

# Promising Practices in Forensic Lab Intelligence

Sharing Lab Intelligence to Enhance  
Investigations and Intelligence  
Operations

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A resource to support agencies in developing and enhancing  
partnerships and engagement between law enforcement  
forensic labs and intelligence units

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## Introduction

In the purest sense, intelligence is the end product of an analytic process that evaluates information collected from diverse sources; integrates the relevant information into a logical package; and produces a conclusion, an estimate, or a forecast about a criminal phenomenon by using a scientific approach to problem solving (that is, analysis).<sup>1</sup> Extensive national efforts to improve the development and use of intelligence since the tragic events of September 11, 2001, have resulted in significant accomplishments. State and local law enforcement agencies have improved intelligence training and emphasized crime analysis and the use of crime analysts. In addition, there has been a keen focus on intelligence-led policing as a model that fosters incorporating new ideas, assets, and practices into strategic and tactical efforts to prevent crime and/or identify its perpetrators.

### National Intelligence Sharing Accomplishments

- *The 9-11 Commission Report*
- Establishment of the Criminal Intelligence Coordinating Council (CICC)
- *National Criminal Intelligence Sharing Plan*<sup>2</sup>
- Information Sharing Environment through the Intelligence Reform and Terrorism Prevention Act of 2004
- National Fusion Center Initiative<sup>3</sup>

Considering recent observations about physical and digital evidence collection associated with illegal narcotics, the opioid epidemic, cybercrimes, and gun-related violence, the submission of evidence to forensic laboratories (labs) and resulting analysis creates an opportunity for building upon improvements in intelligence. Forensic labs hold a significant amount of data and engage in a wide variety of scientific disciplines in analyzing evidence. Because the scientific process is closely aligned with the intelligence cycle, there are excellent opportunities to expand the landscape of intelligence development. Forensic labs develop objective, data-based primary investigative intelligence which, when combined with existing data and other forensic lab information, often creates new information. This lab-aggregated data—such as processed crime guns, National Integrated Ballistic Information Network (NIBIN) hits, and drug submission information—can be used as leads for investigative agencies. **The integration of forensic information in the intelligence process can enhance the relevancy and applicability of intelligence.**

Collaboration between investigative and lab functions can enhance both entities' abilities to analyze their operations' effectiveness, provide better information to decision makers and practitioners, and improve the identification/detection of emerging trends. Development of promising practices will aid organizations in their efforts to combat drugs and violent crime. For example: Determining the origins of crime guns may help law enforcement in its resource allocation models, monitoring drug submissions to laboratories will enable law enforcement to

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<sup>1</sup> *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, Second Edition, David L. Carter, Ph.D., School of Criminal Justice, p. 9, [https://it.ojp.gov/documents/d/e050919201-IntelGuide\\_web.pdf](https://it.ojp.gov/documents/d/e050919201-IntelGuide_web.pdf).

<sup>2</sup> *National Criminal Intelligence Sharing Plan* (NCISP), Global Justice Information Sharing initiative, U.S. Department of Justice, October 2013, <https://it.ojp.gov/GIST/150/National-Criminal-Intelligence-Sharing-Plan-Version-2-0>.

<sup>3</sup> *National Network of Fusion Centers Fact Sheet*, U.S. Department of Homeland Security, <https://www.dhs.gov/national-network-fusion-centers-fact-sheet>.

provide real-time analysis of the types of drugs on the streets today and allow timely adjustments to its interdiction activities, and significantly enhance a law enforcement agency's computer comparison statistics (CompStat)<sup>4</sup> capabilities through the use of laboratory data.

### About This Resource

The Criminal Intelligence Coordinating Council (CICC), on behalf of the Global Justice Information Sharing Initiative ([Global](#)), developed this resource to provide law enforcement intelligence functions and fusion centers (hereafter referred to as “intelligence units”) with promising practices and recommendations on how to develop or enhance the relationships between forensic labs and intelligence units to further build out agency intelligence efforts. These include examples of ways to leverage lab submissions and analysis to augment intelligence operations, and examples of how labs and intelligence units are working together to exchange information. The recommendations contained within this resource are a result of research on existing resources, deliberation with a committee of law enforcement and forensic lab subject experts, and site visits with several lab services that lend themselves to producing intelligence and assisting with investigations and other law enforcement and homeland security operations.

It is important to acknowledge that intelligence units and labs vary in how they are structured and in what organizational authority they reside (e.g., state agency, district attorney's office). As such, not all of the guidance in this resource may apply directly. However, there are useful promising practices that can be employed creatively within a variety of organizational models.

### Lab Discipline-Specific Promising Practices

This resource includes promising practices and recommendations that are specific to certain lab disciplines, as well as a section on those that apply more generally. While a multitude of disciplines are handled by forensic labs, the focus here is on those disciplines that more often overlap with intelligence and investigative components, such as crime guns, drugs and controlled substances, toxicology, digital evidence, and DNA analysis. Other disciplines, such as questioned documents, cryptanalysis, records and symbol examinations, and missing persons identification, are touched on briefly in this resource—not in-depth—since they do not overlap as directly with intelligence and investigative components. Other forensic disciplines may serve more prominent roles for intelligence and investigative operations in the future. Such disciplines include the examination of fingerprints, footwear, tire treads, toolmarks, and trace evidence (explosives, fire debris, gunshot residue, glass, hair, fibers, paints, and other chemical analysis). Future operations may also consider the integration of forensic laboratory data with data from medical examiner/coroner offices, since the data provided through death investigations can provide a wealth of information to identify trends and newly emerging threats.

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<sup>4</sup> *CompStat and Organizational Change: A National Assessment*, National Police Foundation, <https://www.policefoundation.org/projects/compstat-and-organizational-change-a-national-assessment/>.

## Background

The CICC operates under the auspices of Global’s Advisory Committee (GAC)—a Federal Advisory Committee to the U.S. Attorney General providing information sharing priorities and recommendations from the criminal justice field. The CICC was established to support state, local, and tribal law enforcement and homeland security agencies in their ability to develop and share criminal intelligence and information nationwide and is considered the cornerstone of collaboration with federal partners—including the U.S. Department of Justice, the U.S. Department of Homeland Security, the Federal Bureau of Investigation, and the Office of the Director of National Intelligence, Partner Engagement-Information Sharing Environment—to coordinate national initiatives focused on intelligence sharing, achieved largely through the efforts of fusion centers.

The CICC established a task team to explore forensic lab promising practices and lessons learned as they relate to intelligence sharing opportunities and developed recommendations for the field to further improvements in the collection and sharing of intelligence. This effort was coordinated with the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice, and supported by the U.S. Department of Homeland Security. A group of subject experts was identified to serve on the task team, based on their knowledge and experience in the operation of forensic labs and criminal intelligence and investigations.

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## General Laboratory-Produced Intelligence

A tremendous amount of criminal intelligence can be derived from evidence submitted to, and processed by, forensic laboratories. For this intelligence to be useful, both intelligence units<sup>5</sup> and forensic labs must proactively collaborate to establish protocols and processes for sharing intelligence. Several national systems contain forensic data that can be exploited by investigative agencies once proper training, access, and protocols are in place, including implementation of privacy protections.

*"It is incumbent upon both criminal intelligence units and crime labs to proactively collaborate to establish protocols and processes for the sharing of intelligence."*

The following are examples of general intelligence sharing promising practices—or recommendations—as well as identified challenges gathered from field research and site visits at forensic labs and intelligence units.

### General Recommendations

- **Lab Information Management System (LIMS)**—LIMS is a valuable tool for the sharing of information between labs and intelligence and investigative units. While intelligence and investigative personnel may not have access to LIMS, reports can be tailored for a wide variety of investigative and information sharing purposes, as well as facilitate the sharing of forensic testing results. If, in the case of a state lab, the intelligence unit falls within the organizational structure such that access to the LIMS is available, custom access with established permissions for intelligence analysts can enable them to organize and search the information for leads and commonalities with other cases, as well as aid in investigative product development.

LIMS statistical reports also can offer multilayered filtering capabilities (e.g., by county, by all counties, by year, by narcotic type). While not all labs require law enforcement to submit police reports along with their evidence submissions, those that do and have enhanced formats of LIMS are able to submit queries using a name search, cross-reference any associated law enforcement agency number, filter to anyone associated with the incident (e.g., someone who was arrested along with the individual), and list whether evidence was collected. This powerful tool helps to identify any agency that may have arrested a suspect, a known associate, victims, or anyone else with links to the arrested suspect/person of interest. Submission through LIMS is one way to share information across multiple agencies and is extremely helpful for intelligence-led generation purposes, since it provides a more inclusive, global picture of the suspect and/or incident under investigation. Simply having the ability to discover possible associates of a suspect is extremely valuable for intelligence and investigative units.

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<sup>5</sup> For the purposes of this guide, the term “intelligence unit” will refer both to law enforcement intelligence units and fusion centers.



A Web-based LIMS also can connect regional and county labs and facilitate submissions in real time, increasing the rate of information from weekly to daily and improving timeliness issues.

Where permitted by law and policy, intelligence units should seek access to lab information systems to exploit intelligence from forensic lab submissions.

- **Connecting the Evidence “Dots”**—An intelligence analyst pieces together information on a subject in an ongoing case, even if the same subject has been identified in evidence submitted to a forensic lab by a different law enforcement agency for a previous or unrelated investigation. While lab personnel may be unable to piece the strands of unrelated intelligence together, intelligence analysts are able to spot patterns and trends. Having access to lab data helps connect seemingly disparate dots and provide a clearer investigative picture.
- **Linking Results Across Lab Disciplines**—One way to build intelligence and create leads is for labs to cross-reference and connect lab processes across disciplines (e.g., fingerprints, DNA) to identify potential relationships between pieces of submitted evidence (e.g., a shooting may have relevance to drug sales). A cross-disciplinary approach can enable multiple lab disciplines to participate in the identification of persons of interest through access to multiple databases.
- **Standardized Terminology**—The establishment and use of standardized terminology and definitions (e.g., request date, incident date, crime gun terminology) is imperative to ensure the usefulness of the data to law enforcement, investigators, lab personnel, and intelligence analysts across the city, county, state, and region. For example, the data field “county” can refer to the county of the agency or task force or the county of the incident. When multiple entities are using the same terms and definitions differently, the use of this data to connect crimes and uncover trends can be limited. Establishing these types of understanding will enable the effective use of information later as leads and intelligence.
- **Backlogs**—The completion and attainment of lab accreditation has helped labs in the acquisition of resources (equipment/instrumentation, personnel, funding for training, conference attendance, and other forms of professional development) and the implementation of comprehensive systems of standardized management and technical processes. This has improved laboratories’ work products and efficiency and reduced the forensic case backlog.

Another way to reduce lab backlogs is to establish policies, standards, and procedures for the prioritization of submissions and develop guidance for officers in the field submitting evidence and case work. These standards can outline the kinds of cases that **should be** sent to the lab and distinguish between case types. Ultimately, these standards can result in improved case completion times.

Consider adding less items per case since resources are targeted to specific items in a layered analysis rather than a shotgun approach. The result is a quicker turnaround on fewer but more probative items.<sup>6</sup>

Completing a self-assessment of the productivity and quality of each lab unit's work, evaluating processes, and revising procedures based on the results of the assessments can help to streamline lab processes and improve lab capacity to provide intelligence for investigations. This can also enable a forensic lab's request for additional resources based on objective data as lab resources are maximized.

## Relationship-Building Recommendations

- **Intelligence Unit Collaboration**—Labs and intelligence units should meet routinely to share information on the lab's capabilities, services, and data types to encourage collaborative relationships and provide guidance on interpreting lab data to help inform how to use the information in intelligence products.

When intelligence units develop products that include lab data, it is highly beneficial, both in building relationships of trust and to validate the accuracy of the information, to include lab examiners<sup>7</sup> in the review of intelligence products prior to distribution. Lab LIMS can also act as a collector and collator of data coming in from a variety of different agencies, assisting in developing partnerships among law enforcement agencies.

### Checklist for Lab and Intelligence Unit Collaboration

To strengthen relationships, grow capabilities, and inform the intelligence process, labs and intelligence units should meet routinely (in person or virtually by phone or videoconference) to:

- ✓ Create a joint understanding of lab and law enforcement needs.
- ✓ Learn about lab capabilities and services and data types the lab addresses.
- ✓ Improve the evidence submission process.
- ✓ Establish data sharing agreements.
- ✓ Provide training on how lab data can be used as intelligence and facilitate an understanding of how intelligence works.
- ✓ Provide training on how to interpret lab data and the types of intelligence that can be derived from crime labs.
- ✓ Seek lab input and collaboration on intelligence products containing lab data.
- ✓ Create intelligence products for the lab community to communicate intelligence trends, threat perspectives, etc.
- ✓ Share updates on how lab data was used (e.g., led to an arrest or conviction).

In addition, intelligence unit provision of briefings to lab examiners or, at minimum, to lab administration, on how the lab-provided information was used underscores the value and importance of the lab's work and fosters relationships. While lab analysis is but one piece of the full investigative picture, labs have indicated an interest in receiving information on how the data they provide is used (if the data leads to an arrest or conviction) to help

<sup>6</sup> A Crosswalk From Medical Bioethics to Forensic Bioethics, Wickenheiser, R.A., Forensic Science International: Synergy, Volume 1, pp. 35–44, page 13, 2019, <https://doi.org/10.1016/j.fsisyn.2019.03.002>.

<sup>7</sup> The term "lab examiner," for the purposes of this guide, will refer to lab analysts, scientists, and those lab staffers performing lab testing and processes.

inform the process and reinforce the value of their work. The increase in lab knowledge of the application and the use of lab data can also lead to changes in workflow and how/what data is retained, which in turn further enhances the capability and utility of forensic lab-generated and collated data.

Regular intelligence briefings for lab personnel should be performed by intelligence units to better inform those personnel of the needs of law enforcement intelligence units. In addition, intelligence units should consider sending their priority information needs and standing information needs to their forensic labs.

Although fusion centers were originally conceived as terrorism-only intelligence centers, most have expanded to include all crimes and have developed a reputation as trusted intelligence partners with law enforcement and other first-responder agencies. Fusion centers are in a unique position to provide analytic resources to forensic laboratories that may not otherwise have such a capability.

- **Law Enforcement Meetings**—Routine and regular meetings between forensic roles and the law enforcement investigative and intelligence functions help improve the evidence submission process and better understand the laboratory report for clarification, as well as create a joint understanding of forensic lab and law enforcement needs.

Intelligence units that have existing executive boards or steering committees may consider adding lab directors to these bodies to enhance collaboration and partnerships.

- **HSIN Community**—One way to share information and help build relationships with investigators, prosecutors, intelligence analysts, and other labs (e.g., NIBIN) is to establish a community of interest on the Homeland Security Information Network (HSIN) and include a group (or subcommunity) of forensic sciences to discuss trends and patterns and share products. One example is the New Jersey Regional Operations Intelligence Center which has a HSIN Community of Interest for its Drug Monitoring Initiative (DMI) where products are posted and monthly national DMI conference calls are held.
- **National Association Participation**—Participation with similarly aligned associations (e.g., Association of State Criminal Investigative Agencies [ASCIA], International Association of Chiefs of Police [IACP], National Fusion Center Association [NFCA], Major Cities Chiefs Association, Major County Sheriffs of America, American Society of Crime Laboratory Directors [ASCLD]) is a beneficial way to build relationships and make the contacts needed to enable labs to stay at the cutting edge and facilitate the learning/adoption of other organizations' promising practices for information sharing.

## Governance and Operational Structure Recommendations

- **Organizational Placement**—The organizational structure of a forensic lab is vital for relationships, such that the lab is positioned at an appropriate executive/command level in the overall rank structure (not buried under investigations).
- **Centralizing Intelligence Functions**—If at all possible, centralizing intelligence functions (e.g., fusion center, high-intensity drug trafficking area [HIDTA] programs, and real-time crime centers) under one chain of command allows for a more streamlined and interactive intelligence process and simplifies coordination across the functions. Such cross-coordination ensures a common goal of effecting change in processes more efficiently and effectively.
- **Bias**—While it is important to help lab examiners understand the impact that their work product may have on investigations and court cases, it is also important that the scientists not interact directly with intelligence units, since they need to be able to do their work and protect the lab process without undue influence or creating bias. Bias can be cognitive, confirmation, or contextual.

The lexicon of the Organization of Scientific Area Committees for Forensic Science,<sup>8</sup> administered by the National Institute of Standards and Technology, defines bias as:

- **cognitive bias**—A set of influences that may affect the reliability and validity of one's observations and conclusions
- **confirmation bias**—The tendency to search for data or interpret information in a manner that supports one's preconceptions, expectations, or desires
- **contextual bias**— A deviation in human judgment caused by exposure to information that is either irrelevant to the judgmental task or inappropriate for consideration

Use of generalized statistics can facilitate the containment of bias, as discussions focus on trends versus individual cases in process. Additionally, discussion of closed past cases can serve as excellent examples, while also limiting bias.

## Training Recommendations

- **Cross-Training Between Labs and Intelligence Units**—Lab management (e.g., directors, section managers, senior lab scientists) needs to receive training on the intelligence process—how lab data can be used as intelligence and the impact of their work—to facilitate an effective understanding within their sections of how intelligence works, improve productivity and prioritization, and provide an awareness of law enforcement needs.

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<sup>8</sup> Organization of Scientific Area Committees for Forensic Science lexicon, <http://lexicon.forensicosac.org/term/home/index>.

At the same time, leadership in intelligence units need to be educated on the types of intelligence that realistically *can be* derived from forensic labs. This intelligence can include types of lab data available, types of reports and results produced, and education and clarification on both the interpretation and the limitations of lab results. This furthers lab intelligence relationships and law enforcement comprehension of lab processes, capabilities, and capacity. One way to conduct this training is to routinely assign a lab examiner in the intelligence unit for a certain period to establish a baseline on the intelligence process, and, vice versa, assign an intelligence analyst within the forensic lab.

For example, the Federal Bureau of Investigation (FBI) established a Forensic Intelligence Program that provides intelligence products and investigative leads with information derived from forensic exams to support criminal investigations. Through this program, intelligence analysts are assigned to different laboratory functions to create an understanding of forensic lab capabilities and help export intelligence evidence submitted to a forensic lab. Likewise, select forensic lab analysts are provided with enhanced intelligence training to support the FBI Forensic Intelligence Program.

Another method for lab-facilitated training is staging crime scenes and providing instruction on how to work a typical crime scene—what can be collected and what the lab will do with the evidence, the kind of report/information the lab will provide, and what follow-up the investigator will need to do with that information.

Additionally, law enforcement should also be trained regarding bias and providing task irrelevant information—information about the crime, possible suspects, etc.—that would not necessarily be needed for testing, but which could potentially influence analysis. Labs routinely work to minimize their exposure to information that could have the potential to bias the lab examiner. Law enforcement officers should be made aware of how the information they provide may have the potential for creating bias.

- **Standardization Across Jurisdictions**—Another challenge is the lack of standardization in crime scene collection procedures, both within and between jurisdictions. For example, crime scene collection may be conducted at the direction of another investigative entity that may/may not use promising practices or the same level or type of training as crime scene units from other jurisdictions.
- **Internal Lab Cross-Training**—All lab staff members, regardless of their titles, position descriptions, backgrounds, or expertise, should be trained on internal laboratory policies, procedures, and promising practices, as well as external parent agency requirements and accreditation standards, since staff members work collaboratively and, at some point, may individually handle evidence.

