

# Evaluating Presumptive Drug Testing Technology in Community Correction Settings

## **Strategies:**

This survey reveals outcomes that will point you to explore strategies your organization can use in the course of offering DTect products to increase and create sales with existing and new clients.

## **Background:**

This research project was funded the US Department of Justice, for the purpose of evaluating Presumptive Drug Detection Technology (PDDT) developed by Mistral Security Incorporated (MSI) for which DTect is the authorized distributor.

The goals of the evaluations were to determine whether PDDT has a place in the field of community corrections.

This evaluation asked:

Will this technology increase agencies' success in identifying offenders and/or settings that have been exposed to drugs?

Does the technology help to decrease the overall cost of drug testing (i.e., less use of urine analysis)?

And what is the overall cost/effectiveness of using this product?

This Research was extensive and included six (6) Community Corrections Settings; work release programs, probation and parole, and drug courts in three states. This study offers important and valuable information to understanding the market potential for the TPA considering adding PDDT to their product offerings.

## **Summary:**

The Presumptive Drug Detection Technology (PDDT) involved the use of aerosol sprays which were used with specialized paper that react with trace elements of cocaine, heroin, methamphetamine, and marijuana. Basically, the specialized paper is swiped onto a surface (desk, chair, or any item) or a person (hands, arms,

etc.) and then the paper is sprayed with the aerosol. If the paper changes color then it indicates trace elements of a specific drug. Unlike urinalysis, PDDT products are not meant to determine whether a person has ingested drugs, only that the person has touched, handled, or come into contact with an illegal substance.

Observer's staff worked with corrections staff to test the technology on clients within community corrections settings.

Data was collected on 562 tests, interviewed clients, correctional officers, and staff, and observed the use of the Product.

### **Findings:**

Across six sites we found 17 tests that were positive for cocaine (3%) and 90 tested positive for marijuana, heroin, and methamphetamines (16%). Twenty clients tested positive in their urinalysis (3.6%). Out of the 562 clients, only two tested positive for both the PDDT and the UA.

### **PDDT Test Sites:**

Overall The Evaluations Found:

The PDDT was useful in community corrections settings.

The PDDT testing process was readily accepted by clients and corrections staff.

Most of the PDDT positive test results were for marijuana

Anecdotally, PDDT was found to be useful in assessing what drugs might be present in corrections facilities. While we did not conduct an evaluation in the field, we believe that the use of PDDT would be cost effective when it is used to test and confirm the presumption of illegal drug detection of suspicious substances before submitting such substances to laboratories for analysis.

Corrections officers, case managers, and administrators said that PDDT would be a useful tool to be used in a community corrections setting. They did not indicate that PDDT could or should replace the use of other drug testing protocols, such as urine analysis. They found that PDDT would be useful in supplementing existing drug testing. Existing drug testing (urinalysis) reflects recent use or ingestion.

PDDT helps monitor whether or not the client is presumptively handling or in the presence of illegal drugs.

A majority of clients, corrections officers, and case managers believed that the use of PDDT in combination with urine analysis and other drug testing methods would be effective in deterring client drug involvement behavior.

### **Recommendations:**

Recommendations for Administrators:

If PDDT is considered for implementation, leadership from the top is essential. Administrators will need to become familiar with PDDT – what it is, how it works, what it does, and what it does not do. Most importantly, the emphasis should be upon the usefulness of PDDT as one of many tools used by corrections staff to monitor and counsel appropriate client behavior. PDDT limitations are as its name implies – it is presumptive drug detection.

### **Policy changes:**

Administrators believed that they had sufficient policy authority to utilize PDDT in community corrections settings.

### **Engaging Stakeholders:**

Administrators should include stakeholders in discussions before implementing PDDTs. Administrations should engage stakeholders early in the planning process to address concerns.

### **Role of Case Managers:**

The case manager is the key for risk-based client assessments. Case managers should be familiar with the client and the client's behavior. Results from PDDT testing should be considered in the context of a case manager's risk assessment. Accordingly, PDDT positive tests start the conversation between the case manager and the client.

1. To be most effective, PDDT should be used in combination with UAs on a frequent, random basis. The unpredictability of when and what is to be tested using either UA or PDDT or both may deter drug involvement behavior as well as

improving monitoring of not only drug use but also handling or being in the presence of drugs (though deterrence was not measured in this study).

2. Monitoring conditions of probation. PDDT expands the “tools” available to monitor client behavior. Currently, drug-testing protocols are limited to testing for ingestion. Some clients have probationary conditions that prohibit association with known criminals, engaging in criminal activities, or being present when criminal behavior occurs. PDDT offers the opportunity to monitor the clients’ behavior in handling or being in the presence of illegal drugs.

3. Case Managers to Handle PDDT Results - Opening Up the Conversation. Case managers acknowledged that a positive PDDT test could potentially result from transferring drug residues through casual handshakes, innocently touching someone who has been in contact with drugs, rubbing against something with illegal drug residues, being in the presence of someone using illegal drugs, or a result of illegal drug activities. They also acknowledged that a positive PDDT is presumptive only. How should case managers manage the positive PDDT results with the client? Case managers have knowledge as well as documentation of the clients’ behavior patterns. Any PDDT positive result opens the conversation with the client about behavior that may have caused a positive result. There may be discussions of people or places visited by the client where drugs may have been present and why the client was in such a place.

### **Field Operations Use of PDDT:**

PDDT may be helpful in field operations when home and employment sites are visited. This could help case managers test suspicious substances if encountered in the field. In addition, if the client knows that their residence, vehicle and place of employment may be randomly or routinely tested with PDDT, illegal behavior may be deterred.

