	CITY	RESPONSE RECEIVED	CITY	RESPONSE RECEIVED
AL: Mobile*	X	IL: Chicago*		NY: Buffalo*	X
AR: Hot Springs	X	IL: Naperville		NY: New York*	X
AZ: Glendale	X	IL: Northbrook		NY: Valley Stream	
AZ: Phoenix*	X	IL: Park Ridge			
AZ: Tucson*	X	IN: Indianapolis*		OH: Cincinnati*	X
				OH: Cleveland*	X
CA: Arcadia		KS: Salina		OH: Columbus*	
CA: Buena Park	X	KS: Wichita*	X	OH: Kettering	X
CA: Clovis	X			OH: Parma	X
CA: Escondido	X	LA: Bossier City		OH: Strongsville	
CA: Long Beach*	X	LA: Houma	X	OH: Toledo*	X
CA: Los Angeles*	X	LA: New Iberia	X		
CA: Milpitas	X	LA: New Orleans*	X	OK: Broken Arrow	X
CA: Oakland*	X			OK: Oklahoma City*	X
CA: Oceanside	X	MA: Attleboro	X	OK: Shawnee	X
CA: Petaluma	X	MA: Boston*		OK: Tulsa*	X
CA: Pleasanton				OR: Portland*	X
CA: Sacramento*	X	MD: Baltimore*	X		
CA: San Diego*	X	MD: Frederick	X	PA: Erie	
CA: San Francisco*	X	MD: Hagerstown	X	PA: Philadelphia*	
CA: San Jose*				PA: Pittsburgh*	X
CA: San Mateo	X	MI: Detroit*	X	PA: Williamsport	X
CA: Santa Clara	X	MI: Portage	X		
		MN: Blaine	X	TN: Memphis*	X
CO: Denver*	X	MN: Minneapolis*	X	TN: Nashville*	X
CO: Englewood					
CO: Loveland	X	MO: Kansas City*		TX: Austin*	X
		MO: St. Louis*	X	TX: Dallas*	
CT: Norwalk				TX: El Paso*	X
		MS: Jackson		TX: Fort Worth*	X
DC: Washington*	X	MS: Meridian	X	TX: Houston*	X
				TX: Midland	X
DE: Wilmington		NC: Charlotte*	X	TX: San Antonio*	X
		NC: Goldsboro	X	TX: Texas City	X
FL: Jacksonville*	X				
FL: Miami*		NE: Omaha*	X	VA: Alexandria	X
FL: Orlando	X			VA: Norfolk*	X
FL: Tallahassee		NJ: Kearny	X	VA: Virginia Beach*	X
		NJ: Newark*			
GA: Atlanta*				WA: Seattle*	X
		NM: Albuquerque*	X	WA: Tacoma	X
ID: Boise	X				
				WI: Green Bay	X
				WI: Milwaukee*	X

*Among Nation's 75 largest cities.

FIGURE 3
RESPONSES RECEIVED FROM COUNTIES

COUNTY	RESPONSE RECEIVED	COUNTY	RESPONSE RECEIVED	COUNTY	RESPONSE RECEIVED
AL: Jefferson*	X	KY: Jefferson*		OH: Cuyahoga*	X
AL: Marion	X	LA: Ascension	X	OH: Fayette	
AZ: Maricopa*	X	MA: Hampshire	X	OH: Franklin*	X
CA: Alameda*	X	MA: Middlesex*	X	OH: Geauga	X
CA: Contra Costa*	X	MD: Baltimore*	X	OH: Hamilton*	X
CA: Los Angeles*	X	MD: Montgomery*	X	OH: Highland	X
CA: Marin	X	MD: Prince George's*	X	OR: Umatilla	X
CA: Orange*	X	MI: Macomb*		PA: Allegheny*	X
CA: Riverside*		MI: Menominee		PA: Clearfield	X
CA: Sacramento*	X	MI: Oakland*	X	PA: Cumberland	X
CA: San Bernardino*		MI: Tuscola		PA: Montgomery	
CA: San Diego*	X	MI: Wayne*		PA: Washington	X
CA: Santa Clara*	X	MN: Beltrami		PA: Wayne	X
CA: Stanislaus	X	MN: Brown	X	SC: Lancaster	X
CO: La Plata		MN: Hennepin*	X	SC: York	X
FL: Broward*	X	MN: Kandiyohi	X	TN: Shelby*	X
FL: Columbia	X	MN: Lyon	X	TX: Bexar*	X
FL: Dade*	X	MN: Scott	X	TX: Dallas*	
FL: Hillsborough*	X	MO: Franklin	X	TX: Harris*	X
FL: Leon	X	MO: St. Louis*	X	TX: Hutchinson	X
FL: Palm Beach*	X	MS: Jones	X	TX: Midland	X
FL: Pinellas*	X	MS: Marshall	X	TX: Tarrant*	X
FL: Santa Rosa	X	NC: Granville	X	UT: Salt Lake*	X
FL: Seminole	X	NC: Mecklenburg	X	VA: Amherst	X
FL: St. Johns	X	NC: Wilson		VA: Fairfax*	X
GA: Hall		NJ: Essex*	X	WA: King*	X
HI: Honolulu*	X	NJ: Middlesex*	X	WI: Grant	X
IL: Cook*	X	NM: Rio Arriba		WI: Milwaukee*	X
IL: Du Page*	X	NY: Erie*	X	WI: Sauk	X
IL: Winnebago	X	NY: Monroe*	X	WV: Boone	
IN: Delaware	X	NY: Nassau*		WY: Lincoln	X
IN: Madison		NY: Suffolk*	X	WY: Natrona	X
IN: Marion*	X	NY: Westchester*			
IN: Putnam					
IN: Randolph	X				

*Among Nation's 75 largest counties.

