Integrating Drug Testing Into the Risk Assessment Process

Pretrial programs assess the risks of individual defendants failing to appear in court or presenting a danger to the community if released. This assessment involves gathering information about each defendant and then extrapolating risk factors from that information. Information is typically gathered by interviewing the defendant, interviewing reference persons to verify the information provided by the defendant, and checking various criminal justice information systems to establish criminal history. Drug use information, which is one factor that is often examined in the risk assessment process, has traditionally been obtained through interviews with the defendant and reference persons, discussions with probation or parole officers, or completion of a criminal history check.

Although useful in identifying drug use, these traditional means of gathering drug use information have limitations. The interview with the defendant may reveal a detailed history of drug use, but the defendant may not be candid about current and prior use. An examination of the complete criminal record may reflect a lengthy list of drug offenses, but many drug-using arrestees may not have such records. A discussion with the defendant's references or probation or parole officers may provide insight into the defendant's drug use; however, sometimes even these persons may be unaware of the extent of the defendant's drug problem.

Drug testing provides another means of obtaining drug use information. Testing provides an objective, scientific measurement of a defendant's recent use of drugs. Testing compensates for many of the limitations associated with traditional means of gathering drug use information; it does not depend upon the defendant's truthfulness, the criminal record's reflection of use, or the knowledgeability of references or probation or parole officers regarding use. However, a drug test is not an absolute means of measuring drug use and is subject to its own limitations. As discussed fully in chapter 5, Testing of Specimens, a drug test result tells only whether a detectable level of a drug for which a test was run was found in the specimen provided. Because all elements of gathering information have limitations, the best course is to use a combination of all of them.

Drug testing as a risk assessment tool has been applied at two different points. Specimens are collected before the initial bond hearing to incorporate the test results into other information (such as community ties, criminal history, and other drug use information) in making a recommendation to the court. Specimens can also be collected after the initial bond hearing from defendants who have been ordered released and for whom no other indicator of drug use is present. The purpose is to determine whether testing or treatment should be a condition of release.

This testing should not be confused with pretrial drug monitoring, discussed in chapter 3, Integrating Drug Testing Into the Supervised Release Process, in which defendants are monitored to ensure they remain drug free while on release awaiting trial.

Preinitial Appearance Testing

Two issues must be addressed when testing is done before the initial appearance. The first involves the population targeted for testing, and the second involves the integration of test results into the recommendation scheme.

Several possibilities are available when selecting the population to be targeted for testing. Program administrators can decide to target all those for whom a risk assessment is being conducted. If the program currently interviews, investigates, and provides a risk assessment on all new arrestees—misdemeanants and felons alike—a decision may be reached to add testing to that information-gathering process. Another option is to target a subset of the entire population, for example, targeting only those charged with felonies.

The decision about who should be tested is likely driven by availability of resources. Therefore, a jurisdiction may decide to preserve its testing resources by using this information-gathering technique only for those charged with felonies. The population targeted, however, should not exceed the population for which interviews, investigations, and risk assessments are conducted.

A variety of recommendation schemes exist in pretrial services programs. Some are objective systems, using point scales or bail guidelines, in which the defendant's score or point total guides the recommendation. Some are strictly subjective, in which an experienced staff person makes a recommendation based on an examination of all the information. Some schemes combine features of both.

Whatever scheme a program uses, test results should be considered as important as other drug use information, such as admission of current drug use, current drug charges, or prior drug convictions. All information about drug use is needed to determine a defendant's drug history accurately and should be weighted equally in the scheme.

Postinitial Appearance Testing

Six of the twenty-four federal Operation Drug Test sites conduct a drug test immediately after the defendant has been released from court. In addition, several local pretrial drug testing demonstration programs, which began operations by testing arrestees before the initial appearance, later delayed the initial drug test until after the court had decided on release or detention.

A program that adopts the postinitial appearance testing approach must determine who among those released will be targeted for testing. In the six federal Operation Drug Test jurisdictions where the first test is conducted after the initial appearance, any released defendants who have indicators of drug use (such as a self-report, history of drug offenses, or current charge) would have drug testing as a condition of release. Those who have none of these indicators would be asked to submit a specimen upon release. If the result is positive, the release conditions would be modified to require drug testing as a condition of release. If the result is negative, the defendant would have no testing requirement as a release condition.

Performance Measures

Program administrators should continually review how test results are being integrated into the risk assessment process. Particular emphasis should be placed on maintaining the traditional means of gathering drug use information: self-admission by defendant, record of prior or current drug offenses, and reports from probation or parole officers. For example, if the rate of admitted drug use by defendants has decreased since the introduction of drug testing, this may indicate that interviewers are placing less emphasis on obtaining a thorough interview because they know that the test can be used as a backup. Any sign that program staff are placing less emphasis on using traditional sources of obtaining drug use information should be addressed immediately. Administrators can review a number of factors to measure the performance of drug testing as a risk assessment tool.

Preinitial Appearance Testing

To be a useful preinitial appearance risk assessment tool, the test results must be available to the court at the initial appearance. If the program is unable to collect specimens from a sufficient number of defendants before the initial appearance, the goal of integrating drug test results into the initial release decision process cannot be achieved. Program administrators should keep monthly statistics on the percentage of cases in which test results were not available at the initial hearing. This figure should be broken down by:

- □ Percentage of cases in which a defendant refused to submit a specimen.
- Percentage of cases in which a specimen was not collected for reasons other than defendant refusal, such as inability to approach the defendant before the start of court.
- Percentage of cases in which specimens were collected but not tested in time for the initial court hearing.

Program administrators may find that in the first few months of operation, as staff are still becoming accustomed to approaching defendants about submitting to drug testing and to delivering results in time for court, the percentage of cases for which results are available may be low. For example, the Multnomah County program initially collected specimens from only 40 percent of eligible defendants. The Maricopa County program initially experienced a 54-percent refusal rate and made available only 60 percent of collected test results in time for the initial court appearance. By gathering data on the reasons for the absence of results in the remaining cases, administrators can focus their efforts on where the problems lie. If large percentages of defendants are refusing to submit specimens, then administrators should look at how staff are approaching defendants and explaining the purposes of the test. If more than 10 percent of the target population is not being approached by program staff at all, the reasons for this should be explored as well.

Program administrators should determine if the testing program is slowing down the initial appearance hearing. If the court is being delayed because results are not available, the court can pressure the program to speed up the process or simply convene and conduct the initial hearings without the test results, thereby preventing the program from achieving its goals.

Program administrators should examine whether the court has been using the test results in setting conditions of release or detention. If judges are not ordering either drug testing or drug treatment as a condition of release for a significant number of defendants who have tested positive and been released, the results cannot be having an impact on judicial decisionmaking.

Postinitial Appearance Testing

For testing to be useful in postinitial appearance risk assessment, defendants must submit specimens upon release. Defendants may promise in court to report immediately to the pretrial services program for the initial test, but if they do not report, or if they report but for some reason do not submit specimens, the second phase of the risk assessment has not been completed. Program administrators should keep monthly statistics on the percentage of cases in which defendants did not submit to the postinitial appearance test, and they should review the procedures used to track those cases.

Summary of Major Points

Traditionally, drug use information has been gathered through interviews with arrestees, contact with reference persons and probation or parole officers, and a review of the criminal history. Drug use information can also be obtained through drug testing, which provides an objective, scientific measurement of a defendant's drug use. □ Drug testing for risk assessment purposes can take place before the initial appearance in court or immediately after the initial appearance. If it takes place before, the test results can be used with other information in making a recommendation to the court. If it takes place after the initial bond hearing, the purpose of the testing is to determine whether testing or treatment should be a condition of release.

Integrating Drug Testing Into the Supervised Release Process

In general, a pretrial supervised release program involves the monitoring by program staff of defendants who have been released on their promises to abide by certain conditions. The conditions should be related to the risks of each defendant failing to appear at scheduled court hearings and presenting a danger to the community. The supervision of those conditions should be geared toward minimizing those risks. The same goals of minimizing identified risks should apply when integrating drug testing into a supervised release program.

Drug testing as part of a supervised release program typically involves the following:

- □ Defendants are required to report for submission of a urine specimen periodically.
- Program staff monitor compliance with the drug testing condition, noting the test results and whether defendants reported as scheduled.
- Staff counsel defendants who are testing positive or otherwise not complying and, using established guidelines, recommend or impose sanctions.
- □ Sanctions may include an increase in supervision, referral to treatment, or notification to the court that the defendant has failed to comply with program requirements.

The degree of defendant supervision afforded by drug testing is different from that provided by traditional types of conditions associated with pretrial supervision programs. To better understand how to take those differences into account when integrating drug testing into a pretrial supervision program, it may be helpful to review traditional supervision.

Traditional Conditions of Pretrial Release

The conditions set by the court and supervised by pretrial services agencies generally fall into four categories of conditions: status quo, restrictive, contact, and problem-oriented. Action by the court on violations of these types of conditions varies depending on the jurisdiction and the judge, as well as on the condition involved. A violation of a drug treatment referral may be viewed as more serious than failure to report for a job counseling appointment.

Status quo conditions. The defendant is required to maintain residence, employment, or school status. In many pretrial services programs, the

status quo conditions are passively supervised at best. Program staff may check periodically to make sure that defendants have maintained their residence, employment, or school status. Often a change in status may come to light only when defendants call attention to themselves by being rearrested or by missing a court appearance. Even then, little action is taken if these types of conditions are violated. The court is not likely to revoke the release of a defendant simply for moving to a different residence or changing jobs.

Restrictive conditions. The defendant is required to remain in the jurisdiction or to stay away from the complainant or certain areas. Usually, restrictive conditions are also passively supervised. If defendants leave the jurisdiction or enter a restricted area, supervising staff may not find out. If defendants approach the complainant, this fact remains unknown unless the complainant reports it—although a violation of this type of condition is more likely to provoke a response from the court, particularly in cases involving domestic violence.

Contact conditions. The defendant is required to report periodically by telephone or in person to the pretrial services or other supervising agency. Contact conditions can be supervised either passively or actively. In jurisdictions where the number of defendants required to report to the agency is higher than the agency can actively manage or where the agency does not place high priority on the supervision of this condition, defendants who are delinquent in their reporting may go undetected. In these jurisdictions, the events that trigger a detection of reporting delinquency are usually failure to appear for a court appearance or rearrest on a new charge. These events occur too late for a court's response to have any meaningful effect.

Jurisdictions that actively supervise a contact condition know when defendants fail to report and take steps to bring them back into reporting compliance. When these efforts fail, the court is notified and the agency may recommend a hearing to determine whether release should be revoked. If the defendant appears at that hearing, it becomes difficult to establish that the defendant presents a risk of failing to appear in court as the defendant's very presence rebuts the argument that an appearance risk exists. Therefore, the court may be reluctant to impose sanctions.

Problem-oriented conditions. The defendant is required to enroll in substance abuse or mental health treatment, vocational counseling, or another type of program to address an identified risk. Problem-oriented conditions are the most likely to be supervised actively by program staff. In doing so, program staff refer defendants to treatment or counseling centers and regularly check with officials of those centers on the status of those referred. Some supervised release programs merely refer defendants to these centers and assume that all is well unless the center reports otherwise.

Drug Testing as a Release Condition

Drug testing introduces a new feature to pretrial supervision—monitoring the use of illegal drugs of defendants on release. As noted, the status quo and restrictive conditions are not easily monitored. With a contact or a drug treatment condition, defendants must only appear at a specified location a certain number of times per week. For the remainder of time, their activities are unsupervised. With drug testing, however, defendants using drugs while on release and out of the view of supervising officials stand a better chance of being detected when they violate their release condition. This is especially true when using the sweat patch, which detects drug use during the period that it is worn, usually a period of 1 to 2 weeks. Drug testing is similar to electronic monitoring in that it extends the reach of supervision beyond that provided through traditional conditions.

This extended reach brings with it implications that program administrators should keep in mind when planning for integrating drug testing into supervised release. In jurisdictions that have adopted drug testing, judges have responded in unprecedented fashion to violations of the condition. Given this interest among the judges, programs in these jurisdictions have had to ensure that resources were available to supervise the drug testing condition actively, to respond in a timely fashion to any infractions, and to alert the court when violations occurred.

Testing Schedule and Frequency With Urine Testing

Scheduling for a urine drug testing appointment differs from scheduling for a typical contact-related condition. A contact-related condition is usually imposed to ensure that defendants keep in touch periodically with court officials so that no confusion occurs regarding the next court date. Programs, therefore, tend to provide defendants latitude on when to report. Defendants may be instructed to report in person once a week, but it may not matter to the program staff which day of the week it is. In scheduling a drug testing appointment, however, such latitude cannot be granted. A defendant could assess the likelihood of drug use being detected on a given day. If detection were likely on that day, the defendant could simply wait until the next day to report. Drug testing appointments can be set on a regular fixed schedule or on an irregular schedule.

Regular Scheduling System

Under a system of regular scheduling, defendants know their next scheduled test date in advance because the appointment is on a fixed day or days each week, for example, a Wednesday. The defendant is advised of this upon admission to the testing program and receives written notification as well. Each Wednesday when the defendant reports, he or she is given written notice of the date of the next appointment—the following Wednesday. A defendant missing an appointment is already on notice that the next test is scheduled for the following Wednesday.

A regular scheduling system makes it easier for defendants to keep track of their appointments and more difficult for them to claim confusion about the date as an excuse for not reporting. A fixed schedule also enables defendants with jobs or other responsibilities to avoid scheduling conflicts. A regular scheduling system may also be easier for the program to administer. Since each defendant is assigned a fixed day or days each week to report, the staff can easily track compliance.

The disadvantage of regular scheduling is that defendants can plan their drug use around their drug testing appointments.

Irregular Scheduling System

Under an irregular scheduling system, the testing program devises procedures to ensure that the testing dates occur irregularly so that defendants cannot anticipate the next test date. The program also notifies defendants when to report for a test.

Various means can be used to establish an irregular testing schedule. Exhibit 3–1 illustrates an irregular system for defendants who are required to report once a week to submit a specimen. In this example, a defendant is assigned a color corresponding to the day of the week that he or she was enrolled in the testing program. The color does not appear on the same day of the week over the 5-week period. Some programs may opt to have the same color appear on the same day of the week for successive weeks so that defendants will not think that because they were tested on Monday one week they will not be tested on Monday the next week. Other programs establish a random scheduling system in which the color code or other means of designating each defendant is randomly selected.

Day Enrolled	Week 1	Week 2	Week 3	Week 4	Week 5
Monday	Red	Yellow	Blue	Green	Purple
Tuesday	Yellow	Blue	Green	Purple	Red
Wednesday	Purple	Green	Yellow	Red	Blue
Thursday	Blue	Red	Purple	Yellow	Green
Friday	Green	Purple	Red	Blue	Yellow

Exhibit 3-1 Irregular Testing Schedule

Notifying defendants of their next appointment with an irregular system is more cumbersome than with a regular scheduling system. Programs should decide how much notice to give defendants that a test is scheduled and how to provide that notice. Ideally, defendants should be instructed to report for testing within hours of the notification or at least before the end of that day. However, to give defendants some chance to make arrangements for their jobs, child care, or other factors, it may be necessary to provide a day's notice for tests.

Defendants can receive notification of the day of testing by two means. One involves placing the burden of notification on the program, and the other places the burden on the defendants. Under the first method, program staff are responsible for calling all defendants who are due to report. The burden on staff can be lessened through the use of automated dialing systems in which recorded messages are telephoned to defendants who are due to report. Such a system is in place in the Prince Georges County pretrial services program. Under the second method, defendants are typically required to call the program every day to see if their assigned color is scheduled—an approach currently used at several federal Operation Drug Test sites. Placing the burden of daily calling on defendants may result in higher rates of noncompliance as many defendants fail to call every day.

Although an irregular scheduling system has the advantage of keeping defendants at a greater risk of being detected if they use drugs, administration of this system is more difficult than a regular system. Defendants also must deal with greater difficulties regarding scheduling conflicts.

Frequency

Establishing the frequency for testing appointments is a policy decision made by program administrators with input from other system representatives. The frequency favored by many jurisdictions that have used pretrial drug monitoring is once a week. With the retention rate of most drugs of abuse averaging about 48 to 72 hours (see chapter 5, Testing of Specimens, for a list a retention rates), it is also true that testing once a week may allow some defendants to escape detection. When once-a-week testing is combined with an irregular schedule, this possibility is lessened. This approach is used in the federal pretrial program in Arkansas, where defendants are tested once a week on a regular basis and then called in for unscheduled tests twice a month. Still, weekly testing using either type of schedule identifies defendants with severe drug problems.

Testing twice a week is certainly more effective, and three times a week virtually ensures that any drug use would be detected, provided that the appointments fall at appropriate intervals over the week. However, this scheduling becomes difficult to manage with an irregular system. When testing more than once a week, the program must take into account that the same ingestion of a drug that led to a positive result on Monday may lead to a positive result on Wednesday. For this reason, testing more than three times a week is redundant.

The frequency of testing may be decided by the availability of testing resources. Having defendants report three times a week instead of once means three times as many tests must be conducted. Staff and other resources must be sufficient to meet this demand. Exhibit 3–2 shows the testing schedule and frequency of several federal and local pretrial drug testing programs.

Exhibit 3-2 Examples of Testing Schedules

Site	Testing Schedule
	Federal
Arkansas Eastern	Tested once a week on a regularly scheduled basis, plus once every other month on an unscheduled basis.
Minnesota	Tested twice a week at outset. Frequency gradually reduced to twice a month, then once a month if results are negative.
Nebraska	Three testing phases: 4-6 times a month in Phase 1; 2-4 times a month in Phase 2; and 1-2 times in Phase 3. Defendants call a hotline every day to see if they must report.
New Hampshire	Testing done on unscheduled basis at officer discretion, but at least once a month.
New Jersey	Testing frequency determined on case-by-case basis; appointments can be scheduled or unscheduled.
North Carolina Middle	Tested once a week on an unscheduled basis for at least 4 weeks. If results are negative, frequency reduced to twice a month.
	Local
District of Columbia	Tested once a week on a scheduled basis.
Maricopa County	Tested twice a week on a scheduled basis. Frequency reduced if results are negative.
Milwaukee County	Assigned to one of three supervision levels, depending on overall risk. Testing frequency determined by level placement—three times a week for highest level, once a week for middle level, and randomly for lowest level.
Pima County	Tested at least twice a week on a scheduled basis; occasionally called in or field visit made for random test.
Prince Georges County	Tested once a week on a scheduled basis if in treatment; twice a week if not in treatment.

Testing Schedule and Frequency With Sweat Patch

The sweat patch is still not commonly used in pretrial settings, but many probation and parole departments at federal, state, and local levels have been using it. The patch can test for the presence of five drugs—amphetamines, cocaine, marijuana, opiates, and phencyclidine (PCP)—ingested at any time while the patch is being worn. Thus, the "window of detectability" using the sweat patch is open longer than with a urine test. Theoretically, testing when using the patch does not need to be as frequent.

Imposing Sanctions for Testing Violations

For each defendant who is scheduled to report for a drug testing appointment, one of six outcomes occurs. The defendant may:

- □ Fail to report.
- □ Be granted an excuse not to report.
- **□** Report and refuse to submit a urine specimen.
- **□** Report and be unable to submit a urine specimen.
- □ Report and test negative.
- □ Report and test positive.

The outcome for each defendant on each appointment must be accurately recorded and must be reviewed by staff to decide if the specific outcome warrants any action by the program. Technically, a violation of a drug testing condition occurs if the defendant:

□ Fails to report for a testing appointment.

- □ Reports but refuses or is unable to provide a specimen.
- □ Tests positive for drug use.

In addition, when the sweat patch is being used, a violation occurs if evidence of tampering with the patch is present.

Violations of a drug testing condition and the responses of the program to the violations present several difficult issues that must be addressed during planning. For instance, if the defendant reports for all scheduled testing appointments and submits a specimen on each occasion but the test result is always positive, is this a less serious infraction than if the defendant did not report at all? The answer to this question involves making policy decisions after consulting with judges, prosecutors, and defense attorneys (see chapter 1, Gaining Support From Criminal Justice System Representatives). Sanctions against a defendant for violating release conditions can be designed to escalate, with several intervening steps in which an attempt is made to reestablish compliance, before a reconsideration of release by the court is sought. A policy of escalating measures is normally accompanied by a policy of deescalating (reduced) measures. Defendants who, because of an earlier lack of compliance, received more intensive reporting or testing requirements can be moved back into the normal reporting schedule after a period of compliance under the more intensive requirements.

Notification to the court of a defendant's compliance with a drug testing condition need not be limited to instances of violations. Judges may find it useful to receive full compliance reports regularly on all defendants. For instance, the District of Columbia Pretrial Services Agency submits to the court a computer-generated report on compliance with the drug testing condition before each defendant's scheduled appearance. Judges may then respond to defendants who are in violation and encourage those who are doing well or at least making an effort to stop using drugs. The regular reporting of drug test results and the use of the results by the court either to punish by imposing sanctions or to encourage is a critical feature of drug courts.

Program administrators should develop a policy of amending the conditions of release for defendants who are in full compliance with the testing condition. For instance, if the defendant reports for every appointment, tests negative each time, and is in compliance with all other release conditions, scaling back the frequency of testing may be appropriate. Alternatively, a defendant in good compliance can be placed on an irregular testing schedule, with testing conducted once or twice a month. Exhibit 3–3 shows the responses of several pretrial programs when defendants continue to test positive.

Performance Measures

Program administrators have several means of evaluating the effectiveness of their procedures, beginning with a review of the compliance rate of defendants with drug testing requirements. Failing to report for the intake appointment or missing testing appointments is not unusual for some defendants. If large percentages of defendants are failing to report for testing appointments, the reason may be due to the program's operation: the hours or the location may be inconvenient, or the instructions given to defendants about their testing appointments or the consequences for failing to abide by release conditions may not be clear.

Program administrators should also check that the guidelines for handling noncompliance are being followed by staff, that the sanctions for violating conditions are being imposed in the timeframe specified by the guidelines, and that the court is being notified of alleged violations in a timely fashion. Periodic reviews of a sample of cases may be helpful in determining these things.

Exhibit 3-3	Program	Responses	to Positiv	e Results
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Site	Program Response
Federal	All federal jurisdictions notify court of first and any subsequent positives.
Arkansas Eastern	Refer to treatment. Court action requested after second positive.
Minnesota	Increase testing frequency and offer treatment. Court action may be requested if continued positive.
Nebraska	Response depends on defendant's history and cooperation with treatment. Responses range from reprimand to requesting court action.
New Hampshire	First positive, address with defendant. If continued positive, testing frequency increased, refer to treatment.
New Jersey	Refer to treatment at first positive. Court action requested only if defendant does not cooperate with treatment.
North Carolina Middle	Second positive, refer to treatment. If continued positive, court hearing requested, but no recommendation made at hearing.
Local	
District of Columbia	Increase frequency of testing or refer to treatment.
Maricopa County	Notify court; request revocation if continued positive.
Milwaukee County	Report consecutive positive results after the initial supervision test to court along with treatment plan.
Pima County	First positive, refer to treatment and notify court of action taken. Schedule court hearing if continued positive.
Prince Georges County	Continue to work with defendant if in treatment. Court action requested if defendant refuses treatment or misses testing appointments.

Mistakes by staff are inevitable, especially in the first several months of operation. Encountering instances in which defendants were given the wrong date to appear for a testing appointment or erroneous information was provided to the court is not unusual. Program administrators should make clear to staff that any mistakes discovered should immediately be reported to the appropriate program supervisor. In addition to notifying the court if any misinformation was released, the supervisor should investigate and analyze the mistake to determine whether a flaw in the procedures or a shortcoming in staff training was responsible and then take corrective action accordingly.