If PDDT is applied to field operations, procedures on PDDT use on suspicious substances found during field visits and random/routine testing of surfaces or possession in the home, vehicle and place of employment should also be included in new procedures required for PDDT.

## **Who should use PDDT for determining results?**

PDDT testing should be limited to case managers or administrators.

## **Revealing the PDDT Results:**

Administrators should determine how to handle PDDT results with clients and what outcome is to be achieved. Consideration needs to be given on whether or not to show the client the actual PDDT results and what recourse, if any, is to be offered to the client to challenge the results.

In some cases the PDDT results are not intuitively obvious, requiring careful scrutiny and interpretation of the color of very small dots and comparing the color of these dots to the PDDT color chart.

Some administrators who were interviewed were not comfortable with the need for interpretation and were reluctant to send out the PDDT test paper for further chemical analysis confirmation because of limited resources available.

Others accepted the need for interpretation of PDDT results from time to time. They acknowledged that judgment may be required. This group tended to emphasize that PDDT results were only showing a presumptive presence of illegal drugs not a definitive presence.

They indicated that the primary purpose of using PDDT was to open the door for a conversation between the case manager and client to discuss what potential behavior or circumstances could lead to presumptive positive PDDT results.

This group felt there was need to only inform the client of the PDDT test results. They felt it was not necessary to show the client the PDDT sprayed paper results or to offer recourse to undertake additional confirmatory tests. Those that expressed discomfort with interpreting the PDDT results were more inclined to consider the test results as negative. These administrators were generally inclined to show the client the PDDT test result and allow recourse to challenging the PDDT results.

## **General Findings:**

1. The PDDT was useful in community corrections settings.
2. The PDDT testing process was readily accepted by clients and corrections staff. Both felt that it was quick, simple to use, and non intrusive. Training on the PDDT was straightforward and was accomplished within a short time period.
3. Most of the PDDT positive test results were for marijuana, which was expected, as marijuana was not only the prevalent drug of choice but also because its residual properties were more long term than other controlled substances.
4. There appeared to be a cost savings with using PDDT as a screening tool over using UAs. This assumes that PDDT can substitute for UAs under certain circumstances and conditions. The cost savings were based upon the time differences in performing the UAs which had a longer time requirement than the time needed to conduct the PDDT. There were certain circumstances under which community corrections officials felt that the use of PDDT would be cost beneficial and cost effective.

Many community corrections settings use risk analysis methods in evaluating client behavior and progress towards achieving rehabilitation goals. There are some clients who have demonstrated through consistent behavior and monitoring that they are low risk. For these clients, using PDDT, if positive, as a precursor to using a UA test or using PDDT to periodically and randomly replace UAs, would be cost effective to monitor this low risk client group.

5. Anecdotally, PDDT was found to be useful in assessing what drugs may be present in corrections facilities by conducting PDDT test paper swipes in various facility locations as well as to routinely and randomly test surfaces, vehicles, equipment and possessions during field visits to homes and to employment locations. In one instance, an experiment was performed to determine if PDDT could be used to detect (Spice / K2). A known sample of Spice was presented in the experiment. The PDDT ampoule was used and when applied to the sample substance it detected a derivative of marijuana.

6. Corrections officers, case managers, administrators expressed their belief that PDDT would be a useful tool in a community corrections setting. They did not indicate that PDDT could or should replace the use of other drug testing protocols, such as urine analysis. They found that PDDT would be useful in supplementing existing drug testing. In particular, they said that PDDT could help to enforce probation conditions where the client must avoid criminal activity or association with criminals.

7. Existing drug testing reflects recent use or ingestion. PDDT helps monitor whether the client is presumptively handling or in the presence of illegal drugs.

8. A majority of clients, corrections officers, and case managers believed that the use of PDDT in combination with urine analysis and other drug testing methods would be effective in deterring client drug involvement behavior. Using PDDT and urine analysis on a random basis, in combination or singly, adds the element of unpredictability of when the client will be tested and what will be tested. Knowing that they may be tested at any time for ingestion or that any possession, piece of clothing or body exposure could be swiped with PDDT collection papers introduces sufficient uncertainty to the client and may lead to deterrence from drug related behaviors.

### **Cost Comparison of PDDT:**

A cost-comparison analysis was conducted based on the notion that the PDDT could be used as a first step in assessing whether the offender came into contact with drugs. PDDT shows reliability and validity in the field, it may be possible to supplant UAs for screening purposes only. It would not supplant UAs as the basis for determining ingestion of a drug.

The methodology for determining cost effectiveness involved determining if there is a potential costs savings from using traditional methods of drug testing. The approach is to compare the cost of time and materials in using PDDT to the cost of time and materials in using UAs

The material costs for PDDT appear to be comparable or lower than *presumptive* UAs currently in use. Purchasing PDDT could lessen the number of UAs or other tests that could be conducted during the budget year.

## **Recommendations For The Evaluation Of PDDT:**

Pre-Plan, Expect Delays, and Be Open-Minded.

Evaluations of technologies in real-world settings take time and require careful planning and collaboration among a number of entities including the funder, the technology manufacturer, the sites, the focus of the study (the clients), and the users. Pre-planning is essential for the success of an evaluation of technology. The planning process includes a determination of the goals, objects, and outcomes of the evaluation with the funder and the manufacturer. These may change in the field, so users need to be flexible, open-minded and have a willingness to make adjustments during the course of the evaluation, without compromising the integrity of the evaluation.

Human Subjects and Confidentiality are Extremely Important Considerations.

The value of the Institutional Review Board and its focus on human subjects cannot be overstated. The IRB's initial review extended the time frame of the project, but its objectivity and concern for the offender/client strengthened the methodology of the evaluation. By conducting a 'double blind' test of the technology, we were able to protect the offender/client and obtain valid and reliable results.