Lab technicians and scientists tend to work on the cases in front of them. Lab work has traditionally been compartmentalized inside of a silo. Moving from the narrow focus of one case to a more globalized perspective is important. All involved must be aware that what they are working on is vitally beneficial to others who may be working another case



and vice versa. Cross-training for limited periods of time may be useful to help everyone involved achieve at least a minimum level of awareness of the various forensic disciplines/capabilities.

## Challenges

- **Lab Capacity, a Balancing Act**—The ability to provide forensic intelligence is influenced by a lab's capacity (or efficiency). The opioid epidemic, for example, has overwhelmed many labs across the country. In addition, advancements in technology and new forensic capabilities come with new demands, which in turn stress resources to meet the increasing demands. Labs must find a balance between providing forensic intelligence and maintaining productivity within the lab. Lab capacity is the number of cases each lab examiner can reasonably work. If the number of requests for analysis is more than a lab's capacity, backlogs occur. Establishing a process to coordinate with intelligence units to prioritize their requests is essential for lab capacity. Ultimately, more resources are needed, since most labs are underresourced.
- **Automation of Evidence Submissions**—In some labs, the electronic tracking of evidence does not begin until the evidence is physically submitted to the lab. In many cases, law enforcement officers must still complete carbon-copied evidence forms for their submissions. Upon receipt of the forms, lab clerks must manually enter the information into the labs' LIMS to initiate electronic tracking (creating the possibility of entry errors). A pre-log capability for law enforcement officers to electronically submit case information can lead to improved standardization and the ability to share data, reduce errors, and minimize staff resources at the lab's evidence receiving section. An electronic automated evidence submission process can help streamline the evidence submission process and allow for the ability to run electronic queries and reports on the submission information, where valuable intelligence can reside. For example, the ability to electronically search for trends in evidence submissions, such as across drug stamps or query submission information for known associates, can provide critical information to inform the intelligence process.
- **Job Descriptions**—Responsibility for the creation and management of lab examiner job descriptions should be with lab management to ensure that the identified job requirements yield the right candidates with the appropriate education and experience. When job descriptions are established and managed by entities other than the lab, such as a city or state department that centralizes employee job descriptions, there is a disconnect between the skill set needed by the lab and the candidates who apply. This challenge is also faced by intelligence units for analyst positions. Job descriptions created by departments unassociated with the work of a position tend to draw candidates who are unsuitable for the position. When these descriptions are managed by a centralized process, it is important for the lab and the intelligence unit to be proactive and work with the department to revise the job descriptions to better fill future positions. While this is a hiring issue, it is suggested here because it also affects lab capacity.

- **Accreditation and Confidentiality Requirements**<sup>9</sup>—Lab accreditation is of paramount importance. In some locations, if a lab loses its accreditation, it can no longer function. One accreditation requirement relates to the confidentiality of information. An important concern is how sensitive laboratory results may be used and/or released. The intelligence unit, however, can be the buffer between law enforcement patrol and labs because of the unit’s experience with handling sensitive information; its pointer-system approach; implementation of privacy, civil rights, and civil liberties (P/CRCL) policies; and the unit’s compliance with 28 CFR Part 23 and CJIS regulations.

For intelligence units and forensic labs that are not within the same organization, establishing formalized agreements between intelligence units and labs is one way to ensure that the law enforcement-sensitive information provided by the labs is protected and handled in a way that maintains 28 CFR Part 23 compliance. Most intelligence units are accustomed to compiling information from multiple sources, each source serving as a pointer or indicator. Such agreements between a lab and an intelligence unit can specify that the unit use only lab-provided information as a “pointer” or indicator. If the lab data is not serving as the sole source of an intelligence unit’s information, the unit must request the original information from the contributing agency and/or build the information from other sources.

- **Public Transparency**—It is a challenge to balance public transparency with the protection of a lab’s tools and methods from criminal elements. While the public has an intrinsic right to know which tools law enforcement has at its disposal and the significant privacy issues at stake, making a full disclosure of the methods and tools at the lab’s disposal can potentially nullify those capabilities by making criminal elements aware. It is a delicate balancing act that agencies confront regularly.

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<sup>9</sup> Excerpts from International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 17025:2017© include:

4.2 Confidentiality

- 4.2.1 The laboratory shall be responsible, through legally enforceable commitments, for the management of all information obtained or created during the performance of laboratory activities. The laboratory shall inform the customer in advance, of the information it intends to place in the public domain. **Except for information that the customer makes publicly available, or when agreed between the laboratory and the customer (e.g., for the purpose of responding to complaints), all other information is considered proprietary information and shall be regarded as confidential.**
- 4.2.4 Personnel, including any committee members, contractors, personnel of external bodies, or individuals acting on the laboratory's behalf, **shall keep confidential all information obtained or created during the performance of laboratory activities**, except as required by law.
- 8.4.2 The laboratory shall implement the controls needed for the identification, storage, protection, back-up, archive, retrieval, retention time, and disposal of its records. The laboratory shall retain records for a period consistent with its contractual obligations. **Access to these records shall be consistent with the confidentiality commitments**, and records shall be readily available.

## Discipline-Specific Promising Practices

### Crime Guns

Crime guns have always been an important part of law enforcement investigations. Traditionally, a recovered gun from a crime scene would be submitted to a forensic lab for analysis to compare with any known projectiles or shell casings. However, with the development of crime gun intelligence centers and an expanded emphasis by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) to conduct a complete analysis of gun crimes, much more intelligence can be obtained from recovered guns and shell casings than ever before.

In 2017, more than 27,958 firearms were recovered and traced in Texas, with 1,597 involved in a time-to-crime of less than three months.

See ATF Firearms Trace Data–2017 at <https://www.atf.gov/docs/undefined/flwebsite17183911pdf/download>.

Crime gun intelligence (CGI) “utilizes evidence-based technology to provide law enforcement with a unique tool to enhance comprehensive violent gun crime strategies. CGI combines all available information on crime guns and shootings to identify and disrupt the shooting cycle. Crime gun intelligence concentrates on the ways firearms are diverted from the normal venues of regulated commerce to the criminal market, seeks to intervene to prevent that diversion, and establishes connections of crime guns that have already been used. CGI reveals leads not otherwise available to assist in identifying offenders who are illegally purchasing or transferring firearms and the offenders who use them to commit violent crimes.”<sup>10</sup>

The ATF’s *Firearms Tracing Guide* defines a crime gun as follows: “any firearm illegally possessed, used in a crime or suspected to have been used in the crime. This may include firearms abandoned or otherwise taken into law enforcement custody that are either suspected to have been used in a crime or whose proper disposition can be facilitated through firearms trace.”<sup>11</sup>

Any time a gun is used to commit a crime, it leaves behind ballistic data that will identify the weapon and, in

Firearms tracing is the manual process of researching, by hand, all legal transfers of a firearm from manufacturer to retail sale. Using information unique to the firearm such as make, model, and serial number, ATF’s National Tracing Center can conduct research allowing law enforcement to identify the first retail purchaser of a firearm. This information is often valuable in identifying firearms trafficking schemes, which could not only provide relevant leads to current shooting investigations, but can also inform policy-makers on how best to develop strategies for interdicting illegally trafficked guns.

*Crime Gun Intelligence: Disrupting the Shooting Cycle*,  
The National Crime Gun Intelligence Governing Board

<sup>10</sup> *Crime Gun Intelligence: Disrupting the Shooting Cycle*, The National Crime Gun Intelligence Governing Board, August 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/09/CGI-Manual-Best-Practices-ATF-27-AUG-18.pdf>.

<sup>11</sup> *Firearms Tracing Guide: Tracing Firearms to Reduce Violent Crime* (Firearm Tracing Guide), U.S. Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives, November 2011, 5, <https://www.atf.gov/file/58631/download>.

some instances and through investigative means, may be linked to an individual. The gun leaves certain markings on both the projectile and shell casings that can be compared and associated with a specific gun. This data can be entered into a system to compare it with ballistic data from other crime scenes. In addition, a firearm found at a crime scene will have a serial number that can be traced by ATF to identify the dealer where the gun was originally sold and the first retail purchaser.

If a complete analysis is conducted of all ballistic data and other information concerning suspect firearms and recovered shell casings, additional investigative information can be developed and utilized in multiple investigations. Links to other unsolved cases can be established, patterns of criminal activity can be observed, and crime patterns identified.

Vital to this analysis is ensuring that all ballistic data is run through appropriate investigative databases by both forensic laboratory personnel and criminal investigators to ensure that all data has been developed on the suspect gun and suspect individuals, if identified. Key among the systems are NIBIN, a national database of digital images of cartridge cases that have been collected from crime scenes; the Electronic Tracing System (ETTrace), which contains the results of gun trace data determining where a gun was sold; the National Crime Information Center (NCIC), a computerized index of criminal justice information in the United States; the Combined DNA Index System (CODIS), a database that contains DNA profiles from convicted offenders as well as unsolved crime evidence; and various state, local, and criminal intelligence systems.

### Promising Practices

- **Availability of Forensic Lab Intelligence**—Forensic labs should work with intelligence units to establish a process to ensure that results of tests conducted, and the databases queried, are rapidly reported to criminal investigators for follow-up. Conversely, forensic labs have useful information to include in the packets they provide on a processed gun, such as its use, crime scene information, and links to other crime scenes known to certain shooters and/or gang members that can aid law enforcement in disrupting the shooting cycle. One way to share the availability of this information and perform outreach is to discuss crime gun intelligence at CompStat meetings because of the value of the intelligence available within crime gun labs.
- **Encouraging Crime Gun Submissions**
  - **Regional Crime Gun Pickup Locations**—If the entity is a state lab (or working with a state lab), coordinating routine regional pickups for law enforcement agencies to submit crime guns can increase the number of crime guns submitted for analysis.
  - **Crime Gun Recovery Reports**—A forensic lab and an intelligence unit can work together to develop crime gun recovery reports to encourage law enforcement to submit crime guns in a timely fashion. Including information, such as total arrests, total felony convictions, and other information analyzed and connected and provided in a product to investigators and prosecutors supports intelligence-led policing and intelligence-led prosecution. A scoring mechanism can be employed to evaluate the

number of arrests, convictions, gun-involved shootings, etc., and those with the highest scores can be prioritized and included in an intelligence product for law enforcement, assisting in focusing investigative efforts.

- **Universal Terminology**—Using (and facilitating across agencies) consistent gun crime terminology helps to ensure that law enforcement, investigators, lab personnel, intelligence units, and others are applying the same terms that mean the same things, creating a consistent baseline and understanding across agencies.
- **National Integrated Ballistic Information Network (NIBIN)**—The National Integrated Ballistic Information Network (NIBIN), managed by ATF, is a national database of linked ballistics imaging terminals, populated by images of tool marks from fired bullets and spent cartridge cases, which can be compared, and possible matches identified, as probable hits. Probable hits link two crimes or events that were not previously known to be related. These hits are visually examined by firearms examiners for verification. Local police agencies and forensic labs—called NIBIN sites—operate the NIBIN equipment, process firearms evidence, populate the NIBIN database, and search for matches or hits. Tracking gun crimes (name, victim, location, time, type of gun, etc.), in coordination with a well-developed NIBIN program, can be useful for mapping high-frequency gun crimes and source locations to target and arrest/prevent/deter gun violence, connecting shootings in real time. Updating the record with any arrests made in association with the shootings, is also beneficial. NIBIN accuracy and reliability have improved drastically and continue to improve every time a new weapon is entered into the database. NIBIN can provide real-time information if properly resourced and utilized.

The following are a few of the key practices recommended by the National Crime Gun Intelligence Governing Board<sup>12</sup>:

- Law enforcement agencies should submit fired cartridge cases and recovered crime guns to their NIBIN site within 24 hours of collection.
- Trace requests for recovered crime guns should be made the same day as the NIBIN submission.
- NIBIN leads should be processed for additional intelligence that would add value to the lead and should include things such as department incident and supplemental reports, cell tower, cell phone and social media analysis, gunshot detection system alerts, license plate readers, and crime camera images to be included in an intelligence report for investigators.
- Timely dissemination of intelligence reports to investigators. Succinct intelligence reports containing key findings of analysis such as maps, graphical representations of linkages, and person/suspect profiles should be provided as timely as possible. Follow-up or higher-level intelligence analysis can be conducted and provided to investigators

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<sup>12</sup> *Crime Gun Intelligence: Disrupting the Shooting Cycle*, The National Crime Gun Intelligence Governing Board, August 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/09/CGI-Manual-Best-Practices-ATF-27-AUG-18.pdf>.



as investigative circumstances warrant. In instances where NIBIN leads or crime gun intelligence reveals a lead that has a significant impact on public safety, the immediate communication of that raw information to investigators is critical.

- **Prioritizing Crime Gun Processing**—Traditionally, all crime guns are sent to a lab's firearms identification unit, where each is generally assigned a number and given to an examiner for analysis. One recommendation to maximize lab capacity is that, once a gun is swabbed or printed, it be triaged by entering it into NIBIN; if no hit results, no other forensic examination is completed until the lab is advised otherwise. This process has helped some labs reduce backlog in crime gun processing. If, however, there is a hit in NIBIN, a senior examiner can complete a second read on the hit and then forward the hit to the crime gun intelligence unit to develop intelligence products and coordinate with ATF and the intelligence bureau.
- **Crime Gun Intelligence Centers (CGICs)**

CGICs have been established in several locations throughout the country. These centers analyze gun crime data from crime scenes and other suspect locations in order to conduct a comprehensive analysis of information known to law enforcement concerning the suspect weapon. The Bureau of Justice Assistance (BJA) defines crime gun intelligence centers as “an interagency collaboration focused on the immediate collection, management, and analysis of gun crime evidence, such as shell casings, in real time, in an effort to identify shooters, disrupt criminal activity, and to prevent future violence.”<sup>13</sup>

CGICs rely on an ongoing collaboration among ATF, the local police department, the local forensic lab, probation and parole, local police gang units, prosecuting attorneys, the U.S. Attorney's Office, crime analysts, community groups, and academic organizations. These centers have proven to be very effective in requiring a collaborative effort among federal, state, and local law enforcement and forensic lab personnel.

The centers generally use an eight-step process to analyze the data:

1. Evidence collection of casings and firearms
2. Entry of ballistic data into the NIBIN system
3. Distribution of leads to local agencies
4. Triage and referral of ballistic results
5. Investigation and intelligence deconfliction
6. Progress by investigative agencies
7. Referral to state and federal prosecutors
8. Feedback to forensic labs and law enforcement officers

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<sup>13</sup> Crime Gun Intelligence Centers, The National Crime Gun Intelligence Center Initiative, Bureau of Justice Assistance, <https://crimegunintelcenters.org/>.

Conducting such a complete analysis on every crime gun can be resource intensive; however, the investigative results can be compelling because information that cannot be obtained using any other method can be developed concerning an investigation. It is important to have a collaborative effort among various law enforcement agencies and forensic labs in order to complete these tasks. Where possible, multiple agencies in a region should consider the establishment of a crime gun intelligence center using the combined resources of multiple agencies to share the workload.

The Police Foundation recently conducted an in-depth study and review of the Denver Crime Gun Intelligence Center. The study outlines an in-depth description of the entire process needed to completely investigate and analyze crime gun data. It also outlines personnel needed to undertake such an effort in a large metropolitan area.<sup>14</sup>

The following promising practices are excerpted from the *Recovered Ballistic Evidence: Best Practices for Crime Gun Intelligence Centers*<sup>15</sup> by The Police Foundation:

- “It is critical to understand that although test firing, NIBIN entry, and correlation review have traditionally been done by highly trained firearms examiners at a forensic lab, these steps do not need to be performed by firearm examiners, nor do they necessarily need to be performed at a forensic lab. Instead, these tasks can be performed in a controlled and secure location by sworn law enforcement officers, laboratory technicians, NIBIN contractors, or ATF personnel who are appropriately supervised and trained. Not only does this free up firearm examiners to focus their time on confirming the NIBIN leads as “hits,” something that only they can do, but expanding the pool of personnel available to conduct these tasks also helps ensure that they can be accomplished within the 24-hour window.”
- “DNA swabbing does not have to be done by lab personnel or technicians, so long as it is done by appropriately trained and supervised personnel and is properly documented. For example, the Denver Crime Gun Intelligence Center combines several steps of the process, all captured at their lab, utilizing trained personnel (non-firearm examiners) who examine the firearm for any sign of fingerprints (making detailed notes about the presence or absence of visible prints), swab the textured surfaces of the firearm for DNA (making notes detailing the surface areas swabbed), and test fire two rounds from the firearm remotely on a gun cart. As part of the process, because they are physically in possession of the firearm, they also examine the markings on the actual gun to ensure the description of the firearm provided is both accurate and complete, making any correction needed. They then enter the firearms into eTrace. NIBIN contractors subsequently examine the two test-fired cartridge cases to identify which has the most sufficient characteristics for comparison and enter it [into a system that captures cartridge case images]. Although all of these

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<sup>14</sup>Denver Crime Gun Intelligence Center Process Guide, The Police Foundation, 2017.

<sup>15</sup>Crime Gun Intelligence Center Practices: Lessons Learned from the Field, chapter titled *Recovered Ballistic Evidence: Best Practices for Crime Gun Intelligence Centers*, National Police Foundation, Mark Kraft, September 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/10/Lessons-Learned-from-the-Field-CGIC-Practices-NRTAC-Oct-2018.pdf>.

- tasks are performed at the Denver Crime Laboratory, it is worth noting that this ‘one-stop shopping’ approach could just as easily be conducted within the property section or elsewhere in a police department where a secure space that meets the safety requirements for those tasks exists or can be established.”
- “When establishing a NIBIN process, police departments and forensic labs should be flexible in their thinking about who will carry out processes and where they will be carried out. . . . the cast of participants for many tasks can be greatly expanded beyond fully trained firearm examiners, whose time can be freed up to perform the confirmation of hits and other tasks that only they are uniquely qualified to perform. . . . A number of tasks, such as confirming the description of the firearms provided by the recovering officer and swabbing the firearm for DNA, can be performed as part of the test-firing process by a firearm examiner, NIBIN technician, or other appropriately trained and supervised personnel. The objective should be to eliminate inefficiencies and streamline the processing of crime guns and recovered cartridge cases in the NIBIN process.”

## Challenges

- **Addressing the use of NIBIN:** A 2013 National Institute of Justice (NIJ) evaluation of NIBIN—which looked at how crime investigators use NIBIN, and surveyed forensic labs—revealed that<sup>16</sup> although some sites made excellent use of NIBIN and found it to be an extremely useful tool in helping to solve gun-related crime, at the time of the study, many sites were not taking full advantage of NIBIN. The researchers determined that there was large variation between NIBIN sites—hundreds of days—in the amount of time it took to process ballistic evidence and identify hits. Long delays mean that by the time a hit report is sent from a forensic lab to law enforcement, it might be too late to aid an investigation. The researchers also found that sites in areas with the most gun crime entered the most evidence into NIBIN and generated the most hits, but that other sites used NIBIN very little. Regardless, hits often did not contain data, such as the location where the cartridge was found, that might aid investigators. Finally, the researchers found that many investigators and prosecutors who used NIBIN hits did not provide feedback to the forensic lab on how useful the hits were to their investigations—a missed opportunity to improve the system.