Summary of Major Points

- Drug testing as a condition of supervised release is different from traditional types of release conditions. This method offers a means of supervising drug use of defendants while they are out of the view of supervising officials.
- Drug testing appointments can be set on a regular schedule, with defendants advised of the next appointment in advance, or on an irregular schedule, with defendants receiving very short notice to report for testing.
- □ Several options are available for setting the frequency of testing appointments.
- □ Monitoring a drug testing condition requires active supervision by the pretrial services program.
- □ Guidelines must be established and consistently followed for responding to violations of the testing condition.

Part Two

Operational Issues

Chain of Custody

The phrase "chain of custody" encompasses the procedures that govern:

- □ The collection, handling, storage, testing, and disposal of a specimen in a manner that ensures that the specimen is correctly matched to the person who provided it and that the specimen has not been tampered with or substituted.
- □ The documentation that indicates that these procedures have been carried out in each case to provide evidence of a correct match.

Strict adherence by staff to all chain of custody procedures is important for three reasons, all of which are related to quality control. First, adherence ensures that the person being tested does not tamper with the specimen. Given the subject's interest in producing a specimen that tests negative for drug use, various efforts at subterfuge may be employed. Second, it must be established that a particular result was obtained from a specimen provided by a particular defendant. Any breaks in the chain can cast doubt on the result. Third, a regular review of the chain of custody documents by program supervisors can be an effective means of early detection of common errors by staff in specimen collection and handling.

Urine Collection Facilities

The availability, location, and specifications of facilities used to collect specimens have chain of custody implications. Ideal facilities may not be available in a courthouse, jail, or other government or private building where collection takes place. Moreover, given the expenses associated with installing plumbing and lavatory fixtures, constructing a collection facility in these structures is often not possible. Program administrators may therefore be forced to look elsewhere.

Incustody Testing

When defendants in custody are tested, the options for choosing a collection facility are limited. Clearly, a facility must be chosen that is within the perimeter of the custody environment. Even within that environment, the officials in charge of custody (sheriff or correction's department) have security concerns that may further limit the choice.

If arrestees are detained in one holding cell while awaiting transfer to the initial court hearing, lavatory facilities are most likely located within that cell. From the standpoint of custody officials, this location is probably the most convenient and secure one in which collection takes place. However, from the standpoint of chain of custody, collection within a large (and

often crowded) holding cell is problematic. Staff must either enter the cell or stand outside and attempt to control the movement of other detainees to ensure an unobstructed view of the person submitting. Program administrators must work within these constraints to determine if a suitable location can be found that would allow for the required observation.

Noncustody Testing

Defendants appearing for monitoring appointments are required to report to a specific location to have their identifications verified. Ideally, the collection facility should be located near the office where this check-in occurs; staff time is not used efficiently if each defendant must be escorted to a rest room in another part of the building. Moreover, the room in which collection takes place must be large enough to accommodate both the defendant and the witness and must afford the witness a vantage point for direct observance of the defendant voiding the specimen.

Public rest rooms may meet both proximity and space criteria, as they are usually located near offices and are large enough to accommodate the witness, but they should not be used as collection facilities. In addition to a greater intrusion on the subject's privacy (and the potential legal challenges that may follow), the presence of others in a public rest room may distract the witness, thereby diminishing the witness' ability to observe the voiding of the specimen. If a public rest room must be used, it should be closed to the public during the collection process.

Concerns about chain of custody should not be the sole factor in determining the location of the collection facility. Selecting a facility that is not readily accessible to defendants, for instance, would make it difficult for defendants to appear for testing appointments.

Defendant Identification

Procedures must exist to verify the identity of the person who presents as the subject to be tested. If defendants are tested while they are in custody following arrest, procedures should already exist for establishing positive identification. Typically, once defendants are booked into the jail or lockup facility, a wristband is placed on them or a photograph is taken. If these or other means of identification are not available, staff should interview the defendant and check the information provided (date of birth or Social Security number, for instance) against official records before collecting a specimen.

Establishing the identity of defendants not in custody calls for greater caution. These defendants may have had the opportunity to enlist surrogates to report in their place. However, identification can be established in several ways. Checking a driver's license or other photo identification should suffice. Because many defendants may not possess such identification, the program may wish to take its own picture of a defendant upon admission to the program. The program may also obtain a copy of the photograph taken at booking, keeping the photo in the files for retrieval each time the defendant reports.

Urine Specimen Collection

Once a defendant's identity has been confirmed, staff should prepare a label that will be attached to the specimen container once the urine specimen is collected (see exhibit 4–1). The label can be preprinted, listing the information that should be recorded.

Exhibit 4–1 Sample Label		
Name		
	ID#	
Date	Time	
Remarks		
Witness		

Typically, before escorting the defendant to the collection facility, staff should fill in the defendant's name and date of birth on the label. In many jurisdictions, persons arrested are assigned an identification number by the police department, jail, court, or pretrial services program. This number should also be recorded on the label before collection.

Program staff must take precautions to ensure that specimens submitted by defendants are not tampered with or substituted. Generally, these precautions involve having program staff observe the defendant voiding the specimen. The observation should be conducted by a witness of the same sex as the defendant.

Incustody Testing

When observing an arrestee void a specimen while in custody following arrest, staff should be aware that the arrestee did not know that he or she was about to be arrested and therefore lacked opportunity or motive to conceal a substitute urine specimen or adultering chemicals. Moreover, the arrestee undoubtedly had been searched by arresting officials, and any devices that may have been present should have been detected. The witness may therefore need to observe the voiding only to the extent necessary to ensure that dilution with toilet water or soap does not occur. This observation could be accomplished without directly viewing private body parts.

Noncustody Testing

A defendant reporting for monitoring appointments is aware that he or she will be submitting a specimen and therefore could have concealed a substitute specimen or substances that could interfere with the test. Staff may therefore need to observe the defendant void the specimen more directly. The witness must be able to see the urine leave the defendant's body and enter the specimen container. This requires either physical presence in the rest room or outside viewing through a properly placed window.

Ensuring the Integrity of Urine Specimens

The integrity of a urine specimen can be compromised by diluting the specimen by drinking large amounts of fluids before the test—often referred to as "flushing" or "water loading"; by introducing adulterating agents to a specimen after it has been voided; or by submitting a substitute specimen.

Flushing

Various studies have shown that the consumption of 1 to 2 gallons of fluids in the hours before a drug test can reduce the concentration level of a drug found in urine below the drug's cutoff level, producing a false negative result.⁹ Tests are available to check for flushing if suspicions exist that this is occurring.

One such test examines the level of creatinine in the urine. Creatinine is a substance the body produces in the skeletal muscle and eliminates through kidney functions. Its concentration in urine is affected by fluid intake. If the creatinine level falls below a certain point (approximately 20 milligrams per deciliter), this indicates that the subject recently consumed large amounts of fluids. Another test examines the specific gravity of the specimen. This test is conducted by comparing the weight of a drop of distilled water to the weight of a drop of urine. If the urine weighs below a specified level on a scale, the specimen has been diluted through flushing. Of the two tests, the creatinine test is considered the most accurate indicator of flushing, but the gravity test may be most accessible in pretrial drug testing programs because the instrument to run the test is inexpensive and can be operated by inhouse testing staff. The creatinine test can only be conducted at a medical laboratory.¹⁰

Adulteration and Substitution

A common method used to submit a substitute specimen or introduce adulterating substances is to conceal a balloon or other device under the arm with a tube leading to the genital area. Another method includes placing chemical substances under the fingernails and releasing them into the specimen during or immediately following the void.

Regarding adulteration, evidence suggests that most of the commonly used adulterating substances have little or no effect in masking drug use.¹¹ Still, proper chain of custody requires that the testing subject submit an unadulterated specimen.

Even with direct observation, it can sometimes be difficult to determine if the defendant has substituted a specimen. One means of checking this is to take the temperature of the specimen, which should measure close to body temperature (98°F or 37°C) if the specimen is freshly voided. Temperature strips for this purpose are available from medical supply companies.

Specimen Collection Using Sweat Patch

Different chain of custody issues arise when the sweat patch is used in testing. Unlike urine testing, no observation is required for the submission of the specimen; the specimen is submitted continuously while the patch is worn.

The patch is typically applied to a subject's upper arm. The area where the patch is to be applied is first cleansed with alcohol to remove skin oils so that the patch will adhere securely. After the skin is allowed to dry for approximately a minute, the patch is removed from its sterile packaging and applied. Each patch has a serial number, which should be recorded on the chain of custody form once the patch is applied.

The patch is designed to be worn for a period of up to 7 days and to be tamper-evident, meaning that any effort to remove it prematurely will be apparent. The patch is peeled off and the absorption pad is removed, placed in a shipping bag along with chain of custody forms, and mailed to a laboratory for testing.

Specimen Handling and Storage

To establish the chain of custody of a urine specimen, documents must account for every individual who handles the specimen.

Labeling

A mistake made in labeling the specimen is difficult to correct even if all other chain of custody and testing procedures are exactly followed. If the wrong label is placed on a specimen at the point of submission, the wrong result will be attributed to the defendant. If the defendant contests the results, the chain of custody and testing documents will provide strong evidence to contradict the defendant. To prevent a challenge regarding the identity of the sample, several general rules should be observed:

- □ The witness should label, observe, and collect one specimen at a time, even in a large holding facility.
- □ The witness should reconfirm the identity of the defendant before labeling. This can be accomplished by asking the defendant to state his or her name and date of birth and checking the response against the information already recorded on the label.
- □ Once identity has been confirmed, the label should be immediately affixed to the side of the container. The label should never be placed on the top of the container because container caps can be switched.
- □ All writing on the label should be in ink that will not run if it becomes wet.

Daily Log

Because the specimen container and the label attached to it are discarded on completion of testing, a permanent record of the collection must be established. The information should be recorded in a daily log of all

Exhibit 4–2 Sample Collection Witness Log

Collection Witness Log



Page____ of____

Subject Name	DOB	ID#	Witnessed by	Time	Comments

specimens collected and should include the name, date of birth, and identification number of the defendant; the date and time the specimen was collected; and the name of the witness. An example of a collection witness log is given in exhibit 4–2.

Transportation to the Testing Site

The level of difficulty involved in transporting the collected specimen from the collection point to the testing site depends on the distance between the two.¹² If the specimen is collected at the laboratory or in an adjacent office, the chain of custody procedures should be simple. Typically, the person who witnessed the collection will carry the specimen to the designated location in the laboratory.

If the specimen is collected at a distant facility, however, more elaborate procedures are necessary. The specimens must be stored because it is impractical to deliver each specimen as submitted. Stored specimens must be kept in a secure setting to prevent access by unauthorized parties. Specimens stored overnight should be refrigerated to prevent possible decomposition of any drug metabolites. Couriers must transport specimens to the testing facility. For each shipment to the facility, records must show how many specimens are being transported, the name of the person acting as courier, the time the specimens left the collection site, the time they arrived at the testing facility, the name of the person at the testing facility who received the specimen package, and a notation by that person of any specimen containers that sustained damage or other irregularities that might be evident. An example of a specimen transfer log appears in exhibit 4–3.

Testing and Specimen Disposal

The specimen to be tested must be transferred from the container in which it was collected to the receptacle in which it will be tested. Care must be taken to ensure that the specimen remains matched to the person who provided it, especially when numerous specimens are being tested simultaneously.

Because the volume of urine required to conduct a test is very small, some urine should remain in the collection container after the desired volume has been transferred to the testing receptacle. The urine remaining in the collection container must be retained in the event that followup testing is required (see chapter 5, Testing of Specimens, for a discussion of followup testing requirements).

The unused portion of the specimen should be stored in its original collection container in a refrigerator until it is determined whether a followup test is required. Any specimen requiring storage beyond 24 hours should be frozen. To prevent tampering with stored specimens, the refrigerator and the room in which it is located should be locked when unattended. Distribution of keys should be restricted to authorized personnel.

Exhibit 4–3 Sample Specimen Transfer Log

Specimen Transfer Log

Date____

Page____ of____

Section A: To be completed by courier

Specimens collected at
(Name of collection facility)
Time specimens left collection facility
Specimens delivered to
(Name of laboratory)
Time specimens arrived at laboratory
Number of specimens transported
ID#s of transferred specimens
Signature of courier

Section B: To be completed by laboratory official receiving specimens

Were all specimens listed in Section A delivered with this shipment? Y/N	
If no, which specimens were missing?	
Were all specimens in acceptable condition? Y/N	
If no, which specimens were not?	
Comments:	
Laboratory official receiving specimens	
(Name of official)	
	_

The specimen can be discarded once it is determined that no followup test is required or after followup testing has been completed. The policies for the disposal of specimens must be clear to staff to prevent inadvertent disposal of a specimen that is awaiting followup testing.

Management Challenges Related to Chain of Custody

The importance of strict adherence to chain of custody procedures cannot be overstated. Failure to comply with procedures could have severe consequences for both the defendant and the program. Given the sensitive and unpleasant nature of observing and handling urine specimens, program supervisors should be watchful for signs of morale or burnout problems among collection staff. Staff with these problems may not be as conscientious in following chain of custody procedures. Exhibit 4–4 provides a checklist of the chain of custody process.

A regular review of chain of custody documents provides the program supervisor with an effective means of monitoring staff compliance with chain of custody procedures. If signatures, dates, or other vital information are not properly recorded on the chain of custody forms, staff most likely do not understand the chain of custody procedures, which necessitates retraining.

One area within chain of custody is less easily monitored. Program staff observe a defendant submitting a specimen, but no monitoring occurs regarding the staff witness. If the observation by the witness is less direct than specified by the procedures, the defendant is not likely to bring this to the supervisor's attention. Similarly, if the witness does not label the specimen in accordance with procedures, the defendant will probably not complain. The privacy of the interaction between the defendant and the staff witness offers an opportunity for the defendant to bribe the witness into accepting a substitute specimen. This too may go undetected.

Exhibit 4-4 Chain of Custody Checklist

- Desitively identify defendant.
- □ Observe collection of specimen.
- Label the specimen.
- □ Ensure the integrity of the specimen.
- □ Transport specimen to testing area.
- □ Test the specimen.
- □ Record the results.
- D Preserve specimen if further testing is required.

Automated Chain of Custody at the District of Columbia Pretrial Services Agency

The District of Columbia Pretrial Services Agency has developed a completely automated chain of custody process. The process uses computerized technology that captures the image of a defendant upon admission into the program and retrieves that image from the computer each time the defendant reports for a drug test. Once the identity of the defendant has been verified, the computer prints out the sample label, which, in addition to the defendant's name and identification number, contains an individualized bar code. The computer also automatically logs the date and time the defendant reports for testing. Once the sample has been collected, the witness uses a hand-held bar code scanner, which is located immediately outside the collection room, to record the time the specimen was collected. The witness also scans his or her identification (ID) badge so that a computer record identifying the witness is established. The witness then carries the specimen to the laboratory, which is adjacent to the collection facility. Scanning the bar code automatically checks the specimen into the laboratory. The witness again scans his or her ID badge into the computer, and a complete computerized record of the collection and transfer is made.

Once the specimen has been logged into the laboratory by the witness, a laboratory technician examines the specimen for signs of tampering or adulteration and then logs it in as accepted using the bar code scanner. As the specimen is being tested, the technician again scans the label and prints out a matching bar code label that is then affixed to the receptacle in which the specimen will be tested. The specimen is placed on the testing analyzer—the Hitachi 717—which is connected to the Pretrial Services Agency's computer network. Test results are transmitted from the analyzer to the host computer, at which time a technician reviews them for any inconsistencies. Once satisfied that everything is in order, the technician releases the results over the computer network.

This procedure results in a completely paperless chain of custody automatically recorded—documenting the time that the defendant reported for testing, the time the sample was collected, the time it was brought to the laboratory, the time it was tested, the time of any followup tests, and the time that the test results were recorded into the computer and made available to other system users. It also documents every person who had custody of the specimen from the time it was collected until the time it was tested. Preventive measures are probably the best way to address these problems. Applicants for staff witness positions should be carefully screened to determine conscientiousness, attention to detail, and personal integrity. Once hired, staff should receive extensive training on chain of custody procedures with an emphasis on the importance of following those procedures in every instance. Rotation of staff may prevent morale and burnout problems.

Performance Measures

The ultimate test of the effectiveness of chain of custody procedures is their acceptance in court. Have any cases occurred in which the court has refrained from imposing sanctions on an allegedly noncompliant defendant because of concerns about the chain of custody procedures in general or in their application in a particular case? If so, officials should review the record from the court hearing and make any necessary adjustments.

Summary of Major Points

- □ The facilities in which specimens are collected must meet certain requirements regarding privacy and security.
- □ Adherence by staff to chain of custody procedures is important to ensure that the person being tested does not tamper with the specimen, that documented evidence shows that the particular result was obtained from the specimen provided by the defendant, and that program supervisors can detect, through a review of chain of custody documents, any problems in specimen collection and handling.
- Chain of custody procedures should include detailed descriptions of how to identity the person being tested, observation of the voiding of the specimen, proper labeling of the specimen, completion of a collection witness log, transportation of the specimen to the testing facility, and testing and disposal of the specimen.

Testing of Specimens

This chapter addresses the tasks involved in testing bodily specimens primarily urine but also perspiration and hair—for drugs of abuse. The first part presents a review of some of the terminology and methodologies used in drug testing. Next, approaches to testing are considered, followed by discussions about choosing a technology and how to implement a process once decisions have been made.

Review of Drug Testing Methodologies and Terminology

To make informed decisions, administrators need at least a basic understanding of drug testing technology. This section begins with a review of some of the basic terminology encountered in drug testing.

Methodologies

The most commonly used drug testing methodologies fall into two categories: immunoassays and chromatography. While possessing some knowledge of the scientific principles underlying these methods to conduct testing and interpret results is important, a general understanding should be sufficient for the purpose of setting up a pretrial drug testing program. If an explanation of the scientific principles is required, such as when a test result is challenged in court, such explanation is better left to the experts.

Immunoassays use antibodies to detect the presence of drugs or their metabolites in the specimen. A metabolite is the compound that results after the ingested drug has been metabolized by the body. An antibody is a protein that reacts only with the specific substance or with a group of similar substances it is designed to detect. The substance to which the antibody reacts is an antigen. A tag—a substance that can be identified and measured after the antibody and antigen react—is attached to a sample of the drug being tested. The drug containing the tag is called the tagged antigen. The tagged antigen, the bodily specimen possibly containing the drug in question (untagged antigen), and antibodies that react specifically against the drug are mixed together, and the tagged and untagged antigens compete to react with the antibody. The remaining unused tag is considered an indicator of the presence or absence of drugs.

Chromatography involves separating substances in a specimen by extracting them or causing them to attach to some type of material or particle. The separated substances are then identified and measured.

Technologies

The three techniques that utilize the immunoassays most commonly used in criminal justice settings are the enzyme multiplied immunoassay technique (EMIT), the fluorescence polarization immunoassay (FPIA), and the radioimmunoassay (RIA). Chromatography technologies include gas chromatography (GC) and gas chromatography/mass spectrometry (GC/MS).¹³

Immunoassay technologies are the most suitable for use in criminal justice settings. However, RIA is not suitable for onsite testing because the procedure uses radioactive materials that can be handled only by specially trained, licensed technicians and laboratories. Program administrators should contact the manufacturer of each technology for a list of the testing systems that use a specific technology.

Interpretation of Results

Immunoassays have moderate to good sensitivity and can detect small amounts of a drug in urine. However, specificity—the ability to distinguish a single chemical compound from a closely related or cross-reacting component—depends on the procedure used and the drug being detected. Although immunoassays are designed to identify specific drugs or drug metabolites, the chemical reactions that occur during the test may make it difficult to distinguish a specific drug from other substances, such as prescription drugs with similar chemical properties. As a result, false positives—an indication of the presence of a drug when in fact the drug is not present—can occur. Given this possibility, manufacturers of immunoassays, as well as toxicologists, recommend a followup test, or confirmation, using a method that is more specific to a particular drug or its byproducts, such as a chromatography test.¹⁴

True positive and true negative results are considered accurate. Accuracy refers to the ability of the test to obtain the correct result. To establish the accuracy of each result, however, followup testing on each positive is required. As noted earlier, manufacturers of immunoassay technologies and toxicologists recommend that any positive results be confirmed using an analytically different technology, such as chromatography. However, several courts have examined the issue in various criminal justice settings and have not required confirmation. Many of these courts have accepted retesting of positive specimens a second time using the same technology.¹⁵

The interpretation of drug test results using an immunoassay technique should be straightforward; the result is either positive or negative (exhibit 5–1). These two terms may seem very simple, yet they are often used incorrectly. If a result is positive, it means that a drug or its metabolite (or a closely related, cross-reacting compound) was detected above the test's cutoff level—the value that serves as an administrative breakpoint for labeling a specimen positive or negative. The cutoff level can be set low to be very sensitive (thus

minimizing the chance of false negative results); however, the lower the cutoff level, the greater the chance of obtaining false positive results. Setting the cutoff at a high level will increase the chance of obtaining false negative results. The manufacturers of the immunoassay techniques preset the cutoff of the test to a level that places greater emphasis on minimizing the chances of obtaining false positive results. The Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services (HHS) has published mandatory guidelines that specify the policies and procedures to be used by any laboratory to test urine specimens of federal employees (see exhibit 5–2). Even though these guidelines do not apply to testing criminal justice system clients, the specified cutoff levels are nearly the same, with minor exceptions, as the cutoff levels that are preset by the manufacturers of the immunoassays.

Exhibit 5–1 Interpretation of Results

Test Results	Drug Present in Specimen	Drug Not Present in Specimen
Positive	True Positive	False Positive
Negative	False Negative	True Negative

Exhibit 5-2 SAMHSA Guidelines on Cutoff Levels

Drug or Metabolite	Cutoff Level
Amphetamine/Methamphetamine	1,000 ng/ml*
Cannabinoids	50 ng/ml
Cocaine	300 ng/ml
Opiates/Morphine	300 ng/ml
PCP	25 ng/ml

*ng/ml = nanograms per milliliter

A positive result does not measure how much of a drug was present, the last time it was used, or the frequency with which it was used. A positive result is not, by itself, an indicator of impairment. A negative result does not necessarily mean that the subject is not a drug user. It only indicates that no substance for which a test was run was detected in the specimen above the test's cutoff level. The subject may have used a drug that was not part of the screen of tests. The drug or its metabolite may have passed through the subject's system before submission of a urine specimen (exhibit 5–3). Perhaps the subject was able to submit a surrogate urine specimen.

Drug or Metabolite	Duration of Detectability
Amphetamine/Methamphetamine	48 hours
Cannabinoids (marijuana)	
Single use	3 days
Moderate use (4 times per week)	4 days
Heavy use (daily)	10 days
Chronic heavy use	21 to 27 days
Cocaine metabolites	2 to 3 days
Opiates	48 hours
PCP	8 days (approximate)

Exhibit 5–3 Approximate Duration of Detectability of Selected Drugs in Urine

Source: Adapted from the *Journal of the American Medical Association*'s Council on Scientific Affairs (1987, p. 3112).

For these reasons, drug test results should be discussed in terms of the specimen testing positive or negative, rather than the subject being a drug user or a nonuser. In short, a urine test is not an emphatic, absolute measure of whether a person is or is not a user of illegal drugs. However, many regard it as such, and program administrators should correct this misconception when it arises.

Setting for Testing

A pretrial drug testing program can be established either inhouse by the pretrial services program or by contract with an outside laboratory.