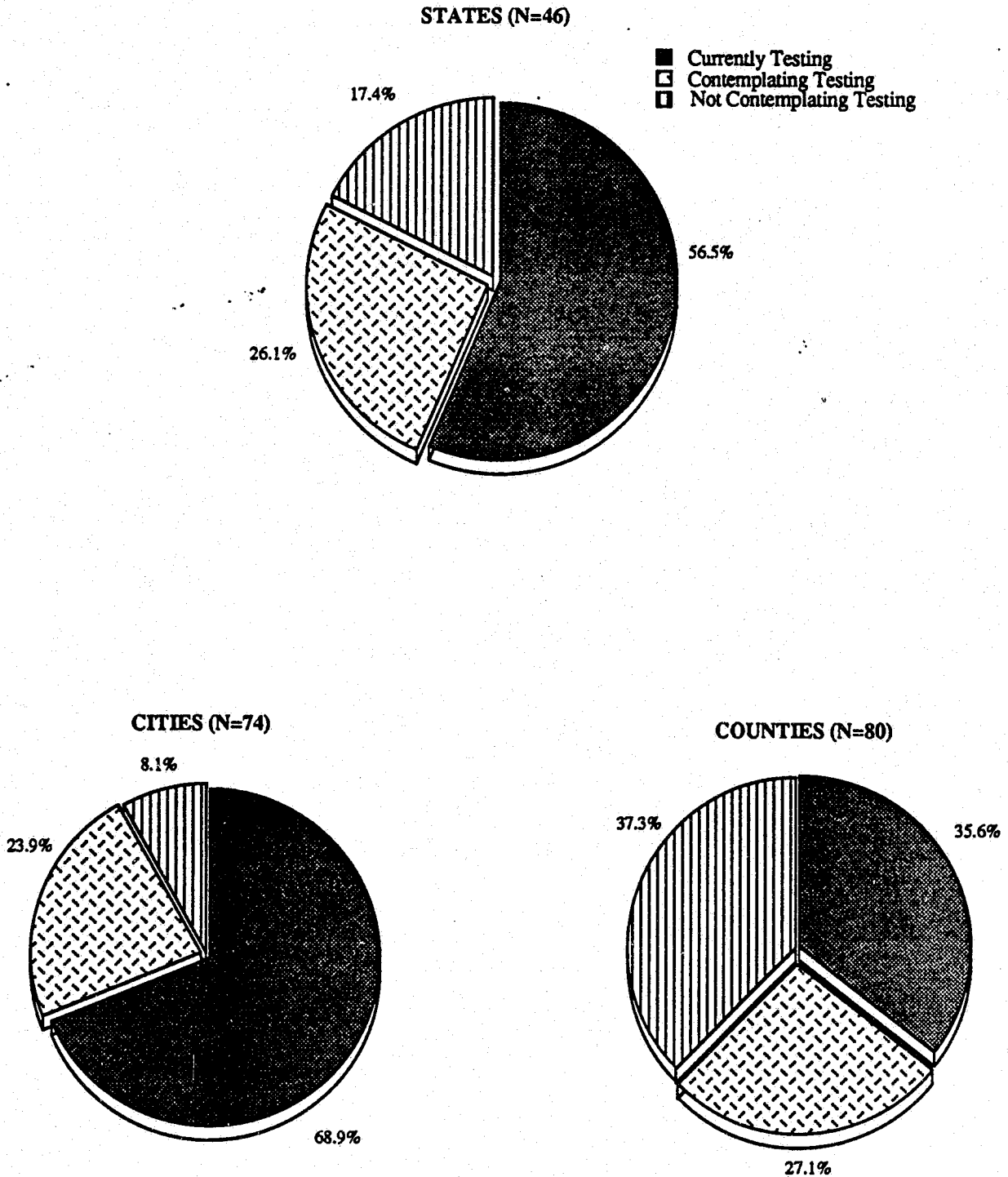
the percentage of private sector firms with over 5,000 employees having instituted written policies (83 percent). More specifically, 91 percent of States, 85 percent of cities, and 71 percent of counties have established written policies. In addition, a substantial majority--73 percent--of responding jurisdictions offer their workforce some type of employee assistance program (EAP) for drug problems. This figure is not substantially lower than the percentage of private sector firms with over 5,000 employees administering employee assistance programs (83.0 percent), nor was there significant variance among the types of jurisdictions. Seventy-three percent of States, 78 percent of cities, and 69 percent of counties reported administering an EAP.

The interest in addressing the problem of drug abuse in the workplace reflected by the above results was confirmed by data on the status of drug testing programs. Overall, 53 percent of jurisdictions operated some form of applicant/employee drug testing program, while another 26 percent reported contemplating the establishment of a program within the next 12 months. Thus, although the figure for current public sector testing is significantly²⁰ lower than the percentage of private sector firms with over 5,000 employees operating drug testing programs (68 percent), when those contemplating initiation of such testing in the near future are added, the total exceeds the private sector figure by 20 percent (88 percent).

As can be seen in Figure 4, a majority of States and cities responding to the survey, as well as nearly 40 percent of responding counties, operate a drug testing program. Fifty-six percent of responding States reported operation of a drug testing program. Furthermore, approximately 26 percent

²⁰ Lazar employed the 2x2 contingency "z" test, establishing the Type I error at .05.

FIGURE 4
JURISDICTIONS' STATUS WITH REGARD TO DRUG TESTING



reported that they were contemplating institution of a testing program. Only 17 percent were neither operating or considering operation of a testing program.

With respect to jurisdictional types, the percentage of cities found to operate drug testing programs was highest, with nearly 69 percent of responding jurisdictions reporting operation of a drug testing program--a figure comparable to that for large private firms. Moreover, 23 percent reported contemplating institution of such a program. A very small fraction--eight percent--reported neither testing nor contemplating testing.

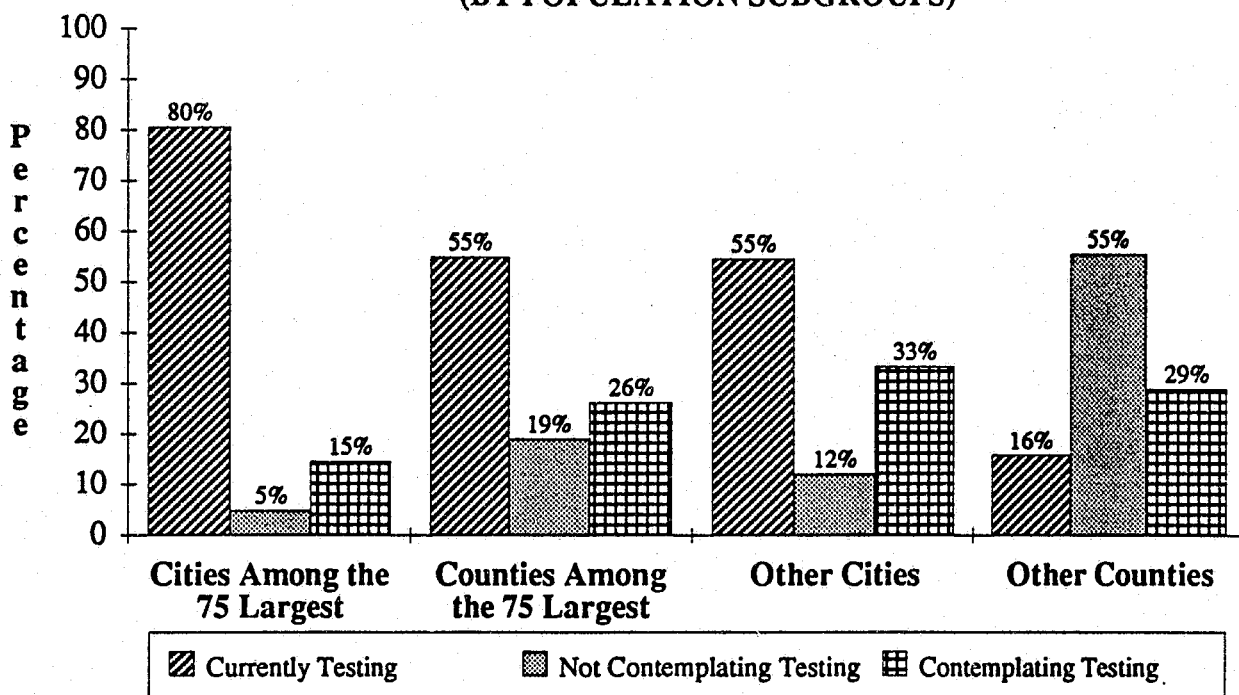
Counties, conversely, were the least involved in operating testing programs, as indicated by the relatively small figure--36 percent--reporting a current testing program. While 27 percent of counties reported contemplating a drug testing program, a relatively large percentage--37 percent--reported neither testing nor contemplating testing.