Since 2013, improvements in the NIBIN technology have drastically improved the accuracy and reliability, which continue to improve every time a new weapon is entered into the database. NIBIN can provide real-time information if properly resourced and utilized.

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<sup>16</sup> Law Enforcement Use of the National Integrated Ballistic Information Network (NIBIN), National Institute of Justice, December 9, 2013, <https://nij.ojp.gov/topics/articles/law-enforcement-use-national-integrated-ballistic-information-network-nibin>.

ATF now mandates a 24- to 48-hour turnaround for NIBIN submissions. While it is an excellent initiative to ensure the timeliness of valuable investigative information, resources will be necessary to meet this requirement.

## Drugs and Controlled Substances

Law enforcement agencies worldwide continue to fight drug abuse by utilizing intelligence developed by law enforcement agencies and other governmental units as primary tools in the fight against drug abuse. Federal agencies, such as the U.S. Drug Enforcement Administration (DEA), the lead federal agency in our nation's fight against drug abuse, the El Paso Intelligence Center (EPIC), the U.S. Department Homeland Security (DHS), and others produce drug intelligence on a routine basis looking at national and worldwide trends. For instance, DEA produces an annual National Drug Threat Assessment.<sup>17</sup> This document provides a strategic analysis of threats posed by illegal drugs and provides decision makers with intelligence that can assist in formulating policies, allocating law enforcement resources, and developing priorities for operational use.

While these federal intelligence reports can be very useful to state, local, tribal, and territorial law enforcement agencies, they generally do not provide a detailed local picture of drug threats within a community or state. This is where forensic lab drug submission data can be beneficial to local authorities in developing intelligence that provides that local drug picture. In many cases, forensic labs are the first to see new drugs or unusual compounds that may be illegal and generally house submissions on a regional or statewide basis, providing for a broader set of data than a local police department's intelligence or records management system.

The emerging opioid crisis is one example of how drug abuse patterns can change rapidly and are originally seen at the onset by submissions to forensic labs. The increased use of the synthetic opiate fentanyl is one area in which law enforcement needs timely information from forensic labs to fully understand the drugs that are currently on the street. There is also a major safety concern that necessitates rapid information exchange between forensic labs and law enforcement officers. Fentanyl is a very dangerous compound, and law enforcement officers need to know in real time what the dangers are for handling this type of material.

The recent *President's Commission on Combating Drug Addiction and the Opioid Crisis* recommends enhanced intelligence and information sharing. Intelligence units can play a vital role in developing this information from forensic labs and providing it to law enforcement and others who have a need and a right to know the intelligence. The President's Commission made the following recommendation: "The Commission recommends the White House develop a national outreach plan for the Fentanyl Safety Recommendations for First Responders. Federal departments and agencies should partner with Governors and state fusion centers [intelligence

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<sup>17</sup>U.S. Department of Justice, Drug Enforcement Administration, *2017 national drug threat assessment*, (Drug Enforcement Administration, 2017).

units] to develop and standardize data collection, analytics, and information-sharing related to first-responder opioid-intoxication incidents.”<sup>18</sup>

### Promising Practices

- **Intelligence Products**—Forensic lab leadership should meet with law enforcement intelligence operators to identify the types of narcotic-specific systems (and information) available within the forensic lab to discuss information that may be beneficial to criminal investigative and intelligence operations.

Intelligence units, such as fusion centers, have a unique opportunity to engage with forensic labs to conduct analysis concerning drug submissions that can prove helpful to intelligence operations. Intelligence units should integrate the Overdose Detection Mapping Application Program (ODMAP)<sup>19</sup> into agency operations to enhance data related to opioid-related drug overdoses and deaths and correlate lab information with ODMAP.

Some intelligence units have developed intelligence products that address current drug abuse issues that can be provided to law enforcement officers on a real-time basis. The following are examples:

- The Vermont Intelligence Center produces a weekly drug monitoring report for law enforcement wherein it highlights new and evolving drug trends throughout the state. This report is provided on a weekly basis to law enforcement and other concerns within the state.
- The New York State Intelligence Center produces a similar bulletin that highlights drug activities throughout the state. The Narcotics B.I.N. (bulletins, intelligence, and news) provides law enforcement with current information that is helpful to street officers and others in assessing drug trends and providing officer safety information.
- The El Paso Intelligence Center produces intelligence products that tie illegal drugs with weapons trafficking, terrorism, human trafficking, human smuggling, illegal migration, money laundering, and bulk cash smuggling. The ability to integrate disparate information from different types of crimes into a combined intelligence analysis is helpful to law enforcement investigations.
- U.S. Customs and Border Protection (CBP) Laboratories and Scientific Services co-chairs a monthly *Scientific Trends Open Network Exchange (STONE)* conference call to share trend data and information among federal, state, local, and international forensic scientists, medical examiners, coroners, intelligence analysts, and members

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<sup>18</sup> The President’s Commission on Combating Drug Addiction and the Opioid Crisis, *Final Report* (The White House, 2017), Recommendation 30.

<sup>19</sup> ODMAP, developed by the Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA), provides near-real-time suspected overdose surveillance data across jurisdictions to support public safety and public health efforts to mobilize an immediate response to a sudden increase, or spike, in overdose events. It links first responders and relevant record management systems to a mapping tool to track overdoses to stimulate real-time response and strategic analysis across jurisdictions, <http://www.odmap.org/>.



of law enforcement on newly identified substances that are interdicted and seized by CBP.

- **New/Nonscheduled Drugs**—For all new nonscheduled drugs, a promising practice is to order the drugs being sold (e.g., compounds), analyze them to determine the ingredients, and share that information with law enforcement to raise awareness of what the drugs contain and possible side effects. After analysis, scheduling the drugs with the state as a controlled substance helps to prevent selling the drugs illegally. Identifying and analyzing the drugs helps with intelligence development and, ultimately, is helpful in getting ahead of the crises. Obtaining samples of new nonscheduled drugs, having the lab analyze them, and then scheduling them as controlled substances with the state is vital for later identification and intelligence sharing with law enforcement.

In addition to scheduling drugs, providing routine updates to intelligence units and law enforcement on the identification of trending drugs, what they contain, and explanations as to why a certain ingredient/compound was added to a drug (e.g., compounds to make the opiate high last longer) is extremely beneficial. Explaining what components are in the drug and why they are part of the mix is valuable information.

- **Drug Stamps**—Generally, lab personnel are tasked with photographing the drug stamps affixed to seized drugs submitted to the lab for analysis. However, delegating this task to either the narcotics bureau, which is responsible for a high percentage of these submissions, or training law enforcement officers to submit drug stamp photos (or descriptions) helps to increase lab capacity and provides vital intelligence.

As part of this process, the lab may develop a photo template as a guide for law enforcement officers in the field to take and submit photos, helping to improve the quality of the stamp photos.

Long before the lab analyzes the drugs, the photos (or descriptions), if stored in a searchable database (similar to a scars/marks/tattoos database), can be searched across agency submissions to illustrate trends and hot locations. Queries are generally conducted using keyword searches. However, implementing the ability to search using the image in question (a probe image), comparable to face recognition search functionality, would be highly beneficial and increase efficiency.

The discovered trends and hot locations can be provided to law enforcement for awareness (e.g., certain stamped drugs causing fatalities). The ability to alert law enforcement that there is a dangerous stamp in distribution is not only preventative but, along with guidance, can assist officers in correctly handling the drug for their own protection.

In addition, intelligence units can use the lab-provided stamp data to provide notifications for shutting down drug sales in specific locations, where the stamps may be causing overdoses because they contain certain fatal compounds.

Besides drug stamps, submitting photos of marked and unmarked glassines can also be useful intelligence. The packaging of the drug can be equally important, even if a stamp is not present.

The intelligence unit can work with the lab in developing awareness products to educate community service providers (without personally identifiable information [PII]) to share information on trends in drug use and overdose activity in the community service provider's areas. The products can enable providers to be alert and aware of drugs sold and used in their areas, for client treatment and prevention purposes.

Lab drug stamp data can be analyzed by intelligence units for changes in stamps, locations of stable stamp sales, tracking of arrests for dealing in those locations, and more for product development for the field. Intelligence units also may work with labs to obtain analysis data on a variety of drug submissions to the lab for creating situational bulletins. For example, a lab may provide a report on fentanyl substances contained in each drug, and the intelligence unit look at such factors as locations, possible gang involvement, and sources to develop a product.

- **Field Drug Test Kits**—Implementing three levels of testing when a law enforcement officer or emergency service personnel come into physical contact (e.g., ingestion) with a fentanyl-laced compound can be lifesaving. Because presumptive tests (field color change kits) can deliver false positives when a different drug (from which the kit was initially designed to test) turns the same color or when the tester incorrectly “sees” a color, it is important for labs to prioritize a secondary, more thorough, test to confirm the field test conclusion. A third test is also recommended, such as through urinalysis, to ensure that the right medication is administered to enable full recovery.

For law enforcement agencies interested in purchasing vendor-sold field drug test kits, the agency's forensic lab should be requested to evaluate the tool and its ability to detect drugs prior to purchase, since not all kits work consistently.

- **Prioritizing Lab Requests**—The opioid crisis has had a significant impact on forensic labs, resulting in unprecedented lab processing backlogs. In prioritizing certain cases over others while complying with policies and standards, it can be helpful for lab administration to meet with requestors of lab information (e.g., deputy attorney generals, state prosecutors) to understand the reasoning for the prioritization of certain cases, as well as the reasons for the types of testing/analysis requested. This communication can assist the lab in balancing the needs of requestors (e.g., testing for trials) while determining actual necessity/warranted processes/analyses.
- **Collaboration Across Entities**—Cities with tent/encampment communities have many associated drug problems. Lab participation in joint meetings with all affected agencies (e.g., public health, law enforcement, city operations, sanitation for clean-up issues, such as how to handle discarded needles) can be beneficial. The involvement of all

stakeholders helps to build relationships and is one way to share intelligence from the lab.

## Challenges

- **Availability of Image Scanning Tools for Law Enforcement**—Secure mobile phone scanning tools, or a standardized process for obtaining consistent quality photographs of seized drugs while in the field, are needed to improve the clarity and readability of the drug stamp images. Such field scanning tools (similar to a cell phone check deposit scanner) could be designed to upload images to a LIMS database.
- **Image Storage**—Another challenge to submitted images of drug stamps is storage capacity.
- **Resource Demands**—The trend, given budget cuts and reduced staffing, is to do more with less. However, when there are successes in the lab, this mind-set can lead to doing even more with even less. Labs need staff resources and instrumentation. As has been recommended throughout this guide, lab personnel communicating regularly with investigators and turning cases around also means more demand on personnel who are now increasingly burdened with communications (e.g., on the phone), and providing explanations to investigators, judges, and others on the lab analysis process and the limitations of and how to interpret/understand results. With multiple scientists having to routinely provide these explanations, such explanations also need to be consistent among scientists. A solution used by one lab was to create an analyst position to handle such communication needs.
- **Drug Processing Backlogs**—With the opioid crisis, the contents of drugs are critically important in understanding why individuals are overdosing. Lab reporting of drug contents is vital for first responders/emergency medical services personnel to be able to deliver the right medication to overdose victims. However, given the crisis, labs are facing immense backlogs in drug processing.
- **Terminology for Drug Packaging**—Consistent terminology is needed for labeling drug packaging (terms law enforcement uses to label packaging versus terms used by scientists at the lab, etc.) so that everyone is using and understanding the same terminology.

## Training

- Many law enforcement agencies provide some level of drug recognition training to first responders. Including lab expertise in the development of this training, and/or in the delivery of such training, is one way to ensure that consistent instruction is provided and furthers the lab/law enforcement relationship. Forensic science experts also can provide briefings on the types of trends that occur in the field.

## Toxicology

Forensic laboratory toxicology analysis is generally performed on body fluids in order to detect illegal drugs, alcohol levels, or other substances that may be the causation factor in illegal activity, or if certain drugs or combinations thereof were involved in an individual's death. Not all laboratories conduct the same types of analysis due to budget limitations, equipment limitations, and other factors and depending on their professional mandates. Additionally, not all laboratories maintain the same level of forensic data concerning individuals or occurrence location data.

Determining the type of substances in biological specimens submitted to the laboratory can provide investigators and policy makers with a clearer understanding of substances that are being abused in their communities, as well as changes in drug use trends over time. Reviewing analysis on a regional or statewide basis can provide a clear understanding of the difference of substance abuse problems in various parts of a state or region. Scientific data from laboratory analysis can provide a factual basis for the degree to which various drugs are being abused in a community versus what may be a popular belief and assisting with the redirection of resources, as appropriate.

The New York State Technical Working Group–Toxicology (TOX-TWG), a Department of Criminal Justice Services (DCJS), conducted a statewide analysis of toxicology testing services<sup>20</sup> in the state of New York. The resulting report indicates how widely drugs are being abused in the state, provides a regional breakdown of the most abused drugs in a region, and provides decision makers with detailed data on substances being abused. The report also found that the availability of this type of data for querying varied considerably from laboratory to laboratory.

- Laboratories should look to standardize data collected concerning toxicology analysis to allow for better analysis of data for intelligence in decision-making processes.
- Laboratory personnel should develop an overview of the types of information collected via toxicology analysis and how it can be used as a part of intelligence efforts.
- Law enforcement intelligence units and fusion centers should further examine what data is available for forensic laboratories on toxicology to get a better understanding of the substances being abused in their states or regions.

More contemporaneous testing can be of assistance to law enforcement when more rapid testing results are necessary during potential public health crises. For example, in 2017, Georgia local law enforcement experienced an overdose outbreak where illicit Percocet pills were found to contain a mixture of other drugs, unbeknownst to the users. With the help of the state crime laboratories drug identification and toxicology departments, more concurrent analyses of the drugs and biological specimens occurred, which led to more rapid local response to the crisis.

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<sup>20</sup> *New York State Forensic Toxicology 2016 Human Performance Testing Summary*, New York State Technical Working Group-Toxicology (TOX-TWG), 2016.

Additionally, in situations where potential toxins can have a direct and negative impact on the public, such as carbon monoxide leaks at hotels or other facilities, rapid screening of biological samples can also aid local law enforcement with actionable intelligence to public health challenges.

The Georgia state crime laboratory has also used various drug trend information in their possession to aid the medical examiner's office and media outlets in providing the public information about the presence of mitragynine (Kratom) in medical examiner cases across the state. The laboratory began screening for this unregulated compound at the end of 2016, and as this compound continues to be controversial with regards to its impact and effects on the human body, the information regarding the drug's presence aids the public by informing them of potential dangers in their area.

The sharing of drug trend information is also important within a laboratory system, with others in law enforcement, and with the public, as both strategic and actionable information. The crime lab for the state of Georgia houses both a drug identification department and a toxicology department. The ability for an internal system to monitor and share their drug trend patterns internally allows for more informative testing in both departments, which aids the internal customers (such as medical examiners) as well as external customers and the public for more timely and accurate drug usage information. For example, the free exchange of information within those two state crime lab departments allowed for both areas to be more informed of changing fentanyl analogue and synthetic opiate compounds being seen throughout the state. This then allowed for both departments to ensure that the appropriate testing methods and drug standards were obtained and shared, in order to determine the drugs present in solid materials and biological samples, which was then able to provide the appropriate agencies with tactical information for investigative and medicolegal purposes. This information exchange was also important in relation to the safety measures that impacted agencies should consider when handling materials, from unknown drug powders and biological samples to the changing drug trends in their areas.

### Promising Practices

- Laboratories can consider working with various intelligence offices in doing an annual evaluation of their own drug trends to determine changes in their state or various regions, as applicable, and using those trends to better inform their customers of substances in their areas. This exchange of information and training opportunity tends to generate more collegiate working relationships with law enforcement and judicial customers, as well as helps to educate those same individuals on the difficulties of testing biological specimens.
- Laboratory management should consider a change to the batch testing of casework. The ability to perform a batch analysis of specimens can help an organization to more rapidly provide testing results on a regular basis that can be used to educate those necessary with timely intelligence regarding drug usage.

## Challenges

- **New drugs**—Recent drug trends in various parts of the United States suggest that the presence of designer drugs, such as designer opioids and benzodiazepines, have begun to develop in recent years. The importance of these drug trends to regional law enforcement and policy makers can enhance a region’s adaptation to new and changing drug use trends. The impact of designer drugs on a laboratory’s testing capabilities can be very challenging, as new methods need to be developed—unless the lab has current testing methods and instrumentation capable of this analysis in biological samples and requiring minimal modification—as well as the challenge of obtaining reference materials from reputable and certified sources with which the identity of new analytes can be confirmed.
- **Instrumentation**—Additionally, the acquisition and application of instrumentation which can potentially aid the laboratory with quicker testing turnaround can be prohibitively expensive to an organization. Newer techniques, such as time of flight mass spectrometry or accurate mass analysis, have the capability to assist an organization in their work production. However, the prices of these types of instruments have not yet reached a level where they are readily available to laboratories with less extensive resources.

## Digital Evidence/Multimedia

In almost every law enforcement investigation, there is an opportunity to gather and seize digital evidence, whether it be a laptop computer, a smartphone, or some other digital storage device. Digital evidence can be easily modified; therefore, extreme care should be taken by investigators to preserve such evidence in its original state for analysis by forensic labs.

Digital evidence labs—or technical services units—can offer a wide array of lab services. These can include analyses associated with cybercrime (both cyber-enabled and cyber-involved crimes) or internet crimes against children (ICAC) investigations, including digital forensics processes, electronic surveillance, communications intelligence (mobile device tracking and historical location analysis), video imaging, video analysis, video/image enhancement, application of traditional technology (pole cameras, trackers, etc.), technical surveillance countermeasures, special purpose vehicles, and more. Digital forensics labs are generally more investigative in nature than some of the other traditional forensic lab disciplines. While digital forensic labs process submitted digital evidence, they can also provide real-time delivery in support of active investigations, such as audio, video, and image analysis and enhancement.

## Promising Practices

- **Nature of the Investigation**—When evidence is received, it is important that the forensic labs consult with the case investigator to determine the nature of the investigation to provide the lab with a better understanding of the potential evidence housed on the electronic device. As can be seen from the following recommended discussion factors,

there is a tremendous potential for investigative and intelligence data to be received from digital evidence.

- Discuss whether other forensic processes need to be performed on the evidence (e.g., DNA analysis, fingerprints, toolmarks, trace, questioned documents).
  - Discuss the possibility of pursuing other investigative avenues to obtain additional digital evidence (e.g., sending a preservation order to an internet service provider [ISP], identifying remote storage locations, obtaining email and/or email server).
  - Consider the relevance of peripheral components to the investigation. For example, in forgery or fraud cases, consider noncomputer equipment such as laminators, credit card blanks, check paper, scanners, and printers. In child pornography cases, consider digital cameras.
  - Determine the potential evidence being sought (e.g., photographs, spreadsheets, documents, databases, financial records).
  - Determine additional information regarding the case (e.g., aliases, email accounts, email addresses, internet service provider (ISP) used, names, network configuration and users, system logs, passwords, usernames). This information may be obtained through interviews with the system administrator, users, and employees.<sup>21</sup>
- **Reporting of Cyber Incidents**—Digital evidence could also include evidence of cyber incidents involving threats or damage to private sector or government entities. Accordingly, the U.S. Department of Homeland Security has created a unified message for reporting cyber incidents to the federal government. The unified message provides contact information to key federal agencies including the Federal Bureau of Investigation, the National Cyber Investigative Joint Task Force, the United States Secret Service, the Homeland Security Investigations, and the National Cyber Security and Communications Integration Center.<sup>22</sup>
  - **Incident Command Support**—For large deployments, the technical services unit can work with the intelligence unit to manage the flow of information on-scene, supporting lead generation, management, and tasking.