With inhouse testing, a facility is set up within the pretrial services program. The pretrial program is responsible for purchasing all testing supplies, hiring and training staff (or arranging for their training by the manufacturers of the testing instruments), collecting specimens, conducting tests, and reporting results. The actual facility is typically located in the jail or at the courthouse, or in proximity to either. With an outside laboratory, the pretrial services program contracts with a laboratory to conduct the testing. The laboratory is responsible for having the testing analyzers and supplies available. The laboratory is also responsible for hiring and training staff or assigning existing staff to the contract. The testing is usually conducted on laboratory premises.¹⁶ The results of the tests are reported directly to the pretrial services program for proper dissemination.

Quality Control

Quality control refers to procedures put in place to monitor the operations of the laboratory. Quality control procedures should be both internal—that is, monitored by supervisory staff—and external. External quality control involves proficiency testing—that is, comparing the performance and operations of a drug testing laboratory with those of other laboratories.

Two types of proficiency testing are used—open and blind. In open proficiency testing, a number of specimens are sent to the laboratory by a sponsoring group on a periodic basis. The laboratory is aware that these are proficiency testing specimens but is not aware of what, if any, substances they may contain. The laboratory tests the specimens and reports the results to the sponsoring group. The results are then compared with results submitted by other laboratories. The laboratory is advised by the sponsoring group how its performance compared with the performance of other laboratories.

Blind proficiency testing is identical in nearly all aspects, except that the specimens arrive at the laboratory with no indication that they are proficiency testing specimens. Therefore, laboratory technicians are unaware that the performance of the laboratory is being measured.

Approaches to Testing

Pretrial drug testing can be accomplished through a variety of options, including:

- □ Setting up an inhouse analyzer-based testing facility.
- □ Testing inhouse with hand-held devices.
- □ Contracting with a local private laboratory.
- □ Sending specimens to a national laboratory.
- **□** Testing with the sweat patch.
- □ Some combination of the above.

Setting up inhouse analyzer-based testing. A number of analyzers on the market can be used for onsite testing, offering various features to meet the particular needs of a jurisdiction. For example, some analyzers are designed for high-volume testing; some, for rapid reporting of results. Some have the ability to interrupt a batch test to have a single specimen tested

immediately. Many can interface with the pretrial agency's information system to provide automated transfer of test results. When space is a problem, models are available that can be placed on a desktop.

In many jurisdictions, various criminal justice agencies share an onsite analyzer-based testing facility. For example, the testing may be done by the pretrial services agency, but the agency might also test other populations such as probationers, drug court clients, and work release residents.¹⁷

Testing with hand-held devices. A number of disposable hand-held devices are currently available. Most are very similar both in appearance—about the size and shape of a credit card—and in the procedures required to run a test. A result is obtained by depositing drops of urine into a sample well. The results appear within minutes, usually indicated by a colored line. Several of these devices test for only one drug, whereas others can test for a number of drugs simultaneously.

Variations to the design of these devices simplify chain of custody by creating a one-step testing process. For example, at least one vendor has developed a plastic stick that is simply dipped into the urine collection cup, with results then appearing on the stick. One vendor has a device that is both a collection cup and testing device, with the testing strip embedded into the side of the collection cup.

Hand-held devices are being used extensively in the federal courts. The Administrative Office of the United States Courts (AOC) has commissioned a study to determine whether the devices meet the accuracy and reliability requirements of the courts. Preliminary results have shown that a number of these devices "showed promise."¹⁸

Testing through a local commercial laboratory. Local commercial laboratories are available in most jurisdictions that are capable of testing for drugs of abuse. When using a commercial laboratory, either specimens can be collected at the site of the pretrial program and then transported to the laboratory or defendants can be instructed to report to the laboratory to submit specimens, which would be collected by laboratory staff.

Testing through a national commercial laboratory. For years, many criminal justice agencies that test for drug use have used the testing services of national commercial laboratories. Programs that use this approach collect the specimens and then ship them to the laboratory. Specimen results typically are available within 48 hours.

Testing perspiration. The sweat patch is an adhesive strip attached to the skin, usually on the upper arm, of a testing subject. It can remain on the skin for up to 1 week. The patch is tamper-evident, meaning that any effort to

remove it will be obvious. As the subject perspires, the sweat is collected by a pad that is part of the patch. Once the patch is removed, the pad is sent for testing at a commercial laboratory using immunoassay technology.

The sweat patch currently is being used with urine testing in approximately 40 federal probation agencies. The Administrative Office of the United States Courts has recommended its trial use as a supervision tool in federal pretrial programs.

Analyzing hair. Since drugs are absorbed into hair shafts, a history of drug use is produced as each hair strand grows. In 1977, researchers developed the means to detect drug metabolites in hair through radioimmunoassay. Studies have shown hair analysis to be very effective in detecting drug use within 1 week of ingestion. The only limit on the length of time for which past use can be detected is the length of the hair—1 inch of hair can track any drug use within a 60-day period.¹⁹

As with the sweat patch, hair analysis does not present the same privacy issues and concerns about disease transmission as with urinalysis. It also has the advantage of showing drug use over a much longer period of time. Even with these advantages, hair analysis is not widely used in criminal justice settings because it is very expensive and can only be conducted at qualified laboratories. Another obstacle to the expanded use of hair analysis in the criminal justice system is the difficulty presented by persons with very short hair styles.²⁰

In addition, several issues have yet to be resolved regarding hair analysis. For example, it is not clear whether exposure to smoked drugs by a nonusing testing subject would produce a positive result. It is also not clear

The Sensor Patch—A Developing Technology

A new drug testing technology that is being tested adapts and combines features of electronic monitoring and drug testing through the sweat patch. The testing subject wears a band on the wrist or ankle, called a sensor patch, that is about the size of a wristwatch. The patch, like the sweat patch, detects the use of drugs as they are excreted in perspiration. Once drug use is detected, the sensor relays this information to a transmitter that the subject wears on a belt. That transmitter sends the information to the supervising official's computer and shows the present location of the subject within a radius of 150 feet even if the subject is several hundred miles away.

This device is being field tested on parolees in Philadelphia. It may be available for widespread use within the criminal justice system by the year 2000. whether some types of hair, such as thick hair, retain drugs more than others. Furthermore, some indications exist that certain hair treatments can hide the use of drugs.

Choosing a Technology

The technologies available for detecting drugs provide options for pretrial program administrators.²¹ In choosing among the options, two factors should be considered.

Acceptance in the scientific community. The most important factor to consider in selecting the technique is whether it has gained acceptance in the scientific community. Do those who are most qualified to make such determinations, in this case toxicologists, view the technique as a reliable means of detecting the presence of drugs in a bodily specimen? In discussions with manufacturers of these technologies, program administrators should ask to see evidence of scientific acceptance.

Admissibility of test results in court. Since drug test results are intended for use by the courts, the judgment of whether results obtained from a certain technique are admissible in court proceedings lies with the court. In making such judgments, the courts determine whether the level of acceptance of the technology within the scientific community is sufficient to allow admissibility. Program administrators should review cases in which the admissibility of test results obtained from those technologies under consideration were challenged in court.

Choosing a Testing Approach

Once the pretrial services program has determined that the technology has been accepted by the scientific community and the courts, program administrators can look at the variety of testing instruments that use scientifically accepted techniques. The instruments, whether hand-held devices or analyzers, offer different features to meet a variety of needs.

Turnaround time. The amount of time it takes to obtain the result from a defendant's specimen can be very important to a pretrial services program. If the program is using test results in formulating recommendations to the court at the initial appearance, the results must be available before that appearance. Even when using the results in the supervision phase, a rapid turnaround time is important as users should be promptly informed of their results. Some testing instruments, especially hand-held devices, are designed to produce results very rapidly. Others may take more time.

Volume of testing. Programs with a high volume of testing may find testing analyzers more helpful than hand-held devices because many analyzers are designed to accommodate a high volume of specimens. The program may be required to produce results on a high volume of specimens in rapid fashion. If that is the case, systems are available that can accomplish this.

Availability and quality of training. If the pretrial services program contracts with a laboratory to perform testing functions on an analyzer, training by the analyzer's vendor may not be a concern of the administrator. The laboratory itself would be responsible for ascertaining that operators of testing analyzers have received proper training. If inhouse testing is to be conducted using an analyzer, however, the availability and quality of training offered by the vendor is very important. A vendor that does not provide training should not be considered. Training with hand-held devices should be much simpler because the process to test involves only a few steps.

Costs. Vendors of analyzers may offer options to lease or purchase the equipment. Program administrators should examine the terms of both lease and purchase agreements and determine which option best meets their needs.

Vendors also may offer pricing packages that reduce costs. For instance, one vendor may offer the testing system at no cost if the program commits to purchasing a set amount of supplies. A competing vendor may offer the supplies at no cost if the analyzer is purchased. However, the price of the various instruments should not be the main factor in making a selection. If the cheapest instrument cannot meet the turnaround time and volume needs of the program or is based on a technology that has not gained acceptance in the scientific community, it would be the wrong choice (see chapter 10, Costs of Pretrial Drug Testing).

Program administrators should visit other criminal justice drug testing programs, clinical laboratories, hospitals, or other institutions that use the testing instruments under consideration. Seeing the instrument in operation and questioning the operators of the system about their level of satisfaction is very helpful.

Choosing a Testing Facility

Whether to implement inhouse testing or to contract with an external laboratory may be one of the most difficult decisions faced by a program administrator. Several factors should be considered in making the choice, and the advantages and disadvantages of each approach should be assessed.

Existence of state or local regulations governing testing facilities. Many jurisdictions have regulations that require laboratories to meet specified performance standards. Some require licensing or certification. In some jurisdictions, these regulations apply only to laboratories engaged in clinical testing; in others, they may extend to all facilities that test specimens—

including those that are set up in criminal justice agencies. Program administrators should identify existing regulations.²²

Availability of an external laboratory. Program administrators should determine whether laboratories in the area meet applicable regulatory requirements and are willing to consider contracting with the pretrial services program. The Yellow Pages of the telephone book, under the heading of Laboratories/Medical, should have a listing of laboratories that test for drugs. These laboratories should be contacted.

Local programs may exist that are not necessarily medical laboratories but that currently provide testing services for other parts of the criminal justice system. For instance, Treatment Accountability for Safer Communities (TASC) programs perform this service in many jurisdictions for probationers. Criminal justice system representatives should therefore be consulted to see if other programs test criminal justice clients.

Availability of suitable space to locate inhouse analyzer-based facility. Difficulties are often encountered in trying to set up an inhouse testing facility in either the jail or courthouse or any other public building. Space of any kind can be difficult to secure in such a building. Space that meets, or that can be renovated to meet, the requirements of a testing facility may not be available.

The area that houses a testing facility must be secure against unauthorized access and be large enough to accommodate the testing analyzer that will be used. The analyzer may require special plumbing or electrical hookups; therefore, such modifications to the space should be anticipated. Since testing supplies and chemicals can be affected by temperatures above or below a room temperature range of 68° to 77° Fahrenheit, a room that is not climate controlled would not be suitable.

It would be convenient, although not necessary, if the area where defendants report for testing, and where they actually submit specimens, is adjacent to the testing facility. This would simplify chain of custody procedures (see chapter 4, Chain of Custody).

Availability of staff for inhouse laboratory. The pretrial services agency's personnel who are assigned or hired to operate testing analyzers require specialized knowledge beyond that normally required to complete traditional pretrial services functions. Program administrators are responsible for recruiting, hiring, training, and supervising these staff members. Some administrators may conclude that these responsibilities are beyond those with which they want to be involved. They may therefore select a contract laboratory.

Turnaround time. An efficiently managed inhouse testing facility using hand-held devices or an appropriate analyzer should be able to meet turnaround time requirements. A contract laboratory may be able to meet the requirements also. Once a turnaround time is established, program administrators can check with available laboratories to see which ones can meet the required time.

Costs. Cost factors depend on the testing approach. If testing functions are contracted out to a laboratory, the pretrial program is not responsible for purchasing analyzers and supplies, hiring testing staff, and making renovations to testing facilities. However, the pretrial program pays the laboratory for the use of instruments, supplies, staff, and other general costs associated with the laboratory's overhead (see chapter 10, Costs of Pretrial Drug Testing).

Chain of custody concerns. Chapter 4 describes acceptable chain of custody procedures. Chain of custody might be simpler when using inhouse testing, especially if the testing is done with hand-held devices. However, procedures can be developed for transporting specimens from the collection point to the laboratory. Plans under each option should be drawn up and compared.

Comparative Advantages of Testing Approaches

Once factors regarding selection have been examined, program administrators must determine which approaches remain viable options. Perhaps no laboratories are available that meet the program's turnaround time needs. Maybe no space is suitable for an inhouse, analyzer-based facility. Ideally, several options will remain open, and, if so, program administrators should then weigh the advantages and disadvantages of each (see exhibit 5–4). Given the differences among jurisdictions, each listed advantage may not hold true in every instance in every jurisdiction.

Advantages of an Inhouse, Analyzer-Based Facility

Generally, such a facility should be able to process the testing of specimens more rapidly than an outside laboratory. This is especially true when the testing facility is located near the collection site and when the facility is responsible for testing only specimens collected from the pretrial population. The contract laboratory would no doubt be responsible for providing results to other clients, and this could slow down the processing of the specimens for the pretrial program.

Chain of custody is simplified if the specimens do not leave the building in which they were collected. It is also simplified if custody of the specimens is not transferred from the pretrial program to the laboratory. When the pretrial program has sole custody of a specimen, program administrators can be more confident that chain of custody procedures are not compromised. Once a specimen leaves the custody of the pretrial program, the program loses some control over how that specimen is handled.

Approach	Advantages
Inhouse testing analyzer-based testing	Ability to test large volume of specimens in short time. More rapid turnaround of results than outside laboratory. Greater control over chain of custody than outside laboratory.
Inhouse hand-held devices	Simple to use. Fastest turnaround time for results. Most simplified chain of custody.
Contract laboratory	Highly trained staff. Record of performance. Greater testing resources.
Sweat patch	Simple to apply and remove. Less intrusive than urine testing. Ability to detect drug use continually while patch is worn.

Exhibit 5–4	Advantages of Testing Approaches
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An inhouse facility may also provide the pretrial program with greater confidence about the release of information. Because all test results would be under the sole control of the pretrial services program until dissemination to appropriate officials, less danger exists for an inadvertent release to an unauthorized party.

Advantages of Inhouse Hand-Held Devices

Hand-held devices have become very popular in criminal justice agencies given their portability, ability to provide rapid results, and ease of operation. Since they require no machinery to maintain and calibrate, these devices can be used by criminal justice officers with no formal training in drug testing. Furthermore, the device does not need to be refrigerated before use, as is the case with reagents used on analyzers.

Another attraction of these devices is that they simplify the chain of custody of a specimen. For example, with these devices, the same officer who witnessed the collection of the specimen can also test it—and the test can be done in the presence of the person who submitted the specimen. With analyzer-based testing, the specimen is usually collected by one person, taken to the testing facility (which can require transporting it outside the building, especially when using a commercial laboratory) possibly by another individual, and then tested by yet one more individual.

Advantages of a Contracted Laboratory

A contracted laboratory is likely to be staffed by trained technicians with experience in testing specimens. The laboratory usually employs a staff toxicologist who supervises the technicians. This toxicologist may also be able to testify in court, if necessary, on the laboratory procedures used to obtain a test result.

A laboratory that has been in operation for some time has established a track record of its performance. Program administrators can interview former or current clients of the laboratory to get an impression of its services. Program administrators can tour the laboratory to inspect the facility and check procedures.

A contract laboratory, especially a large one, is likely to have the resources to handle exigencies, such as instrument failure or staff turnover. An inhouse facility that has purchased one testing instrument may face problems if the instrument breaks down. Likewise, an inhouse facility with two trained operators may be seriously understaffed if one leaves.

Advantages of the Sweat Patch

The sweat patch has certain advantages over urinalysis. Drugs typically can be detected in urine for 48 to 72 hours, depending on the drug; however, any drug use that occurs while the patch is worn can be detected. In addition, testing with the patch does not involve the degree of intrusiveness that occurs when observing the submission of a urine specimen. Unlike urinalysis, which requires the handling of urine specimens, testing with the sweat patch raises few concerns about disease transmission.

Implementing Testing in an Inhouse Facility

The tasks involved in setting up an inhouse testing facility include completing an agreement with the vendor of the selected testing analyzer or hand-held devices, renovating the space selected, hiring and training staff, establishing quality control procedures, and implementing procedures for confirmation of positive results.

Completing the Agreement With the Vendor

Before placing the order for the testing analyzer or hand-held devices, program administrators should verify that the terms of the agreement with the vendor are clear. If an analyzer is purchased, the administrator should review the warranty with the vendor. Many vendors offer maintenance contracts on analyzers after the warranty period expires. These contracts can cost thousands of dollars, and programs could face unexpected maintenance costs when their warranty expires. Program administrators should discuss with the vendors at the time of purchase the costs associated with maintenance contracts.

An analyzer used to test urine specimens, like any other equipment, is subject to occasional failure. Problems can often be resolved by program staff if they receive telephone instructions from technical representatives of the analyzer's manufacturer. In other instances, however, an onsite visit by a technical representative may be required. Whether the analyzer is purchased or leased, program administrators should ensure that an agreement is reached regarding response time for service calls. If the analyzer cannot be fixed onsite and must be shipped out for repair, the administrator should have an agreement with the manufacturer that it will promptly provide a substitute instrument at no additional cost.

To ensure quality control, the protocol for the operation of testing instruments requires that periodic maintenance checks be conducted by trained technicians provided by the analyzer's manufacturer. Program administrators should ensure that the frequency of these checks is in compliance with established protocol and that the frequency is recorded in the written agreement.

The availability of training by the manufacturer should be addressed in the agreement. As a new program begins operations, staff who will be responsible for testing specimens must receive training. As staff turnovers occur, new staff should receive training. Several manufacturers operate training centers that are continuously in session at their headquarters. Others offer periodic regional training sessions. Some training sessions are designed primarily for clinical technicians and do not focus specifically on testing urine to detect drugs. Therefore, program administrators must make certain that the manufacturer provides the training necessary to meet program needs.

Renovating the Facility

If program administrators opt to test with analyzers rather than hand-held devices, the room where the analyzers are to be located needs to be prepared. The vendors of the selected analyzer should provide information on special electrical, plumbing, or ventilation requirements for the instrument. Some vendors even provide engineers to inspect the space and note any changes that are required.

If the office space to be used as the testing facility requires extensive renovations, program administrators should attend to this task next. Soliciting bids for contracts for construction work might be necessary. This process alone could consume several months. After the contractors are selected, program administrators should meet with them to make certain that all the needs of the facility are addressed. Program administrators should request a schedule for the completion of the work so that other tasks can be planned.

Hiring and Training Staff

Program administrators must develop job descriptions and job classifications when staffing a new inhouse pretrial drug testing program, particularly one that will use an analyzer-based approach. In jurisdictions where new job descriptions and classifications must be processed through and approved by county personnel departments, this could be a time-consuming task.

The testing vendor should have a training program available for staff. Administrators should schedule training sessions for new staff as soon as possible (see chapter 7, Staffing, for a discussion of the issues surrounding staff recruiting, hiring, and training).

Establishing Quality Control Procedures

Effective quality control procedures involve compliance with established written protocols governing all aspects of the testing process, including chain of custody and actual testing of the specimen (quality control procedures for chain of custody are described at length in chapter 4, Chain of Custody).

The manufacturer of the testing analyzer or hand-held device should make available a list of quality control procedures that should be followed to ensure accurate and efficient operation of the test. All protocols and procedures for maintenance and operation of the testing system and the storage, preparation, and use of testing supplies must be observed in accordance with the manufacturer's instructions.

Program administrators should participate in at least one proficiency testing program. SAMHSA maintains a list of proficiency testing service providers that have met HHS's certification criteria. The proficiency testing provider chosen should have HHS certification.

If an incorrect result is reported to the proficiency testing service provider, administrators should investigate the reasons for the incorrect result and prepare a report for their files on the investigation and any corrective actions taken. Records of proficiency testing results must be kept on file.

Implementing Confirmation Procedures

Some issues related to the requirements of followup testing may arise during the planning process, and program administrators should be aware of those issues. Manufacturers of drug tests and toxicologists call for confirmation of all positive results on a second, analytically different technique, particularly when the person tested may suffer from a positive result. Due to the inability of immunoassays to distinguish between some substances that share similar chemical structures, a more specific confirmation test is required to show the distinction. Scientists consider the GC/MS testing system the most reliable means of confirmation.²³ The costs associated with confirmation by GC/MS, however, can be very high, ranging from \$25 to \$50 per confirmation test. If each positive result is confirmed by GC/MS, a pretrial services program with a high volume of testing and a large number of positive results may face operating costs that are two to three times greater than if no confirmation were to take place.

As noted earlier, another, less expensive option that has been approved by several courts is retesting specimens using the same technology.

Options may be available to program administrators for developing procedures for followup testing on positive specimens. For instance, the program may opt to confirm by GC/MS only those results that are disputed by defendants or those that will lead to court action.

Because confirmation of positive results may require testing on a different methodology than that used in the initial screen, contracting with a laboratory for confirmation is generally more practical. An inhouse testing facility is not likely to have instruments on hand that utilize a different methodology. The skills required to conduct confirmation on the most preferable technique—GC/MS—are likely to be well beyond the expertise available at an inhouse facility.

Implementing Testing in a Contracted Laboratory

The tasks involved in contracting with a laboratory for testing will depend on whether the program is required to issue a Request for Proposals (RFP) to eligible laboratories and then select the laboratory after a competitive process. If this is required, the program must develop the RFP, review the proposals, and make a selection. Once a selection is made, whether through a competitive process or not, the pretrial services program must negotiate the terms of the agreement with the selected laboratory.

Developing a Request for Proposals

Before the RFP is written, program administrators should determine the selected laboratory's responsibility. Clearly, the laboratory will be responsible for the actual testing of collected specimens. The collection of the specimens, however, can be the responsibility of either the pretrial program or the laboratory. If the pretrial program retains responsibility for the collection, transportation of the specimens could be left either to the pretrial program or to the laboratory.

Each program manager determines who will be responsible for the collection and transportation of specimens to the laboratory. Some may want to turn over all testing-related responsibilities to the contracted laboratory because of staff resistance to handling urine specimens or because laboratory staff can carry out chain of custody more effectively. On the other hand, some program administrators may want to retain the control provided through inhouse collection and transportation. Program administrators may find that defendants who have contact with the program staff collecting the specimens may comply more fully with testing. This occurred in Pima County, where officials first arranged for the laboratory to collect specimens for both the preinitial appearance test and the supervision tests. After a period of time, procedures were changed so that pretrial program staff collected specimens, resulting in higher rates of collection. Similar results were obtained in Multnomah County when pretrial program staff assumed responsibility for specimen collection.

Once the exact functions are decided and defined in the RFP, program administrators can describe the requirements of the program, such as turnaround time, expected volume, number of drugs to be screened, cutoff levels, and followup testing procedures. Based on this information, applicants should be asked to submit a budget with the proposal.

The RFP also should ask applicants to provide the following information:

- □ The testing methods, techniques, and instruments available for both screening and confirmation testing. Administrators may wish to specify in the RFP which testing technologies and instruments must be used by the laboratory.
- □ The chain of custody procedures from the point of collection and transportation (unless the pretrial program handles these) to the point of testing and disposal of specimens.
- □ Proof of compliance with any applicable licensing or certification requirements.
- □ Assurances that the laboratory follows the manufacturer's protocol for testing urine specimens.
- □ The quality control procedures the laboratory uses.
- □ Staff credentials. (Resumes should be included with proposals.)
- □ The availability of staff to testify in court at violation hearings.
- □ A list of references of past or current clients, particularly of those involved in drug testing for the criminal justice system.