In addition to determining which of the responding cities and counties were operating or contemplating establishment of a drug testing program, Lazar analyzed the relationship between jurisdictional size and drug testing activity. As mentioned previously, participating cities and counties were chosen in one of two ways: the 50 largest cities and 50 largest counties were chosen for participation, as well as 50 other randomly selected cities and 50 other counties. Given that each group (of cities and of counties) was comprised of two different populations, analysis by subgroup seemed appropriate. In fact, a city or county's population size was found to relate significantly²¹ to whether it was

²¹ For a discussion of significance testing involving a jurisdiction's size, see Section 3.14.

already operating a drug testing program. Figure 5 depicts the rate of drug testing in large and small cities and counties.²² As can be seen, a sizable majority of large cities (80 percent) reported operating a drug testing program, while 15 percent were contemplating institution of such a program. Among smaller cities, only 55 percent reported operating such programs, while 33 percent had plans to test employees or applicants for drug use.

FIGURE 5
JURISDICTIONS' STATUS WITH REGARD TO DRUG TESTING
(BY POPULATION SUBGROUPS)



²² It should be noted that several of the randomly selected "Other" cities and counties were found to be listed by the U.S. Census Bureau as among the 75 largest cities or counties. Accordingly, Lazar broadened the field of analysis to comprise the 75 largest cities versus other cities, and the 75 largest counties versus other counties.

Analysis by size revealed even greater discrepancies between counties of different populations. An examination of large counties' testing practices revealed a majority of responding jurisdictions--55 percent--operating a drug testing program. Twenty-six percent were considering instituting a testing program, while only nine percent of large counties reported neither testing nor contemplating testing. Among smaller counties, on the other hand, only 16 percent were currently operating a testing program. Twenty-nine percent of such counties reported that they were contemplating such action, while almost one-third have no plans for such a program. The percentage of large counties with a testing program, as well as the percentage of such counties considering testing, more closely approximated the overall figures for States and cities. Clearly, large jurisdictions--whether cities or counties--were more likely to already be performing some type of drug testing than were small jurisdictions.

3.4 Origins and Focus of Programs

Although some jurisdictions have been conducting drug testing since the 1960's (New York City, for example), most instituted their workplace testing programs after the Drug-Free Workplace Act of 1986. In fact, nearly 47 percent of jurisdictions began their testing programs as recently as 1989.

Most State workplace drug testing programs were initiated quite recently, with the average start date of testing programs being August 1987. City programs were instituted somewhat earlier, with an average start date of programs being May 1986. The average start date of counties' testing programs--January 1987--falls in between that of States and cities.

In considering the reasons respondents gave for initiating drug programs, it must be recognized that the questionnaires were completed by

program managers, as opposed to policy makers who presumably would have been more knowledgeable regarding why programs were established. Nonetheless, it seems appropriate to attach some validity to the responses since program managers should not be totally lacking in insight into the reasons programs were initiated. According to the managers, the two most compelling reasons were to reduce drug use in the workplace and to respond to Federal encouragement and mandates. Also cited frequently as reasons for the establishment of testing programs were to increase overall productivity, to increase public confidence in government officials, and to reduce accident rates.

All three jurisdiction types were more likely to test applicants than employees, as illustrated in Table 1. As can be seen, private firms with drug testing programs tested applicants and employees in roughly the same ratio as State and local governments.

TABLE 1
TESTING APPLICANTS VERSUS EMPLOYEES

Subject of Test	States	Cities	Counties	Private Firms (BLS)
Applicants	96.0%	96.1%	96.4%	95.9%
Employees	72.0%	60.8%	60.7%	68.4%

The frequency of applicant and employee drug testing by particular jurisdictional agencies is depicted in Figures 6 and 7. Two major overall observations can be made. First, both police applicants and employees were the groups most likely to be tested by all three jurisdiction types. Second, the likelihood of any jurisdiction type testing applicants of a particular agency roughly corresponded to the likelihood of its testing employees of that agency (allowing for the generally higher amount of applicant testing versus employee testing).

States were most likely to test applicants and employees in their police and corrections agencies. They did not report testing any court applicants or employees.

Cities were most likely to test police and fire applicants. With regard to employee testing, cities were most likely to test "all employees," followed by police and fire employees in that order. In this context, it should be noted that combining the "all employee" response with the information provided by cities on whether they kept records on employees tested for various reasons suggests that "all employee" testing was much less likely to be implemented on a random basis than for reasonable suspicion or other causal reasons, such as after an accident.

Counties were most likely to test police and corrections applicants and employees. They were least likely to test court applicants and employees.

Similar results were obtained from jurisdictions contemplating the initiation of drug testing programs. For example, in response to the question regarding which employee/applicant populations might be eligible for drug testing, States contemplating initiation of a program were most likely to designate police and corrections personnel as candidates for