In large rural areas, digital evidence agents and local law enforcement often must work in unfamiliar terrain (e.g., performing a search for a dangerous criminal or investigating a missing person report). To assist agents and officers on the ground in communicating with airborne assets and the incident command center, a lab may implement software capable of sending and receiving mobile phone geolocation data to agents in the field. This type of program can help officers and agents stay aware of each other's presence and helps airborne assets and command centers to reposition agents in the field as events unfold.

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<sup>21</sup> Forensic Examination of Digital Evidence: A Guide for Law Enforcement, National Institute of Justice, 2004, <https://www.ncjrs.gov/pdffiles1/nij/199408.pdf>.

<sup>22</sup> **Cyber Incident Reporting: A Unified Message for Reporting to the Federal Government**, U.S. Department of Homeland Security, <https://www.dhs.gov/sites/default/files/publications/Cyber%20Incident%20Reporting%20United%20Message.pdf>.



In addition, the use of internet-based applications can aid labs in pushing information to multiple law enforcement customers simultaneously during a deployment, allowing for communication in real time (including large-document exchange). Utilization of this type of application allows for tracking requests for service, providing and maintaining analytical work product accountability, and maintaining situational awareness of case developments. For example, such a platform can allow agents to share signed warrants electronically.

For information deconfliction and investigative coordination during deployments, having a representative from the lab in the incident command center helps to ensure that everyone is seeing the same information and allows for rapid information deconfliction before the information is relayed to agents/officers in the field.

- **Preserving Data**—Forensic labs can encourage investigators to take a broad look at the potential universe of available digital evidence and help them determine how to preserve/request/obtain this evidence so that as much as possible is available when they need it. Requests to tech/communications providers should be sent to preserve data, since certain types of data cannot be retrieved once deleted, and that data may be valuable later. Sometimes, the only way to access that data is to request its preservation at the outset of every investigation.

As part of this recommendation, the lab can create a dedicated, secure email account into which mobile phone companies can “dump” data. This is a quick and effective way to distribute large amounts of data to lab examiners at headquarters and to those working in the field.

- **Online Investigations**—Lab personnel and intelligence analysts may benefit, in the online environment, from using a sandboxed virtual environment for probing a subject’s online space while providing protection from infection and compromise and retaining anonymity.
- **Access to Tools and Software:** The lab can provide intelligence units with access to tools and software and collaborate with intelligence analysts to assess threats, identify subjects, and plan any follow-on actions. This collaborative model eases the flow of information and reduces latency. The process also conserves valuable time and physical resources.

## Challenges

- Most electronic investigative tools require consistent and reliable internet access and bandwidth to operate effectively, push information to the field, and receive updates from the field. Availability of high-speed internet is imperative to utilize such tools, especially in rural areas. Until reliable high-speed networks are deployed nationwide, this will be a challenge.

There are some work-around capabilities (temporary network extenders, cell towers on wheels with independent power-generation capabilities, satellite downlinks, and ad-hoc agreements with mobile phone operators to set up emergency towers in the event of a deployment), though these measures do not represent a long-term solution.

- Communicating digital forensic capabilities to customers (e.g., local law enforcement, prosecutors) is a challenge. One reason is that the technologies that drive these improved capabilities, are constantly changing. While access to a new set of tools allows a unit to perform a function it could not accomplish before, keeping disparate agencies informed about the improved capabilities is an ongoing challenge.

## Training

- Lab-facilitated training for law enforcement officers, intelligence analysts, and investigators on digital forensics (e.g., computers, electronics) is vital, both in knowing what kinds of intelligence and information can be drawn from these types of devices and to establish a good understanding of lab results. It also alerts regional and local law enforcement to the tools a lab has available and the expertise it can lend in certain investigative situations. This training helps to build relationships and comprehension of lab capabilities, as well as improved understanding of lab-provided intelligence packets.
- The United States Secret Service operates the National Computer Forensics Institute<sup>23</sup> (NCFI), which is the nation's only federally funded training center dedicated to instructing state and local law enforcement officers, prosecutors, and judges in cybercrime investigations. The NCFI provides a national standard of training in electronic crimes investigations, network intrusion response, computer forensics, mobile devices, and high-tech crime prosecution and adjudication.

## DNA Analysis

The development of DNA analysis in forensic laboratories has revolutionized how law enforcement agencies conduct violent crime investigations in this country. The ability to positively identify an individual from body parts or body fluids has allowed law enforcement agencies to solve cases that seemed unsolvable before. To manage the results of DNA analysis by forensic laboratories in the United States, the FBI developed the Combined DNA Index System, also known as CODIS.<sup>24</sup> The system allows federal, state, tribal, and local law enforcement agencies to share DNA profiles in order to identify offenders and connect matching cases across the country. All 50 states participate in CODIS.

CODIS stores the following information about DNA analysis:

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<sup>23</sup> [www.nfci.usss.gov](http://www.nfci.usss.gov).

<sup>24</sup> Frequently Asked Questions on CODIS and NDIS, Federal Bureau of Investigation, <https://www.fbi.gov/services/laboratory/biometric-analysis/codis/codis-and-ndis-fact-sheet>.

1. DNA profiles—the set of identification characteristics or numerical representation at each of the various loci analyzed
  2. Agency Identifiers of the agencies submitting DNA profiles
  3. Specimen identification numbers—generally, numbers assigned sequentially at the time of sample collection or submission to the laboratory. These numbers do **not** correspond to names, social security numbers, criminal history identifiers, or correctional facility identifiers
  4. Names of the DNA laboratory personnel who entered the DNA profiles in CODIS<sup>25</sup>
- Note: With many labs now utilizing Lean Six Sigma to streamline their operation, this process can translate to the involvement of multiple individuals per case. For example, the person who enters the DNA profile in CODIS may not be the person who started the DNA analysis.

CODIS is part of the National DNA Index System (NDIS) which contains data on convicted offenders, arrestees, legal detainees, forensic [casework], unidentified human remains, missing persons, and relatives of missing persons. Information in CODIS is available only to criminal justice agencies for law enforcement identification purposes.

### Promising Practices

- Forensic labs should explore data available in local CODIS systems that could be exported and utilized by law enforcement intelligence. There will be a need for legal review as to what data can be released under federal law. Intelligence unit and forensic laboratory representatives should meet to gain a thorough understanding of the type of information available from CODIS through their local labs.
- Intelligence units and forensic labs should establish a process to regularly share actionable intelligence obtained via CODIS to deconflict current case information with information received via the lab.
- When a lab discovers that there is DNA linking an individual to a certain crime, sending that information to the intelligence unit will enable the unit to run further analyses/intelligence queries (e.g., gang database searches).
- For investigative entities that are legally permitted to do so, lab-run DNA can assist investigators who are permitted to use the information to search genealogy databases. Investigators turn to forensic genealogy when DNA has been obtained at a crime scene, a suspect match has not been obtained in the NDIS, and investigative leads have not identified viable suspects.<sup>26</sup> Searching publicly available databases containing DNA information from individuals who have placed their DNA in the database for the purpose

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<sup>25</sup> Ibid.

<sup>26</sup> Forensic Genealogy, Bioethics and the Golden State Killer Case, Ray A. Wickenheiser, Forensic Science International: Synergy, Volume 1, 2019, <https://www.sciencedirect.com/science/article/pii/S2589871X19301342>.

of finding missing relatives can provide investigative information to solve a previously unsolved crime.<sup>27</sup>

- **Sexual Assault “Kit” Testing**—An example of different divisions working together to close the loop is the use of sexual assault kits. One best practice is for labs to analyze the kits, if eligible, and enter them into CODIS; then the intelligence unit follows up on the kits that have positive CODIS queries. Joint efforts such as these help to reduce backlog.

## Challenges

- Rapid DNA analysis is a fully automated (hands-free) process of developing a DNA profile from a reference sample buccal (cheek) swab in less than two hours without human intervention. While Rapid DNA technology is maturing quickly and is reliable for known single source samples, progress is still needed for mixed DNA samples, which represent the majority of crime scene samples.
- IT enhancements, including live scan integration, are necessary for a booking station to input DNA profiles from an approved Rapid DNA system into CODIS.<sup>28</sup> Readiness documents and other additional information can be found at [www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna-analysis](https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna-analysis). The FBI fully supports Rapid DNA and is looking to implement it on a much broader platform to alleviate backlogs in forensic labs. The FBI is conducting a Rapid DNA pilot program in several states initiated through the booking process.

### FBI’s Rapid DNA Initiative

The Rapid DNA Act of 2017 (Public Law 115-50) was signed by the President of the United States on August 18, 2017. The act authorizes the FBI Director to “issue standards and procedures for the use of Rapid DNA instruments and resulting DNA analyses.”

The FBI’s Rapid DNA initiative<sup>5</sup> is working to link FBI approved commercial instruments capable of producing a CODIS core loci DNA profile within two hours to the existing CODIS infrastructure in order to search unsolved crimes of special concern while a qualifying arrestee is in police custody during the booking process.

The FBI Laboratory Division has been working with the FBI Criminal Justice Information Services (CJIS) Division and the CJIS Advisory Policy Board (CJIS APB) Rapid DNA Task Force to plan the effective integration of Rapid DNA into the booking station process. The Bureau is developing the necessary interfaces for such booking stations to communicate with CODIS. As part of these development efforts, the FBI began testing and evaluation of the Rapid DNA booking communications infrastructure and plans to initiate pilot testing with select federal, state, and local law enforcement for the uploading and CODIS searching of arrestee Rapid DNA records during the booking process.

<https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna>

For purposes of uploading into CODIS, Rapid DNA systems are not authorized for use on crime scene samples. All crime scene samples must be processed by an accredited forensic DNA Laboratory that follows the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories to be eligible for upload and search in the CODIS system.

<sup>27</sup> Ibid.

<sup>28</sup> Rapid DNA Executive Summary—FBI’s Vision of Rapid DNA, Federal Bureau of Investigation, <https://www.fbi.gov/file-repository/rapid-dna-executive-summary-9-25-17-final.pdf/view>.

- Adequate resources/staffing must be provided for the laboratory to provide timely DNA investigative leads to investigators. In addition, law enforcement must also be properly resourced in order to follow up on the DNA investigative leads that are provided by the lab.
- Legislation and legal issues can also be a challenge since some of this information can vary depending on the state or jurisdiction.

## Other Lab Disciplines

While it is acknowledged that a multitude of disciplines are handled by forensic labs, the disciplines addressed in this resource are those that more often overlap with intelligence and investigative components, such as crime guns, drugs and controlled substances, digital evidence, and DNA analysis. This chapter briefly touches on promising practices for the lab disciplines of questioned documents, cryptanalysis, records and symbol examinations, and missing persons identification, which can yield intelligence but do not as readily overlap with intelligence and investigative components.

### Questioned Documents, Cryptanalysis, and Records and Symbol Examinations

Analysis of questioned documents by forensic laboratories can include a wide variety of source material that can be compared and analyzed to determine authenticity of disputed identification documents, and other types of documents. Questioned documents can become evidence in a wide variety of crimes including drugs, volatile crime, financial crime, and identity fraud, as well as other crimes where the authenticity of documents is in question.

While paper documents and digital communications analysis is becoming a greater part of most law enforcement agency investigations, many state and local laboratories do not have capabilities to conduct a wide variety of questioned document examinations.

Most federal laboratories specialize in questioned documents concerning their investigative priorities. For instance, the FBI's Cryptanalysis and Racketeering Records Unit<sup>29</sup> supports law enforcement and the intelligence community through the analysis of cryptic communications—or cryptanalysis—records examinations, and symbol examinations.

- Cryptanalysis—Decrypt manual codes and ciphers found in letters, notes, diaries, ledgers, and other types of written or electronic communications. Common users of codes include foreign and domestic terrorists, organized crime members, gangs, prison inmates, and violent criminals.
- Records Examinations—Examine and decode records from illicit businesses, such as drug trafficking, prostitution, illegal gambling, and human trafficking. Examinations may reveal the types of operation, dates of activity, gross profits, number and roles of participants, and accounting methods.
- Symbol Examinations—Examine cryptic symbols from graffiti, tattoos, or other sources to provide intelligence and investigative leads to law enforcement.

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<sup>29</sup> <https://www.fbi.gov/services/laboratory/scientific-analysis/cryptanalysis-racketeering>.

FBI Laboratory Division's Questioned Documents Unit (QDU)<sup>30</sup>—The FBI's QDU provides forensic support to the FBI and federal, state, and local law enforcement agencies by conducting forensic examinations on evidence collected during an investigation. This is accomplished through written reports that contain results of examinations and technical information relating to the evidence and by providing expert testimony concerning information and opinions contained in the reports, when required. The QDU conducts the following forensic examinations: handwriting comparisons; fractured/cut edge comparisons (e.g., paper, tape, postage stamps, dryer sheets); plastic bag comparisons; printing process examinations (e.g., document authentication/typewriting classification); charred and liquid-soaked document preservation; indented writing examinations; alternate light source examinations (e.g., ink discrimination, alterations, enhancements); office machine artifact comparisons; tire tread and shoeprint comparisons/classification; and database queries (e.g., queries of an anonymous letter file, automated counterfeit identification database, bank robbery note file, tire tread and shoe print databases). They also offer testimony in legal proceedings and training to counterparts in law enforcement.

Homeland Security Investigations' (HSI) Forensic Laboratory Questioned Documents (QD) Unit—The DHS Immigration and Customs Enforcement (ICE), HSI<sup>31</sup> is the investigative arm of DHS and a vital U.S. asset in combating criminal organizations illegally exploiting America's travel, trade, financial, and immigration systems. The HSI Forensic Laboratory's QD Unit analyzes, compares (e.g., comparison with a known travel document standard), and evaluates suspect travel documents to determine whether the documents are genuine, counterfeit, or altered. The HSI Forensic Laboratory is the only federal laboratory that focuses on domestic and international travel and identification documents, making it a unique and vital resource for the law enforcement community. The laboratory provides forensic, intelligence, and investigative support for ICE, DHS, U.S. Customs and Border Protection (CBP), U.S. Citizenship and Immigration Services (USCIS), and the U.S. Department of State—to include state, local, and tribal governmental entities, as well as foreign law enforcement agencies—that specifically deal with domestic and international travel and identification documents (e.g., passports, visas, driver's licenses, identification cards) and vital records (e.g., birth, death, marriage certificates). In fact, any questioned document or supporting document used to substantiate an individual's identity may be submitted to the HSI Forensic Laboratory's QD Unit for forensic examination.

The HSI Forensic Laboratory's QD Unit conducts the following forensic examinations: alteration, authentication, common or same-source association, handwriting, indented impressions, printing processes, thermal ribbon analysis, typewriting and typewriter ribbon analysis, charred and liquid-soaked documents, and physical matches. They also provide expert witness testimony in legal proceedings.

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<sup>30</sup> <https://www.fbi.gov/services/laboratory/scientific-analysis/questioned-documents>.

<sup>31</sup> <https://www.ice.gov/hsi-fl>.



U.S. Secret Service (USSS) Forensic Services Laboratory Questioned Documents (QD) Branch—Within DHS, the USSS<sup>32</sup> QD Branch provides forensic analyses and technical support to field offices in the investigation of fraud and forgery, counterfeit documents, traveler's checks, bank checks, credit cards, false identification instruments, and documents related to protective intelligence cases. The QD Branch also provides analysis and comparison of handwriting, hand printing, typewriting, and computer printing as well as chemical analysis of inks, toner, paper, and other substances.

The QD Branch determines the authenticity of all types of documents through the use of conventional and chemical examinations. Various types of forensic document examinations performed in the QD Branch include handwriting, typewriting, typewriter ribbons and other machine printing, alterations, erasures, striations on documents and other evidence to determine genuineness, forgery, and alteration, or to establish source.

Document authentication examinations involve counterfeit identity and monetary documents including, but not limited to, traveler's checks, bank checks, credit cards, driver's licenses, birth certificates, passports, and any other false identity documents. These examinations involve populating the Questioned Identification Document and Link Database (QID) with new counterfeit documents. The QID database permits the entry, search, and examination of identity documents for the purpose of establishing authenticity. This system also allows the user to perform link analysis (i.e., determining common sources for counterfeits) based on correlations.

Instrumental analysis (IA) examinations involve specialized techniques developed over decades at the USSS. These examinations provide for the identification of components used in the production of papers, fibers, inks, watermarks, metals, and printing processes. IA examinations are performed utilizing a wide variety of chemical and instrumental analysis techniques. Examinations also involve restoring or deciphering charred and water damaged documents, erasures, and obliterations. Resources include the International Ink Library and Watermark Collections as well as the Toner and Printer files, maintaining extensive liaison with the ink, printer, and copier industries. These collections represent the world's most comprehensive related reference files.

A unique capability of the USSS QD Branch is the Forensic Information System for Handwriting (FISH), a specialized computer program used to digitally measure handwriting characteristics on incoming threat letters and compare that data with previously submitted handwritten threats in an effort to associate letters, cases, and known subjects. In support of the protective intelligence component of the USSS mission, FISH primarily contains handwritten threats against the President and others under USSS protection. Outside agency assistance regarding threats to other public figures is also available.

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<sup>32</sup> <https://www.secretservice.gov/investigation/>.

Another significant USSS QD Branch capability is the Thermal Ribbon Analysis Platform (TRAP). Counterfeiters employ thermal printing technology to counterfeit driver licenses and credit cards. Thermal printing technology employs printer ribbons that contain “ghost images” of information they were used to print. The TRAP is a specialized scanning device that automates the process of imaging thermal ribbons and produces computer graphics files containing images scanned from thermal printer ribbons. These images can be used to show what documents the ribbon was used to print.

## Promising Practices

- The following promising practice/recommendation is associated with the FBI’s QD Unit:
  - The following emails can be used to submit digital evidence for shoe print, tire tread, and bank robbery note searches. Search requests may be emailed on agency letterhead, along with the image to be searched, to the following addresses.
    - [shoeprintsearch@ic.fbi.gov](mailto:shoeprintsearch@ic.fbi.gov)
    - [tiretreadsearch@ic.fbi.gov](mailto:tiretreadsearch@ic.fbi.gov)
    - [bankrobberysearch@ic.fbi.gov](mailto:bankrobberysearch@ic.fbi.gov)
    - [codebreakers@ic.fbi.gov](mailto:codebreakers@ic.fbi.gov)
- The following promising practices/recommendations are associated with the HSI Forensic Laboratory’s QD Unit. The HSI Forensic Laboratory’s QD Unit:
  - Contacts state agencies with which a laboratory has established points of contact when a trend is discovered in fraudulent IDs coming from a specific state. For states without such established relationships, the lab creates document intelligence alerts and reference guides, which are available to law enforcement officers via HSIN.
  - Strives for 100 percent peer review of all cases (especially handwriting cases), with examiners cross-trained to work all categories of questioned documents.
  - Has reciprocal relationships with many countries and shares products, reference guides, etc. with international counterparts. In addition, the laboratory holds weeklong exchanges in which international representatives visit the lab and exchange information.
  - Supports state and local governments and recommends that states contact the HSI Forensic Laboratory’s QD Unit for assistance, especially since many local and state forensic labs no longer have active QD sections. Requests for analysis from state and local agencies, such as fusion centers, should come through the respective field HSI SAC office to augment collaboration and potentially offset travel costs/concerns related to continued investigations or court proceedings. HSI SACs serve as a liaison between the requesting agency and HSI. Contact information for the HSI SAC offices is available at <https://www.ice.gov/contact/hsi>.
  - Has a research and development (R&D) section, which assists in developing the next generation of government-issued IDs. This section reviews document designs and prototypes and provides input from a security perspective. For example, for a new

passport, R&D will provide advice based on testing and lessons learned from past applied research to improve security features for future ID development and demonstrate ways to alter or spoof IDs.