Reviewing Applications

The review should be a two-step process. The first step should be to read each proposal with the following questions in mind:

- Does the applicant address each question?
- □ Does the applicant meet any existing licensing or certification requirements?

- □ Has the technique used by the laboratory been accepted within the scientific community?
- □ Can the laboratory meet the needs of the program?
- □ Do the chain of custody procedures seem thorough?

The next step should be to contact the references and then conduct an onsite inspection of those applicants still under consideration. During the inspection of a laboratory, administrators should:

- □ Verify the accuracy of any information presented in the proposal.
- Conduct a walk-through of chain of custody procedures, with a laboratory official explaining each step in the process during the walkthrough. Check entries on chain of custody logs (review chapter 4, Chain of Custody, before inspection).
- □ Check the laboratory's procedures to protect the security of testing instruments, stored specimens, supplies, and records, and determine who has access to restricted areas.
- □ Ask to see the laboratory's results from proficiency testing programs.
- □ Ask to see evidence of the laboratory's certification or license if required.
- □ Check the laboratory's procedures to ensure that it follows manufacturer's protocols for testing urine specimens.

Selecting a Laboratory

Program administrators should review the information provided in the proposals and collected during the inspections, then select the laboratory that best meets the needs of the program.

Many jurisdictions may require selection of the lowest bidder for any government contract. In selecting a laboratory to conduct drug testing, however, selection of the lowest bidder solely on the basis of the bid may actually result in greater long-term costs. If the reliability of the results obtained from the selected laboratory cannot be demonstrated in court, the program may become involved in costly litigation.

One toxicologist has published a sample laboratory inspection sheet to aid in an objective assessment of the applicant laboratories (see exhibit 5–5). The use of such an instrument may make it possible to waive any requirements regarding selection of the lowest bidder.

Exhibit 5–5 Sample Laboratory Inspection Sheet	
Laboratory	Final Score
Quality of Services (60 points)	
Test Methods (20 points) (Consider sensitivity, established reliability.)	Score
Internal Chain of Custody (10 points) (Consider if description is adequate, methods of identifying samples, recordkeeping.)	Score
Quality Assurance Program (10 points) (Consider use of standards, internal blind quality control, certification of standards.)	Score
Turnaround Time (5 points) (Consider how results are reported, timeliness.)	Score
Specimen Pickup, Shipping, Provision for	
Frozen Storage (10 points)	Score
Supplies (5 points) (Consider design, labeling security of bottles and kits, instructions for use.)	Score
Services Tot	al Score
Personnel (30 points)	
Laboratory Director/Manager (15 points) (Consider who will provide expert testimony.)	Score
Management Staff (10 points)	Score
Technical Staff (5 points)	Score
Personnel Tot	al Score
Experience (10 points)	
Current Clients (5 points)	Score
Court/Arbitration Experience (5 points)	Score
Experience Tot	al Score

Source: Willette, Robert E., 1986, "Choosing a Laboratory," in *Urine Testing for Drugs of Abuse,* Research Monograph 73:13–19, Washington, DC: National Institute on Drug Abuse.

Negotiating Terms of the Contract With Selected Laboratory

Once the laboratory has been selected, terms of the contract with the laboratory must be negotiated and made final. The contract should address the turnaround time for the reporting of results, the drugs for which the laboratory will test, and the procedures for followup testing of positive specimens.

The contract also should specify the pricing arrangement. Two arrangements are available: cost-per-test and fixed-price. With a cost-per-test arrangement, the pretrial program pays the laboratory the specified amount for each test conducted. Typically, this means that the laboratory bills the pretrial services program at the end of each month after the number of tests performed that month have been counted. With a fixed-price arrangement, the pretrial program pays the laboratory a set fee regardless of the number of tests conducted. The fee is calculated by estimating the expected volume of tests to be conducted.

With a cost-per-test arrangement, the pretrial services program pays only for tests that were conducted. With a fixed-price arrangement, the fee paid may not reflect the number of tests performed. If the volume was underestimated, the pretrial services program would pay for tests that were not done. If the volume was overestimated, the laboratory would not be compensated for the work completed.

Despite the uncertainty involved with the fixed-price arrangement, both the pretrial services program and the laboratory may prefer this arrangement because it permits them to develop budgets using the agreed-upon amount.

Program administrators should make certain that a provision of the contract allows for:

- □ Periodic and unannounced inspections of the laboratory by pretrial program officials and any technical experts chosen by staff.
- □ Assurances that the laboratory follows the analyzer manufacturer's protocols for specimen testing.

Performance Measures

Whether the testing is conducted by an inhouse facility or by contract with an outside laboratory, several questions should be answered to measure performance:

- □ Are the test results being provided within the timeframe required by the program and the court?
- □ Are laboratory staff following testing procedures in all instances?
- □ Are quality control measures being implemented?

- □ Do these measures point to any problems in the laboratory's operations?
- □ Have any court challenges to the accuracy of the testing system, the procedures employed by the laboratory for testing, or the qualifications of the technicians performing the tests been successful?

Summary of Major Points

- To make informed decisions, program administrators should gain at least a basic knowledge of the technical aspects of testing urine specimens for drugs of abuse.
- Several technologies are available for testing of specimens. The most important factor to consider in selecting a technology is whether it has gained acceptance in the scientific community.
- □ A variety of testing analyzers and hand-held devices that employ these technologies are available and are designed to meet a variety of needs.
- Testing can be conducted inhouse, using either analyzers or hand-held devices, or by contract with an outside laboratory. The advantages and disadvantages of each approach should be weighed by each program given its situation and needs.

Confidentiality

Maintaining confidentiality entails limiting access to test results and other program information about the defendant, such as scheduled testing appointments and compliance with the drug testing condition. Confidentiality also means limiting the use of such information. Thus, confidentiality procedures ensure that test results are released:

- □ Only to appropriate agencies and persons and only for appropriate purposes.
- □ Only as a means of setting conditions of pretrial release and penalties for violating pretrial conditions.
- □ Only in writing or in person—never over the telephone.
- □ Following applicable federal, state, and local confidentiality laws.

The policies outlined in this chapter conform to federal and most state and local standards. Nevertheless, program administrators should consult any state and local confidentiality policies before drafting guidelines.

Federal Confidentiality Guidelines

All federally assisted programs must conform to 42 CFR Part 2, Confidentiality of Alcohol and Drug Abuse Patient Records: Final Rule.²⁴ Federally assisted programs include:

- Programs conducted directly by a federal agency or through contract with the agency.
- Programs operating under the authority or through license of a federal agency. These include providers of Medicare services and agencies licensed to dispense methadone and other controlled substances.
- Programs supported by federal funds. These include recipients of federal financial assistance, programs operated by states or localities receiving federal funds that could be (but are not necessarily) spent on drug or alcohol abuse programs, and programs given tax-exempt status or to which taxpayers can make tax-deductible contributions through the Internal Revenue Service.

Additionally, any agencies referring defendants to drug testing or drug treatment programs fall under 42 CFR.

Rule 42 CFR covers information obtained by federally assisted programs that may directly or indirectly identify a person as a drug user. In a healthcare setting, all program information about patients is confidential. Under limited circumstances, and usually with the patient's consent, health-care or treatment programs can release information to other parties. These parties receive only information needed to carry out a specific duty involving the patient.

In a criminal justice setting, 42 CFR forbids agencies that receive drug test information from using that information as evidence in a pending charge against a defendant who is in a drug testing or drug treatment program.²⁵ However, courts ordering defendants into drug testing or treatment can receive information to monitor the defendant's compliance with conditional release.²⁶ Other criminal justice agencies can receive drug test information to perform specific duties regarding the defendant. Generally, the following conditions apply:

- Courts should receive information to set conditions of pretrial release and condition violation hearings. A program may also inform the court of a defendant's compliance (positive tests and record of appearance) before each court date.
- □ Defense counsel should have full access to the defendant's drug test results to help prepare arguments for bond hearings and help gauge a defendant's possible drug treatment needs. A program should verify that the attorney is the counsel of record before releasing information.
- Prosecutors should receive drug test information to prepare arguments for bond hearings and to request modifications or revocation of pretrial release.

State and Local Confidentiality Guidelines

States may have separate confidentiality guidelines for drug test information. Rule 42 CFR allows states to prohibit certain disclosures that federal guidelines allow, so some state guidelines may have tighter restrictions on releasing information. However, states cannot permit disclosures forbidden by 42 CFR.²⁷

Some pretrial programs have agreements with the local court that restrict the use of program information. Because pretrial drug test results are agency information, they fall under these local guidelines. For example, under the Washington, D.C., bail statute, pretrial agency information can be used only to set bond; in hearings to determine sanctions for noncompliance with release conditions, failure to appear, and rearrest; and in perjury and impeachment-of-testimony proceedings. Agency information cannot be used to determine guilt.²⁸

Pretrial programs without local guidelines on using program information should include restrictions on use of drug test results in their Memorandum of Understanding (MOU) (see chapter 1, Gaining Support From Criminal Justice System Representatives, for a complete discussion of the MOU).

Release of Information

Only certain individuals or agencies are authorized to receive drug test information. Agencies participating in the MOU may receive pretrial drug testing program information without a defendant's signed consent. Usually, these agencies include the courts, prosecutors, supervision agencies, defense attorneys, and probation and parole departments. Pretrial programs should not release program information to victims, the media, or police.²⁹ Laboratories contracted to test urine specimens and treatment facilities used by the pretrial program should release information only to the pretrial program.

To ensure this restricted access, programs should develop written policies regarding the release of information. The procedures should cover how information is released and how releases are recorded; they should be included in the program's procedures manual.

Information on drug test results should be released only after persons requesting information satisfactorily identify themselves and explain why they want the information. Persons should receive information only to carry out duties specified in the MOU, and only specific employees should be authorized to release information and to record release transactions.

Second-Party Release of Confidential Information

42 CFR stipulates:

This information has been disclosed to you from records protected by Federal confidentiality rules (42 CFR Part 2). The Federal rules prohibit you from making any further disclosure of this information unless further disclosure is expressly permitted by the written consent of the person to whom it pertains or as otherwise permitted by 42 CFR Part 2. A general authorization for the release of medical or other information is NOT sufficient for this purpose. The Federal rules restrict any use of the information to criminally investigate or prosecute any drug or alcohol abuse patient. A person who receives confidential information, pursuant to his/her responsibilities in a criminal justice agency, concerning a client whose participation in a program was made a condition of the disposition of charges, release from custody, or probation may redisclose and use it only to carry out official duties with regard to the client's conditional release or other action in connection with which the consent was given. All releases of information should be recorded. The record should include the name of the employee releasing the information, the name of the recipient of the information, his or her reason for requesting the information, and the date and time of receipt. Recipients of test information should receive a statement informing them that, in accordance with 42 CFR, they are prohibited from releasing information to another party.

Defendant's Consent for Information Disclosure

Generally, 42 CFR forbids disclosure of program information without a defendant's consent. (This does not include information given to criminal justice agencies for performing a specific duty related to the defendant.) Rule 42 CFR requires programs to use written consent forms when obtaining a defendant's consent (exhibit 6–1). These forms must have the defendant's name, the name of the drug testing program, the name of the requesting party, and the purpose of the disclosure. The forms must also have space for the date of disclosure and the defendant's signature or signature of a person authorized to sign for the defendant. The forms also should provide a line for the program employee to sign as witness to the defendant's or defendant designate's signature.

When parties other than those who signed the MOU request information, programs should investigate whether release would be appropriate. Release to persons not bound by the MOU should be related to pretrial supervision in the pending case (third-party supervision or placement in a drug treatment program, for example).

Security of Records

To ensure the confidentiality of drug test information in their possession, programs should secure all written records in locked areas, with access limited to persons authorized to release information. Information stored in computers should be available by password only. Programs should also have written procedures regulating the access to and use of written records.

Performance Measures

Any breach in confidentiality procedures should be reported to the appropriate program officials and investigated. Program officials should also periodically review practices for release of information to make certain that staff are following procedures.

Exhibit 6–1 Sample Consent Form	
I request/authorize	
(name of patient/defendant)	
(name or general designation of program which is to make the disclosure)	
(kind and amount of information to be disclosed)	
to	
(name or title of the person or organization to which disclosure is to be made)	
for (purposes of the disclosure)	
Date Signature of patient/defendant	
Signature of person authorized to sign in lieu of the patient/defendant (when required)	
Witness	
This consent is subject to revocation at any time except to the extent that the program, which is to make the disclosure, has already taken action in reliance on it. If not previously revoked, this consent will terminate upon	
(specific date, event, or condition)	

Summary of Major Points

- Federally assisted drug testing programs must conform to the confidentiality guidelines outlined in 42 CFR Part 2, Confidentiality of Alcohol and Drug Abuse Patient Records: Final Rule, which generally regards all program information about defendants as confidential. Programs receiving test information must also follow 42 CFR.
- Under limited circumstances, programs can release information to other parties, but only as needed to carry out a specific duty involving the defendant.

- □ Release of information to anyone not a party to the MOU requires a defendant's written consent and a legitimate reason for requesting the information.
- **D** Programs should have written procedures for releasing information.

Part Three

Management Issues

Staffing

A drug testing program requires a staff of adequate size and training to perform program functions. Sufficient staff should be on board to observe chain of custody requirements during collection and transport of urine specimens to the testing location. The staff should be able to test specimens, process program information, and supervise defendants ordered into pretrial drug monitoring. Several factors determine staffing needs for a drug testing program.

The first factor is the size of the target population and the rate of supervised release. If the program conducts preinitial appearance testing, the target population determines how many specimens are collected and tested. The expected rate of supervised release after introducing drug testing determines how many defendants are placed into pretrial drug monitoring.

The number of hours of operation also affects staff size. Drug testing programs must have staff large enough to cover all urine collection and testing shifts. A program collecting and testing specimens only during standard business hours (for example, 8 a.m. to 5 p.m.) requires smaller staff than one operating 24 hours a day.

The size of the staff also depends on the number of duties performed by the agency and how responsibilities are allocated. Programs collecting and testing specimens inhouse will require larger staff than programs contracting these responsibilities to a laboratory. Programs incorporating collection or supervision duties into the work of the pretrial interview staff require smaller staff for its drug program.

An agency's financial resources inevitably affect the nature and scope of the drug testing program (see chapter 10, Costs of Pretrial Drug Testing, for a discussion of drug testing costs). Some jurisdictions may have the budget to staff an inhouse facility with collection, supervision, and testing personnel. Others may need to incorporate these activities into the duties of the present pretrial staff or contract them out to a laboratory. When projecting staff costs for a budget, program administrators must remember that sufficient staff are needed to ensure the privacy and due process rights of defendants tested and help prevent legal challenges to the drug testing program. Programs unable to hire adequate numbers of new staff or pass along drug testing functions to current staff should reduce the defendant population targeted for testing.³⁰

Staff Positions and Duties

Five positions are common to pretrial drug testing programs. Which positions a program fills depends on which jobs are done inhouse and which jobs are done by existing pretrial program staff.

Program supervisor. The program supervisor oversees the daily operations of the drug testing program and ensures adherence to written protocols. The supervisor also hires and trains new staff, schedules and staffs testing and collection shifts, and updates the procedures manual. The program supervisor should be well acquainted with the program's testing technology and be able to explain the testing procedure to program staff and the court.

Supervision officers. These officers monitor defendants in the program, reassigning them from one level of supervision to another. They also refer defendants to treatment. Additionally, supervision officers draft violation and status reports for court and represent the program at court hearings.

How a pretrial program staffs its supervision component is important because drug testing will likely increase the numbers of defendants supervised. To help manage the increased numbers, pretrial programs may incorporate drug testing supervision officers or supervision of the drug testing condition into the regular pretrial supervision office.

Specimen collectors. These staff members identify defendants for drug testing, explain the purpose and use of preinitial appearance tests to defendants, and directly observe defendants submitting specimens for both preinitial appearance testing and pretrial drug monitoring. Specimen collectors also carry specimens to the testing facility, observing proper chain of custody requirements. Often, personnel from contracted laboratories collect urine specimens.

Drug testing technicians. Drug testing technicians, or laboratory staff, test urine specimens and maintain the inventory of laboratory supplies. These staff calibrate and maintain the analyzers. They also monitor the accuracy of test results and must be proficient in the testing technology used by the program.

Data entry staff. Programs may employ staff to enter data into the information system or may assign data processing to other staff, such as supervision officers. Programs with multiuser automated information systems should hire a system administrator to maintain the system and oversee data entry (see chapter 8, Information System).

Recruiting and Hiring Staff for an Inhouse Testing Program

Laboratory staff for drug testing programs often come from chemistry, medical technology, or forensic science departments of local schools. Programs may prefer staff with these backgrounds; however, the technologies generally used for urine testing, particularly hand-held devices, do not require prior experience in these fields.

Local hiring policies determine how quickly the program can staff and begin drug testing. Usually, programs fit under one of the following hiring policies:

- □ The pretrial program hires staff independently. Some pretrial programs can independently post job announcements, screen candidates, and select new staff. Usually, these programs bring on prospective employees quickly.
- □ The pretrial program posts jobs through its parent department. Pretrial programs under a court, probation, corrections, or other department post job announcements through the department's personnel office. Either the personnel office or the pretrial program interviews and selects applicants.
- □ The jurisdiction hires for all public jobs. Some jurisdictions have a central personnel office for public-sector jobs. This office interviews applicants and sometimes gives a civil service-type exam. Applicants passing this exam are placed on an employees' list. Agencies needing employees pick applicants from this list.

When planning a pretrial drug testing program's timetable, program administrators should consider which hiring policies are in effect in the jurisdiction and allot enough time to follow those policies.

Staff from other pretrial program departments may be able to assume some duties of drug testing. For instance, interviewers might collect specimens, and supervision officers might monitor the drug testing condition. Before using existing staff to perform drug testing functions, program administrators should gain staff support for drug testing and for assuming some drug testing duties. Even if support for drug testing is high among staff, administrators must decide if adding drug testing functions to staff responsibilities would be a burden.

Training, Certification, Compensation, and Turnover

Staff training is important and can take several forms and proceed at several levels. Program administrators should develop a training program to acquaint supervisors with program policies and procedures. Supervisors in turn should train collectors and data entry staff.

Testing with hand-held devices does not generally require training from the vendor. Analyzer vendors should train and certify testing technicians. Vendors conduct special training programs that last anywhere from 2 days to 1 week. Whether hand-held devices or analyzers are used, testing staff should be kept up to date with advances in testing technology. Some vendors distribute newsletters to testing programs to help with this.

The testing program must verify that the contracted laboratory's specimen collectors and testing technicians meet the job requirements noted above and are certified by the testing analyzer's manufacturer. The program must also verify that laboratory staff meet state requirements for operating testing instruments.

Salaries for drug testing staff should be commensurate with those for comparable pretrial or probation program staff, and the pay scale of the testing program's supervisor should follow that of other department supervisors. Collectors' salaries should likewise follow those of interviewers, and supervision personnel salaries should be comparable with other supervision officers.

Drug testing programs often experience periods of high turnover. Collectors tire of the daily gathering of urine specimens. Laboratory staff who become proficient in laboratory procedures may not feel challenged by daily testing and choose to leave. Program administrators should anticipate regular turnover in the drug testing program and keep a network of hiring sources for future employees.

Performance Measures

A drug testing program will not operate efficiently if the size of the staff is not sufficient to meet the demands of the program or if staff have not been sufficiently trained. Officials should review the functions performed, the hours of operation, the amount of work completed, and the quality of work to determine if the size of the staff is appropriate and if any additional training is required.

Summary of Major Points

Staff size depends on the number of employees the testing program needs to operate efficiently. Sufficient staff should be on board to collect specimens properly, observe chain of custody requirements, test specimens, process program information, and supervise defendants ordered into supervised testing.

- Jobs common to a pretrial drug testing program are program supervisor, supervision officers, specimen collectors, drug testing technicians, and data entry staff. Programs with automated information systems may wish to hire a system administrator to maintain the information system.
- Staff from other pretrial system departments can assume some drug testing duties. The present staff should be part of and approve any decision to add duties to their jobs. Program administrators could also add drug testing functions to the job descriptions of new pretrial services officers.
- □ All staff must be trained to perform their jobs. Supervisors should train collectors and data entry staff. Testing technicians should be trained and certified by the testing analyzer manufacturer. Drug testing staff should be kept up to date with advances in testing technology.

Information System

Drug testing requires an information system for recording program information, reporting information to other parties, monitoring defendants in drug testing, and protecting the confidentiality of test results. This information system should provide program administrators with the means to organize, research, and control the operations of the drug testing program. Many pretrial programs have information systems that handle pretrial interview, criminal history, and other program information. For these programs, processing drug test information entails adapting the current system to record drug tests and monitor defendants ordered into testing.

Capabilities of an Information System

An information system should allow a pretrial drug testing program to perform the following functions:

- □ **Process all program information.** The information system should allow program staff to enter and retrieve drug test results, testing schedules, compliance reports, and violation notices. The system should catalog information by a defendant's name, identification number, and case number.
- □ Monitor the performance of defendants placed into pretrial drug monitoring. Program staff should know the status of each defendant in pretrial drug monitoring. Monitoring information comprises all test results; the defendant's current testing schedule, sanction level, and next appointment date; the results of any court hearings; and referrals to treatment.
- □ **Draft violation notices, status reports, and operational reports.** The system should allow program staff to gain access to information that enables them to draft reports to the court and other parties. Automated information systems should allow the program to print operational reports such as daily schedules of drug test appointments and lists of defendants who are in violation of the drug testing condition.
- □ Manage the flow of information between the drug testing program and other parties. The system should permit program staff to transmit information to and receive information from other agencies, particularly test information from contracted laboratories. If the system is on a mainframe computer, it should restrict access to test information from others using the mainframe.
- □ Evaluate the drug testing program and the drug testing condition. The information system should allow the program to evaluate the effectiveness of the drug testing condition and of program practices,

as recommended by the National Association of Pretrial Services Agencies.³¹ To evaluate drug testing, the information system must process demographic information on tested defendants, the rate of positive tests, charge information, and case outcome. To evaluate the drug testing program, the information system should process the rate of specimen collection, the efficiency of reporting test results, and the results of proficiency testing.

□ **Determine the rate of drug use and the types of drugs used.** The information system should allow local officials to track the drug use trends in the arrest population on a regular basis.

Types of Information Systems

Information systems are either manual or automated, but programs with automated systems usually keep hardcopies of all information entered into the automated system.

Manual Systems

Manual systems file copies of program information under a defendant's name, identification number, or case number. Information such as prior arrests may be stored in books or in files, with card indexes cataloging the books or files containing the information. Each card contains the defendant's name, date of birth, identification number, and the book, file, and page number containing other defendant information.

Automated Systems

These systems use microcomputers, minicomputers, or mainframes to store information. Microcomputers or personal computers (PCs) are the smallest and, usually, least expensive computers. They can be fitted with floppy or hard disk drives and can run various software packages. They can be single-user systems or combined into a multiuser system or local area network (LAN). A file server—a computer with large storage capacity and fitted with the LAN's operating software—links the PCs together and acts as the system's main storage unit. PCs that are in a LAN share information and applications such as additional storage and printers.

Minicomputers are multiuser systems often employing one central processing unit and several "dumb" terminals—visual display terminals with no processing ability. Examples of minicomputers include the IBM AS400 and System 36/38 and Digital Equipment Corporation's Microvax.