FIGURE 6
AGENCIES REQUIRING TESTING OF APPLICANTS

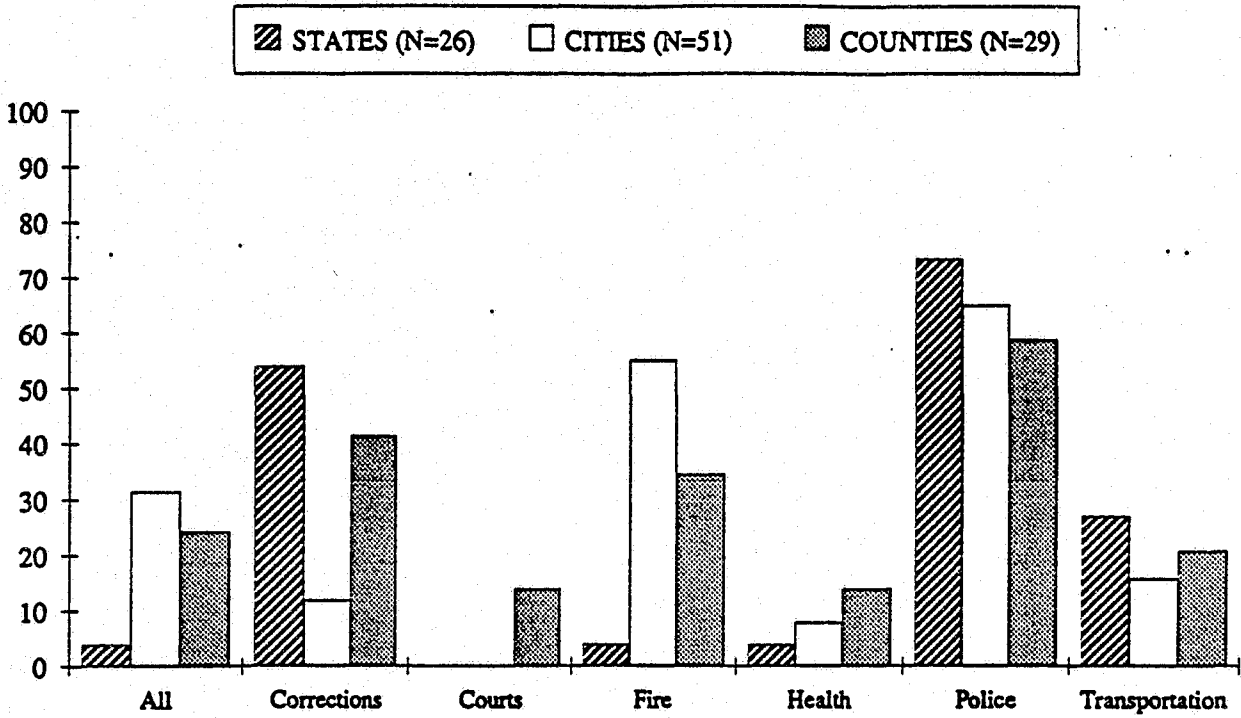
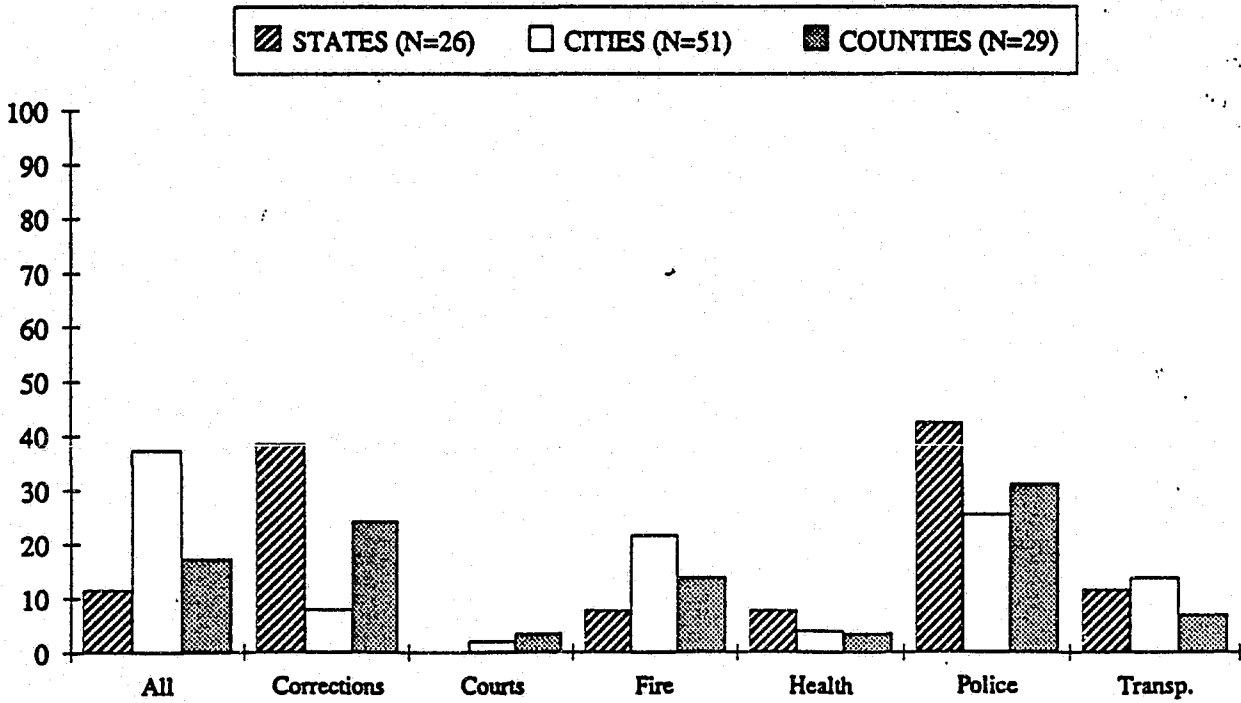


FIGURE 7
AGENCIES REQUIRING TESTING OF EMPLOYEES



testing (67 percent designated police and 58 percent designated corrections). Also like their counterparts already engaged in testing, States not yet testing were least likely to list court personnel as candidates (8 percent named courts).

Like States, cities contemplating drug testing cited police as the most likely testing candidates (65 percent did so). Few, conversely, identified corrections personnel (5.9 percent versus 58 percent for States), responses that also corresponded to those given by States and cities already engaged in drug testing. The second most frequently named group by cities contemplating drug testing programs was fire (53 percent). Another group not named frequently was health personnel (at 5.9 percent). In contrast to States and cities, counties contemplating drug testing were most likely (57 percent) to name all applicants and/or employees as possible candidates for testing. This finding was also in sharp contrast to the practices of counties already engaged in testing, which were extremely unlikely to test all employees. Larger and smaller counties were approximately equally likely to hold this view. However, the second most likely candidates for testing were the police (at 33.3 percent), a finding more consistent with those for counties already doing tests. Court staff were least likely to be tested (at 4.8 percent).

3.5 Drug Testing Technology and Practices

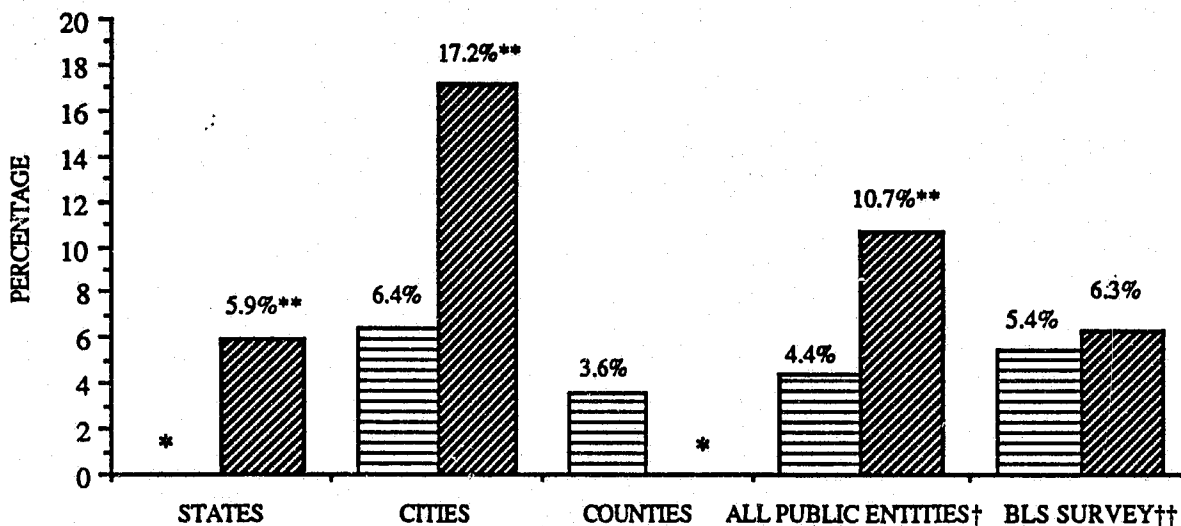
All three jurisdiction types were more likely to use enzyme than radio or fluorescence polarization immunoassays to conduct applicant/employee drug testing. Fifty-eight percent of States, 76 percent of cities, and 52 percent of counties used the enzyme method (all three frequently citing the Smith-Kline brand "EMIT" as their assay of choice). States, counties and cities overwhelmingly subjected initial positive test results to

confirmation through gas chromatography/mass spectrometry; 95 percent of States, 96 percent of cities and 92 percent of counties confirmed initial positive results in this way.

3.6 Outcomes of Testing

As depicted in Figure 8, the overall percentages of public sector applicants testing positive were similar to the private sector figures presented in the BLS survey. However, the data on positive test results for public sector employees was too limited--both in terms of the number of employees tested and the number testing positive--to permit Lazar to report findings with any level of confidence. Thus, although Figure 8 shows an overall rate of 10.7 percent for public sector employees and a rate of 17.2 percent for city employees, the small database involved makes these percentages less meaningful than would otherwise be the case.

**FIGURE 8
PERCENTAGE OF APPLICANTS/EMPLOYEES TESTING POSITIVE**



 Applicants
 Employees

*Small sample size does not permit analysis of this data element.