- Has developed partnerships with international partners, resulting in a network of exchanges. However, within the United States there is no mandatory reporting requirement to HSI for fraudulent identification cards (IDs) (such as seized fake IDs used by students, false class licenses [commercial driver's (CDLs)]). When a state intercepts false IDs, especially international travel documents, it would be beneficial to contact the respective field SAC/HSI office to seek laboratory assistance. Recommendation: States should contact their laboratories to discuss the transfer of seized fraudulent documents after final adjudication. This helps provide additional samples of fraudulent IDs used, assists in possible ongoing investigations, and provides intelligence on trends of fraudulent IDs occurring in particular regions.
- The following promising practices/recommendations are associated with the USSS Forensic Services Laboratory's QD Branch:
  - Data from specialized databases, such as those maintained for the FISH and QID systems, may be made available for sharing.
  - As a laboratory that employs multiple disciplines in examinations, results from QD examinations can be considered along with fingerprints and DNA results.
  - A QD Branch liaison for appropriate intelligence units can be established and maintained, along with training provided for intelligence community staff to promote understanding of QD capabilities and examination results.

## Challenges

- The HSI Forensic Laboratory's QD Unit works with the U.S. Department of State Office of Consular Affairs to coordinate the collection of identification document standards from foreign countries. This can be an overwhelming task to manage, given that there are 193 countries and new identification documents introduced routinely. Gaining cooperation and building and maintaining relationships with those countries are ongoing tasks.
- HSI does not have a budget for court subpoena travel. While the lab does not charge a fee for providing forensic services, they do not have the budget for traveling for court testimony. In addition, because of ethical implications, HSI cannot accept funding from a state or local agency; funding can be accepted only from federal entities (e.g., the U.S. Department of State).

## Training

- The FBI's Laboratory Division QDU provides training to federal, state, and local forensic examiners on specialized technical topics in the forensic document discipline and assists law enforcement by providing information and presentations concerning the capabilities of the QDU as well as forensic document discipline in general. The QDU monitors,

develops, and provides information to legal, investigative, and forensic personnel on legal issues and assists other forensic document examiners in formulating written examination guidelines to standardize procedures.

- HSI provides training to HSI task force officers (TFOs). There are 30 SAC principal field offices (29 in the continental United States and one in San Juan, Puerto Rico) that create task forces based on their offices' priorities. Further, during TFO training, HSI informs officers of the availability of laboratory resources.
- HSI creates fraudulent document detection training modules to train federal, state, and local authorities.
- Information is distributed via training on examining identification documents and identifying fraud as well as through document intelligence alerts and reference guides that are available to law enforcement partners via HSIN.
- The USSS QD Branch provides support for forensic training for the USSS, law enforcement agencies within DHS, and outside entities including academic institutions, while also maintaining liaison with federal, state, and local law enforcement agencies. The QD Branch has assisted in responding to crime scenes and processing evidence in all areas of USSS jurisdiction.

## Missing Persons Identification

Missing persons investigations are an important but time-consuming function within most law enforcement agencies. Prior to 2007, an agency could be investigating a missing person while another agency, in a different area of the country, could locate an unidentified person (dead or alive), and the two agencies would not know that they were investigating the same person. Missing persons and unidentified remains investigations can sometimes involve many different forensic services, such as fingerprints, DNA analysis, forensic odontology, forensic anthropology, and other services. The merging of the results of the different forensic services is difficult, and making them available on a national basis is a major undertaking.

In 2007, the National Institute of Justice (NIJ) initiated the National Missing and Unidentified Persons System (NamUs) as a national clearinghouse and resource center for missing, unidentified, and unclaimed persons cases. The result is a national clearinghouse where all of the various forensic investigative data can be stored in one location for analysis purposes.

## Promising Practices

The University of North Texas Health Science Center now operates the NamUs System on behalf of the National Institute of Justice. Forensic data can be submitted by any forensic lab medical examiner/coroner office, or law enforcement agency and made available for analysis

by any authorized user. The center has added analytic support to the services provided to assist agencies with analyzing the data.

- Fusion centers and intelligence operations should explore the data available from the NamUs system to determine whether it has analytic value for investigations.
- Labs and law enforcement agencies make it a priority to submit information to NamUs.

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## Appendix A: Glossary of Terms

**Actionable Intelligence**—Intelligence and information with sufficient specificity and detail that explicit responses to prevent a crime or terrorist attack can be implemented.<sup>33</sup>

**Analysis**—In intelligence, analysis means that activity whereby meaning—actual or suggested—is derived through organizing and systematically examining diverse information and applying inductive or deductive logic for the purposes of criminal investigation or assessment.<sup>34</sup>

**Civil Liberties**—According to the U.S. Department of Justice’s Global Justice Information Sharing Initiative, the term “civil liberties” refers to fundamental individual rights, such as freedom of speech, press, or religion; due process of law; and other limitations on the power of the government to restrain or dictate the actions of individuals.<sup>35</sup> They are the freedoms that are guaranteed by the Bill of Rights—the first ten amendments to the Constitution of the United States. Civil liberties offer protection to individuals from improper government action and arbitrary governmental interference.

**Civil Rights**—The term “civil rights” refers to those rights and privileges of equal protection that government entities must afford to all individuals in the United States regardless of race, ethnicity, gender, national origin, religion, sexual orientation, gender identity, or other characteristics unrelated to the worth of the individual. Protection of civil rights means that government entities will act to ensure that individuals are not discriminated against based on any federally or state protected characteristic. For example, a state may have constitutional or statutory language regarding parental status. Generally, the term “civil rights” involves positive (or affirmative) government action to protect against infringement, while the term “civil liberties” involves restrictions on government.<sup>36</sup>

**Confidentiality**—Refers to the obligations of individuals and institutions to appropriately use information and data under their control once they have been disclosed to them and in accordance with applicable data security laws and policies. Lab accreditation confidentiality requirements, established by the International Organization for Standardization/ International Electrotechnical Commission (ISO/IEC) 17025:2017© include:

### 4.2 Confidentiality

4.2.1 The laboratory shall be responsible, through legally enforceable commitments, for the management of all information obtained or created during the

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<sup>33</sup> *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, Second Edition, David L. Carter, Ph.D., School of Criminal Justice, Michigan State University, Office of Community Oriented Policing, U.S. Department of Justice, January 2009, <https://fas.org/irp/agency/doj/lei.pdf>.

<sup>34</sup> Ibid.

<sup>35</sup> Civil Rights and Civil Liberties Protections Guidance, at 4, Office of the Director of National Intelligence, August 2008, [https://www.dni.gov/files/ISE/documents/DocumentLibrary/Privacy/CR-CL\\_Guidance\\_08112008.pdf](https://www.dni.gov/files/ISE/documents/DocumentLibrary/Privacy/CR-CL_Guidance_08112008.pdf).

<sup>36</sup> The definition of “civil rights” is a modified version of the definition contained in the *National Criminal Intelligence Sharing Plan* (NCISP), at pp. 5–6, <https://it.ojp.gov/GIST/150/National-Criminal-Intelligence-Sharing-Plan-Version-2-0>.



performance of laboratory activities. The laboratory shall inform the customer in advance, of the information it intends to place in the public domain. **Except for information that the customer makes publicly available, or when agreed between the laboratory and the customer (e.g., for the purpose of responding to complaints), all other information is considered proprietary information and shall be regarded as confidential.**

4.2.4 Personnel, including any committee members, contractors, personnel of external bodies, or individuals acting on the laboratory's behalf, **shall keep confidential all information obtained or created during the performance of laboratory activities**, except as required by law.

8.4.2 The laboratory shall implement the controls needed for the identification, storage, protection, back-up, archive, retrieval, retention time, and disposal of its records. The laboratory shall retain records for a period consistent with its contractual obligations. **Access to these records shall be consistent with the confidentiality commitments**, and records shall be readily available.

**Crime Analysis**—The process of analyzing information collected on crimes and police service delivery variables in order to give direction for police officer deployment, resource allocation, and policing strategies to maximize crime prevention activities and the cost-effective operation of the police department.<sup>37</sup>

**Crime Gun**—The ATF defines a crime gun as “any firearm illegally possessed, used in a crime or suspected to have been used in the crime. This may include firearms abandoned or otherwise taken into law enforcement custody that are either suspected to have been used in a crime or whose proper disposition can be facilitated through firearms trace.”<sup>38</sup>

**Crime Gun Intelligence (CGI)**—CGI utilizes evidence-based technology to provide law enforcement a unique tool to enhance comprehensive violent gun crime strategies. CGI combines all available information on crime guns and shootings to identify and disrupt the shooting cycle. Crime gun intelligence concentrates on the ways firearms are diverted from the normal venues of regulated commerce to the criminal market, seeks to intervene to prevent that diversion, and establishes connections of crime guns that have already been used. CGI reveals leads not otherwise available to assist in identifying offenders who are illegally purchasing or transferring firearms and the offenders who use them to commit violent crimes.<sup>39</sup>

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<sup>37</sup> *Minimal Criminal Intelligence Training Standards for Law Enforcement and Other Criminal Justice Agencies in the United States (Minimum Criminal Intelligence Training Standards), Version 2.0*, Global Justice Information Sharing Initiative (Global), U.S. Department of Justice (DOJ), October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

<sup>38</sup> U.S. Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives, *Firearms Tracing Guide: Tracing Firearms to Reduce Violent Crime* (Firearm Tracing Guide), November 2011, 5, <https://www.atf.gov/file/58631/download>.

<sup>39</sup> *Crime Gun Intelligence: Disrupting the Shooting Cycle*, The National Crime Gun Intelligence Governing Board, August 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/09/CGI-Manual-Best-Practices-ATF-27-AUG-18.pdf>.

**Crime Gun Intelligence Centers**—An interagency collaboration focused on the immediate collection, management, and analysis of gun crime evidence, such as shell casings, in real time, to identify shooters, disrupt criminal activity, and to prevent future violence.

**Crime-Pattern Analysis**—An assessment of the nature, extent, and changes of crime based on the characteristics of the criminal incident, including modus operandi, temporal, and geographic variables.<sup>40</sup>

**Criminal Intelligence**—Information deemed relevant to the identification of and the criminal activity engaged in by an individual who or organization that is reasonably suspected of involvement in criminal activity. Criminal intelligence records are maintained in a criminal intelligence system per 28 CFR Part 23.<sup>41</sup> The end product of an analytic process that evaluates information collected from diverse sources; integrates the relevant information into a logical package; and produces a conclusion, an estimate, or a forecast about a criminal phenomenon by using the scientific approach to problems solving (that is, analysis).<sup>42</sup>

**Cryptanalysis**—The process of deciphering encrypted communications of an intelligence target.<sup>43</sup>

**Cryptography**—The creation of a communications code/encryption system for communication transmission with the intent of precluding the consumption and interpretation of one's own messages.<sup>44</sup>

**Cryptology**—The study of communications encryption methods that deal with the development of codes and the “scrambling” of communications to prevent the interception of communications by an unauthorized or unintended party.<sup>45</sup>

**Entity**—A law enforcement agency or fusion center with an intelligence or analytic unit function.

**eTrace**—Electronic Tracing System. Internet-based system that allows participating law enforcement agencies to submit firearm traces to the ATF National Tracing Center (NTC).

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<sup>40</sup> *Minimum Criminal Intelligence Training Standards, Version 2.0*, Global, DOJ, October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

<sup>41</sup> *Fusion Center Privacy, Civil Rights, and Civil Liberties Policy Development Template, Version 3.0*, Global Justice Information Sharing Initiative, U.S. Department of Justice, March 23, 2019, <https://it.ojp.gov/GIST/48/Fusion-Center-Privacy--Civil-Rights--and-Civil-Liberties-Policy-Development-Template--Version-3-0>.

<sup>42</sup> *Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies*, Second Edition, David L. Carter, Ph.D., School of Criminal Justice, p. 9, [https://it.ojp.gov/documents/d/e050919201-IntelGuide\\_web.pdf](https://it.ojp.gov/documents/d/e050919201-IntelGuide_web.pdf).

<sup>43</sup> *Minimum Criminal Intelligence Training Standards, Version 2.0*, Global, DOJ, October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

**Evidence**—Something that can help identify the responsible persons, establish an element of crime, reconstruct crime events, or link crimes.

**Examiner**—For purposes of this guide, the term “examiner” refers to lab staff, lab analysts, and lab scientists who perform scientific lab procedures. The term “analyst,” for this guide, is applied to intelligence analyst. See Intelligence Analyst.

**Forensic Intelligence**—The use of forensic analyses and data to provide actionable information to a specific investigation, establish crime patterns and trends, or inform crime-prevention strategies.

**Forensic Science Service Providers**—Forensic science service providers, in common parlance, are “forensic laboratories” or “forensic labs.” Defined as having at least one full-time analyst, however named, who examines physical evidence in criminal and/or investigative matters and provides reports or opinion testimony with respect to such evidence in United States courts of law.<sup>46</sup>

**Fusion Center**—A “collaborative effort of two or more Federal, State, local, tribal, or territorial (SLTT) government agencies that combines resources, expertise, or information with the goal of maximizing the ability of such agencies to detect, prevent, investigate, apprehend, and respond to criminal or terrorist activity.”<sup>47</sup> (Source: Section 511 of the 9/11 Commission Act). State and major urban area fusion centers serve as focal points within the state and local environments for the receipt, analysis, gathering, and sharing of threat-related information between the federal government and SLTT and private sector partners.

**Intelligence**—See Criminal Intelligence.

**Intelligence Analysis**—See Analysis.

**Intelligence Analyst**—A professional position in which the incumbent is responsible for organizing various facts, documentation of circumstances, evidence, interviews, and any other material related to a crime into a logical and related framework for the purposes of developing a criminal case, explaining a criminal phenomenon, describing crime and crime trends and/or preparing materials for court and prosecution, or arriving at an assessment of a crime problem or crime group.<sup>48</sup>

**Intelligence Assessment**—A comprehensive report on an intelligence issue related to criminal or national security threats available to local, state, tribal, and federal law enforcement agencies.<sup>49</sup>

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<sup>46</sup> *Strengthening the Forensic Sciences*, National Science and Technology Council Committee on Science, Subcommittee on Forensic Science, Executive Office of the President of the United States, May 2014, <https://www.ncjrs.gov/pdffiles1/NIJ/251422.pdf>.

<sup>47</sup> Office of the Program Manager, ISE, *Information Sharing Environment (ISE) Functional Standard (FS) Suspicious Activity Reporting (SAR), Version 1.5.5*, [https://nsi.ncirc.gov/documents/SAR\\_FS\\_1.5.5\\_PMISE.pdf](https://nsi.ncirc.gov/documents/SAR_FS_1.5.5_PMISE.pdf).

<sup>48</sup> *Minimum Criminal Intelligence Training Standards, Version 2.0*, Global, DOJ, October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

<sup>49</sup> Ibid.

**Intelligence Bulletins**—A finished intelligence product in article format that describes new developments and evolving trends. The bulletins are typically sensitive but unclassified (SBU) and available for distribution to local, state, tribal, and federal law enforcement.<sup>50</sup>

**Intelligence Products**—Reports or documents that contain assessments, forecasts, associations, links, and other outputs from the analytic process that may be disseminated for use by law enforcement agencies for prevention of crimes, target hardening, apprehension of offenders, and prosecution.<sup>51</sup>

**Intelligence-Led Policing (ILP)**—A process for enhancing law enforcement agency effectiveness toward reducing crimes, protecting community assets, and preparing for responses. ILP provides law enforcement agencies with an organizational framework to gather and use multisource information and intelligence to make timely and targeted strategic, operational, and tactical decisions.

**Intelligence Unit**—For the purposes of this guide, the term “intelligence unit” refers to any law enforcement unit designated, trained, and authorized to handle and develop criminal intelligence, including fusion centers.

**Lab**—A forensic laboratory (lab) that holds a significant amount of data, considering the variety of evidence it analyzes, and engages in a wide variety of scientific disciplines.

**Lab Capacity**—The number of cases each lab examiner can reasonably work. If the number of requests for analysis is more than a lab’s capacity, backlogs occur. Everything related to forensic intelligence is influenced by the lab’s capacity, particularly timeliness of analysis.

**Law Enforcement Intelligence**—The end product (output) of an analytic process that collects and assesses information about crimes and/or criminal enterprises to make judgments and inferences about community conditions, potential problems, and criminal activity with the intent to pursue criminal prosecution, project crime trends, or support informed decision making by management.<sup>52</sup>

**Need to Know**—As a result of jurisdictional, organizational, or operational necessities, access to sensitive information or intelligence is necessary for the conduct of an individual’s official duties as part of an organization that has a right to know the information to perform or assist in a law enforcement, homeland security, or counterterrorism activity or other lawful and authorized government activity, such as to further an investigation or meet another law enforcement requirement.

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<sup>50</sup> Ibid.

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.

**NIBIN**—National Integrated Ballistic Information Network. ATF's NIBIN is the only interstate ballistic identification system that allows law enforcement partners to associate ammunition casings, crime guns, and crime scenes.

**NIBIN Lead**—A linkage of two or more gun crimes (shooting, crime gun recovery) through the utilization of NIBIN technology.

**NIBIN Hit**—A confirmed linkage of two or more gun crimes (shooting, crime gun recovery) through the utilization of NIBIN technology made by two certified firearms examiners.

**Open Source Intelligence**—Individual data, records, reports, and assessments that may shed light on an investigatory target or event and that do not require any legal process or any type of clandestine collection techniques for a law enforcement agency to obtain. Rather, such intelligence is obtained through means that meet copyright and commercial requirements of vendors, as well as being free of legal restrictions to access by anyone who seeks the information.<sup>53</sup>

**Personally Identifiable Information**—Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information, that is linked or linkable to a specific individual.<sup>54</sup>

**Preventive Intelligence**—Intelligence that can be used to interdict or forestall a crime or terrorist attack.<sup>55</sup>

**Privacy, Civil Rights, and Civil Liberties (P/CRCL) Policy**—A printed, published statement that articulates the policy position of an organization on how it handles the PII that it maintains and uses in the normal course of business. The policy should include information relating to the processes of information collection, receipt, access, use, dissemination, retention, and purging. It is likely to be informed by the Fair Information Practice Principles (FIPPs). The purpose of the P/CRCL policy is to articulate that the center will adhere to those legal requirements and center policy determinations that enable collection, receipt, access, use, dissemination, retention, and purging of information to occur in a manner that protects personal privacy interests. A well-developed and implemented P/CRCL policy uses justice entity resources wisely and effectively; protects the center, the individual, and the public; and promotes public trust.