Mainframes are larger than LANs and minicomputers and can hold more information. They can contain several individual automated systems. Each individual system may have access to some or all of the information stored under other systems in the mainframe. In an automated system, screens can be designed to emulate the hardcopy forms used with manual systems. Each screen is prompted by the defendant's name, identification number, or case number. Most automated systems also have manual backups of information in case the automated system is inoperable.

Choosing an Information System

Both manual and automated systems have strengths and weaknesses. Generally, manual systems are less expensive and easier to set up and maintain. They may be ideal for programs with low volumes of information and minimal information processing needs. However, manual systems may limit a program's ability to research the efficiency of the drug testing program and the drug testing condition. Programs using manual systems may not be able to generate certain operational reports quickly or at all.

Automated systems cost more than manual systems and require more effort to maintain. In a mainframe shared by different users, drug testing staff may often have to wait to enter and retrieve information due to other users on the mainframe. Automated systems may also have significant downtime, making the system unaccessible. However, an automated system can handle larger volumes of information and provide the program with better research and report-generating capabilities than a manual system.

Several factors are considered in choosing an information system:

- □ Estimated volume of testing. To estimate the volume of information after implementing drug testing, a pretrial program must determine whether drug testing will increase the number of defendants released into its custody with the drug testing condition. Programs expecting a small increase may opt for a manual information system or a single microcomputer fitted with database software. Jurisdictions expecting a large increase in volume may need an automated system.
- □ **Capability of the current information system.** The information system in place may be sufficient to handle the information needs of a drug testing program or may only need a simple upgrade.
- □ Expected uses of the information system. Programs planning only to track a defendant's progress through the drug testing program may need only a manual system. Programs planning to research drug testing as a release condition or monitor the efficiency of the pretrial drug testing program may prefer an automated system. Programs wishing to streamline information entry or upgrade the capability to generate operational reports also may need an automated system.

Processing Drug Testing Program Information

Test Results

The information system should catalog results from all drug tests and include the test date, the collector's name or initials, the type of test, and the next scheduled test date. Also included should be the defendant's present status in the program, such as current testing schedule and sanction level. Exhibit 8–1 is a variation of the test result screen in the automated system used by the Washington, D.C., pretrial program. Although formatted for a computer, the screen can be adapted to a manual system.

Some testing analyzers can be programmed to file test results directly into an automated system. Programs using these systems also make hardcopies

Exhibit 8-1 Sample Test Result Screen

Substance Abuse Detail		
Date of data entry		
Identification number:	Name:	
Defendant's testing schedule:		
Defendant's current status in prog	ram:	
Defendant reports using: Within:		
	(W=Week, M=Month)	
Test date: Test:		
(S=Sch	eduled, U=Unscheduled, L=Lockup, O=Other)	
(Collec	tor's initials)	
Test results: (P=Positive, N=Negative, O=No test, I	D=Did not submit, F=No show, J=Jail)	
Amphetamine:		
Cocaine:		
Methadone:		
Opiate:		
PCP:		
Next test date:		

of test results and file them with other information regarding compliance to pretrial release conditions. Program administrators, in collaboration with the manufacturer, should determine the testing analyzer's ability to interface with existing computer systems.

Programs contracting testing to an outside laboratory must include in their information system the method for transferring test information from the laboratory to the program. For example, programs can use facsimile machines or modems to transmit hardcopies of test results. In automated systems, the information could go directly into the database; in manual systems, a hardcopy of the information would be sent to the program. Program staff would record each test result in the defendant's file and keep the hardcopy as a log of the day's test results. Another option is hand delivering results from the laboratory to the testing program.

Initial Release Records

These records should include the drug testing condition because drug conditions become part of the court's release order. Programs should keep hardcopies of the release forms used by the court and the form outlining the conditions of pretrial release, including the drug condition.

At the initial test, program staff should log in the defendant's results and appointment schedule into the information system. Using the substance abuse detail screen shown in exhibit 8–1, an initial test would appear as illustrated in exhibit 8–2.

Tracking Defendants Placed Into Pretrial Drug Monitoring

The information system should permit entry and retrieval of information on scheduled dates and the defendant's current program status. Users should be able to generate reports using the system to reduce the work needed to supervise drug program defendants.

Programs should record all test results on the drug test recording form or the formatted computer screen. The information system should group the test results under the defendant's name and identification number or case number. Each test result should have the defendant's test schedule, next test date, and status in the program.

For each test date, the information system should generate a list of defendants due for testing. In addition to the name and identification number of each scheduled defendant, this list may contain the results of previous drug tests (positive for which drug, failure to report, excused absence) and the defendant's sanction level. A sample drug testing log is provided in exhibit 8–3.

Exhibit 8–2 Completed Initial Test Result Screen

Substance Abuse Detail	
	Date of data entry <u>11/02/98</u>
Identification number:	Name:John Doe
Defendant's testing schedule:	
Defendant's current status in program:	
Defendant reports using: Cocaine	Within: W
	(W=Week, M=Month)
Test date: <u>11/01/98</u> Test: <u>L</u>	
(S=Scheduled, U=L	Inscheduled, L=Lockup, O=Other)
Escorted by:	
(Collector's initials)	
Test results:	
(P=Positive, N=Negative, O=No test, D=Did not su	ubmit, F=No show, J=Jail)
Amphetamine: <u>N</u>	
Cocaine: P	
Methadone: <u>N</u>	
Opiate: <u>N</u>	
PCP: <u>P</u>	
Next test date: 11/08/98	

Drafting Violation Notices, Status Reports, and Operational Reports

A manual information system should allow the program to create violation and status reports for court personnel, prosecutors, and defense attorneys. This task requires quick access to a defendant's current status, record of test dates, results and appearance, case number, and next court date. An automated system should allow the program to generate reports automatically.

A manual information system should keep all information on a pending case together in one file. Each case file should go into a larger file of defendant information. This allows the program to check compliance in several pending cases at once. One type of compliance file is a log of condition compliance. The log would include the release date and conditions, test

Exhibit 8–3 Sample Drug Testing Log

Daily Drug Testing Log

		(Date)
Name:	DOB:	Identification number:
Testing schedule:	Case numb	er: Next court date:
Judge:		
Defendant's address:		
Phone:		
Last test date:	Results:	
(Dru	ug: Pos/Neg, Failed	d to report, Unable to submit, Excused)
(Dru	ug: Pos/Neg, Failed	d to report, Unable to submit, Excused)
Test date:	Results:	
(Dru	ug: Pos/Neg, Failed	d to report, Unable to submit, Excused)
(In complianc	e, In technical viola	ation, Violation notice sent, Terminated)
Next scheduled drug	test:	
Collector:	7	Fime of collection:
Time sample taken to	aboratory:	
Review release cond	itions:	Check address:
Review court date:	Re	view next test date:
Reviewer:		

dates and results, internal and formal sanctions, and a running commentary on compliance.

An automated system should have a supervision subsection logging release conditions and compliance. This subsystem would be similar to the manual compliance log and would include the full record of defendant reports including testing appointments, internal and formal sanctions applied, and the dates of court actions. Each supervision log should pertain to a single pending case.

Status Reports

Programs may opt to send status reports to judges on the dates a defendant is due in court. Usually, these reports are compilations of the defendant's scheduled testing appointments to date. Each test date includes the result of each test.

In Washington, D.C., the judge handling a case can access a drug test result status report online at any time. The judge has a computer on the bench in the courtroom and views the results while the defendant is in court.

Exhibit 8-4 Sample Violation Report

Violation Report	
То:	_
(Judge's name)	
From:	
(Program Staff Person)	
RE: Defendant:	_ DOB:
Case number(s):	
Your Honor:	
On, the above-named defendant was releas (date)	ed to the supervision of
this agency with the following conditions:	
(Poloopo conditions)	·
(Release conditions)	
The following violations are alleged:	
The defendant failed to report for scheduled drug tes	ting on:
The defendant tested positive for drug use on the foll	owing dates:
	·
Other violations:	
	•
Recommendation:	
Release with the following conditions:	
	·
Revocation of release and a contempt sentence of _	, followed by
release on the following conditions:	

Violation Report

Violation Reports

Violation reports include information about the specific violation, attempts to bring the defendant into compliance, and recommended sanction (see exhibit 8–4). In addition to making this information readily available, the information system is likely to make drafting the report easier. Most automated systems can combine information from different subsections into a report. Stand-alone PC systems should include templates of the standard violation form. The template is similar to a hardcopy form, and program staff fill in information at various prompts on the screen. If the program has a variety of recommended sanctions, the screen should include information about each sanction and the conditions under which it should be recommended. As with status reports, violation reports can be transferred automatically to the judge handling the case.

Evaluating the Drug Testing Program and the Drug Testing Condition

The information system should allow program administrators to assess the effectiveness of drug testing and the operation of the drug testing program. It should allow for collecting data on trends such as rates of positive results and specimen collection and the types of defendants testing positive. It should also allow the program to analyze the data in these categories. Automated systems should have the capacity to generate statistics from the data collected.

Issues in Information Processing

Ensuring Information Flow and Integrity

To ensure timeliness and consistency of information, programs should assign data entry duties to specific staff. These duties include entering test results, schedules, current status, and next test dates. If a program uses an automated system, staff should be assigned to generate and update operational reports. Staff should record information in the automated system and make a manual copy as a backup.

Programs with automated information systems should hire a qualified system administrator to troubleshoot problems that may occur and to enhance the system. Pretrial drug testing programs with either automated or manual information systems might consider staffing a data-processing unit to check the accuracy of the information entered and to back up system information.

Automated systems can fail from a hardware malfunction or software problems. To protect records from such failures, the program should keep hardcopy records as backups. The data-processing staff or system administrator should create and maintain the backup records.

Ensuring Confidentiality

If drug test information is kept on a mainframe shared by other users, the pretrial program must restrict access to the information to parties who have a right to review the results. Computer units can be fitted with passwords to certain screens and locked after business hours. Either the supervisor or system administrator should lock manual records and determine who should have access to them. Exhibit 8–5 shows how programs can select information system capabilities that meet their needs.

Need	System Capability
Processing program information in the testing program.	Easy entry and access; cataloging of drug test information by the defendant's name, identification number, or case number. Paper forms or computer screens to enter information.
Monitoring defendants placed.	Paper forms or computer screens to record drug test results, appointments, current status in the testing program, violations forwarded, and treatment referrals.
Protecting confidentiality test results.	Automated systems that can restrict information to unauthorized users. Manual records locked and restricted by a staff person.
Creating notices and reports.	Automated systems with report-generating ability. Manual reports requiring specific information on the defendant and the violation. Automated templates with formatted reports.
Evaluating drug testing the drug testing program.	Systems that can codify data in demographic and condition categories such as age, race, gender, rate of positive tests, rate of specimen collection, and defendants testing positive and negative. Systems that run statistical functions or are compatible with statistical software.

Exhibit 8–5 Checklist for Assessing Information-Processing Needs

Performance Measures

In reviewing the performance of the information system, program administrators should evaluate how quickly staff can gain access to data and generate notices and reports. They should also assess the security of test results within the system. Any instances in which an unauthorized party gains access to the system must be investigated, and measures must be taken to prevent future occurrences. Officials should also examine whether the system is capable of efficient data entry and retrieval of drug test information. A pattern of inability to gain access to information because of computer failure or other problems must be addressed.

Summary of Major Points

- □ An information system should allow the pretrial drug testing program staff to enter test results, monitor the performance of defendants in pretrial drug monitoring, draft violation notices and status reports, and evaluate the drug testing program and the drug testing condition.
- An information system may be manual, automated, or a combination of both. Automated systems include microcomputers, minicomputers, LANs, and mainframes.
- □ Whether a program uses an automated or a manual system depends on the volume of testing it expects, the capability of its current information system, and the anticipated use of the information system.
- If a program uses an automated system, it should keep hardcopies of information such as test results, referral notices, and violation requests. Staff should store these forms in a file containing information on compliance with all release conditions.
- An information system should keep all information on a pending case in one file. Manual systems should incorporate a log of condition compliance. The log should include the release date and conditions, test dates and results, internal and formal sanctions, and a running commentary on compliance. Automated systems should have a supervision subsection logging release conditions and compliance and should include the full record of defendant reports including test appointments, internal and formal sanctions applied, and dates of court actions.

Procedures Manual

The procedures manual is a guidebook of the testing program's policies and procedures and is a necessity for a pretrial drug testing program. It serves as a training tool for new employees and a reference for current employees and persons outside the drug testing program. The procedures manual explains how the program targets defendants for testing, collects and tests urine specimens, supervises defendants ordered into pretrial drug monitoring, releases drug test information, and handles violations of the drug testing condition. It also states which program staff are responsible for what function.

Writing the Manual

Before drafting the procedures manual, all functions of the drug testing program should be outlined including:

- □ Targeting defendants for testing.
- □ Collecting urine specimens and observing chain of custody for preinitial appearance and pretrial drug monitoring specimens.
- □ Testing specimens, including retesting and confirmation, and sending test results to the court.
- Placing defendants into pretrial drug monitoring and creating testing schedules.
- □ Tracking defendants through the drug testing program.
- **D** Responding to program violations and terminations from the program.
- □ Adhering to confidentiality requirements.

Staff members responsible for each function should be indicated, as well as materials (such as forms and testing paraphernalia) needed to perform the function and the entries that need to be made in the program's information system.

The manual should be written in language easily understood by persons unfamiliar with the program, and technical terms should be explained on first occurrence. Sentences should be short and sections should be brief.

The manual should be organized in a sequence that follows a defendant's progress through the drug testing program. In the first section, the procedures for targeting defendants for testing should be described. The second section should address obtaining consent, collecting specimens, and maintaining chain of custody. Later sections should describe the information system, sanctions for program violations, and confidentiality policy. Each section should give the date of when it went into effect and should list the staff responsible for the tasks mentioned. For example:

Page
Effective Date:

Sections of the Manual

Targeting defendants for testing. The first section should identify the defendants targeted for preinitial appearance drug testing: for example, all defendants or all felony-charged defendants. If the program does not conduct preinitial appearance testing, this section should explain how to identify defendants for testing. If the program uses an assessment scale to select defendants, the manual should identify which division does the assessment and how. For example, interviewers may use the assessment scheme to recommend pretrial drug monitoring after determining a defendant's release eligibility.

Urine collection and chain of custody. This section should follow the procedures described in chapter 4 (Chain of Custody) and chapter 11 (Legal Considerations in Pretrial Drug Testing). The section should instruct collectors to explain to program participants that preinitial appearance testing is voluntary, make certain that defendants understand the concept of voluntary consent, and note the drugs and legal medications the defendants admit using.

The chain of custody discussion should detail the procedures for collecting urine specimens, guarding against tampering during specimen submission, and transporting specimens to the laboratory. This section should advise staff to take particular care when observing the voiding of the specimen during pretrial drug monitoring since defendants can contaminate or switch specimens during that time.

Testing procedures. Testing procedures should describe how to perform initial tests, retests, and confirmation tests. Because initial testing should follow manufacturer's guidelines, these guidelines should be included in the body of this section. Policies for followup testing of positive specimens should also be discussed.

Testing procedures should also explain the manufacturer's guidelines for properly operating the analyzer or hand-held device. Other testing procedures to be discussed include when and how to dispose of urine specimens and how to handle positive results that might have been caused by prescribed medications (see chapter 5, Testing of Specimens).

Testing schedules in pretrial drug monitoring. The manual should explain how to schedule appointments for defendants ordered into pretrial drug monitoring and how the program determines a defendant's testing schedule (see chapter 3, Integrating Drug Testing Into the Supervised Release Process).

Violation procedures. The manual should list the sanctions incurred for each instance of a positive test or missed appointment. It should state the exact response to an infraction, from an informal talk with the defendant about his or her compliance to a formal request for bond revocation. It should also identify who carries out the response. The manual should specify the number of infractions after which violation notices are written, how the notices are prepared, and what recommendation, if any, is made to the court. A sample of the violation notice should be included in an appendix to the manual. The manual should also describe reduced requirements for defendants who abide by program conditions (see chapter 3, Integrating Drug Testing Into the Supervised Release Process).

Information system and case tracking. The manual should describe how the program tracks defendants through the drug testing program, including procedures for recording initial test results, placing defendants into pretrial drug monitoring, entering results of scheduled drug tests, noting internal and formal sanctions used, and recording the information sent to the court and other parties (see chapter 8, Information System).

Confidentiality policies. Confidentiality policies listed in the manual should be the same as those in the Memorandum of Understanding (MOU). The manual should state who can receive program information and under what circumstances. It should also note when release of information to the MOU parties and other agencies requires a written consent form signed by the defendant. In addition, the manual should identify the staff responsible for releasing information and list procedures for identifying parties requesting information, releasing information, and logging the release in the program's information system. It should explain procedures for storing program information.

The manual should also state to whom information is never released such as the media and victims—and the policy on releasing information to the defendant's family, friends, or employer. Finally, the manual should explain the penalties for violation of confidentiality rules by program staff. This may include suspension, other disciplinary action, or job termination (see chapter 6, Confidentiality). **Appendixes.** The manual should include sample forms or memorandums mentioned in the text in appendixes. Such forms or memorandums include:

- □ The consent form used to explain the program to arrestees before preinitial appearance testing.
- □ The label placed on specimen bottles after a defendant submits a specimen.
- □ The urine collection log used to record specimen collection for preinitial appearance and pretrial drug monitoring.
- □ The assessment scheme or other criteria for recommending defendants into pretrial drug monitoring.
- □ The specimen transfer form used to record the receipt of urine specimens by laboratory personnel.
- **□** The form sent to the court showing the results of drug testing.
- **□** The exit interview form.
- □ The information system's log of scheduled appointments.
- □ The violation notice.
- □ Referral-to-treatment forms.

Other appendixes could include:

- □ 42 CFR Part 2, the federal standards for confidentiality of drug test results.
- □ The program's MOU and other local directives relating to the program.
- Laboratory procedures for testing if the program uses a contracted laboratory.
- □ The arrest charges making a defendant eligible for preinitial appearance testing or pretrial drug monitoring.
- □ The pretrial program's recommendation scheme.

Updating the Procedures Manual

The procedures manual should be updated when procedures change. Updates should be specific and note the staff affected by the change and any new forms or computer entries required. Updates should include the date that the new procedure takes effect.

The procedures manual should be kept in a three-ring binder so staff can add or remove sections easily.

Summary of Major Points

- □ A procedures manual describes all the pretrial drug testing program's policies and procedures. It serves as a training guide for new employees and a reference for current employees and persons outside the program.
- □ The manual should note which person or unit is responsible for carrying out each function. It should be written to be easily understood by persons unfamiliar with the program. Sections should be brief, with technical terms explained, and should explain a defendant's progress through the program.
- Sections should include the dates procedures went into effect. The manual should accommodate changes in program procedures and should be updated whenever procedures change. Updates should note the staff affected by the change and any new forms or computer entries required.

Costs of Pretrial Drug Testing

One frequently asked question about drug testing in criminal justice settings is, "How much does it cost to set up and run a testing program?" The answer is often frustrating: "It depends." Although accurate, this response is hardly helpful. This chapter seeks to provide a more satisfactory answer by providing actual costs for the various approaches to drug testing, as well as other costs associated with each approach.

Testing Approach

The options available for testing are discussed in chapter 5, Testing of Specimens. Briefly, these options include:

- □ Setting up an inhouse analyzer-based testing facility.
- □ Testing inhouse with disposable, hand-held devices.
- □ Contracting with a local private laboratory or sending specimens to a national commercial laboratory.
- **□** Testing with the sweat patch.

Exhibit 10–1 provides an overview of the cost of various testing approaches to a five-drug screen.

Different cost factors are included with each option. Programs using the inhouse analyzer-based testing approach find that a urine specimen can be tested for one drug for an average of \$1; a five-drug screen costs \$5 on average. These figures include only the costs of reagents—the chemicals needed to run the test. They do not include startup costs associated with an inhouse analyzer-based facility, including the purchase or lease of equipment³² and facility renovation.³³ They also do not include the cost of maintenance contracts on analyzers. Such contracts, which could run into thousands of dollars per year depending on the number and type of analyzers, ensures that the instruments remain serviced and are promptly repaired.³⁴

These figures do not include staff costs. In an analyzer-based facility, staff time is needed to calibrate the analyzer, prepare the reagents for testing, perform quality control checks, and conduct daily maintenance procedures. Because these procedures involve multiple steps, staff must be thoroughly trained.

A variety of portable, hand-held devices are on the market for programs that choose this testing approach. The use of these devices results in testing costs that range from \$2.50 to \$4.50 per individual test. Programs that use these devices avoid many expenses associated with analyzer-based testing, such as equipment purchase, facility renovation, and staff time to conduct procedures that are critical to analyzer-based testing.

Testing Approach	Average Cost Per Screen [†]	Included in the Cost	Not Included in the Cost
Inhouse analyzer- based testing	\$5.00	Chemicals to conduct test.	Purchased or leased equipment. Facility renovation. Maintenance contracts on analyzers. Specimen collection supplies. Staff time to collect specimens. Staff time to calibrate and maintain analyzers. Staff time to mix chemicals needed to run tests. Staff time to run tests. Confirmation of positive results.
Inhouse hand-held devices	\$17.50	Testing devices.	Specimen collection supplies. Staff time to collect specimens and run tests. Confirmation of positive results.
Local private certified laboratory	\$100.00	Conducting the test. Confirmation of positive results by GC/MS.	Specimen collection supplies. Staff time to collect specimens. Costs to transport specimens to laboratory.
National private certified laboratory	\$10.00	Conducting the test.	Specimen collection supplies. Staff time to collect specimens and prepare them for shipment. Shipping expenses. Confirmation of positive results.
Sweat patch	\$23.00	Price of the patch. Shipment to a commercial laboratory. Conducting the test.	Confirmation of positive results.

Exhibit 10–1 Comparison of Costs of Testing Approaches for a Five-Drug Screen*

^{*}A five-drug screen is selected so that more direct cost comparisons can be made among all the approaches. The sweat patch, as currently designed, tests exclusively for five drugs: amphetamine, cocaine, marijuana, opiates, and PCP. All the other approaches allow for single or multiple screen testing.

¹It is important to remember that these costs will vary depending on a number of factors. For example, many programs that use analyzer-based inhouse testing find that testing costs average \$1 per test or \$5 for a five-drug screen. Other programs with a low volume of testing might pay higher costs for reagents. Volume may also affect the prices of testing at an outside laboratory. The average cost listed for the hand-held devices was derived by taking the middle point of the price range (\$2.50 to \$4.50 per test multiplied by five). The actual price of a five-drug screen using hand-held devices would range from \$12.50 to \$22.50.

If a local private laboratory is used to conduct the testing, pretrial programs should contract only with laboratories that have received certification from the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services. Using certified laboratories provides assurance that the results will be as accurate as possible. Costs vary for such testing but average \$20 for each drug tested.

For years, many criminal justice agencies that test for drug use have used the testing services of national commercial laboratories. Results are usually available within 48 hours. Costs typically range from \$2 to \$3 per individual drug tested or from \$10 to \$15 for a five-drug screen.

Testing with the sweat patch involves a very different approach to testing. The patch tests perspiration, rather than urine, for evidence of drug use. The patch is typically applied and removed by program staff and then shipped to a commercial laboratory for testing. Because the patch can detect any drug use while applied to the subject and can be worn for 1 to 2 weeks, it monitors drug use more efficiently than urine testing.