**Small sample size makes results questionable.

†Only cities and States reflected in this figure.

††Sample of 400 firms with over 5,000 employees.

3.7 Reasons for Testing

Based on responses to the question about whether jurisdictions kept records on the number of employees tested for various reasons, reasonable suspicion appeared to be the employee testing strategy most utilized by States, with 50 percent reporting that records were kept on individuals tested for this reason. The next most likely reason for employee testing by States seemed to be as a follow-up to a substance abuse treatment program (22.2 percent of the jurisdictions reporting). Cities' responses overwhelmingly suggested that reasonable suspicion was their primary reason for employee testing, with 93.5 percent reporting that records were kept on employees tested on this basis. The next most likely reason for city employee testing was apparently as a response to an accident or unsafe practice.

Falling between the State and city figures, 72.2 percent of counties with an employee testing program also provided responses that suggested reasonable suspicion as the principal basis for employee testing.

3.8 Drug Testing Practices in the Criminal Justice System

From initial analysis of the data, it appeared that criminal justice agencies other than the courts were more likely to be involved in drug testing than other entities. In order to substantiate this observation, Lazar compared respondent testing policies and projections for the criminal justice agency group (police, courts, and corrections) as a whole to policies and projections for the non-law enforcement agency group (fire, health, and transportation) as a whole. Weighted averages were used to assess the likelihood of any jurisdiction type's testing personnel in any criminal justice agency and any jurisdiction type's testing personnel in any non-criminal justice agency. Comparison of the results indicated a

strong difference between drug testing practices in criminal justice agencies and practices in other agencies:

- Jurisdictions currently testing applicants were significantly²³ more likely to test applicants to criminal justice agencies than applicants to other agencies.
- Jurisdictions currently testing employees were significantly²³ more likely to test employees of criminal justice agencies than employees of other agencies.
- Jurisdictions contemplating institution of a drug testing program were significantly²³ more likely to project testing of criminal justice personnel than personnel in other agencies.

These results are particularly significant given the minimal involvement of courts, which tended to reduce the differences between criminal justice and non-criminal justice agencies. They demonstrate clearly that criminal justice agencies are in the forefront of the public sector adoption of applicant/employee drug testing as a drug abuse prevention tool.

3.9 Responses to Positive Tests

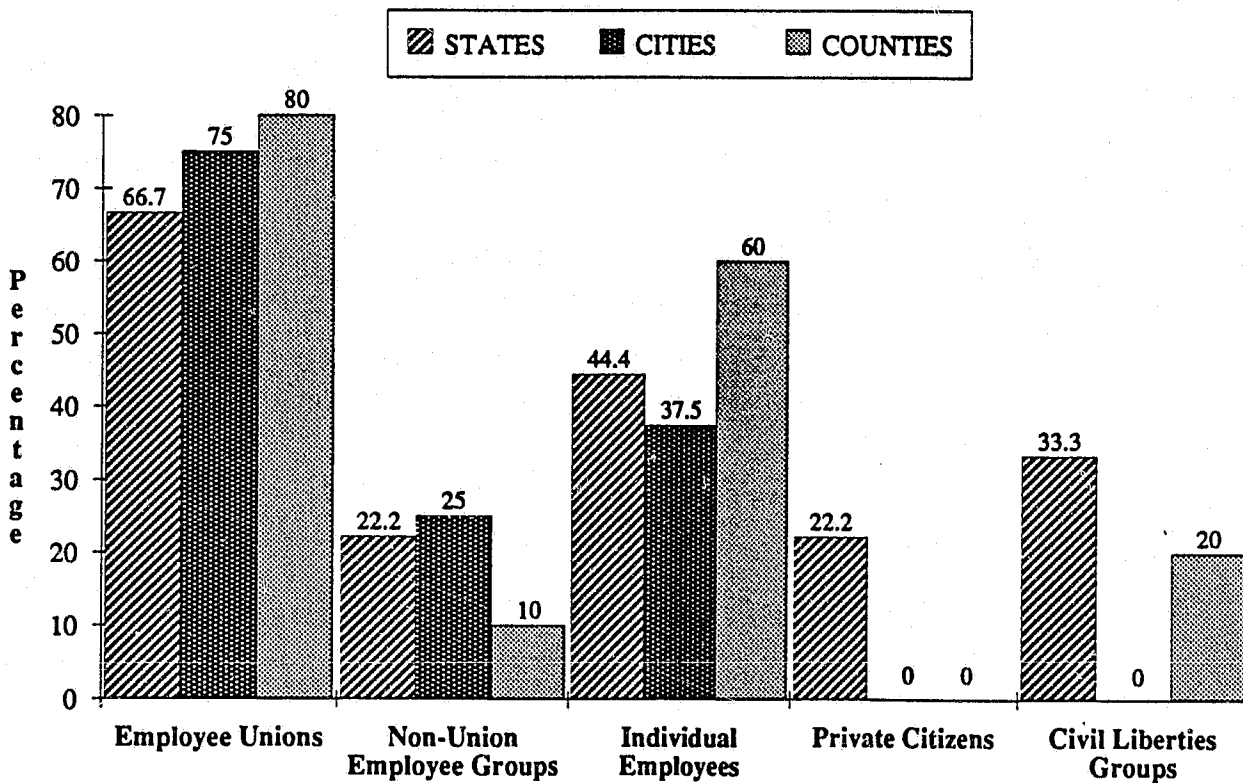
For all three jurisdiction types, the response to an employee's testing positive was much more likely to be a referral to an employee assistance program than termination. Generally, jurisdictions reported that employees testing positive more than twice were terminated, with 50 percent of States, 64 percent of cities, and 67 percent of counties responding in this way. With respect to this issue, it should be noted that evidence from other sources suggests that responses to positive test results vary across agencies. For example, police personnel testing positive are much more likely to be terminated than personnel in health agencies.

²³ Lazar employed the Student's T-test, establishing the Type I error at .05. See Section 3.14 for a list of significance tests conducted.

3.10 Challenges to Drug Testing Programs

Approximately one-third of the jurisdictions with a testing program-- 35 percent of States, 31 percent of cities, and 35 percent of counties-- reported experiencing challenges to the program. A breakdown of groups challenging jurisdictional drug testing programs appears in Figure 9. Employee unions were the group most likely to mount a challenge, constituting a clear majority of cases for all three jurisdiction types. Another frequent source of challenges was the individual employee, while private citizens were least likely to challenge testing practices.

FIGURE 9
GROUPS CHALLENGING A JURISDICTION'S DRUG TESTING PROGRAM*



*Percentages do not add to 100. This reflects the fact that some jurisdictions were challenged by more than one group.