**Privacy Protection**—A process of maximizing the protection of privacy, civil rights, and civil liberties when collecting and sharing information in protecting public safety and public health.

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<sup>53</sup> *Minimum Criminal Intelligence Training Standards, Version 2.0*, Global, DOJ, October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

<sup>54</sup> For further information about the breadth of PII and how to perform an assessment of the specific risk that an individual can be identified using the information, see Revision of Office of Management and Budget Circular A-130: *Managing Information as a Strategic Resource*, July 2016, <https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/OMB/circulars/a130/a130revised.pdf>.

<sup>55</sup> *Minimum Criminal Intelligence Training Standards, Version 2.0*, Global, DOJ, October 2007, <https://it.ojp.gov/GIST/108/Minimum-Criminal-Intelligence-Training-Standards>.

**Right to Know**—A requirement for access to specific information to perform or assist in a lawful and authorized governmental function. Right to know is determined by the mission and functions of a law enforcement, homeland security, counterterrorism, or other lawful and authorized government activity or the roles and responsibilities of personnel in the course of their official duties.

**Strategic Intelligence**—An assessment of targeted crime patterns, crime trends, criminal organizations, and/or unlawful commodity transactions for purposes of planning, decision making, and resource allocation; the focused examination of unique, pervasive, and/or complex crime problems.<sup>56</sup>

**Tactical Intelligence**—Evaluated information on which immediate enforcement action can be based; intelligence activity focused specifically on developing an active case.<sup>57</sup>

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<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

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## Appendix B: Recommended Resources

### Lab-Specific Resources

#### Controlled Substances

**National Forensic Laboratory Information System (NFLIS) Reports website**, Drug Enforcement Administration, U.S. Department of Justice,  
<https://www.nflis.deadiversion.usdoj.gov/Reports.aspx>.

**NFLIS-Drug Midyear Report 2018**, National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA),  
<https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLISDrug2018MY.pdf>.

#### Crime Guns

**Crime Gun Intelligence Center Practices: Lessons Learned from the Field**, National Police Foundation, September 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/10/Lessons-Learned-from-the-Field-CGIC-Practices-NRTAC-Oct-2018.pdf>.

**Firearms Tracing Guide: Tracing Firearms to Reduce Violent Crime** (Firearm Tracing Guide), U.S. Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives, November 2011, <https://www.atf.gov/file/58631/download>.

**Law Enforcement Use of the National Integrated Ballistic Information Network (NIBIN)**, National Institute of Justice, December 9, 2013, <https://nij.ojp.gov/topics/articles/law-enforcement-use-national-integrated-ballistic-information-network-nibin>.

**Minimum Required Operating Standards for National Integrated Ballistic Information Network (NIBIN) Sites**, Bureau of Alcohol, Tobacco, Firearms, and Explosives,  
<https://www.atf.gov/firearms/docs/undefined/mrosnibinsitesauditstandardspdf>.

**NIBIN Resources Website**, includes NIBIN Guidance, Training, and Contact information,  
<https://www.atf.gov/firearms/nibin-resources>.

**Opening the Black Box of NIBIN: A Descriptive Process and Outcome Evaluation of the Use of NIBIN and Its Effects on Criminal Investigations, Executive Summary**, William King, William Wells, Charles Katz, Edward Maguire, James Frank, National Institute of Justice, U.S. Department of Justice, October 2013, <https://www.ncjrs.gov/pdffiles1/nij/grants/243977.pdf>.

## Digital Evidence

**Cyber Incident Reporting: A Unified Message for Reporting to the Federal Government**, U.S.

Department of Homeland Security,

<https://www.dhs.gov/sites/default/files/publications/Cyber%20Incident%20Reporting%20Unit%20Message.pdf>.

**Forensic Examination of Digital Evidence: A Guide for Law Enforcement**, National Institute of Justice, 2004, <https://www.ncjrs.gov/pdffiles1/nij/199408.pdf>.

**Law Enforcement Cyber Center Website**, International Association of Chiefs of Police and coordinated by the Bureau of Justice Assistance, <https://www.iacpcybercenter.org/>.

## DNA

**Forensic DNA Website**, Types of Forensic Evidence, Forensics, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, <https://nij.ojp.gov/topics/forensics/forensic-dna>.

**Frequently Asked Questions on CODIS and NDIS** website, Federal Bureau of Investigation, <https://www.fbi.gov/services/laboratory/biometric-analysis/codis/codis-and-ndis-fact-sheet>.

**Many DNA Matches Aren't Acted On**, Richard Willing, USA Today, November 21, 2006, [https://usatoday30.usatoday.com/news/nation/2006-11-20-dna-matches\\_x.htm](https://usatoday30.usatoday.com/news/nation/2006-11-20-dna-matches_x.htm).

**National Best Practices for Sexual Assault Kits: A Multidisciplinary Approach**, National Institute of Justice, DOJ, 2017, <https://www.ncjrs.gov/pdffiles1/nij/250384.pdf>.

**Rapid DNA**, Federal Bureau of Investigation (FBI), <https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna>.

**Rapid DNA Executive Summary—FBI's Vision of Rapid DNA**, FBI, <https://www.fbi.gov/file-repository/rapid-dna-executive-summary-9-25-17-final.pdf/view>.

## Human Factors

**Latent Print Examination and Human Factors: Improving the Practice Through a Systems Approach**, The Report of the Expert Working Group on Human Factors in Latent Print Analysis, National Institute of Standards and Technology and the National Institute of Justice, 2012, [https://ws680.nist.gov/publication/get\\_pdf.cfm?pub\\_id=910745](https://ws680.nist.gov/publication/get_pdf.cfm?pub_id=910745).

**Biases In Forensic Experts**, Itiel E. Dror, April 19, 2018, Volume 360, Issue 6386, p. 243, Science Magazine, download from <http://science.sciencemag.org/>.

## Intelligence and Strategic Response

***The Contribution of Forensic Science to Crime Analysis and Investigation: Forensic Intelligence***, Olivier Ribaux, Simon J. Walsh, Pierre Margot, January 27, 2006, [www.ncbi.nlm.nih.gov/pubmed/16099615](http://www.ncbi.nlm.nih.gov/pubmed/16099615).

***Crime Gun Intelligence: Disrupting the Shooting Cycle***, The National Crime Gun Intelligence Governing Board, August 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/09/CGI-Manual-Best-Practices-ATF-27-AUG-18.pdf>.

***Crime Gun Intelligence: Disrupting the Shooting Cycle***, The National Crime Gun Intelligence Governing Board, August 2018, <https://crimegunintelcenters.org/wp-content/uploads/2018/09/CGI-Manual-Best-Practices-ATF-27-AUG-18.pdf>.

***The Intelligent Use of Forensic Data***, Bruenisholz, Eva; Prakash, Sameer; Ross, Alastair; Roux, Claude; Morelato, Marie; Raymond, Tony; Walsh, Simon; O'Malley, Troy; and Ribaux, Olivier, 2015, 10.13140/RG.2.1.1937.8009, <http://www.anzpaa.org.au/ArticleDocuments/635/intelligent-use-of-forensic-data.pdf.aspx>.

***Law Enforcement Intelligence: A Guide for State, Local, and Tribal Law Enforcement Agencies***, Second Edition, David L. Carter, Ph.D., School of Criminal Justice, p. 9, [https://it.ojp.gov/documents/d/e050919201-IntelGuide\\_web.pdf](https://it.ojp.gov/documents/d/e050919201-IntelGuide_web.pdf).

***National Best Practices for Implementing and Sustaining a Cold Case Investigation Unit***, National Institute of Justice, Office of Justice Programs, U.S Department of Justice, 2016, <https://www.ncjrs.gov/pdffiles1/nij/252016.pdf>.

***National Criminal Intelligence Sharing Plan***, Global Justice Information Sharing Initiative, U.S. Department of Justice, October 16, 2013, <https://it.ojp.gov/GIST/150/National-Criminal-Intelligence-Sharing-Plan-Version-2-0>.

***Information Sharing Environment (ISE) Functional Standard (FS) Suspicious Activity Reporting (SAR), Version 1.5.5***, Office of the Program Manager, ISE, [https://nsi.ncirc.gov/documents/SAR\\_FS\\_1.5.5\\_PMISE.pdf](https://nsi.ncirc.gov/documents/SAR_FS_1.5.5_PMISE.pdf).

## Privacy, Civil Rights, and Civil Liberties

***Civil Rights and Civil Liberties Protections Guidance***, Office of the Director of National Intelligence, August 2008, [https://www.dni.gov/files/ISE/documents/DocumentLibrary/Privacy/CR-CL\\_Guidance\\_08112008.pdf](https://www.dni.gov/files/ISE/documents/DocumentLibrary/Privacy/CR-CL_Guidance_08112008.pdf).

***Fusion Center Privacy, Civil Rights, and Civil Liberties Policy Development Template, Version 3.0***, Global Justice Information Sharing Initiative, U.S. Department of Justice, March 23, 2019, <https://it.ojp.gov/GIST/48/Fusion-Center-Privacy--Civil-Rights--and-Civil-Liberties-Policy-Development-Template--Version-3-0>.

## Appendix C: Examples of Collaboration

The following are links to news articles, sample products, tools, and a presentation that highlight the collaboration between forensic labs and intelligence units.

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## News Articles Featuring Lab and Intelligence Collaboration

**“Utah Officials Warn of Phony CBD Oil That Causes Seizures, Loss of Consciousness, and Slurred Speech: The product is being sold at Wasatch Front smoke shops,”** Tiffany Caldwell, *The Salt Lake Tribune*, December 22, 2017, <https://www.sltrib.com/news/2017/12/21/utah-officials-warn-of-phony-cbd-oil-that-causes-seizures-loss-of-consciousness-and-slurred-speech/>.

**“The Cheap Drug Spice Is on the Rise in Salt Lake City—and It’s Killing People,”** Ryan Trimble and Eric S. Peterson, Utah Investigative Journalism Project, *The Salt Lake Tribune*, May 26, 2018, <https://www.sltrib.com/news/2018/05/19/operation-rio-grande-has-helped-clean-up-heroin-and-meth-in-salt-lake-city-but-spice-is-on-the-rise-and-its-killing-people/>.

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## **Samples of Collaboration: Intelligence Products, Tools, and Presentation**

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## Fentanyl Disguised as Prescription Pills

### Intelligence Dissemination Report

Office of the Regional Operations and Intelligence Center (ROIC)

Office of Drug Monitoring & Analysis ~ ROIC201901-01551D

NJ ROIC SIN: NJ CRM-0100 (Geographic)/DHS SIN: HSEC 10 (Illicit Operations)

31 January 2019

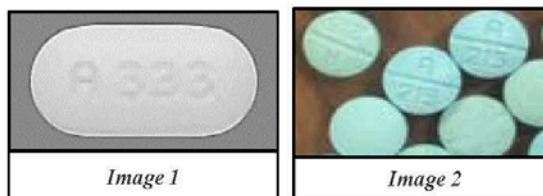
#### Key Findings:

Imitation oxycodone pills containing fluoroisobutyryl fentanyl (FIBF) have been seized in NJ.

#### Details:

17 January 2019, NJSP Crime Suppression North seized hundreds of suspected oxycodone pills from a residence in Irvington. Forensic laboratory analysis determined the content to be fluoroisobutyryl fentanyl (FIBF).

- Approximately 500 white oblong, pills imprinted with "A333" (Image 1), were suspected to be 10mg oxycodone pills.
- Approximately 30 round, blue pills imprinted with "A215" (Image 2), were suspected to be 30mg oxycodone pills.



Forensic laboratory testing of pills with identical markings, seized from the same residence at an earlier date, determined the pills contained fluoroisobutyryl fentanyl (FIBF), procaine, and quinine. Analyst Note: this is first time in NJ that the "A333" marked pill has tested for a fentanyl.

#### Implications for New Jersey:

Law enforcement continues to encounter imitation prescription pills, such as oxycodone, containing fentanyl and fentanyl class compounds.

- Counterfeit pills pose a significant hazard to anyone without knowledge of their true contents.

#### Recommendations for Law Enforcement<sup>123</sup>:

Anyone potentially exposed to suspected opioids should seek guidance from hazardous material trained professionals.

- Powder-free nitrile gloves should be worn during routine drug handling.
- Personal Protective Equipment (PPE) worn during seizures must be disposed of properly.
- Do not eat, drink, smoke or use the bathroom while working in an area with suspected adulterants. Do not touch the eyes, mouth, and nose after touching any surface potentially contaminated.
- Wash skin thoroughly with cool water and soap; do not use hand sanitizer, it may enhance absorption.
- If accidental exposure occurs, move away from the suspected source of exposure; notify dispatch, request EMS, and report exposures in accordance with agency guidelines.
- All first responders should be equipped with an adequate supply of naloxone.
- Hazardous materials response unit should be involved in all search warrants and site exploitation when narcotics are involved.

<sup>1</sup> American College of Medical Toxicology and American Academy of Clinical Toxicology. Retrieved August 14, 2017, from [http://www.acmt.net/Library/Fentanyl/Position/Fentanyl\\_PPE\\_Emergency\\_Responders.pdf](http://www.acmt.net/Library/Fentanyl/Position/Fentanyl_PPE_Emergency_Responders.pdf).

<sup>2</sup> The National Institute for Occupational Safety and Health (NIOSH). (2017, July 10). Retrieved August 14, 2017, from <https://www.cdc.gov/niosh/topics/fentanyl/risk.html>

<sup>3</sup> Fentanyl Safety Recommendations for First Responders. (2017). <https://>

**Source:** Law Enforcement

**Source Reliability:** Completely Reliable

**Contributing Agencies:** NJSP & NJSP Office of Forensic Sciences

**Dissemination:** New Jersey Law Enforcement

**Request for Information and Contact Information:** *Any agency with additional information regarding this topic, or with questions about this product, may contact the Drug Monitoring Initiative (DMI), Office of Drug Monitoring & Analysis at (609) 963-6900 ext. 6273, or [DMI@gw.njsp.org](mailto:DMI@gw.njsp.org).*



# **LVMPD - ATF** **Crime Gun Intelligence Center** **Lab Case # - - /Gun Series ID# - -**

*NIBIN has produced a correlation (NIBIN Lead) between the below listed events. This should only be considered an investigative lead. This NIBIN Lead is not intended to stand alone to establish probable cause for arrest. Microscopic examination by a firearms examiner is needed to confirm this association. Contact the LVMPD Forensic Laboratory or ATF for any further assistance.*

Agency Case #	Date of Incident	Crime	Incident Location	Type of Evidence	Purch	Poss	Suspect	Victim	Event Summary
EVENT # LVMPD	08/12/2019 @ 0037hrs	Illegal Shooting <b>**ShotSpotter**</b>	ADDRESS FIELD (NE/F3)	9mm cartridge case			Suspect #1  Suspect #2		Officers received a ShotSpotter notification of gunfire in the area. A witness said he saw two suspects running through the desert area after they shot off a round. Officers located two suspects and a foot pursuit ensued. Suspect #1 threw a fanny pack over the wall and fled while suspect #2 was taken into custody and transported to CCH for possession of marijuana and obstructing a Police Officer. Inside the fanny pack officers located a Taurus PT 24/7, 9mm, Serial # XXXXXXXX, and (1) 9mm cartridge case.
	Time Between Events: <b>Approx. 2 hours</b>		<b>*Persistent Hot Spot Frank Area*</b>	Taurus PT 24/7, 9mm, Serial # XXXXXXXX (No eTrace)			<b>Suspect #2 is a gang member</b>		
EVENT # LVMPD	08/11/2019 @ 2246hrs	Att Robbery W/DW	ADDRESS FIELD (NE/G3)	9mm cartridge cases			Suspect #1  Suspect #2	Victim #1	The victim was sitting in his vehicle inside of the apartment complex parking lot when two suspects approached him and asked for the time. The victim waved them off and the two suspects started to walk away. Suspect #1 started walking towards the victim's vehicle, pointed a black handgun at the victim, and told the victim to get out of the car. The victim immediately put his vehicle in reverse and drove away. As the victim was driving away, suspect #1 started shooting at the vehicle. Officers located (6) 9mm cartridge cases.
	Time Between Events: <b>4 days</b>		<b>*Persistent Hot Spot George Area*</b>						
EVENT # LVMPD	08/07/2019 @ 2154hrs	Att Robbery & Assault W/DW	ADDRESS FIELD (SE/J4)	9mm cartridge cases			Suspect #1  Suspect #2  Suspect #3	Victim #1  Victim #2	The victim was walking with her son when they were approached by three suspects, ranging in age from 13 to 15 years-old. One suspect demanded the victim give him everything she has. The victim grabbed her son and walked away. Another suspect said, "Someone is going to die tonight." Suspect #1 produced a silver handgun with a black handle and fired multiple rounds at victim #1 and victim #2. Officers located (5) 9mm cartridge cases.

\*LVMPD Lead Investigator: Det. ----- (LVMPD EVENT #) and Det. ----- (LVMPD EVENT #)  
 \*\*\*Data is preliminary; taken from Forensic Lab NIBIN Hit Notification.\*\*\*

Last Update: 9/6/2019  
 ANSEC

Page 1 of 1





UNCLASSIFIED

## GEORGIA INFORMATION SHARING & ANALYSIS CENTER

### PUBLIC SAFETY ALERT

26 May 2017

#### **(U) Public Safety Alert – Transdermal Drugs Found in Counterfeit Pills**

##### **Overview:**

(U) The Georgia Bureau of Investigation (GBI) is issuing a public safety alert regarding transdermal drugs contained within counterfeit pills. Counterfeit pills contain drugs other than those indicated by their external markings. Transdermal drugs are those that are absorbed through the skin. Since January 2015, the GBI Crime Lab has received 454 exhibits of counterfeit pills. In one instance, the crime lab received a pill with markings consistent with oxycodone (non-transdermal drug) but determined that the pill actually contained fentanyl, furanyl fentanyl, and U-47700 (street name “pink”) (all transdermal drugs). Because of this, the GBI Crime Lab did an internal study to determine the contents of other counterfeit pills submitted to the lab by law enforcement agencies in Georgia. While public awareness regarding the dangers of skin contact with synthetic opioid powders has recently increased, the public should be aware that certain synthetic opioids contained in counterfeit pills can also be absorbed through skin contact.

##### **Of Note:**

- (U) The study conducted by the GBI Crime Lab revealed that Metro-Atlanta has the most instances of counterfeit pills in the state. The two most common substances found within the counterfeit tablets were depressants and opiates.
- (U) Since January 2015, the GBI Crime Lab has received 454 exhibits of counterfeit pills, approximately 75 of which contained fentanyl and/or U-47700.
- (U) In 2017, the GBI Crime Lab determined that there were 8 fentanyl, 6 furanyl fentanyl, and 15 U-47700 pills that were embossed as a non-transdermal drug.
- (U) To date in 2017, Georgia had 10 deaths reportedly as a result of furanyl fentanyl and 6 deaths related to U-47700.
- (U) In the last 4 months, the GBI Crime Lab Drug Identification Unit received approximately 50 cases involving fentanyl, U-47700 and/or furanyl fentanyl statewide.