Patches are sold in packages of 50, with each patch priced at \$7 or \$350 for a package. Each patch comes with the supplies to apply, remove, and ship it to a laboratory, which typically will charge \$16 to screen for five drugs³⁵ and an additional \$22 to confirm positive results by gas chromatography/mass spectrometry (GC/MS).

Confirmation Testing

As noted in chapter 5, in many cases, specimens that test positive should receive followup testing. That testing can take one of two forms: retesting the specimen using the same type of test employed for the initial test or confirming the result through the use of a technology that is analytically different from and more specific than the technology used in the initial test. Although courts have generally approved the admittance of positive drug test results confirmed through simple retesting using the same technology, SAMHSA recognizes followup testing by GC/MS as the most reliable means of confirmation.

Confirmation of all positive results through GC/MS can become very expensive, with costs ranging from \$20 to \$50 per positive result. A less costly option is available for jurisdictions where a simple retest is insufficient for court action: the program can use GC/MS to confirm only those results that are disputed by defendants and that would lead to a court sanction against the defendant.

Specimen Collection Costs

When calculating the costs of a drug testing program, staff time to collect the specimen should be considered. If a high volume of testing is involved, separate collection staff may be needed.

Specimens collectors should always wear disposable gloves. Suitable gloves are available from a number of sources and can be purchased in packages of 100 for between \$10 and \$15. Specimen containers, available from medical supply companies in packages of 100, should be available for between \$20 and \$25. Temperature strips, which are attached to the specimen container immediately after a specimen has been provided to measure its temperature to verify that it was freshly voided, are also available from medical supply companies in packages of 100 for between \$20 and \$25.

Point of Testing and Target Population

Jurisdictions that have tested for drug use at the pretrial stage have applied the testing at two different points: one test just before or immediately after the initial appearance in court to help identify drug users and tests on a regular basis during the pretrial supervision period to monitor defendants' drug use. Some jurisdictions have used drug testing to both identify and monitor drug users. Others use testing exclusively to monitor drug use of defendants once released (see chapters 2 and 3).

Regardless of whether testing is done to identify drug users or to monitor their use during supervision, officials must identify the population to be targeted for participation in drug testing. Several options exist from which to choose. Some examples include:

- □ All defendants charged with a felony drug offense.
- □ All defendants charged with a felony or misdemeanor drug offense.
- Only felony defendants identified during the pretrial intake process (through interviews, collateral information, or drug test results from probation supervision, for example) as drug users.
- □ All defendants identified during the pretrial intake process as drug users.

Once a decision is made regarding point of testing and the target population, program officials need to estimate the number of defendants likely to fall within that population. For example, if the program is using drug testing to identify drug users coming into the system who are charged with violent felony offenses, officials should examine data over the past year to determine how many defendants fall into that category.

Drug Screen

The drug screen refers to the number and types of drugs for which a test is run. A variety of options exist in the selection of drugs for which tests will be conducted. For example, the program could test for cocaine, morphine, and amphetamine in every test; expand the screen to include phencyclidine and marijuana; or select the drugs that will be included in the screen on a case-by-case basis. Most technologies available for drug testing, whether using hand-held or analyzer-based devices, allow a program to customize its drug screen.

In selecting the drug screen, program officials should determine which drugs are most prevalent in the jurisdiction through discussion with law enforcement and other criminal justice officials and through review of available data. Periodically, spot checks should be conducted for other drugs. When testing a defendant during the supervision period, one costsaving measure may be to test the defendant primarily for his or her drug of choice.

Frequency of Testing

A defendant on supervised release with a drug testing condition is required to report regularly to the pretrial program for drug testing. If the program uses the sweat patch for testing, the defendant reports once a week so that the patch can be removed and a new one applied. If the program uses urine testing, given the retention time of drugs in urine, defendants do not need to report more than three times a week; even weekly testing should be sufficient to detect chronic drug users.

Compliance and Sanction Policies

The pretrial program should develop sanctioning policies for defendants who continue to test positive or who fail to report for testing. These policies have an impact on testing costs. For example, if a defendant tests positive on a once-a-week test, the policy may call for increasing the frequency of testing to twice a week. On the other hand, the policy may call for removing individuals from further testing requirements after a number of negative test results have been recorded.

Forecasting precisely what the impact of these policies will be on the number of tests being done is difficult. Therefore, caution should be used in estimating their impact on costs.

Other Factors Affecting Costs

Rate of Drug Abuse Within Target Population

The percentage of drug-using defendants affects the costs of testing. A jurisdiction in which 60 percent of defendants under supervision are identified as drug users may wish to dedicate more testing resources than a jurisdiction where only half as many drug users have been identified.

Average Length of Time Target Population Is Under Supervision

The average time of supervision should be calculated at several levels. The average duration of supervision for each group should be determined and broken down further by whether the charge or offense is a misdemeanor or felony. For example, the average pretrial supervision period in a jurisdiction may be 9 months for felony cases and 6 months for misdemeanor cases.

The size of the target population, the rate of drug use within that population, and the average length of time these defendants are in pretrial drug monitoring can be used to determine the average caseload of drug users in each group. One important caveat, however, is that in those jurisdictions that use drug testing to identify as well as to monitor drug users, defendants not currently under supervision will likely be identified as requiring drug testing.

Information System Costs

Information processing is a critical element of a drug testing program. Although a variety of options are available for the processing and exchange of information, the cost implications of any enhancements to existing information systems must be considered.

Summary of Major Points

- □ The ultimate cost of a pretrial drug testing program depends on a number of policy decisions, including who and when to test, how to test, what to test for, and how often to test.
- □ Program administrators can better plan their drug testing budgets by carefully calculating the impact of these policy decisions on costs.

Part Four

Legal Issues

Legal Considerations in Pretrial Drug Testing

Drug testing at the pretrial stage can implicate several constitutional rights including:

- **□** Fourth amendment requirements for the reasonableness of a search.
- □ Fifth and fourteenth amendment due process issues.
- □ Fourteenth amendment equal protection issues.
- □ Fourth amendment requirements for a consent search.

General Fourth Amendment Issues

The fourth amendment states that:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation and particularly describing the place to be searched, and the persons or things to be seized.

Traditionally, with noncriminal searches—those not conducted for evidence in a trial—courts determine reasonableness under the fourth amendment through a balancing test. This test requires courts to balance the need for the search against its intrusion into an individual's reasonable expectation of privacy. Considered in this balance is the reason for the search, whether individualized suspicion exists to search the individual or that person's belongings, and how the government would conduct the search.³⁶ In 1989, the U.S. Supreme Court defined drug testing as a search under the fourth amendment.³⁷

Preinitial Appearance Drug Testing

Several pretrial programs that have done preinitial appearance drug testing have conducted tests without suspicion of individual drug use. A question may exist of whether, at the preinitial appearance stage, the government has an interest strong enough to outweigh individual privacy rights.³⁸ To be reasonable, preinitial appearance drug testing may have to be exempt from a requirement for individual suspicion and probable cause. One such exception, used by programs that have tested preinitial appearance, is a search based on a defendant's voluntary consent. Perhaps as a result of establishing consent before the test is taken, no known challenges have occurred to date on the constitutionality of preinitial appearance testing.

Pretrial Drug Monitoring

Testing at the postrelease stage has been challenged in the courts on fourth amendment grounds. In one case, a defendant who was ordered into pretrial drug monitoring challenged the Washington, D.C., pretrial drug testing program as violating his fourth amendment protections against unreasonable searches and seizures. The trial court ruled against him, finding that the drug testing program did not raise issues of "constitutional dimension" [Berry v. District of Columbia, No. 84–2659, slip op. At 7 (D.D.C. June 14, 1985)]. In 1987 the court of appeals found that pretrial drug monitoring amounted to a search and seizure under the fourth amendment and reversed the trial court ruling. The court of appeals also stated it could not rule on the drug testing program because the trial court's record "with respect to this issue is virtually barren" (833 F.2d. 1031, 1034). It remanded the case for the trial court to make findings on the drug testing program's reasonableness, using the traditional balancing test. Among the issues for the trial court to consider are the possible correlation between drug use and pretrial misconduct, the reasonableness of assuming that defendants ordered into the drug testing program are potential drug users, and the manner in which drug testing was conducted. The Berry case was eventually dismissed by the lower court in August 1991.

In 1995, the Supreme Court of California ruled that imposing drug testing as a condition of pretrial release does not violate a defendant's fourth amendment rights (*In re York*, California Sup. Ct., No. S032327, 4/27/95, 54 Cr.L. 1568). In affirming an appellate court's ruling, the supreme court reasoned that drug testing constitutes a "reasonable" condition that a bailsetting court may impose on a defendant to ensure public safety.

In 1996, in another challenge to the D.C. pretrial drug testing program, a defendant appealed his conviction for criminal contempt of court for violating the release condition to abstain from illegal drugs. The defendant had tested positive for illegal drugs on several occasions. The District of Columbia Court of Appeals denied the motion to suppress the results of the drug test and, in doing so, upheld the constitutionality of drug testing as a condition of pretrial release. In addressing fourth amendment issues, the court wrote

[T]he means, i.e., drug testing, selected by the court to protect the applicable governmental interests could reasonably be viewed as the "least restrictive" available as the statute requires. It may not be practical to ask a given arrestee whether he or she has been using drugs while on release, for there is no assurance that the arrestee will respond truthfully. Testing is a reliable way to monitor drug use, and testing by analyzing urine samples is less intrusive than blood tests, and less restrictive than constant supervision or incarceration. [*Oliver v. U.S.*, D.C. Ct. App, No. 95–CO–434, August 29, 1996]

Reasonableness of the Testing Method: Determining the Testing Population

How a drug testing program collects and tests urine specimens and who it tests will help determine whether the search is conducted reasonably. In public employee cases, courts have favored testing programs that create the most private and nondegrading testing atmosphere possible and that ensure against unnecessary disclosure of test results.³⁹

Courts also have favored drug testing that is narrow in scope. The Supreme Court questioned whether the U.S. Customs Service should test employees in certain work categories,⁴⁰ and the U.S. Court of Appeals for the District of Columbia had doubts that all arrestees ordered into D.C.'s drug testing program were potential drug users.⁴¹

Due Process

The 5th and 14th amendments guarantee fair court proceedings before liberty is deprived⁴² (procedural due process) and forbid government behavior that "shocks the conscience"⁴³ (substantive due process).⁴⁴

Substantive Due Process: Chain of Custody and Urine Collection

Courts have held that extracting bodily fluids, even forcibly, does not offend due process if done reasonably. In *Schmerber* v. *California*, 384 U.S. 757 (1966), for instance, the U.S. Supreme Court ruled that forcibly taking a blood sample conformed to due process because it was done in a hospital and blood extraction is a common and safe procedure.⁴⁵ Lower courts have ruled that drug testing complies with substantive due process when reasonable collection and testing procedures exist.⁴⁶

Procedural Due Process: Chain of Custody and Reporting Violations of the Drug Testing Condition

In public employee cases, courts have determined the presence or lack of procedural due process on the reliability of the testing method⁴⁷ and the need for a hearing before any adverse action (such as job termination or demotion).⁴⁸ To satisfy procedural due process requirements, testing programs must have in place a chain of custody policy for proper sample collection and handling, proper testing guidelines, and scientifically reliable testing technology (see chapter 4, Chain of Custody, and chapter 5, Testing of Specimens).⁴⁹

Reliability of Testing Technology: Reporting Violations of the Drug Testing Condition

Most pretrial drug testing programs perform the initial test and retests using the immunoassay technique. Courts hearing probation and parole revocation cases and considering impeachment of a defendant's testimony at trial have found that retests on immunoassay have reached a level of general acceptance in the scientific community and satisfy due process concerns.⁵⁰ Still, because immunoassays can produce false positive results, courts have recognized the importance of confirmatory testing (confirming against false positive results), which can only be done using more accurate technology.

Equal Protection

The 14th amendment also prohibits differential treatment of similarly situated groups or persons unless a legally satisfactory reason exists. In the *York* case, the Supreme Court of California took up the issue of whether requiring defendants placed on pretrial release to submit to drug monitoring violated equal protection because defendants who could afford bail had no such requirement. The court held that this was not a violation of equal protection, noting

[T]he legislature clearly had a rational basis for concluding that public safety would be enhanced if such defendants [those deemed risks to public safety], when afforded the leniency of a bail-free release, were required to comply with those reasonable conditions that a court or magistrate, in his or her discretion, believed to be necessary in order to deter further criminal conduct.⁵¹

Consent

Whether consent to preinitial appearance drug testing is voluntary has not been formally questioned in any demonstration program jurisdiction. This could partly be due to the procedures used by the demonstration programs to ensure that consent to testing is indeed voluntary. Despite the lack of challenges, specific requirements exist for obtaining consent that programs must respect. The Supreme Court has also exempted searches based on consent from the fourth amendment's requirements for individualized suspicion.⁵² Lower courts have ruled that valid consent negates the need to balance individual privacy interests to the government's need for the search because an arrestee waives those interests.⁵³

The principal Supreme Court decision on consent searches is *Schneckloth* v. *Bustamonte*, 412 U.S. 215 (1973). In that case, the Court developed the "to-tality of the circumstances" approach to define coercion and the factors that determine if it exists. *Schneckloth* dealt with consent to a search in a

criminal case, but lower courts have used the totality of the circumstances approach when ruling on the voluntary nature of consent given for drug testing.⁵⁴ Courts reviewing consent in public employee drug testing cases have defined coercion as the threat of job loss or demotion if an employee refuses to submit to testing.⁵⁵

According to the Supreme Court's opinion in *Schneckloth*, the presence of coercion depends on the following factors:

- Environment. Preinitial appearance testing usually occurs in a detention facility. The Supreme Court has noted that custody alone is not coercive, but increases the government's burden of proving that consent is voluntary.⁵⁶ Features may exist in a custodial setting to heighten coercion. For example, release from custody tied to consent to drug testing, whether explicit or implicit, would reduce voluntariness. The custodial setting also may heighten the effect of certain individual factors that may reduce an arrestee's understanding of consent.
- Maturity. Courts have ruled that maturity largely depends on an individual's age and education, but have not set a definitive age or educational level for the determination of maturity.⁵⁷ However, programs should note the emphasis on age and education when determining maturity and take special care when dealing with younger arrestees.

Maturity also can depend on an arrestee's prior involvement with the legal system. The Supreme Court has used in its totality-of-thecircumstances test the fact that a consenting individual was "no newcomer to the law."⁵⁸ A federal appeals court, noting a subject's two previous convictions, ruled in 1983 that he voluntarily consented to a search of his home.⁵⁹

❑ Mental incapacitation and "knowing" consent. Some mentally impaired arrestees may not understand the concept of voluntary consent. Other arrestees may be incapacitated by substance abuse. This impairment can be temporary or a long-term disability affecting an arrestee's release. The Supreme Court did not make knowledge of the right to refuse consent a prerequisite for valid consent.⁶⁰ However, proof that an arrestee knew of the right to refuse can help prove that consent was voluntary, especially in a coercive environment.⁶¹ Drug testing programs should give an explanation of the drug test, especially if it cannot remove arrestees from the general population for testing.

Meeting Legal Requirements

This monograph has attempted to outline procedures that will satisfy possible legal requirements for pretrial drug testing. The principal procedures include the following:

- □ **Defining legal requirements.** Before undertaking drug testing, program administrators should consult their jurisdiction's attorney for an opinion concerning pretrial drug testing. The Multnomah County pretrial program did this, and the county's counsel raised several important issues, such as whether drug testing was a reasonable search and whether individualized suspicion was required when testing defendants. Administrators also may ask the attorney for a review of the principal cases in drug testing.⁶²
- □ Obtaining consent to preinitial appearance testing. The pretrial programs performing preinitial appearance testing have screened out arrestees who—because of language barriers or mental or physical incapacitation-may not have understood the concept of consent and tested only those defendants who submitted voluntarily. The screening techniques mirror those used to screen for the pretrial interview. When possible, programs removed arrestees from the general custodial setting to a more private area.

All pretrial drug testing programs should give defendants a verbal and written explanation of the drug test. Staff should explain that the test is voluntary, that the court will use test information in setting release conditions or in other bond-related matters (such as bond revocation hearings), that the court will not use results to determine guilt, and that scheduled drug tests may become a release condition if the initial test is positive. Staff also should state that the arrestee can refuse to submit to testing and still be considered for pretrial release. Exhibit 11–1 provides an example of a written explanation.

Both the written and oral notices are identical and delivered in language the arrestee best understands. The program may wish to give the defendant a hardcopy of the signed consent form.

- □ Ensuring privacy of specimen collection. Most of the demonstration drug testing programs attempted to provide as private a collection atmosphere as possible. For example, specimen collectors in Maricopa County used a two-way mirror system to observe specimen submission during pretrial drug monitoring. The defendant goes into the rest room alone and is observed through the mirror by the collector.
- □ Adopting acceptable chain of custody procedures. Each demonstration program developed policies for chain of custody, specifically urine collection and specimen testing, similar to those outlined in chapter 4, Chain of Custody. Each used a legally acceptable technology to perform initial tests and either retested or confirmed positive results. All had policies for observing urine submission, properly labeling specimens, and transporting samples from the collection area to the laboratory.

Exhibit 11–1 Sample of a Written Explanation

By signing this form, I agree to provide a urine specimen to Pretrial Services. I have been informed verbally of the following:

- 1) My participation in drug testing is voluntary. I may refuse to provide a urine sample and still be eligible for pretrial release.
- 2) The results of my drug test and information from my pretrial interview will be used by the court to set the conditions of my release. The results will not be used as evidence against me in this or any other case nor will the test results be used to bring new charges against me.
- 3) The court may order drug testing as a condition of pretrial release if this test is positive.
- 4) If I fail to report for drug testing as required, or fail to abide by any condition of pretrial release, the court may revoke my release.

Defendant's Signature	
Case Number	
Collector's Signature	
Date	

Summary of Major Points

- Drug testing is a search under the fourth amendment.
- □ Lower courts have ruled that drug testing complies with substantive due process when collection and testing procedures are reasonable.
- □ The highest courts in California and Washington, D.C., have upheld the constitutionality of pretrial drug monitoring.
- □ Drug testing programs should provide a verbal and written explanation of the drug test before requesting the arrestee's consent.
- □ Before undertaking drug testing, program administrators should consult their jurisdiction's attorney for an opinion.

Annotated Bibliography

Program Descriptions

- Author: Administrative Office of the United States Courts
- **Title:** Final Report on the Demonstration Program of Mandatory Drug Testing of Criminal Defendants
- **Citation:** Washington, DC: Administrative Office of the United States Courts, March 1991.

The final report and evaluation of a drug testing demonstration program in eight federal judicial districts beginning in 1989. Testing under the pilot program included prearraignment urinalysis of arrestees and supervisory testing of pretrial and probation clients. Evaluators found that onsite testing procedures established in the districts were reliable and timely. Prearraignment testing identified more drug-using arrestees than were found through self-reports alone, although it did not identify more drug-using probationers than existing methods.

Author: Bureau of Justice Assistance

- **Title:** Urinalysis as Part of a Treatment Alternatives to Street Crime (TASC) Program
- **Citation:** Washington, DC: U.S. Department of Justice, July 1988.

A brief examining the issues, processes, and procedures for implementing drug testing within a TASC program. Topics discussed include the rationale for including a drug testing component within TASC, legal issues, conducting tests, and comparing the benefits and costs of onsite and contracted testing. Author: Cadigan, T.

Title: The Federal Demonstration Program of Mandatory Drug Testing

Citation: Washington, DC: Administrative Office of the United States Courts, 1992.

A discussion of the experiences of the eight federal judicial districts participating in the pilot drug testing program. The author notes that 31 percent of defendants overall were positive when tested before the initial court appearance. Of these, 57 percent who tested positive admitted to drug use beforehand. Drug monitoring postconviction did not identify significantly more drug users than methods already employed by the districts. This led the Administrative Office of the United States Courts to recommend against expanding drug testing of probationers.

Author: Carver, J.A.

Title: "Pretrial Urine Testing: Implications for Drug Courts From A Decade's Positive Experience"

Citation: On Balance Spring 1996: 2-3.

A description of the Washington, D.C., pretrial drug testing program and overview of the city's Drug Intervention Program drug court. The author states that a program of regular drug testing combined with immediate sanctions for noncompliance and strong case management structure can reduce drug usage and pretrial misconduct at least in the short term. Author: Carver, J.A.

Title: "Using Drug Testing to Reduce Detention"

Citation: Federal Probation March 1993: 42–47.

Findings from a study of Washington, D.C.'s, Pretrial Services Agency's Intensive Pretrial Supervision Program for high-risk drug-using defendants. Supervision included halfway house placement and semiweekly urinalysis. A positive test result or other program violation resulted in immediate revocation. The report states that, although 80 percent of program defendants had a history of drug use, only 3.5 percent of the 7,014 urine samples collected and tested were positive. This compared to a 36-percent positive rate for defendants in regular pretrial supervision. The author credits the "swift and certain" sanctions scheme for lowering drug-use rates.

- Author: Demonstration Pretrial Drug Testing Programs
- Title:Drug Testing and Intensive Supervision
Programs Procedures Manuals,
Final Draft

Citation: 1988-1992.

Operational manuals compiled by the seven pretrial services agencies chosen between 1988 and 1992 to replicate the "D.C. model" (urinalysis before the initial court appearance and as a condition of supervised pre trial release). Each manual includes sections on collecting and testing urine samples, integrating drug testing into existing risk assessment and supervision schemes, calibrating instrument-based testing technology, establishing confidentiality policies and memorandums of understanding with agencies sharing drug test results, and adding drug test data to existing management information systems.

Author:	Weinman, B.
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- **Title:**Treatment Alternatives to Street Crime
(TASC): Implementing the Model
- **Citation**: Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance, September 1988.

An implementation guide to provide practical advice and workable instructions on starting or improving TASC programs. The document outlines the mission and philosophy of TASC programs, organizational and operational elements, and a glossary of TASC program terms.

Research and Evaluation

- Author: Adjudication Technical Assistance Project and EMT Group, Inc.
- **Title:** Results of Survey of Trial Court Administrators on the Use of Pre-Trial and Post-Conviction Alternatives and Drug Testing
- **Citation:** Washington, DC: The American University, February 1989.

A report on a 1988 survey of 600 local court administrators on pretrial release and sentencing options used by local jurisdictions, including how many used drug testing at the pretrial, diversion, and postsentence stages. From the responses received, pretrial drug testing appeared to occur on a limited basis, primarily as a supervisory condition. Most sites responding reported testing only felony arrestees, those charged with drug offenses, or defendants with a known history of drug use. Drugs for which tests were done included opiates, cocaine, stimulants, and several prescription medications.

- Author: Britt, C.L., Gottfredson, M.R., and Goldkamp, J.S.
- **Title:** "Drug Testing and Pretrial Misconduct: An Experiment on the Specific Deterrent Effects of Drug Monitoring Defendants on Pretrial Release"
- **Citation:** Journal of Research in Crime and Delinquency 29(1): 62–78, February 1992.

The authors use data from demonstration drug testing programs in Pima and Maricopa Counties, Arizona, to argue that prearraignment and supervisory drug testing have minimal to no effect on predicting or controlling rates of pretrial misconduct.

- Author: Goldkamp, J.S., Gottfredson, M.R., and Weiland, D.
- **Title:** "Pretrial Drug Testing and Defendant Risk"
- **Citation:** The Journal of Criminal Law and Criminology (Northwestern University School of Law) 81(3): 585–652, 1990.