3.11 Costs of Drug-Free Workplace Programs

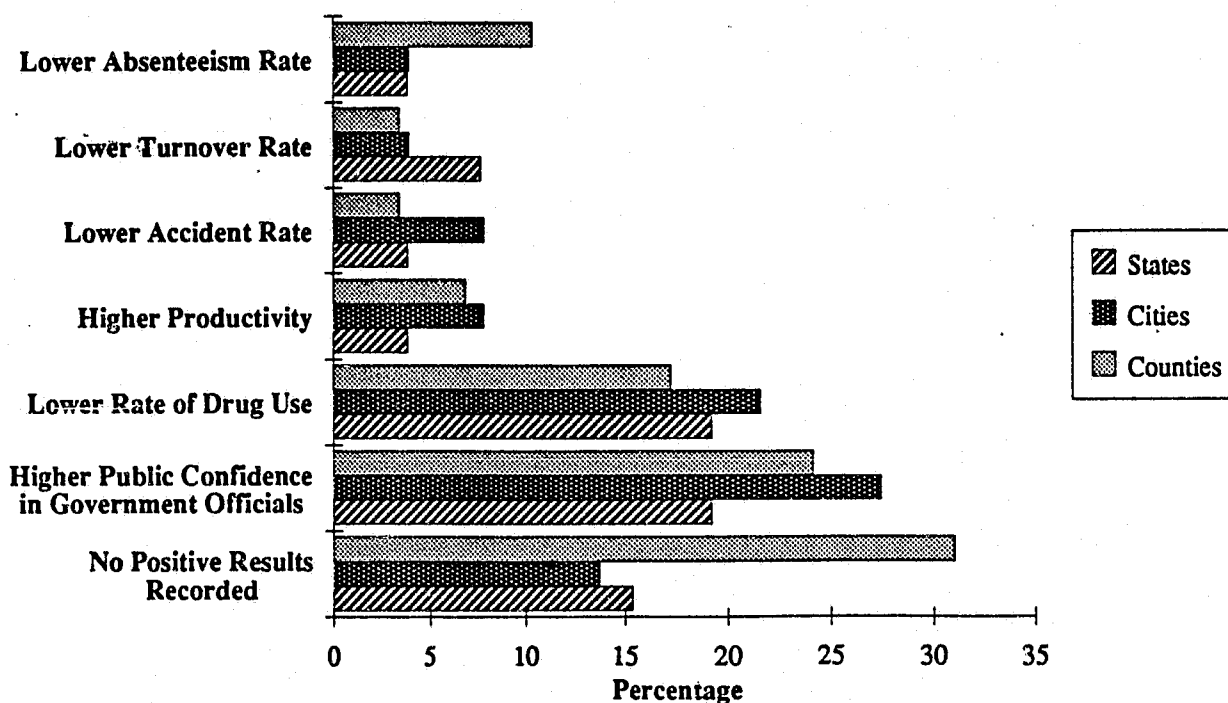
Jurisdictions tended to be tracking the costs associated with specimen collection and analysis efforts. They were not, however, collecting data that would permit them to calculate the costs of follow-up treatment, other Employee Assistance Program activities, or lost employee work time associated with testing and treatment.

3.12 Impacts of Drug Testing Programs

Overall, 81 percent of responding jurisdictions reported positive results from drug testing efforts, while 19 percent held the view that their drug testing programs had brought no positive results. Respondents' assessments of what results had been gained from drug testing varied somewhat by jurisdiction type, as illustrated in Figure 10. States were

FIGURE 10

PERCEIVED BENEFITS OF A JURISDICTION'S DRUG TESTING PROGRAM



most likely to cite greater public confidence in government officials and a lower rate of drug use (almost one in five jurisdictions reported each of these outcomes) as positive results of their drug testing programs. States were least likely to cite lower absenteeism, lower accident rates and higher productivity as results of drug testing.

Cities held the most positive view of the benefits of drug testing. Like States, cities were most likely to view greater public confidence in government officials as a positive result of their drug testing programs, with over 25 percent citing such an outcome. Also, a lower rate of drug use was their second most frequent response. Cities were least likely to cite lower absenteeism and turnover rates as results of drug testing.

In contrast to the other two jurisdiction types, counties were most likely to report that their drug testing programs had no positive results. Greater public confidence in government officials was the second most likely response. Counties were least likely to cite lower turnover and accident rates as results of drug testing.

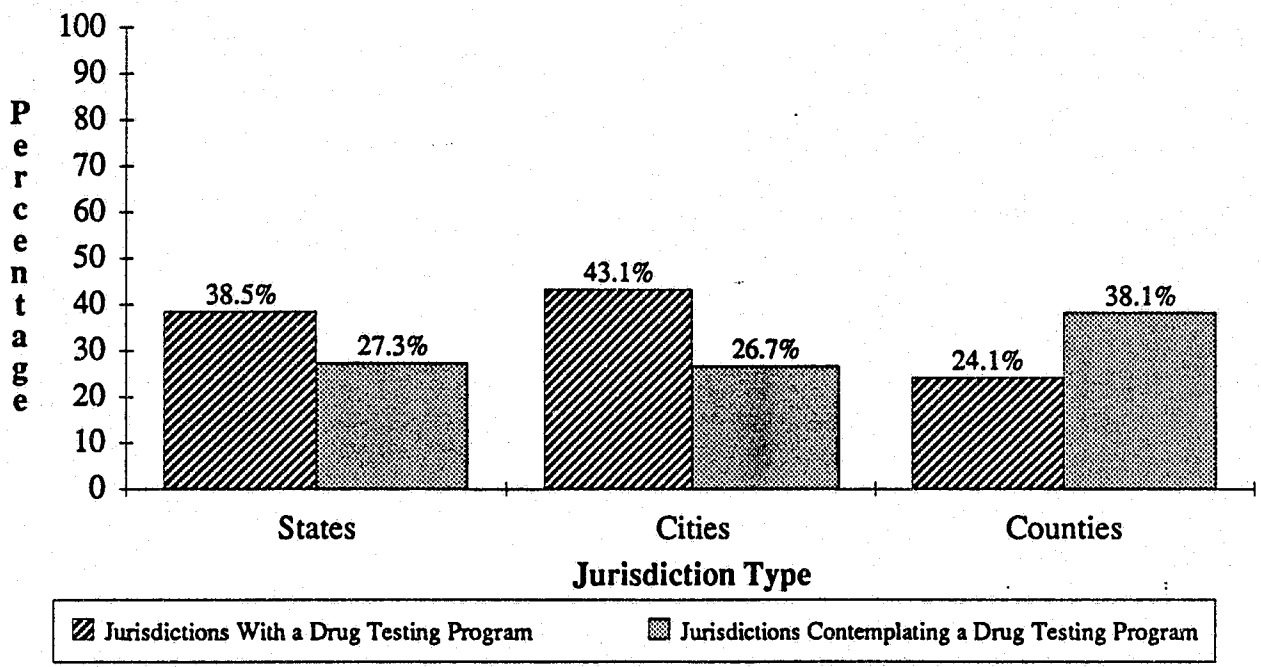
Sixteen percent of responding jurisdictions reported that drug testing had produced an impact on measures related to productivity (reduced absenteeism, turnover and accident rates were included as possibilities in the survey). This figure increased to 26 percent when respondents with programs three or more years old were scrutinized.

3.13 Technical Assistance Needs

In order to assess jurisdictions' Federal technical assistance needs, responses on this subject from the population of jurisdictions contemplating drug testing were analyzed in tandem with responses from those having a testing program already in place. Overall, 35 percent viewed technical assistance as potentially beneficial, with 37 percent of currently testing

jurisdictions and 32 percent of jurisdictions contemplating testing interested in technical assistance. More information related to this issue is presented in Figure 11. This response suggests a significant need for assistance, given the over 3,000 counties in the country and the approximately 1,000 cities with populations in excess of 25,000.