(U) ANALYST NOTE: Recent incidents highlighted in the media, in which law enforcement or public safety have had skin contact, and even overdoses from transdermal drugs (namely synthetic opioids) have increased public awareness of the dangers present in unknown powders. This GBI Crime Lab study underlines the potential for pills from an unknown source (marked and unmarked) to contain the same transdermal components that could result in inadvertent overdoses. At a minimum, gloves should be worn when handling pills from an unknown source, regardless of markings or indications. However, as long as prescriptions are obtained from a pharmacy, the pills are safe to take as directed. But if purchased by other means, the user is at risk.

Furanyl fentanyl and U-47700 are synthetic opioids that are analogues of fentanyl; they are not approved for human or animal use and are extremely toxic in low doses. In Georgia, 2016, there were 11 overdoses from U-47700 and 7 from furanyl fentanyl. In 2017, 10 deaths were reported as a result of furanyl fentanyl thus far and 6 for U-47700. While fentanyl is approved for human use under medical supervision, this drug resulted in 162 overdoses in 2016.

##### **Background**

(U) ANALYST NOTE: Should you come in contact with an opioid and an overdose is suspected, administer Naloxone immediately and call 911. It should be noted that multiple doses of Naloxone may be required. U-47700 or furanyl fentanyl may cause symptoms such as shallow breathing, pinpoint pupils, nausea or vomiting, dizziness, lethargy, clammy, cold skin, loss of consciousness, and/or heart failure.

##### **Contact Information**

(U) This bulletin (FY17-047a) was prepared by the Georgia Bureau of Investigation/Georgia Information Sharing and Analysis Center (GISAC). Comments and queries may be addressed to GISAC at 404-486-6420 or [generalinfo@gisac.gbi.ga.gov](mailto:generalinfo@gisac.gbi.ga.gov).

UNCLASSIFIED



## GEORGIA INFORMATION SHARING & ANALYSIS CENTER

INTELLIGENCE BULLETIN #FY17-015  
SITUATIONAL AWARENESS BULLETIN

1 September 2016

### GBI Crime Lab Receives Synthetic Opioid Carfentanil

#### Scope

The following situational awareness bulletin is being provided by the Georgia Information Sharing and Analysis Center (GISAC) as an officer safety alert. It is intended to brief federal, state, and local law enforcement and public safety communities regarding carfentanil, a synthetic opioid that is a fentanyl analog used to tranquilize large animals, such as elephants. It is suspected of playing a role in hundreds of overdoses in some Midwest states of the country. **In the last week, the GBI Crime Lab drug identification unit received three cases from separate seizures in the metro Atlanta area.**

#### Key Takeaways

- Carfentanil, a synthetic opioid, has been seen in some Midwest states, including Indiana and Ohio, where there have been media reports on hundreds of overdoses.
- The GBI Crime Lab has received three cases from separate seizures in the metro Atlanta area of carfentanil during the past week.
- Carfentanil is extremely toxic in very small doses and it is highly recommended that investigators use extreme caution and use their personal protective equipment when handling or packaging any synthetic opioid.

**ANALYST NOTE:** The GBI Crime Lab has received three cases containing carfentanil (final result pending) from separate seizures in the last week which means the schedule II drug may be making its way to Georgia. All three were suspected heroin and the solid material is consistently tan in color, indistinct from the average heroin case commonly analyzed. It is illegal to purchase in the United States but can be obtained online using Chinese-based websites willing to sell it. The price ranges between \$400 and \$800 per gram not including shipping.

#### Background

Carfentanil is a Schedule II drug used as a tranquilizer for large animals. It is 100 times more powerful than Fentanyl and 10,000 times stronger than morphine. It is used to sedate large animals such as elephants. This drug is **HIGHLY DANGEROUS** and should be handled with utmost caution. It can be inhaled or absorbed through the skin and is extremely toxic in even the smallest quantities. Only 1 microgram is necessary for the effect to appear in humans. Should you come in contact with carfentanil, and an overdose is suspected, administer Naloxone immediately and call EMS. It should be noted that multiple doses of Naloxone may be required.

It is recommended that protective equipment be utilized whenever you encounter any such powdered substance as carfentanil may cause the following symptoms: shallow breathing, pinpoint pupils, nausea or vomiting, dizziness, lethargy, clammy, cold skin, loss of consciousness, and/or heart failure.

Page 1 of 2

The Drug Enforcement Administration (DEA) recommends that if you have reason to believe a drug contains fentanyl or fentanyl analogs such as carfentanil, that you do not field test it but submit it directly to the lab with the appropriate submission markings. <https://www.dea.gov/divisions/hq/2016/hq061016.shtml>

**ANALYST NOTE: Suspicious activity reporting can assist authorities with mitigating potential threats. Contact GISAC at 404-486-6420 with any questions about law enforcement suspicious activity reporting protocols or national initiatives.**

**Contact Information & Product Tracking**

This bulletin (FY16-034) was prepared by CIA0077 with the Georgia Information Sharing and Analysis Center (GISAC). Comments and queries may be addressed to GISAC at 404-486-6420 or [generalinfo@gisac.gbi.ga.gov](mailto:generalinfo@gisac.gbi.ga.gov).

**Distribution**

Georgia Public Safety Community  
HSIN Georgia Communities of Interest  
GTIP Partners  
GBI Investigative Division  
Georgia State Patrol





## GEORGIA INFORMATION SHARING & ANALYSIS CENTER

### INTELLIGENCE BULLETIN #FY17-047 OFFICER SAFETY BULLETIN

26 May 2017

#### Officer Safety Bulletin – Transdermal Drugs Found in Pills and Powders

##### Scope

The Georgia Bureau of Investigation (GBI) is issuing an officer safety alert regarding transdermal drugs contained within counterfeit pills, not just powders as previously reported. Counterfeit pills contain drugs other than those indicated by their external markings. Since January 2015, the GBI Crime Lab has received 454 exhibits of counterfeit pills. In one instance, the crime lab received a pill with markings consistent with Oxycodone (non-transdermal) but determined that the pill actually contained Fentanyl, Furanyl Fentanyl, and U-47700 (pink) (all transdermal). This discovery resulted in an internal study to determine the contents of other counterfeit pills submitted to the lab by law enforcement agencies in Georgia. **While public safety awareness regarding the dangers of skin contact with powders has recently increased, personnel should be aware that pills also have the potential to contain dangerous drugs that can be absorbed through skin contact.**

##### Key Takeaways

- Since January 2015, the GBI Crime Lab has received 454 exhibits of counterfeit pills, approximately 75 of which contained fentanyl and/or U-47700.
- In the last 4 months, the GBI Crime Lab Drug Identification Unit received approximately 50 cases involving Fentanyl, U-47700 and/or Furanyl Fentanyl.
- To date in 2017, Georgia had 10 deaths reportedly as a result of Furanyl Fentanyl and 6 deaths related to U-47700.
- In 2017 in Georgia, there were 8 Fentanyl, 6

Furanyl Fentanyl, and 15 U-47700 (pink) pills that were embossed as non-transdermal drug.

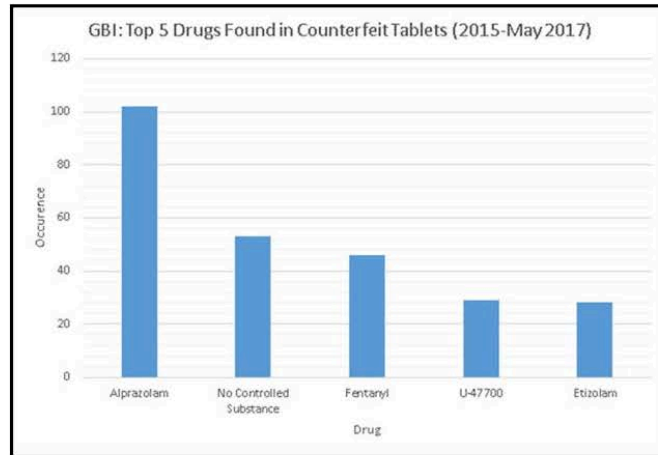
- Because these drugs are lethal at very low doses, law enforcement should use extreme caution when handling any item suspected to be fentanyl, analogues of fentanyl or any potent opioid. Law enforcement should not downgrade personal protective equipment (PPE) on scene if test kits or hand held scanning devices yield negative results. **Mixtures and low concentrations can lead to false negatives. At a minimum, gloves should be worn when handling ANY PILL, regardless of markings or indications.**

**ANALYST NOTE:** Recent incidents in which law enforcement or public safety have had skin contact, and even overdoses from transdermal drugs (namely synthetic opioids) have increased awareness of the dangers present in unknown powders. This study underlines the potential for pills (marked and unmarked) to contain the same transdermal components that could result in inadvertent overdoses.



## Background

The study conducted by the GBI Crime Lab revealed that Metro-Atlanta has the most instances of counterfeit pills in the state. By a significant margin, the top counterfeited logos represent Alprazolam (Xanax) and Oxycodone, specifically 30 M logo and XANAX2 logo. The two most common substances found within the counterfeit tablets were depressants and opiates. Of particular concern were transdermal drugs in the opiate drug class that were disguised as Oxycodone, a non-transdermal drug. So far in 2017, there were 8 Fentanyl, 6 Furanyl Fentanyl, and 15 U-47700 (pink) pills that were embossed as non-transdermal drug.



In the last 4 months, the GBI Crime Lab Drug Identification Unit received approximately 50 cases involving Fentanyl, U-47700 and/or Furanyl Fentanyl statewide. Because these drugs are lethal at very low doses, law enforcement should use extreme caution when handling any item suspected to be fentanyl, analogues of fentanyl or any potent opioid. Law enforcement should not downgrade personal protective equipment (PPE) on scene if test kits or hand held scanning devices yield negative results. Mixtures and low concentrations can lead to false negatives.

**Furanyl Fentanyl and U-47700, synthetic opioids that are not approved for human or animal use, are extremely toxic in low doses. In Georgia, 2016, there were 11 overdoses from U-47700 and 7 from Furanyl Fentanyl. While fentanyl is approved for human use under medical supervision, this drug resulted in 162 overdoses in 2016. In 2017, 10 deaths were reported as a result of Furanyl Fentanyl thus far and 6 for U-47700.**

**ANALYST NOTE: Should you come in contact with an opioid and an overdose is suspected, administer Naloxone immediately and call EMS. It should be noted that multiple doses of Naloxone may be required. It is recommended that protective equipment be utilized whenever you encounter any such powdered substances or pills that contain opiates as they may cause the following symptoms: shallow breathing, pinpoint pupils, nausea or vomiting, dizziness, lethargy, clammy, cold skin, loss of consciousness, and/or heart failure.**

The Drug Enforcement Administration (DEA) recommends that if you have reason to believe a drug contains fentanyl or fentanyl analogs, that you do not field test it but submit it directly to the lab with the appropriate submission markings. <https://www.dea.gov/divisions/hq/2016/hq061016.shtml>

### Contact Information & Product Tracking

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Georgia Bureau of Investigation  
Georgia Information Sharing & Analysis Center

# INTERFACE

**VOL.1**

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## ABOUT GBI-GISAC

The Georgia Information Sharing and Analysis Center (GBI-GISAC) is a division of the Georgia Bureau of Investigation and serves as the primary repository for counterterrorism and criminal intelligence information in the state. Formed shortly after September 11, 2001, GBI-GISAC is one of 79 U.S. Department of Homeland Security recognized fusion centers in the United States, established to enhance information sharing between local, state, and federal agencies. The diverse team of analysts, agents, and personnel, leveraging expertise through public and private sector partnerships, transforms the flow of raw information into an actionable intelligence picture. GBI-GISAC distributes alerts, bulletins, threat assessments, and other relevant intelligence products to law enforcement, public safety, emergency management, and private sector partners throughout Georgia.

### MISSION

The mission of GBI-GISAC is two-fold: to provide investigative support to law enforcement in Georgia for criminal activity and to dedicate resources to the protection of Georgia's citizens against the threat of terrorism.

**RESOURCES:** For additional information on GBI-GISAC, visit:  
<https://investigative-gbi.georgia.gov/georgia-information-sharing-analysis-center>

## IN THIS ISSUE

**ILLEGAL OPIOIDS PRESENT AN ONGOING THREAT** to social and economic structures on local, state, and national levels. This inaugural edition of the GBI-GISAC INTERFACE explores the extent of this threat, discusses related crime trends and public safety concerns, while highlighting ways in which inter-agency collaboration is working to effectively combat problems here in Georgia.

# INTERFACE Vol. 1

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This following is comprised of information gathered from open source and internal reporting, including redacted criminal investigations. This product is the property of GBI-GISAC, but can be distributed without prior authorization.

## FEATURE ARTICLE

### COLLABORATIVE EFFORTS TO COMBAT GEORGIA'S OPIOID CRISIS

*The ongoing effort to combat Georgia's opioid crisis is a collaborative, multi-agency, multi-level response on many different fronts. The GBI works with local, state, and federal agencies to understand the complexities of this issue, support our public safety and public health partners with proactive measures, and work with law enforcement to get illegal opioids off the street.*



(GBI Personnel at Work)

#### UNDERSTANDING THE EPIDEMIC

Georgia, like so many other states, finds itself amidst an epidemic fueled by escalating opioid addiction. Consistent with national trends, opioid-related overdose deaths have rapidly increased throughout the state, ranking Georgia among the top eleven states with the most opioid deaths. Of Georgia's 159 counties, 55 have an overdose rate higher than the national average. Deaths resulting from such overdoses have risen exponentially within the last four years, and such statistics don't even take overdose survivors into account. However, this crisis is much more than data and discussion points amongst medical professionals. The opioid epidemic is a social and economic crisis, impacting nearly every aspect of the rural and urban community structure.

**To clarify, the term 'opioids' are a class of drugs used to reduce or treat pain. The Centers for Disease Control (CDC) categorize opioids into three groups: prescription opioids, fentanyl, and heroin.**

Terms associated with this issue, including references to the "opioid epidemic" are no longer limited to discussions amongst the medical community, but rather now commonly used in public discourse, criminal justice reform, and even dinner table discussions. Drug overdoses are now the leading cause of death nationwide among Americans under the age of 50. Here in Georgia, recent studies found just under 70% of all drug overdose deaths to be opioid-related; with a 10-fold increase in deaths involving prescription opioids since 1999.

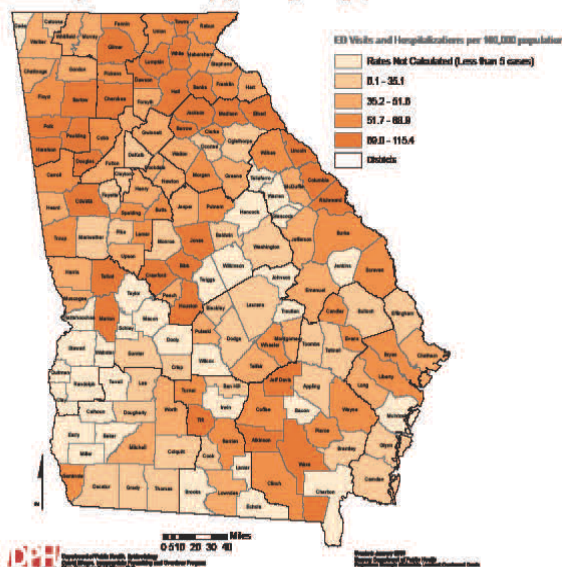
Category	Description
<b>Prescription Opioids</b>	Prescribed by doctors or obtained through medical or pharmaceutical means intended to treat moderate to severe pain. Common types include oxycodone, hydrocodone, morphine, and methadone.
<b>Fentanyl</b>	A synthetic opioid pain reliever, more potent than others, intended for more severe pain in specific medical settings. However, the illegal production and distribution of fentanyl, and related stronger analogues has been on the rise in several states, including Georgia.
<b>Heroin</b>	An illegal opioid having no medical use. In recent years, abuse of heroin has risen across nearly all demographic categories, as more users become addicted to prescription or synthetic opioids and turn to heroin when unable to obtain other opioids.

Statistically, the death rate for opioid-related overdoses in the metro-Atlanta region is higher than the rest of the state, and specifically heroin-involved overdoses were concentrated in urban and suburban areas such as metro-Atlanta, Augusta, Macon, Columbus, and Savannah. Yet the opioid crisis is not localized to the areas with the highest statistics and populace.



Additionally, these studies report that opioid-related overdoses occur in both urban and rural areas; showing this to be an issue across all geographic and socioeconomic groups. The Georgia Department of Public Health monitors overdose incidents statewide and can be used to illustrate the scope of this issue in terms of rural versus urban.

#### Any Opioid-Involved Overdose Emergency Department Visits and Hospitalization Rates, by County, Georgia, 2017



(DPH Office of Environmental Health)

The GBI Department of Forensic Science also has analyzed drug identifications made by the crime lab by county. For example, in a five-month<sup>1</sup> span, the GBI DOFS conducted 1,272 drug identifications for law enforcement agencies in which the substance submitted for testing was found to contain opiates. Those 1,272 cases found to contain opioids spanned 124 of Georgia's 159 counties.

#### CENTRAL AND SOUTH GEORGIA OUTBREAK

In June of 2017, Navicent Health, located in Macon, Georgia (Bibb County), treated six opioid overdoses and one related death. During the following nine days, the Georgia Poison Center verified 27 opioid overdoses to be linked to counterfeit Percocet pills. These cases occurred in central and south Georgia regions including Macon, Warner Robins, Centerville, Perry, and Albany.

Two of the individuals who overdosed reported taking pills they believed to be Percocet, which had been purchased illegally. The pills were described as yellow in color with the numbers 10/325 on one side and



(WSB Channel 2 Action News)

<sup>1</sup> DOFS, July-November 2016

the word Percocet in all capital letters on the opposite. Investigators with the Bibb County Sheriff's Office interviewed overdose victims and conducted several subsequent search warrants. These searches did not lead to any arrests. However, police did obtain two counterfeit pills.

Experts examining the pills noted the counterfeit tablets were not stamped as deeply as manufacturer pills and the imprint of the name was at an angle. The GBI Crime Lab analyzed and identified the pills as containing two rare and potent illicit synthetic fentanyl analogues (U47700 and cyclopropyl fentanyl). For comparison, scientists estimate U-47700 has an approximate potency 7.5 times higher than morphine.

#### GBI-GISAC'S UNIQUE ROLE IN THE ISSUE

The Georgia Bureau of Investigation, having statewide original jurisdiction in drug enforcement investigations, continues its commitment to quality drug enforcement services throughout the state. Central to this focus is the GBI's cooperative efforts with federal, state, and local partners. Regional Drug Enforcement Offices (RDEOs) are located across the state in Carrollton, Cleveland, Metter, and Sylvester.

With a combined territory that covers the state, the Georgia Bureau of Investigation's GISAC division (GBI-GISAC) is strategically positioned to provide intelligence support to law enforcement agencies and to collect, analyze, and disseminate narcotics intelligence. The structure of GBI-GISAC embeds intelligence analysts with drug task force initiatives throughout the state; providing direct tactical support to narcotics investigations within a region while maintaining a central clearinghouse of information to analyze trends on a larger scale.