An evaluation of a Dade County (Miami), Florida, project to determine if drug test results available before the initial court appearance helped predict the likelihood of future pretrial misconduct. Controlling for other factors related to misconduct (and that were available to the court at bail setting), the researchers found no relationship between positive test results and failure to appear. However, a significant relationship was found between positive test results and rearrest, particularly rearrests for serious crimes against persons. The authors also suggest that a classification scheme could be developed to predict which defendants would test positive on an initial test. This would eliminate the need—and expense—for these tests.

- Author: Goldkamp, J.S., and Jones, P.R.
- **Title:** "Pretrial Drug Testing Experiments in Milwaukee and Prince George's County: The Context of Implementation"
- **Citation:** Journal of Research in Crime and Delinquency 29(4): 430–465, November 1992.

The article describes the evaluations of demonstration pretrial drug testing programs in Milwaukee, Wisconsin, and Prince Georges County, Maryland. According to the authors, the experiences of these programs did not support the view that testing before bail setting added to a court's ability to predict future misconduct or that drug testing as a pretrial release condition would discourage failure to appear or rearrest. The authors further assert that each site experienced significant issues in implementing drug testing, though these issues did not affect the final research findings.

- Author: Goldkamp, J.S., Jones, P.R., Weiland, D., and Gottfredson, M.R.
- **Title:** "Measuring the Impact of Drug Testing at the Pretrial Release Stage: Experimental Findings From Prince George's County and Milwaukee County"
- **Citation:** *Crime and Justice Research Institute* November 1990.

Reported findings of an evaluation of U.S. Department of Justice-funded pretrial, drug testing demonstration projects in Prince Georges County, Maryland, and Milwaukee County, Wisconsin. The researchers concluded that information about drug use was not a powerful predictor of pretrial misconduct and that drug monitoring as a condition of release did not produce lower rates of pretrial misconduct when compared with a control group. Author: Gottfredson, M.R., Britt, C.L., and Goldkamp, J.S.

Title:Evaluation of Arizona Pretrial ServicesDrug Testing Programs

Citation: Tucson, AZ: University of Arizona, 1990.

Reported findings from the U.S. Department of Justice-funded pretrial drug testing demonstration projects in Pima and Maricopa Counties, Arizona. According to the authors, evaluation of the demonstration programs did not support the hypothesis that knowledge of drug test results improves the ability to predict pretrial misconduct or that supervised pretrial drug testing reduces pretrial misconduct. The authors also concluded that for Pima County, a "drug risk screening instrument" could be used instead of preinitial appearance drug testing to identify drug users. The instrument would incorporate the characteristics of defendants who tested positive on the initial test during the evaluation period.

- Author: Gropper, B.A.
- **Title:**Probing the Link Between Drugs and
Crime
- **Citation:** Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Brief, February 1985.

A summary of research examining the link between drug use and crime. The Brief finds evidence in these studies that narcotic drug users are heavily involved in crime—much of it violent—and that the level of crime committed was influenced by current usage status. Heroin users were just as likely as nonusers to commit homicides and rapes and more likely to commit robberies and weapons offenses. The research summarized also suggested that today's narcotics users are not as addicted to the drug as earlier users (given the impurity of the drugs now available) and can actually control their compulsion for the drug to some extent, making the notion that the "craving for drugs" encourages criminality less valid.

Author: Jones, P.R., and Goldkamp, J.S.

Title: "Implementing Pretrial Drug Testing Programs in Two Experimental Sites: Some Deterrence and Jail Bed Implications"

Citation: *The Prison Journal* 73(2), 199–219, June 1993.

Examines the sanctioning systems for responding to positive drug tests developed by the Milwaukee, Wisconsin, and Prince Georges County, Maryland, demonstration pretrial drug testing programs. The evaluators discuss the problems in implementing these sanction schemes and conclude that each program increased the level of noncompliance with court conditions while not significantly affecting pretrial misconduct rates. They also state that better control of defendant behavior may come from improving the mechanisms of addressing sanctions and not drug testing.

Author: Kapsch, S., and Sweeny, L.

Title: Multnomah County Detection and Monitoring of Drug Arrestees Project: Evaluation Final Report

Citation: Portland, OR: Reed College, March 1990.

The final evaluation results of the Multnomah County, Oregon, pretrial drug testing demonstration project. The study found that defendants placed in the drugmonitoring program as a condition of pretrial release did not show lower rates of failure to appear or rearrest than a control group of defendants not placed in the program. Author: Kapsch, S., and Sweeny, L.

- **Title:** Multnomah County Detection and Monitoring of Drug Arrestees Project: Implementation Report
- **Citation:** Portland, OR: Reed College, March 1990.

Reports on implementation issues regarding the Bureau of Justice Assistance-funded pretrial drug testing demonstration project in Multnomah County, Oregon. Among the issues discussed are problems encountered by the site's contracted testing lab in collecting and testing specimens before the initial appearance, the cost-effectiveness of preinitial appearance testing, and procedures for establishing unscheduled supervised drug tests.

- Author: Pretrial Services Resource Center and American Probation and Parole Association
- **Title:** An Assessment of the Use of Drug Testing in the Criminal Justice System
- **Citation:** Washington, DC: Pretrial Services Resource Center and American Probation and Parole Association, June 1992.

A review of recent surveys on how jurisdictions nationwide use drug testing in their criminal justice systems. The authors found 91 jurisdictions in 31 states with pretrial drug testing programs and 163 jurisdictions in 41 states with drug testing as part of probation supervision. Approximately 40 percent of all testing jurisdictions used onsite testing facilities.

- Author: Rhodes, W., Hyatt, R., and Scheiman, P.
- **Title:** Predicting Pretrial Misconduct with Drug Arrestees: Evidence from Eight Settings

Citation: Washington, DC: U.S. Department of Justice, September 1994.

An assessment of drug testing as a predictor of pretrial misconduct, based on findings from pretrial drug testing programs in Washington, D.C. (using three settings); Maricopa County, Arizona; Dade County, Florida; Prince Georges County, Maryland; Manhattan, New York; and Milwaukee County, Wisconsin. Researchers found evidence that drug test results predicted misconduct, though the evidence was inconsistent: Some sites found drug tests were not predictive and others found a link between drug results and either failure to appear or rearrest, but not both. The study also asserts that urinalysis cannot distinguish between moderate and heavy drug users. This claim is important since criminal behavior often increases with heavy drug use. This study was capsulated in a January 1996 National Institute of Justice Research in Brief.

- Author: Toborg, M., Bellasai, J.P., Yezer, A.M.J., and Trost, R.P.
- **Title:**Assessment of Pretrial Urine Testing in
the District of Columbia
- **Citation:** Washington, DC: U.S. Department of Justice, December 1989.

Final evaluator's report on the National Institute of Justice-funded pretrial drug testing pilot program undertaken by the District of Columbia Pretrial Services Agency. The researchers examined prearraignment and supervisory pretrial drug testing and concluded that information about drug use was linked significantly to pretrial misconduct and that supervised testing lowered these rates among drug-using defendants. The researchers also found that less than half of the defendants identified by urinalysis as drug users admitted to current drug use when interviewed.

Author:	Toborg, M.A.	, and Kirby, M.P.
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Title: Drug Use and Pretrial Crime in the District of Columbia

Citation: Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Brief, October 1984.

An analysis of data from 1979 to 1981 of pretrial misconduct and drug use in Washington, D.C. The authors conclude that drugusing defendants were twice as likely as nonusers to be rearrested pending trial and half again more likely to fail to appear for scheduled court dates. This finding suggests that "efforts to discourage drug use may be effective ways to reduce pretrial criminality and increase public safety."

- Author: Visher, C.A.
- **Title:** Pretrial Drug Testing
- **Citation:** Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Brief, September 1992.

A summary of research findings from pretrial drug testing demonstration sites in Pima County and Maricopa County, Arizona; Washington, D.C.; Prince Georges County, Maryland; Multnomah County, Oregon; and Milwaukee County, Wisconsin, as well as pretrial drug testing research projects in Dade County, Florida, and Manhattan, New York.

- Author: Wheeler, G.R, and Rudolph, M.A.
- **Title:** "Drug Testing and Recidivism of Houston Felony Probationers"
- **Citation:** Perspectives, American Probation and Parole Association, Fall 1990: 36–43.

Findings from a study of drug testing and recidivism among felony probationers in Houston, Texas. The evaluators found that drug-using probationers had higher technical violation rates than nonusers, although both groups had similar rates for law violations. Drug treatment also seemed to benefit most those drug users with characteristics for failure, such as prior convictions, youthfulness, or high-risk classification scores.

Standards and Guidelines

- Author: American Probation and Parole Association
- **Title:** Drug Testing Guidelines and Practices for Adult Probation and Parole Agencies
- **Citation:** Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance, July 1991.

Guidelines adopted by the leading professional association for probation and parole practitioners. Subjects discussed include coordinating drug testing into overall postsentence supervision, selecting drug testing methodologies, confirming positive results, contracting for drug testing services, coordinating testing schedules, and costs associated with testing.

- Author: National Association of Pretrial Services Agencies
- **Title:**Guidelines for Pretrial Release and
Diversion: Drug Testing
- **Citation:** Lexington, KY: National Association of Pretrial Services Agencies, 1995.

Guidelines promulgated by the leading professional association of pretrial services practitioners. Includes discussions on the proper use of prearraignment and supervised drug testing, due process and other legal issues, confidentiality, drug testing methodologies and protocol, managing drug testing information, and monitoring and evaluating drug testing components.

Testing Technology

- Author: Baer, J.D., Baumgartner, W.A., Hill, V.A., and Blahd, W.H.
- **Title:** "Hair Analysis for the Detection of Drug Use in Pretrial, Probation, and Parole Populations"

Citation: Federal Probation March 1991: 3–10.

Reports on the results of a National Institute of Justice-funded study of hair analysis as an identifier of drug use. It concludes that hair analysis can effectively measure the severity of an individual's drug problem. Citing results from the Drug Use Forecasting program showing that up to 80 percent of persons entering the criminal justice system have positive urinalysis results, the authors note that the criminal justice system must make distinctions regarding light, moderate, and heavy drug users to use limited resources more efficiently.

Author: Baer, J.D., and Booher, J.

Title: "The Patch: A New Alternative for Drug Testing in the Criminal Justice System"

Citation: Federal Probation June 1994: 29–33.

Provides a description of the sweat patch, briefly reviews how it works, and then presents the results of a study designed to test the patch's utility in criminal justice settings. The study, which involved 127 participants, found several advantages to using the patch, such as eliminating the need to observe and handle urine specimens and having a longer detection period than urine testing.

Author: Berka, C., and Baumgartner, W.

Title: "Hair Analysis for Drugs of Abuse: Applications in the Criminal Justice System" **Citation:** *Perspectives,* American Probation and Parole Association, Summer 1991: 51–54.

Findings from a pilot program that assessed using hair analysis to identify and monitor probationers and parolees in Florida. The findings confirmed the hypothesis that current methods of identifying drug use, including urinalysis, greatly underestimate drug use by probationers and parolees. The authors argue that in addition to increasing the likelihood of detecting drug use, hair analysis was a less intrusive way to collect a specimen, was more difficult for users to "beat," and provided a more complete historical record of drug use.

- Author: Gropper, B.A., and Reardon, J.A.
- Title: "Developing Drug Testing by Hair Analysis"
- **Citation:** National Institute of Justice Journal April 1993: 8–15.

Discusses the National Institute of Justice's (NIJ's) efforts to examine issues related to hair testing in criminal justice settings. NIJ established a 5-year plan to support research and development of hair testing. Efforts in the plan include: funding of a study in Pinellas County, Florida, to compare urinalysis and hair analysis in identifying drug use among arrestees; cosponsorship with the National Institute of Standards and Technology and the National Institute on Drug Abuse (NIDA) of a study to develop standardized testing materials for hair analysis; and co sponsorship with NIDA of a study to examine such questions as whether the amount of a drug found in hair is related to the amount ingested and how much time elapses after ingestion before a drug can be detected in hair. The article states that a need exists for additional study to "ensur[e] acceptance of hair as a medium for detecting drug use, and for developing standardized guidelines for use of hair testing in criminal justice agencies."

- Author: Mieczkowski, T.
- **Title:** *Hair Analysis As a Drug Detector*
- **Citation:** Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Brief, October 1995.

Description of a 6-month National Institute of Justice pilot study of hair analysis of 152 probationers in Florida. The researchers found that hair analysis was a better indicator of cocaine use over an extended timeframe, though urinalysis was much better in identifying recent and short-term use. Urinalysis also appeared to be a better detector of opiates, especially codeine, whereas both hair and urine testing proved effective in detecting marijuana. The author concludes that hair and urine testing can complement each other given their capacity to expose different patterns of drug use and that hair sample collection is a less difficult and more comfortable procedure for probation officers than urine collection.

- Author: Mieczkowski, T., Landress, H.J., Newel, R., and Coletti, S.D.
- **Title:** Testing Hair for Illicit Drug Use
- **Citation:** Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Brief, January 1993.

Results from a 1989 study of 303 pretrial detainees in Pinellas County, Florida, comparing hair analysis to urinalysis and self-reports. Researchers found that hair analysis expanded the "time window" for detecting drug use to several months and was twice as likely as urinalysis to detect cocaine use and four times more likely than self-reporting. The authors conclude that hair analysis is superior to detecting watersoluble drugs such as cocaine and opiates and does not raise privacy concerns or invasiveness issues associated with urine collection.

Author: Visher, C., and McFadden, H	., and McFadden, K.
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- **Title:** "A Comparison of Urinalysis Technologies for Drug Testing in Criminal Justice"
- **Citation:** Washington, DC: U.S. Department of Justice, National Institute of Justice, Research in Action, June 1991.

Presents the findings of a study comparing urinalysis technologies commonly used in criminal justice: immunoassays (EMIT, TDX, and RIA) and thin-layer chromatography (TLC). After evaluating the results of more than 2,000 urine specimens submitted by probationers and parolees with each of the four technologies, the authors conclude that little difference occurred in accuracy levels among the three immunoassays. However, TLC was "seriously deficient in detecting" drug use.

- Author: Willette, R.E.
- **Title:** An Evaluation of Non-Instrumented Drug Tests for The Administrative Office of the United States Courts: Summary Report
- **Citation:** Washington, DC: Administrative Office of the United States Courts, April 1997.

A report comparing the accuracy of 15 noninstrument hand-held drug testing devices to the EMIT testing technology. The authors chose the EMIT system because it is used most often by federal pretrial and probation programs for testing. The comparison found that eight noninstrument tests were comparable to EMIT in detecting drugs in urine. Five tests also produced perfect scores for detecting or reporting the absence of drugs in urine when confirmed through GC/MS technology.

Urine Collection Procedures

- Authors: Cargain, M.J., Robinson, J.J., and Pinkston, K.P.
- Title: "Specimen Adulteration: Who's Winning the Battle?"
- **Citation:** *The Journal of Offender Monitoring* 11(2): 18–20, Spring 1998.

Describes various techniques and products used to adulterate a urine specimen by either flushing or adding substances to the urine after it has been voided.

Author: Elbert, M.

Title: "The Use of Creatinine and Specific Gravity Measurement to Combat Urine Test Dilution"

Citation: *Federal Probation* December 1997: 3–10.

Describes various techniques used by testing subjects to mask drug use by "flushing" their systems through the consumption of large amounts of liquids before submitting a specimen. Also describes tests that can detect whether flushing has occurred.

Program Procedures

- Author: Administrative Office of the United States Courts
- **Title:** Probation and Pretrial Services Division On-Site Drug Testing Procedures Manual
- **Citation:** Washington, DC: Administrative Office of the United States Courts, November 1992.

Operations guide for federal probation and pretrial programs conducting urinalysis either before the initial court appearance or as a condition of court-ordered supervision. Subjects include the legal authority to test arrestees and defendants, intake procedures, specimen collection, protocols for instrument- and noninstrument-based testing, confidentiality, and reporting results to court.

- Author: Carver, J.A., Boyer, K.R., and Hickey, R.
- **Title:** Management Information Systems and Drug Courts: The District Of Columbia Approach
- **Citation:** Washington, DC: District of Columbia Pretrial Services Agency, November 1995.

A paper prepared for the 47th Annual Conference of the American Society of Criminology. The authors describe in detail the Drug Test Management System used by the District of Columbia Pretrial Services Agency to track defendants placed in the city's drug court or released on bail with a drugmonitoring condition. Among the features discussed are reading test results from testing machinery, access by judges to drug tests, scheduling tests, and minimizing the chances of mislabeling test samples through bar coding.

- Author: Vito, G.F., Wilson, D.G., and Keil, T.J.
- **Title:** "Drug Testing, Treatment, and Revocation: A Review of Program Findings"
- **Citation:** *Federal Probation* September 1990: 37–43.

A discussion of how information on drug use by probationers and parolees can help in supervising these clients, using as a reference a drug testing/monitoring program in Jefferson County, Kentucky. The authors conclude that drug testing can be a vital tool in client supervision, especially in identifying chronic users in need of treatment.

Legal Issues

Case/Citation: Berry v. District of Columbia, 833 F.2d. 1031 (D.C. Cir., 1987).

The first court case to examine the constitutionality of pretrial drug testing. The defendant challenged the District of Columbia pretrial drug testing program as an unreasonable search and seizure under the fourth amendment. The appeals court found that drug testing was a fourth amendment-style search. Balancing governmental interests with individual rights, the court further ruled that a reliably proven, positive correlation between drug use and pretrial misconduct could overcome a defendant's privacy concerns. However, the court did not rule on whether testing was unreasonable since the trial court's record "with respect to this issue is virtually barren" and remanded the case back to the trial court (833 F.2d. 1031, 1034). The case was eventually dismissed by the lower court in August 1991.

Case/Citation: Commonwealth v. Danforth, 576 A.2d 1013 (Pa. Super. 1990).

A ruling by the Court of Appeals for the State of Pennsylvania on applying the "special needs" test for reasonableness to criminal justice drug testing, specifically for a blood test after arrest for drugs and alcohol. The court found that testing at this stage was not a special situation beyond the normal need of law enforcement and that such testing had to occur under a warrant or meet the traditional "balancing test" for reasonableness.

Case/Citation: Oliver v. U.S., D.C. Ct. App., No.95-CO-434 (1996).

A Court of Appeals of the District of Columbia ruling affirming the constitutionality of supervised pretrial drug testing. The court rejected the defendant's arguments that the District's bail law did not allow drug testing and the broader assertion that drug testing was an unreasonable search. The court relied on case law and research on drug testing in the District to rule that testing was a reasonable way to ensure the government's interest in reducing pretrial misconduct.

Case/Citation: Schneckloth v. Bustamonte, 412 U.S. 218 (1973).

The U.S. Supreme Court's definitive opinion on fourth amendment-style searches secured through a person's voluntary consent. Voluntary consent is the basis for preinitial appearance drug testing. In this case, the Court developed the "totality of the circumstances" test to determine voluntariness, which considered the environment where the search occurred and the maturity of the person giving consent.

Case/Citation: Skinner v. Railway Labor Executives Association, 489 U.S. 602 (1989). National Treasury Employees Union v. Von Raab, 489 U.S. 656 (1989).

The first decision by the U.S. Supreme Court on federal employee drug testing. The Court ruled that drug testing is a fourth amendmentstyle search and created a new test—"special needs beyond the normal need for law enforcement"—to justify a search in the absence of probable cause. The special needs exception states, generally, that a search is legal if the government has a special need, which is tied to security or public safety, that outweighs an individual's reasonable expectation of privacy.

Case/Citation: In re York, Calif. Sup. Ct., No. S032327.

A Supreme Court of California ruling that upheld the constitutionality of pretrial drug testing as a condition of release. The court rejected the defendant's argument that imposing pretrial drug testing as a condition of release was a violation of the fourth amendment's prohibition of unreasonable search and seizure (ruling that a testing condition is reasonable) and of equal protection rights. Author: delCarmen, R.V., and Sorensen, J.R.

Title:"Legal Issues in Drug Testing
Probationers and Parolees"

Citation: *Federal Probation* December 1988: 19–27.

A comprehensive review of case law on postadjudication testing. Included are discussions on acceptable testing methods; screening and confirmation tests; testing as an acceptable condition of probation or parole; and constitutional issues involving reasonable searches, due process, and equal protection.

Author: Rosen, C.J., and Goldkamp, J.S.

- **Title:** "Constitutionality of Drug Testing at the Bail Stage"
- **Citation:** Journal of Criminal Law and Criminology 80(1), Spring 1989.

A comprehensive review of case law on prearraignment drug testing. The authors use U.S. Supreme Court and lower appeals court decisions to define drug testing in general as a fourth amendment-style search. They then argue that prearraignment testing does not fit the tests for reasonableness defined for certain noncriminal searches (such as testing federal employees) or criminal searches allowed before the first court appearance (such as searches incident to arrest) and booking searches. The authors argue that prearraignment testing can be performed legally if based on an arrestee's voluntary consent.

Drug Courts

- Author: Belenko, S., and Dumanovsky, T.
- Title: Special Drug Courts: Program Brief
- **Citation:** Washington, DC: U.S. Department of Justice, November 1993.

A description of the critical elements, program experiences, and evaluations of two common drug court models: dedicated drug treatment and speedy trial/differentiated case management courts. The document also lists contact persons for various drug courts nationwide and includes a bibliography of drug court publications.

Author:	Cooper, C.S., and Bartlett, S.R.
Title:	Juvenile Drug Courts: Operational Char- acteristics and Implementation Issues
Citation:	Washington, DC: Drug Court Clear-

inghouse and Technical Assistance Project, The American University, October 1996.

An overview of the operational characteristics and issues in planning or implementing a juvenile drug court, drawn from a survey of 19 programs nationwide. The publication describes the common characteristics of these courts, their case-processing procedures and treatment and rehabilitative services, and the issues and concerns addressed during planning and implementation.

- Author: Drug Court Clearinghouse and Technical Assistance Project
- **Title:** Juvenile Drug Courts: Preliminary Assessment of Activities Underway and Implementation Issues Being Addressed
- **Citation:** Washington, DC: U.S. Department of Justice, October 1996.

A "snapshot" of current juvenile drug court programs and the issues they address. The report discusses the role of the judge in these courts; the target population; differences between juvenile and adult drug courts; sanctions employed for noncompliance; and special strategies being used to involve family members, address cultural diversity, and involve noncriminal justice resources and agencies.

- Author: Drug Court Clearinghouse and Technical Assistance Project, National Center for State Courts, and the National Consortium of TASC Programs
- **Title:** Drug Courts: An Overview of Operational Characteristics and Implementation Issues, Vols. I and II
- **Citation:** Washington, DC: U.S. Department of Justice, 1996.

Results from a comprehensive survey of 20 drug court programs that have been in effect for at least 1 year. Findings include: reduced recidivism rates for program participants; reduced drug-use rates for persons who successfully completed these programs; expansion of original program target populations; support for the drug court concept by prosecutors and law enforcement officials; and a drug court treatment cost range of between \$900 and \$1,600, compared with an average \$5,000 per defendant for a "minimal" period of incarceration.

- Author: General Accounting Office
- **Title:** Drug Courts: Overview of Growth, Characteristics, and Results
- **Citation:** Washington, DC: U.S. General Accounting Office, July 1997.

The U.S. General Accounting Office's (GAO's) final report to the Congress of the United States on "the effectiveness and impact" of drug courts, specifically those funded in part through Title V of the Violent Crime Control and Law Enforcement Act of 1994 (P.L. 103-322). GAO identified and surveyed 140 drug programs (134 of which responded) and evaluated 20 studies of drug court programs. As of December 31, 1996, drug courts operated in 38 states, the District of Columbia, and Puerto Rico, and were being planned in at least 8 of the remaining 12 states and Guam. More than 65,000 defendants had been admitted to these programs since 1989, with 31 percent completing the programs successfully. However, GAO

could not comment on the effectiveness of these programs, given the diversity of the programs and evaluations and the lack of followup data on program participants. It recommended that the U.S. Department of Justice require federally funded drug courts to collect and maintain data on participants and include evaluation components.

