ARIZONA DEPARTMENT OF PUBLIC SAFETY

RAPID DNA QUARTERLY REPORT
FOURTH QUARTER, FY2022

July 15, 2022
Arizona Department of Public Safety

“Courteous Vigilance”

Quarterly Report of Rapid DNA Partner Sites

Fourth Quarter, FY2022

Background

The Arizona FY22 budget appropriated $600,000 in onetime funding to the Arizona Department of Public Safety (AZDPS) to “purchase and deploy rapid DNA testing devices throughout this state” and, “subject to availability of monies and upon request of the county sheriff, to train law enforcement personnel on properly using the Rapid DNA testing devices”.

These new instruments will supplement an existing Rapid DNA program that the AZDPS has been operating since 2014.

Statute also requires the AZDPS to submit quarterly reports to the chairpersons of the Judiciary Committees in the Arizona House and Senate. These reports must include: 1) The number of rapid DNA tests performed by the department and county sheriffs. 2) The number of criminal suspects identified or matched by rapid DNA testing to the combined DNA index system. 3) The total number and types of crimes identified or matched by Rapid DNA testing.
Rapid DNA Instrument Deployment

The AZDPS has purchased four Rapid DNA instruments with the one-time funding and has distributed them around the state for greater access to law enforcement personnel. Four regional sites were identified - Yuma County Sheriff’s Office, Cochise County Sheriff’s Office, Yavapai County Sheriff’s Office, and Pinal County Sheriff’s Office. Memorandums of Understanding (MOU) are completed and executed between AZDPS and all four partner sites. All purchased instruments have been received and have been installed at all four sites, which were renovated to accommodate the program. The instrument at Yuma County Sheriff’s Office was officially brought online on May 18, 2022. The instrument at Yavapai County Sheriff’s Office was online as of July 1, 2022. Validation of the other two sites to bring them online will be completed once necessary reagents are received from the vendor.

Training of Rapid Operators

Rapid DNA Operator training established by the AZDPS is a course that provides a combination of online and in-person training in basic biology and DNA, basic DNA interpretation, collection and preparation of samples for use on the rapid instrument, running the rapid instrument, using the standalone database associated with the Rapid DNA Law Enforcement Program, and court testimony training. To complete the course, trainees are required to pass a written exam and complete a practical exam where they correctly walk through the steps of a sample collection, preparation, and run on the Rapid DNA instrument.

Training is complete for five Rapid Operators at Yuma County Sheriff’s Office. Training will be complete as of July 8, 2022 for three Rapid Operators at Yavapai County Sheriff’s Office. Training started at Pinal County Sheriff’s Office on June 29, 2022 for five Rapid Operators, and training is scheduled in July for Cochise County Sheriff’s Office for an additional five Rapid Operators.

Utilization of AZDPS Rapid DNA Instruments

As mentioned above, instruments funded with the FY22 onetime appropriation are just coming online and therefore have not been used to analyze DNA samples. While the Yuma instrument is online, no cases have been run by Yuma County Sheriff’s Office as of June 30, 2022. Yuma County Sheriff’s Office held a meeting with local user agencies in the final week of June to discuss appropriate case types for Rapid DNA analysis.

AZDPS felt it would be beneficial to include data from the Department’s Rapid DNA program with instruments located within AZDPS Crime Laboratories in Maricopa and Pima County.
In Quarter 4 of FY22, 12 cases involving 12 DNA samples were processed through the AZDPS Rapid DNA program. These tests resulted in 4 out of 12 (33%) samples providing leads in 4 of the 12 (33%) cases. Cases run during this period included assorted property crimes, a homicide and a sexual assault.

Since the inception of AZDPS Rapid DNA program in April 2014, 670 cases have been run on the program instruments with 243 leads provided, translating to a success rate per case of 36.3%.

Rapid DNA data from crime scenes is currently not allowed to be uploaded to the combined DNA index system (CODIS). Therefore, the number of criminal suspects identified or matched by Rapid DNA testing being reported comes from the standalone Arizona DNA index system. A breakdown of these cases and samples is included in the below table (Pima County did not utilize the Rapid DNA instrument during this reporting period as the instrument at that location is awaiting supplies to be validated).

<table>
<thead>
<tr>
<th>INSTRUMENT SITE</th>
<th># OF CASES RUN</th>
<th># OF CASES WITH LEADS</th>
<th>SUCCESS RATE</th>
<th># OF SAMPLES RUN</th>
<th># OF SAMPLES WITH LEADS</th>
<th>SUCCESS RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa County</td>
<td>12</td>
<td>4</td>
<td>33%</td>
<td>12</td>
<td>4</td>
<td>33%</td>
</tr>
<tr>
<td>Pima County</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>4</td>
<td>33%</td>
<td>12</td>
<td>4</td>
<td>33%</td>
</tr>
</tbody>
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<th># OF SAMPLES WITH LEADS</th>
<th>SUCCESS RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa County</td>
<td>53</td>
<td>20</td>
<td>38%</td>
<td>84</td>
<td>25</td>
<td>30%</td>
</tr>
<tr>
<td>Pima County</td>
<td>11</td>
<td>5</td>
<td>45%</td>
<td>15</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>64</td>
<td>25</td>
<td>39%</td>
<td>101</td>
<td>30</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Promulgation of Rapid DNA Rules**

Chapter 403 Laws 2021 (HB2893 Criminal Justice BRB) requires AZDPS to promulgate rules within the Arizona Administrative Code to ensure there is a uniform and proper application of Rapid DNA technology by law enforcement professionals in Arizona. AZDPS has received rule making approval from the Governor’s Regulatory Review Council.

The new rules are scheduled to be published in July 2022 as “Chapter 15. Department of Public Safety – Rapid DNA” under “Title 13. Public Safety”.