FIGURE 11
JURISDICTIONS AGREEING THAT FEDERAL TECHNICAL ASSISTANCE WOULD BE USEFUL IN ESTABLISHING OR IMPROVING THEIR DRUG TESTING PROGRAM



3.14 Results of Significance Testing (Tests of Statistical Hypotheses)

To explore possible relationships between selected demographic characteristics²⁴ and jurisdictions' drug testing status, a series of statistical significance tests were performed. In this regard, the Student's t-test for differences in means and the chi-square "goodness of fit" test, with Type I error set at .05, were utilized. As illustrated in Figure 12, significance testing revealed that the probability of a jurisdiction deploying a testing program increased according to its population. Similarly sized jurisdictions were found to be more or less alike in their drug testing practices. Other hypotheses relating to cities' and counties' characteristics and the likelihood that they performed drug testing were not validated as a result of significance tests. A list of tests performed, including those cited in Section 3.8 above, and their results appear in Figure 12.

24 Demographic data were obtained from the County and City Data Book (U.S. Census Bureau, U.S. Department of Commerce, 1988).

FIGURE 12
RESULTS OF SIGNIFICANCE TESTING (STUDENT'S T AND CHI-SQUARE)

Jurisdiction	H ₁ (Hypothesis)	Result
States	Higher total revenue is linked to drug testing	Accepted
	Higher total general direct expenditure per capita is linked to drug testing	Accepted
	Higher total Federal funds and grants are linked to drug testing	Accepted
	<i>Higher percentage of budget on police protection is linked to drug testing</i>	Rejected
Cities	Group of 75 largest (in terms of population) is more likely to perform drug testing	Accepted
	<i>Group of 75 largest (in terms of population) with higher per capita expenditure is more likely to perform drug testing</i>	Rejected
	<i>Higher total revenue is linked to drug testing (all cities)</i>	Rejected
	<i>Higher total general direct expenditure per capita is linked to drug testing (all cities)</i>	Rejected
	<i>Higher percentage of budget on police protection is linked to drug testing (all cities)</i>	Rejected
Counties	Group of 75 largest (in terms of population) is more likely to perform drug testing	Accepted
	<i>Group of 75 largest (in terms of population) with higher per capita expenditure is more likely to perform drug testing</i>	Rejected
	<i>Higher total revenue is linked to drug testing (all counties)</i>	Rejected
	<i>Higher total general direct expenditure per capita is linked to drug testing (all counties)</i>	Rejected
	<i>Higher percentage of budget on police protection is linked to drug testing (all counties)</i>	Rejected
All	Jurisdictions contemplating institution of a drug testing program are more likely to project testing criminal justice personnel than other types of personnel.	Accepted
	Jurisdictions testing applicants are more likely to test criminal justice applicants than other applicant types.	Accepted
	Jurisdictions testing employees are more likely to test criminal justice personnel than other types of personnel.	Accepted

4.0 MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.1 Major Findings

Based on analysis of the data collected, Lazar's major findings with regard to the principal questions addressed by the research effort are as follows:

- Drug testing in the public sector workplace has become widespread. Fifty-three percent of all jurisdictions surveyed reported conducting some form of applicant/employee testing, while 26 percent of all jurisdictions are contemplating institution of a drug program within twelve months. Nearly 47 percent of jurisdictions with a testing program initiated their drug testing programs as recently as 1989.
- Overall, government employers were found to have instituted anti-drug programs (including testing, employee assistance, and written directives) with roughly the same frequency as private sector employers.
- Reducing drug use in the workplace and responding to Federal encouragement and mandates were the reasons most frequently cited by program managers to explain why testing programs had been initiated.
- Cities were the most likely jurisdiction to operate a testing program, with nearly 69 percent of jurisdictions reporting testing. Counties were least likely to test, with only 37 percent reporting operating a program. The State figure fell in between those of the other two jurisdictions, with over 56 percent reporting testing.
- As a jurisdiction's size increases, so does its likelihood of conducting applicant/employee drug testing. (This conclusion does not apply to States; only cities and counties were analyzed by size.)
- Jurisdictions were more likely to test police officers, whether applicants or employees, than they were to test any other employee group.
- While nearly 100 percent of jurisdictions with a drug testing program test applicants, two-thirds test employees.
- Jurisdictions testing employees appear to be testing primarily on the basis of reasonable suspicion.
- Jurisdictions overwhelmingly employ Federally approved methods of drug testing, using one of three standard immunoassays, as well as a confirmatory assay.
- Overall percentages of positive rates for public sector applicants were similar to, although slightly lower than equivalent figures for

the private sector. Although public sector employees appeared to be more likely to test positive than their private sector counterparts, the small numbers involved made this finding questionable.

- Employees testing positive for drug use are generally given at least a second chance before being terminated. Almost three-quarters of jurisdictions offer employee assistance programs to which first-time abusers are referred. Based on evidence from other sources, it appears that this practice does not hold for personnel in certain agencies (e.g., police), who are less likely to be given another chance.
- Jurisdictions are not keeping records on the types of drugs being used by employees or, except for specimen collection and analysis, on the costs of treatment, other EAP activities, or employee downtime during treatment and testing.
- Approximately one-third of jurisdictions with a testing program reported receiving challenges to their program. Challenges were principally leveled by employee unions and individual employees.
- Approximately 80 percent of jurisdictions with drug testing programs cited positive results, with cities holding the most positive view and counties the least.
- Approximately one-third of jurisdictions either testing or contemplating testing stated that increased Federal technical assistance would be useful.

4.2 Conclusions

Lazar has drawn the following conclusions from the above findings.

- In spite of a lack of Federal or other centralized guidance for public sector employers, State and local jurisdictions seem to have evolved similar testing programs, with regard to physical testing procedures as well as subjects of testing. These programs also have much in common with those instituted at the Federal level.
- The public sector has lagged somewhat behind the private sector in instituting drug testing, but may surpass industry in this regard within the next year. Although there are critics of drug testing by public employers, the overwhelming trend to establish such programs is evidence of a consensus that they are worthwhile. This consensus exists despite the absence of conclusive data regarding their effectiveness.
- The prevalence of drug use, as measured by drug testing, seems not to vary by an employee's "estate" (i.e., private versus public). There is, however, evidence that drug use among city employees may be higher than among their counterparts in States and counties.

- Employee assistance programs appear to be viewed by most jurisdictions as a useful tool for helping personnel with drug problems.
- Given the relatively low positive rate for employee drug tests and the apparently widespread practice of testing primarily on the basis of reasonable suspicion, the accuracy of the processes used to determine that a "just cause" exists for drug testing is questionable.
- Although a significant number of drug testing programs were initiated very recently, enough mature programs exist to permit an evaluation of whether the benefits of drug testing exceed its costs.

4.3 Recommendations

- A cost-benefit analysis of the efficacy of drug testing should be undertaken, given the growing popularity and significant resources spent by all types of jurisdictions on testing. At a minimum, case studies of a sample of States, counties and cities which have operated programs for three years should be undertaken, using a pre/post time series analysis approach. If possible, a quasi-experimental design should be implemented, allowing jurisdictions with drug testing programs to be compared to matched sites that do not test.
- A survey similar to the one reported on in this study should be conducted every two to three years to monitor the characteristics and outcomes of programs.
- Information on the nature and scope of Employee Assistance Programs (EAPs) should be collected, and the impacts of such programs should be examined to determine their effectiveness and identify exemplary approaches.
- An analysis should be conducted of the relationship between the criteria used by a jurisdiction to determine "reasonable suspicion" and the percentage of employees testing positive. The results, combined with other appropriate information, should be used to develop guidance for jurisdictions' use in making "reasonable suspicion" determinations.
- Since so many jurisdictions reacted positively to the suggestion of technical assistance, an increase in Federal aid should be established. At the present time, this aid would focus on helping those contemplating establishment of drug testing set up such programs and on reviewing the procedures of those who already have such programs and offering suggestions for improvements wherever possible. A training video designed specifically for the public sector and distributed with the cooperation of an organization such as the National League of Cities might be an effective mechanism for conveying such advice. As additional information is garnered through the types of studies recommended above, it should be translated into expanded guidance for public sector employers.