Author: Peters, R.H.

Title: Evaluating Drug Court Programs: An Overview of Issues and Alternative Strategies

Citation: Washington, DC: Justice Programs Office, The American University, March 1996.

A monograph describing the need for and advantages of adding an evaluation component to a drug court's design. The author describes how evaluation data should be used and illustrates several long- and shortterm evaluation strategies. Also featured is a discussion on developing an evaluation management information system.

- Author: Sherin, K.M., and Mahoney, B.
- **Title:** Treatment Drug Courts: Integrating Substance Abuse Treatment With Legal Case Processing
- **Citation:** Washington, DC: Center for Substance Abuse Treatment, U.S. Department of Health and Human Services, 1996.

A guide to help policymakers and practitioners "plan, implement, monitor, and evaluate programs that integrate substance abuse treatment [usually drug courts] with the pretrial processing of criminal cases." The authors discuss the key elements of treatment drug courts, steps to plan and design such courts, implementation and evaluation issues, court costs and financing, and legal and ethical questions involving testing and treating defendants at the pretrial stage.

Appendix A

Current Pretrial Drug Testing Applications

Site	Test To Identify	Drug	Testing	Confirmation		
Site	Site Users Panel Approach Policies Federal*					
Arkansas Eastern [†]	Before initial appearance.	Amphetamines, cocaine, opiates, PCP, and marijuana.	Analyzer-based inhouse facility.	Retest all positives. Positives sent to private laboratory if defendant does not admit use.		
Minnesota [‡]	Before initial appearance.	Amphetamines, cocaine, opiates, marijuana, and benzodiazepine.	Analyzer-based inhouse facility.	Positives sent to private laboratory if defendant does not admit use. When defendant admits use, sample is saved for 1 month.		
Nebraska	Before initial appearance.	Amphetamines, cocaine, opiates, PCP, and marijuana.	Hand-held in- house testing for initial test; supervision tests sent to private laboratory.	Positives sent to private laboratory if defendant does not admit use. Exception: All amphetamine positives sent to private laboratory.		
New Hampshire	Before initial appearance.	Amphetamines, cocaine, opiates, and marijuana.	Hand-held inhouse testing.	Positives sent to private laboratory if defendant does not admit use.		
New Jersey	After initial appearance.	Amphetamines, cocaine, opiates, PCP, and marijuana.	Hand-held in- house testing plus sweat patch.	All positives sent to private laboratory for confirmation.		
North Carolina Middle	After initial appearance.	Amphetamines, cocaine, opiates, and marijuana.	Hand-held inhouse testing.	All positives sent to private laboratory for confirmation.		
	Local					
District of Columbia	Before initial appearance.	Amphetamines, PCP, cocaine, opiates, and methadone.	Analyzer-based inhouse facility.	Retest all positives. Positive specimens frozen. If result challenged, specimen sent to local laboratory for confirmation.		
Maricopa County	N/A	Ability to test for wide range of drugs.	Contract with TASC program, analyzer-based facility.			
Milwaukee County	N/A	Cocaine, opiates, and marijuana.	Analyzer-based inhouse facility.	Retest all positives. Positives sent to private laboratory if defendant does not admit use.		
Pima County	N/A	Amphetamines, cocaine, and opiates.	Analyzer-based facility operated by probation.	Retest all positives. Defendant can request and arrange for independent confirmation.		
Prince Georges County	N/A	Cocaine, PCP, and opiates.	Analyzer-based inhouse facility.	First positive during supervision period sent to private laboratory for confirmation if defendant does not admit use.		

*

Represents a sample of federal programs known to be performing pretrial testing. One of the original federal pilot drug testing sites; it is currently participating in Operation Drug Test. One of the original federal pilot drug testing sites. †

‡

Site	Supervision Testing Practices	Program Responses to Continued Positives	Contact Person			
	Federal*					
Arkansas Eastern	Tested once a week on a regularly scheduled basis, plus once randomly every other week.	Refer to treatment. Court action requested after second positive.	Jamie Holt 501–324–5745			
Minnesota	Tested twice a week at outset. Frequency gradually reduced to twice a month, then once a month if results are negative.	Testing frequency increased and treatment offered. Court action may be requested if continued positive.	Tim Norgren 612–290–3890			
Nebraska	Three testing phases: tested 4–6 times a month in Phase 1 and 1–2 times in Phase 3. Defendants call hotline every day to see if they must report for test.	Response depends on defendant's history and cooperation with treatment. Responses range from reprimand to requesting court action.	Tim Connor 402–437–5795			
New Hampshire	Testing done randomly at officers' discretion, but at least once a month.	First positive, address with defendant. If continued positive, testing frequency increased and refer to treatment.	Peter Russo 603–225–1515			
New Jersey	Testing frequency determined on case-by-case basis; can be regularly scheduled or random appointments.	Refer to treatment at first positive. Court action requested only if defendant does not cooperate with treatment.	Tom Henry 973–645–2230			
North Carolina Middle	Tested once a week on a random basis for at least 4 weeks. If results are negative, frequency reduced to twice a month.	Second positive, refer to treatment. If continued positive, court hearing requested, but no recommendation made at hearing.	Elaine Rector 910–631–5371			
	Local					
District of Columbia	Tested once a week on a scheduled basis.	Increase frequency of testing or refer to treatment. Court action requested if treatment or testing appointments missed.	Jerome Robinson 202–727–6190			
Maricopa County	Tested twice a week on a scheduled basis. Frequency reduced if results are negative.	Notify court; request revocation if continued positive.	Perry Mitchell 602–506–1304			
Milwaukee County	Assigned to one of three supervision levels depending on overall risk. Testing frequency determined by level placement.	Second consecutive positive result after the initial supervision test reported to court along with treatment plan.	Marilyn Walczak 414–223–1307			
Pima County	Tested at least twice a week on a scheduled basis; occasionally called in or field visit made for a random test.	First positive, refer to treatment and notify court of action taken. Schedule court hearing if positive results continue.	Shelby Myer 520–740–3310			
Prince Georges County	Tested once a week on a scheduled basis if in treatment; twice a week if not in treatment.	Continue to work with defendant if in treatment. Court action requested if refuses treatment or misses testing appointments.	Linda Kinnikin 301–952–7050			

Notes

- 1. Administrative Office of the United States Courts, March 29, 1991, Final Report of the Director of the Administrative Office of the United States Courts on The Demonstration Program of Mandatory Drug Testing of Criminal Defendants, Washington, DC: Administrative Office of the United States Courts.
- 2. White House Directive on Drug Testing Arrestee, Memorandum to the Attorney General, December 18, 1995.
- 3. Several agencies can perform different functions related to pretrial drug testing. For example, a Treatment Accountability for Safer Communities (TASC) program can collect and test urine specimens as well as offer treatment options. This approach is used in Maricopa County. Although different agencies can have a hand in the program, the pretrial services agency should have administrative oversight. Owing to its oversight responsibility, a pretrial agency should ensure that a contracted laboratory complies with specific procedures for collecting and testing specimens and reporting drug test information. For more information on TASC programs, consult the Bureau of Justice Assistance, January 1988, *Treatment Alternatives to Street Crime, TASC Programs: Program Brief,* Washington, DC: U.S. Department of Justice.
- 4. Bureau of Justice Assistance, February 1991, Edward Byrne Memorial State and Local Law Enforcement Assistance Program: Fiscal Year 1991 Discretionary Program Application Kit, Washington, DC: U.S. Department of Justice, 233.
- 5. National Association of Pretrial Services Agencies, February 1995, *Guidelines for Pretrial Drug Testing*, San Francisco, CA: National Association of Pretrial Services Agencies.
- 6. Since pretrial programs are responsible for releasing pretrial supervision information, they should respond to any subpoenas for drug test information.
- 7. See 42 CFR Part 2, June 1987, "Confidentiality of Alcohol and Drug Abuse Patient Records: Final Rule," *Federal Register* 52(110).
- 8. The D.C. program also gives probation officers test results of specimens collected for the initial bond hearing. This allows the officers the opportunity to update their supervision records. The program has an agreement with the probation department that test results will not be used in probation revocation matters.
- 9. Elbert, Michael J., December 1997, "The Use of Creatinine and Specific Gravity Measurement to Combat Urine Test Dilution," *Federal Probation* 61(4).

- 10. Ibid.
- 11. In one study, researchers tested eight products, including dry bleach, salt, a chemical drain opener, eye wash, and a liquid detergent, plus three products that are advertised as drug test adulterants. Three separate hand-held testing devices were used to test urine adulterated by these products for the presence of cocaine and marijuana. Most of the products had no impact on most of the tests. One product, THC-Free, did mask both cocaine and marijuana use on all three testing devices. Bogema, Stuart C., *Evaluation of Three Rapid Immunoassay Devices for Screening of DHHS Five Drugs in Urine.*
- 12. When hand-held devices are used to test the specimen, often the test is conducted at the same time and place the specimen is collected, with the witness conducting the test in the presence of the defendant. In such instances, chain of custody is greatly simplified (see chapter 5, Testing of Specimens, for more information on these hand-held devices).
- 13. Another chromatography-based technology that had been used extensively in criminal justice settings is thin-layer chromatography (TLC). However, a study several years ago compared various technologies and found that TLC performed poorly in identifying drug users. Specifically, TLC identified only about 8 percent of the positive opiate specimens, 11 percent of the positive cocaine specimens, 19 percent of the positive phencyclidine (PCP) specimens, 48 percent of the positive marijuana specimens, and 12 percent of the positive amphetamine specimens. These results led researchers to conclude: "Standard thin-layer chromatography was found to be seriously deficient in detecting the five substances examined in this study. Therefore, TLC is unlikely to be useful for screening or confirming urine specimens for illegal drug use within criminal justice populations." (National Institute of Justice-Bureau of Justice Assistance, 1991, A Comparison of Urinalysis Technologies for Drug Testing in Criminal Justice, Washington, DC: U.S. Department of Justice, 27.) Given these findings, this monograph does not consider TLC a suitable testing technology.
- 14. The study discussed in note 18 contains a more detailed discussion on the use and limitations of immunoassay and chromatography methods.
- Lahey v. Kelly, N.Y. 2d 135 (N.Y., Ct. of App., 1987); In re Johnston (Wash. Sup. Ct. No. 53580-9, 1987); Spence v. Farrier (CA8, No. 85-902. 1986); Harmon v. Auger, 768 F.2d 270, 276 (Eighth Cir., 1985); Jensen v. Lick, 589 F. Supp. 35 (D.N.D. 1984); Vasquez v. Coughlin, 499 N.Y.S. 2d 461 (Sup. Ct. App. Div., 1986); and Peranzo v. Coughlin, 605 F. Supp. 1504 (S.D.N.Y. 1985). One court has ruled that an unconfirmed positive result was admissible as evidence in a contempt of court proceeding,

U.S. v. *Roy*, Crim. No. 12098–84 (D.C. Sup. Ct., 1986). Another found unconfirmed results to be "presumptively reliable and thus generally admissible into evidence in every case," *Jones* v. *U.S.*, No. 86–31 (D.C. Ct. App., 1988). Other courts have ruled that test results that were retested using the same technology but not confirmed by an alternative method can be used to support sanctions in prison disciplinary proceedings.

- 16. However, the contract laboratory may arrange to set up an onsite testing facility, testing specimens in the same proximity to the jail or courthouse as with an inhouse testing facility. In Maricopa County, for example, the contracted laboratory (TASC) set up testing equipment in the county jail.
- 17. Pretrial services programs in the District of Columbia and Milwaukee, Wisconsin, operate inhouse analyzer-based drug testing facilities that conduct testing for others in the system. The Pima County pretrial services program has its testing done at the county probation department's inhouse facility.
- 18. Willette, Robert, April 1997, *An Evaluation on Non-Instrumented Drug Tests for the Office of the U.S. Courts: Summary Report*, Denver, CO: Duo Research Inc.
- 19. Mieczkowski, Tom, October 1995, *Hair Analysis As a Drug Detector,* Research in Brief, Washington, DC: U.S. Department of Justice, National Institute of Justice.
- 20. Mieczkowski, Tom, April 1997, *Hair Assay and Urinalysis Results for Juvenile Drug Offenders,* Research Preview, Washington, DC: U.S. Department of Justice, National Institute of Justice.
- 21. The NIJ–BJA study of testing technologies found that "no one type of immunoassay was consistently superior to the others in identifying positive and negative specimens" (National Institute of Justice–Bureau of Justice Assistance, 1991, *A Comparison of Urinalysis Technologies for Drug Testing in Criminal Justice.* Washington, DC: U.S. Department of Justice).
- 22. According to the Mandatory Guidelines for Federal Workplace Drug Testing Programs, drawn up by the Alcohol, Drug Abuse, and Mental Health Administration, U.S. Department of Health and Human Services, a laboratory is authorized to test such specimens only if it has been certified by SAMHSA as having met all provisions of the guidelines. These guidelines do not apply to testing of criminal justice system clients.
- 23. Peat, Michael E., 1988, "Analytical and Technical Aspects of Testing for Drug Abuse: Confirmatory Procedures," *Clinical Chemistry* 34: 472.
- 24. Federal Register June 1987, 52(110).
- 25. See 42 CFR, Section 2.12(d).

- 26. See 42 CFR, Section 2.35(a).
- 27. See 42 CFR, Section 2.20.
- 28. District of Columbia Code, 1981 Edition (Vol. 5), Section 1303(d).
- 29. Although supplying test results to persons outside the criminal justice system is discouraged, programs may wish to give results to a defendant's family members or employers, with the defendant's signed consent. Pretrial programs may want to consult with their jurisdiction's attorney on whether such disclosure is acceptable.
- 30. The District of Columbia Pretrial Services Agency, which conducts preinitial appearance testing in addition to pretrial drug monitoring using an inhouse analyzer-based facility, tests several hundred specimens each day, and is open for testing 12 hours per day. The program's drug testing staff comprises approximately 15 employees. Other programs that test small numbers of defendants and that send specimens out to contract laboratories or that use the portable handheld devices have not had to increase their staff size as a result of their testing activities.
- 31. National Association of Pretrial Services Agencies, July 1978, Performance Standards and Goals for Pretrial Release and Diversion: Release; Standard XIII, 71, San Francisco, CA: National Association of Pretrial Services Agencies.
- 32. In establishing an inhouse analyzer-based testing facility, officials can negotiate costs with the vendor of the selected analyzer. Many vendors will finance an analyzer or provide one at a much lower cost (even donating one) if the program makes a commitment to purchase a certain volume of testing supplies.
- 33. Extensive plumbing and electrical renovations may be required to office space designated for use as a drug testing facility. Programs should check with vendors of various analyzers before a selection is made to determine the electrical and plumbing requirements of the instrument.
- 34. Ways are available to achieve greater cost-efficiency with analyzerbased inhouse testing. For example, if more than one agency in a jurisdiction is currently conducting drug testing, savings could be realized if all testing were combined under one facility. For example, if the pretrial services program wanted to start drug testing and the probation office already has an inhouse analyzer-based testing facility, savings might be realized if the inhouse facility took responsibility for all testing. In addition, many analyzers have the capability to file test results directly from the analyzer into an agency's automated information system, thereby saving data entry costs.

- 35. The five drugs are amphetamines, cocaine, marijuana, opiates, and PCP.
- 36. Bell v. Wolfish, 441 U.S. 520, 559 (1979); O'Connor v. Ortega, 480 U.S. 709, 721 (1987); New Jersey v. TLO, 469 U.S. 324, 341 (1985); and U.S. v. Martinez-Fuerte, 428 U.S. 543, 560 (1976). Individualized suspicion states that a search may be conducted if an individual's conduct provides a reasonable basis for it. Usually, the intrusion into privacy must be minimal [Terry v. Ohio, 392 U.S. 1 (1968)]. In its opinion in National Treasury Employees Union (NTEU) v. Von Raab and Skinner v. RLEA, the U.S. Supreme Court added to this balancing test a special needs search focused on individuals. A special needs search occurs when only a minimal intrusion into privacy is involved, but involves an important government interest outside of normal law enforcement. Individualized suspicion is unnecessary since requiring it would jeopardize that interest (U.S. v. Martinez-Fuerte, 428 U.S. 543, 560 (1976); NTEU v. Von Raab, 489 U.S. 656, 668–672; Skinner v. Railway Labor Executives Association (RLEA), 489 U.S. 602, 634). The Court ruled that urinalysis performed on public employees in the interest of public safety fell under the special needs search category. To date, however, the special needs test for reasonableness has not been applied to criminal justice drug testing.
- 37. Skinner, 489 U.S. 602, and NTEU, 489 U.S. 656.
- 38. In *Berry* v. *District of Columbia*, the court of appeals considered the government's desire to reduce pretrial misconduct among drug-using arrestees valid enough to conduct pretrial drug monitoring, but noted that its opinion did not address preinitial appearance testing (*Berry* v. *District of Columbia*) n. 833, F.2d. 1031, 1033 and 1036, n. 20). Like the degree of privacy maintained by pretrial arrestees before bond is set, whether the desire to reduce pretrial misconduct can be applied to preinitial appearance testing may be a question for individual courts to decide.
- 39. See NTEU and Skinner supra. n. 43.
- 40. In *NTEU*, 489 U.S. 656, 678, the U.S. Customs Service's testing program covered such positions as accountant, baggage clerk, co-op student, and mail clerk/assistant. The U.S. Supreme Court doubted that persons in these jobs would have access to "classified" information and asked the appeals court to review the work categories that fell under the testing program.
- 41 . Berry, 833 F.2d. 1031, 1035.
- 42. Matthews v. Eldridge, 424 U.S. 319, 335 (1976).
- 43. Rochin v. California, 342 U.S. 165, 172 (1952).

- 44. Self-incrimination is not an issue because urinalysis yields physical "evidence" that is not covered under the fifth amendment [*Schmerber* v. *California*, 384 U.S. 757, 761 (1996)]. Moreover, urinalysis results are considered pretrial program information, which cannot be used to determine guilt. To further ensure how test results are used, major criminal justice representatives in each current testing jurisdiction, particularly the chief judge of the local court, the local prosecutor, and the public defender, signed an MOU which, in part, stated that test results would not be used on the question of guilt.
- 45. Schmerber, 384 U.S. 757, 768-771 (1966).
- 46 . Yanez v. Romero, 619 F. 2d. 851, 854 (10th Cir. 1980), and Feliciano v. *City of Cleveland*, 661 F. Supp. 578, 586 (N.D. Ohio, 1987).
- 47. *NTEU*, 816 F. 2d. 170. 181 and *Capua* v. *City of Plainfield*, 643 F. Supp. 1507, 1521.
- 48. *Capua*, 643 F. Supp. 1507, and *Jones* v. *McKenzie*, 628 F. Supp. 1500, (D.D.C. 1986).
- 49. NTEU, 516 F. 2d. 170, 181.
- 50. Peranzo v. Coughlin, 675 F. Supp. 102 (S.D.N.Y. 1987) (urinalysis as the only evidence at prison disciplinary and parole hearings satisfies due process); Jensen v. Lick, 589 F. Supp. 35 (D.N.D. 1984) (unconfirmed EMIT test does not violate due process); Wykoff v. Resig, 613 F. Supp. 1504 (N.D. Ind. 1985) (double EMIT tests or their equivalents satisfy due process); and U.S. v. Jones, No. 83–31 (D.C. Ct. App., 1988) (retests on EMIT satisfy procedural due process in impeaching defendant's testimony at trial).
- 51. In re York, Calif. Sup. Ct. No. S032327.
- 52. Schneckloth v. Bustamonte, 412 U.S. 218, 219 (1973); U.S. v. Mendenhall, 446 U.S. 544, 558-559; and U.S. v. Watson, 423 U.S. 424 (1976).
- 53. Mack v. U.S., 814 F.2d. 120, 124 (Second Cir. 1987).
- 54. Feliciano v. City of Cleveland, 661 F. Supp. 578, 593 (N.D. Ohio, 1987); Railway Executives Assn. v. Burnley 839 F. 2d. 575, 589 (Ninth Cir. 1988); and American Federation of Government Employees v. Weinberger, 651 F. Supp. 726, 736 (S.D. Ga. 1986).
- Capua, 643 F. Supp. 1507, 1521 (D.N.J. 1986); Feliciano, 661 F. Supp. 578, 595 (N.D. Ohio, 1987); and American Federation of Government Employees, 651 F. Supp. 726, 736 (S.D. Ga. 1986). Courts have accepted consent as a condition of assignment to a new job (*NTEU*, 816 F.2d. 170, 179) and consent given on the promise that no criminal charges would be filed against the employee tested [*Mack*, 814 F.2d. 120, 124 (2nd Cir., 1987)].
- 56. U.S. v. Watson, 423 U.S. 411, 424.

- 57. U.S. v. Calvente, 722 F. 2d 1019 (2nd Cir. 1983), stressing defendant's age and prior involvement with the law; and U.S. v. Mayes, 552 F. 2d. 729 (Sixth Cir. 1977), consent invalid when given by an 18-year-old defendant with less than a seventh-grade education.
- 58. *U.S.* v. *Watson*, 423 U.S. 411, 424. The subject in this case had consented to a search of his car for stolen credit cards. The court noted a prior arrest on mail theft charges and the arrestee's prior cooperation with law enforcement officials in the 2 years preceding its ruling.
- 59. U.S. v. Calvente, 722 F. 2d. 1019, 1023 (1983).
- 60. *Schneckloth*, 412 U.S. 218, 227: "While knowledge of the right to refuse consent is one factor to be taken into account (in determining whether consent is voluntary), the government need not establish such knowledge as the sine qua non of an effective search"; and *U.S.* v. *Watson*, 423 U.S. 411.
- 61. Schneckloth, 412 U.S. 218; U.S. v. Bethea, 598 F. 2d. 331 (Fourth Cir. 1979); and Mendenhall, 446 U.S. 544, 558–559.
- 62. NTEU v. Von Raab, 489 U.S. 656 (1989), and Skinner v. Railway Labor Executives Association, 489 U.S. 602 (1989).

Sources for Further Information

For more information on drug testing in the pretrial services system contact:

Pretrial Services Resource Center

1325 G. Street NW. Suite 770 Washington, DC 20005 202–638–3080

Bureau of Justice Assistance

810 Seventh Street NW. Washington, DC 20531 202–514–5947 World Wide Web: http://www.ojp.usdoj.gov/BJA

Bureau of Justice Assistance Clearinghouse

P.O. Box 6000 Rockville, MD 20849–6000 1–800–688–4252 World Wide Web: http://www.ncjrs.org

U.S. Department of Justice Response Center 1–800–421–6770 or 202–307–1480

Bureau of Justice Assistance Information

General Information

Callers may contact the U.S. Department of Justice Response Center for general information or specific needs, such as assistance in submitting grants applications and information on training. To contact the Response Center, call 1–800–421–6770 or write to 1100 Vermont Avenue NW., Washington, DC 20005.

Indepth Information

For more indepth information about BJA, its programs, and its funding opportunities, requesters can call the BJA Clearinghouse. The BJA Clearinghouse, a component of the National Criminal Justice Reference Service (NCJRS), shares BJA program information with state and local agencies and community groups across the country. Information specialists are available to provide reference and referral services, publication distribution, participation and support for conferences, and other networking and outreach activities. The Clearinghouse can be reached by:

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