- A cooperative arrangement should be developed with a sample of cities, counties and States that would allow the results of their drug testing to be shared with the Federal government so that drug abuse patterns can be monitored in the public sector workplace. At a minimum such a system should be designed to analyze results of employee testing in critical agencies such as police, corrections, fire and transportation. It should be noted that, because of various coding problems, it is unlikely that this sort of monitoring can be accomplished through ongoing projects which aggregate data collected by drug testing laboratories.

APPENDIX
SURVEY INSTRUMENT

DRUG-FREE WORKPLACE PROGRAMS IN THE PUBLIC SECTOR:

SURVEY OF STATE AND LOCAL GOVERNMENTS

Information about State or Local Official Completing this Form:

Name	_____	Telephone	_____
Title	_____		
Agency	_____		
Address	_____		

PRELIMINARY QUESTIONS

1. How many persons are currently employed in your jurisdiction? _____
2. Does your jurisdiction have a written policy regarding drug use in the workplace?
 Yes No
3. Does your jurisdiction administer an employee assistance, counseling, or treatment program(s) serving employees with drug problems?
 Yes No
4. Do agencies or departments (e.g. police, fire, etc.) in your jurisdiction conduct drug testing among their applicants and/or employees?
 Yes (please turn to the NEXT PAGE and continue filling out the questionnaire).
 No, but we are considering the implementation of such a program within the next 12 months (please complete questions 5 and 6 on THIS PAGE ONLY, THEN STOP).
 No, and we are not contemplating such a program (please STOP HERE).
5. Which applicants and/or employees in your jurisdiction might be eligible for drug testing? (please check all that apply)
 All Corrections Courts Fire
 Health Police Transportation
 Other (please specify) _____
6. Do you envision a need for Federal technical assistance in establishing your jurisdiction's drug-free workplace program?
 No
 Yes (please use the space below to describe your technical assistance needs in more detail, e.g. a manual on program design, a training course, etc.).

Please return this form to:
The Lazar Institute, 6726 Lucy Lane, McLean, VA 22101
If you have any questions, please call (703) 821-0900 and ask for Roberta Feldman or Raymond Milkman.

PART A. ORIGINS AND FOCUS OF YOUR JURISDICTION'S DRUG-FREE WORKPLACE PROGRAM

1. In what year was your jurisdiction's drug testing program initiated? _____

2. Why did your jurisdiction initiate a drug testing program? (please check all that apply)

- State law
- County or City law
- Federal encouragement towards a drug-free workplace
- As part of a health or "wellness" program
- To reduce absenteeism
- To reduce turn-over
- To reduce accident rates
- To increase overall productivity
- To reduce drug use
- To increase public confidence in government officials
- Other (please specify) _____

3. Please tell us which agencies/employee groups require employee or applicant drug testing; which agencies/groups plan to institute testing within the next 12 months; and how many persons are currently employed within each agency.

AGENCIES REQUIRING TESTING	AT PRESENT		WITHIN THE NEXT 12 MONTHS		NUMBER OF PERSONS CURRENTLY EMPLOYED
	Applicants	Employees	Applicants	Employees	
All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Corrections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Courts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

PART B. THE DRUG TESTING PROCESS: PROCEDURES AND VERIFICATION

1. Does the laboratory responsible for processing test samples employ the following initial immunoassay(s)? (please check all that apply)

- Radio (RIA)
- Enzyme (EIA)
- Fluorescence polarization (FIA)
- Other (please specify) _____

2. Does the laboratory verify initial positive results through confirmatory assays?

- Yes, through gas chromatography/mass spectrometry assays (GC/MS)
- No
- Other (please specify) _____

PART C. NUMBER AND RESULTS OF URINALYSIS TESTS ADMINISTERED

1. APPLICANT TESTING

- a. How many applicants were eligible for testing during the past 12 months? _____
- b. How many applicants were tested? _____
- c. How many applicants tested positive with a confirmatory assay? _____
- d. If possible, please indicate how many applicants tested positive for:
 - Amphetamines _____
 - Barbiturates _____
 - Cocaine _____
 - Marijuana _____
 - Opiates _____
 - PCP _____
 - Other (please specify) _____

2. EMPLOYEE TESTING

- a. How many employees were eligible for testing during the past 12 months? _____
- b. How many employees were tested? _____
- c. How many employees tested positive with a confirmatory assay? _____
- d. If possible, please indicate how many employees tested positive for:
 - Amphetamines _____
 - Barbiturates _____
 - Cocaine _____
 - Marijuana _____
 - Opiates _____
 - PCP _____
 - Other (please specify) _____

e. Please indicate whether your jurisdiction keeps a record of the number of employees tested for the following reasons: (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Suspicion of Use | <input type="checkbox"/> At Random |
| <input type="checkbox"/> Accident or Unsafe Practice | <input type="checkbox"/> After Treatment |
| <input type="checkbox"/> During Treatment | |
| <input type="checkbox"/> Other (please specify) _____ | |

PART D. YOUR JURISDICTION'S RESPONSE(S) TO POSITIVE EMPLOYEE TEST RESULTS

1. How does your jurisdiction usually respond when an employee is confirmed positive for drug use?

- Immediate Termination
 - Referral to EAP for Counseling/Treatment
 - Other (please specify) _____
- _____
- _____

2. Is it possible for an employee to retain his/her job after testing positive more than twice?

- No
 - Yes (please explain) _____
- _____

PART E. YOUR JURISDICTION'S DRUG-FREE WORKPLACE PROGRAM: RELATED ISSUES

1. Have there been any challenges to your jurisdiction's drug testing program?

Yes (please complete the chart below) No

CHALLENGER	TYPE OF CHALLENGE		
	Lawsuits	Negative Comments or Protests	Other (please specify) _____
•Employee Unions			
•Non-Union Employee Groups			
•Individual Employees			
•Private Citizens			
•Civil Liberties Groups			
•Other (please specify) _____			

2. Does your jurisdiction keep a record of costs associated with the following aspects of its drug-free workplace program? (check all that apply)

Specimen collection/analysis EAP treatment-related activities/facilities
 Outside treatment activities/facilities Employee down time during testing/treatment

3. What results have been gained from the initiation of your jurisdiction's drug-free workplace/drug testing program?

Lower absenteeism rates Lower turn-over rates
 Lower accident rates Higher overall productivity
 Decreased drug use Increased public confidence in government officials
 No positive results recorded
 Other (please specify) _____

4. Would increased Federal technical assistance be useful to your jurisdiction's drug-free workplace program?

No
 Yes (If yes, please use the space below to describe your technical assistance needs in more detail, e.g. a manual on program design, a training course, etc.)

Please return this form to:

*The Lazar Institute
 6726 Lucy Lane
 McLean, VA 22101*

If you have any questions, please call (703) 821-0900 and ask for Roberta Feldman or Raymond Milkman.

Thank you for your cooperation.