Analysts are a critical component to these investigations, serving local, state, and federal law enforcement entities who typically request analytic support to identify criminal subjects, isolate suspicious financial activity, or analyze phone records. In many cases, information developed by analysts may directly result in arrests from the local drug trade to the dismantling of larger Drug Trade Organizations (DTO) that operate on national and even international levels.

The GBI remains an active partner in the Statewide Opioid Task Force, the Opioid Strategic Working Group, and the Northern District of Georgia Heroin Working Group (among various other initiatives). The Statewide Opioid Task Force was formed in September of 2017 to enhance communication between more than 144 stakeholders from public, private, and non-profit sectors, as well as local, state, and federal officials on the opioid crisis. As the lead law enforcement agency for the task force, the GBI has personnel serving in a variety of task force roles in addition to participating in the opioid strategic working group with 39 other agencies.

## FEATURE ARTICLE

### DRUG OVERDOSE NOTIFICATION (DON) SYSTEM

GBI-GISAC in partnership with the Georgia Department of Public Health (DPH) and the Atlanta Carolinas HIDTA (AC HIDTA) created the Drug Overdose Notification (DON) System, a new method to directly alert affected law enforcement and public safety personnel when DPH determines a drug overdose cluster or 'spike' occurred in their area of responsibility. GBI-GISAC will use the DON System to send out notifications via secure law enforcement channels to local sheriff's offices, police departments and 911 centers when DPH Epidemiologists have determined there has been a concentration of overdoses seen in an area over a particular time frame. This will equip local public safety counterparts with insight to expect potential overdoses in their jurisdiction. GBI-GISAC will also provide recommendations to law enforcement on handling the notifications, responding to scenes, and recommend proactive safety measures.

For example, during the previously mentioned June 2017 Macon and Bibb County incident, GA DPH notified GBI-GISAC of the opioid overdose spike. The GBI Crime Lab tested the suspect pills and determined that they contained two fentanyl analogues (U47700 and cyclopropyl fentanyl). This incident, as well as the continuing crisis in opioid overdoses all over the country and in Georgia, highlights the need for quick identification of clusters and messaging to affected public safety and law enforcement personnel. Authorities were able to warn the public about these specific pills which likely saved lives.

GA DPH, AC HIDTA and GBI-GISAC have established an "early warning system" that, based on certain kinds of data, will trigger a notification to an affected area that they may have an overdose situation.

### OVERDOSE DETECTION MAPPING APPLICATION PROGRAM

In early to mid-2017, AC HIDTA and GA DPH began promoting the use of the Overdose Detection Mapping Application Program (ODMAP) for use by public safety in Georgia. ODMAP was piloted in the Washington/Baltimore HIDTA region in early 2017 and currently there are more than 800 counties within 44 states entering data and more than 46,000 overdose incidents have been reported.

The ODMAP program enables first responders and law enforcement officers to have a straightforward method to report drug overdoses in real time, and to show overdose information across multiple jurisdictions. ODMAP is a mobile app that first responders can install on their smartphones and devices. It allows users to log overdose incidents and relevant details with the touch of a button; logging real time data from the field instantly.

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To date, more than 40 agencies are registered to use ODMAP, and the tool's effectiveness will only increase the more users input real time data. As more agencies enter data into ODMAP, the Georgia DPH Drug Overdose Surveillance Unit (DOSU), public safety agencies, and state and local law enforcement will have a clearer picture of the overdose situation in their respective areas of responsibility. Law enforcement can use ODMAP data to determine illicit drug flow activity in an area as they develop narcotics investigations, while public safety personnel can gain insight into how many naloxone doses were administered in potentially related non-fatal overdoses.



ODMAP Screen Shot (Washington/Baltimore HIDTA)

**Law enforcement and first responder personnel (only) interested in getting access to ODMAP for their agency can contact William Trivelpiece at [wtrivelpiece@achhidta.org](mailto:wtrivelpiece@achhidta.org)**

### PREPARING FOR THE FUTURE

The state of Georgia recently appropriated funding to allow the GBI to specifically address the opioid crisis by responding to and investigating opioid related deaths with their own task force. Funds requested in this solicitation will supplement, not supplant state funding for personnel.



## FEATURE ARTICLE

In 2018, GBI-GISAC applied for and was awarded two federal grants focused on combating this epidemic; the COPS Office Anti-Heroin Task Force (AHTF) Program grant award and the Technology Innovation for Public Safety (TIPS) Addressing Precipitous Increasing in Crime grant.

Funds awarded under the AHTF grant will be utilized to fund 3 GBI Special Agents, 1 Assistant Special Agent in Charge, and 2 Criminal Intelligence Analysts to increase the number of personnel dedicated to opioid investigations. Two Criminal Intelligence Analysts will be utilized to collect and analyze information from statewide investigations to conduct crime analysis, identify patterns and trends, produce intelligence products related to opioid trends and distribution tactics, and in turn, disseminate them to law enforcement at the state, local, and federal level. Analysts will also facilitate information sharing to public health and private sector entities.

This personnel increase will supplement, not supplant, current state drug enforcement resources to a level that will allow GBI to most effectively implement this strategy. In 2018, the Georgia state legislature funded 11 opioid task force positions for the GBI. These positions will be strategically allocated throughout the state to supplement investigations and analysis. The funding provided by AHTF will ensure a dedicated enforcement group to tackle the issue of metro-Atlanta Drug Trafficking Organizations that distribute narcotics throughout the state.

Along with dedicated personnel to address opioid investigations, an upgraded case management system was a crucial component to allowing personnel to successfully develop actionable intelligence and crime analysis. GBI will utilize the funding from the TIPS award to upgrade its case management system to capture data that will establish links between opioid related deaths and drug investigations. This will provide investigative leads for the identification, investigation, and prosecution of the distributors responsible for overdose deaths.



GBI Crime Lab's Deneen Kilcrease briefs law enforcement on opioids

### CONCLUSION

Stakeholders from all functions of government, medicine, and the community are increasingly learning from one another and coordinating efforts to ensure the most effective methods to combat the opioid crisis are implemented and adapted. Researchers, policy makers, members of the public safety community, and everyday citizens play a critical role to seek solutions on a local to national level. Ongoing initiatives like the ones herein, along with specific events and symposiums will continue the collaborative progress against the misuse of opioids in Georgia.

*"Last year nearly 50,000 people died from the opioid epidemic in America. As shocking and tragic as that figure is, it significantly understates the impact of this crisis. The tentacles of this epidemic affect our society in myriad ways—in our schools, hospitals, prisons, workplaces and our homes. Given the public mission of this university, we felt a civic imperative to convene this interdisciplinary group of faculty and graduate students who are conducting research on opioids. Our goals for the symposium are to disseminate important research, foster collaboration across disciplines and ultimately to make a real-world difference in addressing this national crisis."*

*—Fazal Khan, Associate Professor, School of Law, University of Georgia,*

Countless dedicated professionals across the state work in various roles to effect real change in the opioid epidemic. Medical and mental health professionals, to include drug treatment & recovery programs, provide critical health care services; while researchers and public health experts analyze evidence and trends. The public safety and law enforcement community are on the front lines of this fight, responding to overdose incidents, pill mills, and drug-related crime wreaking havoc on communities. Lives and communities can see progress only through effective collaboration of all these stakeholders at the local, state, and national level. Short- and long-term goals include the development and sharing of best practices for all stakeholders in their respective fields and ultimately the reduction in opioid abuse, associated crime, and overdose deaths. Through strategic information-sharing, education, policy, and cooperation; stakeholders can begin to reclaim ground in this state and national crisis.



(Source: Gwinnett Police press release)

## OPIOID RELATED CRIME: Pharmacy Burglaries, Armed Robberies & Targeted Opioid Thefts

As authorities continue to cut off the supply of opioids flowing into illicit drug markets, addicts and offenders are increasingly willing to resort to bolder or more violent tactics. Whether the intent is for personal misuse or profit, the epidemic demand fuels break-ins, robberies, and cargo thefts that wreak havoc on communities and private businesses.

Since Georgia recognized opioid abuse as an epidemic, authorities have cracked down on the supply part of the equation by shutting down pill mills and investigating prescription abuse and fraud. Extensive measures were taken to adopt prescription drug monitoring programs, allocate manpower and resources to investigate prescription fraud, and passing tougher licensing laws, to name a few. In fact, the Georgia Drugs and Narcotics Agency estimates that at least 100 pill mills were operating in Georgia several years ago, however tougher licensing laws and enforcement have shut down an estimated 1/3 of those operations.

While crack down efforts on those production methods have proven effective, the decrease in supply is associated with rises in opioid related crimes that include violence. Thefts may be as 'minor' as an addict stealing prescription pills from their family or a hospital employee pocketing a single vial, ramping up to someone stealing a doctor's prescription pad to file fraudulent pharmacy orders. The larger scale and bolder crimes such as middle-of-the-night drug store burglaries or brazen mid-day armed robberies at pharmacies underline the escalation police are documenting with regard to opioid related crime.

The Drug Enforcement Administration (DEA) estimates hundreds of thousands of dollars of drugs have been stolen from Georgia pharmacies in the last year. Some of these thefts occur during after hour break-ins while others involve brazen armed robberies where pharmacy staff are held at gunpoint. Thefts of these drugs are occurring in medical facilities across the country, as staff and personnel steal opioids to feed personal addictions or sell for a financial profit. Additionally, shipments of opioids are being targeted while in transit, as police work cases with opioid cargo being stolen out of locked tractor trailers.

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### PHARMACY BURGLARIES AND ARMED ROBBERIES

In June of 2017, the Eastside Family Pharmacy located in Snellville was broken into and thousands of dollars' worth of pain pills and other medication (including those to treat cancer and sickle cell patients) were stolen. It was the second time this specific pharmacy had been burglarized within a three-month timeframe, totaling more than \$40,000 worth of drugs stolen between the two break-ins.



(Surveillance footage from string of pharmacy burglaries. Suspects broke in through drive-thru window wearing gorilla mask, gloves)

In December of 2017, burglars stole approximately 9,000 oxycodone pills valued at \$12,000 from a pharmacy in Stockbridge. In January of 2018, a woman robbed a Forsyth Pharmacy at gun-point taking narcotics. Police believe the same woman was responsible for robbing a Norcross pharmacy months earlier. Also in January, an attempted robbery was thwarted by the owner of the North Fulton Pharmacy in Alpharetta after a gun-wielding man demanded narcotics. In February 2018, a Bibb County pharmacy was also robbed for narcotics.



In November 2018, pharmacies in Glenwood and Statesboro were burglarized by subjects wearing gorilla masks and gloves who gained access through the drive thru window (photo at left). At least one of these subjects is believed to have committed additional thefts in Vidalia, Hazlehurst, and Douglas with more than \$17,000 worth of drugs stolen.

Violence during these brazen robberies seems to be escalating. Most recently, on December 7, 2018, three masked suspects entered the VN Pharmacy in Norcross, jumping the counter and assaulting an employee. According to Gwinnett Police, the employee was grabbed and dragged to the back room before being forced to open a safe. Suspects held a gun to the employee's head and side nearly the entire duration of the attack. In addition to the business's cash drawer and employee's purse, the suspects stole a large quantity of prescription medication. Gwinnett Police continue to investigate this incident. These crimes further emphasize the scope of Georgia's ongoing and evolving opioid epidemic, specifically underlining the ripple effect of crime associated with the abuse and drug trade of opioids.

#### CARGO THEFTS

Thieves are not limited to stealing from brick and mortar establishments but have begun targeting opioid sources while in transit. For example, in October of 2018, a large shipment of fentanyl patches were stolen off a Georgia-based tractor trailer while parked in another state. More than 700 boxes of fentanyl patches were stolen while the (locked) tractor trailer was briefly parked at a travel center. Subject(s) broke into the back of the trailer, unloaded the shipments of fentanyl patches and left before the driver returned to the rig. Such crimes have the added difficulty of crossing jurisdictional boundaries which often complicate criminal investigations. However, with law enforcement's increasingly collaborative and intelligence-driven approach to these cases, they have become more effective in dismantling these kind of criminal networks.

**DID YOU KNOW?** The GBI has a specialized unit dedicated to major theft, specifically working cargo thefts like the one mentioned above. Cargo theft is a nationwide issue with a significant impact on the U.S. economy. Cargo theft crimes account for an estimated direct merchandise loss of \$10 to \$25 billion per year. The robust transportation infrastructure throughout the state includes major Interstate highways and ports, enabling freight and cargo to be transported across the Southeast. In a single year, it is estimated that more than 43.5 million truckloads of cargo, valued at more than 1.4 trillion, traveled Georgia's highways. This also makes Georgia an attractive target for cargo thieves. New laws carrying stricter punishments have helped law enforcement crack down on these crimes. In fact, Georgia losses dropped 64% in 2016 (the year following the passage of Georgia's Cargo Theft Act legislation). The Major Theft Unit, using both conventional methods of investigation along with innovative techniques, will continue to address cargo crimes in Georgia.

#### THEFTS BY MEDICAL AND HEALTHCARE PERSONNEL

Medical professionals are not immune from addiction. In fact, many stressful or unique aspects of the healthcare profession put employees at an increased risk for substance abuse. Criminal investigations into healthcare facility personnel stealing opioids for personal abuse or financial profit are ongoing in jurisdictions across the country.

In some cases, personnel with access and opportunity will forge prescriptions for various quantities and tablets. In larger practices, it may take a significant amount of time before doctors or staff notice discrepancies in their records and prescriptions; allowing someone to get away with filling dozens if not hundreds of fraudulent prescriptions at different locations. In more egregious cases, personnel will steal drugs from the patients in their care, either withholding doses and falsifying charts, or going so far as to replace stolen drugs with placebo substances. For instance, personnel may drain liquid opioid medications from sealed, secured vials and refill them with saline solution before "re-sealing" the vials with glue. In these types of cases involving tampered pain medication, a patient's health is directly at risk.



*"With the pill mills closing down, we've seen an increase in the number of burglaries, robberies and (employee) pilferage," ... "The demand or need for prescription drugs is still there. The black market just finds a source. People who went to pill mills to get drugs to sell have to find another source and that source has become pharmacies. Either that or addicts turn to heroin."*

*— Rick Allen, Former Director (retired), Georgia Drugs and Narcotics Agency*

#### CONCLUSION

Security personnel, law enforcement and business owners should be aware of the lengths offenders are willing to go to obtain these drugs. Facilities can work to enhance security for their employees and customers, but the demand for opioids remains high. Pharmacy robberies, burglaries, and targeted thefts of opioids not only effect the flow of supply into the illicit drug market, but significantly impact local economies, small businesses, and the public safety community.

## FOCUS ON FENTANYL

### ONGOING CHALLENGES & CONSIDERATIONS FOR PUBLIC SAFETY

**FENTANYL** is a schedule II opioid approved for use as a painkiller and anesthetic. It is the most potent opioid available for use in human medical treatment. Like other opioids, fentanyl is incredibly addictive, with the added danger that it can be absorbed through the skin (transdermal) or accidentally inhaled. Such potency and exposure-risk poses a serious threat to officer safety when it comes to searches and testing in the field. The threat to officer safety is so serious that most law enforcement agencies have ceased field testing when heroin or fentanyl is suspected to be present because of the possibility of potential harm from accidental exposure.

#### FENTANYL FACTS:

- Described as 50 to 100 times more potent than morphine.
- Seized in more criminal cases in GA in 2017 than any prior year
- The most prevalent and significant opioid threat in the U.S.
- New analogues of fentanyl continue to emerge including acryl fentanyl and tetrahydrofuran fentanyl, which are more potent than fentanyl.
- One such new analogue of fentanyl is carfentanyl, a schedule II drug that is 100 times more potent than fentanyl and up to 10,000 times more potent than morphine. (PHOTO AT RIGHT)
- Other new analogues include furanyl fentanyl and tetrahydrofuran (te-truh-hahy-druh-fyoor-an) fentanyl.



*Potency comparison of Heroin, Fentanyl, Carfentanyl*

#### BACKGROUND

Fentanyl is a prescription drug that is typically used to treat patients with severe chronic pain or to help manage pain after surgery. It was introduced as an intravenous anesthetic in the 1960s. When prescribed for legitimate purposes, it is administered via injection, transdermal patch, or in lozenges. The newer forms of fentanyl related to the current opioid epidemic have been produced in illicit labs. Illegally-produced fentanyl can be found in the form of a powder, spiked on blotter paper, mixed with or substituted for heroin, or as tablets that mimic other, less potent opioids. Fentanyl can be swallowed, snorted, injected, or put on blotter paper and inserted into the mouth so that it is absorbed through the mucous membrane.

Fentanyl's effects resemble those of heroin and include euphoria, drowsiness, nausea, confusion, constipation, sedation, tolerance, addiction, respiratory depression and arrest, unconsciousness, coma, and death. Users risk overdose when they inadvertently ingest fentanyl that was mixed with the drug they purchased. Heroin and cocaine are the most common recreational drugs that, unknowingly to the user, may contain fentanyl, however methamphetamine, marijuana, and other pills have increasingly been found to contain fentanyl as well.

New versions of fentanyl are being created all the time. Several new analogues are more potent than fentanyl, creating cheaper alternatives for drug distributors. This enhanced potency makes it significantly more dangerous to first responders and opioid users. In 2017, the Forsyth County Sheriff's Office submitted forensic evidence containing acrylfentanyl and tetrahydrofuran fentanyl to the GBI crime lab. At that time, neither synthetic opioid had previously been identified by the crime lab. Both drugs can be absorbed through the skin (transdermal absorption) and are highly dangerous. Multiple reports in other states indicated that the opioid reversal drug, naloxone, may not be effective if someone overdosed after ingesting acrylfentanyl. While its effects can be limited depending on the opioid's potency, naloxone remains the most effective opioid antagonist in reducing the effects of an opioid overdose.



## FOUR CORNERS OF GEORGIA

### NORTHWEST

#### JASPER SMOKE SHOP SEARCH WARRANT

In September of 2018, law enforcement executed a search warrant at A-1 Smoke Shop in Jasper, Georgia (Pickens County). The investigation began when several teenagers were sickened after smoking a substance known as "Blaze." The teenagers purchased e-cigarette liquid (illegally) from the A-1 smoke shop. Police set up undercover buys at the store, and the store owner indicated to (undercover) officers that the e-cigarette liquid contained Kratom<sup>1</sup>.

During the search warrant, a detective came in contact with an unknown substance and needed immediate transport to the hospital. Another detective and two EMS personnel were also treated after they had a reaction. Investigators were unsure if the substance sickening the detective (and believed to have been what sickened the teenagers initially) contained Kratom as the store owner claimed, or another unknown narcotic. The shop owner was arrested and faces charges of manufacturing, distributing, dispensing or possessing controlled substances and distributing Nitrous Oxide.

Samples of substances were analyzed by the GBI Crime Lab. None of the liquids or e-cigarettes tested contained Kratom or a narcotic. Bottles of liquid labeled as "Blaze", "Kronic Juice", and "Gold Drops" were all confirmed as containing Synthetic Cannabinoid(s). Some liquids also contained CBD. Several items of e-cigarettes tested positive for both CBD and Synthetic Cannabinoid(s). The e-cigarettes contained Cannabidiol (CBD) and Schedule I Synthetic Cannabinoid(s). Kratom was identified in some non-liquid items. It is believed that tablets containing Kratom is what sickened the personnel, but officials were not able to confirm the specific exposure reaction.

<sup>1</sup>The U.S. Drug Enforcement Administration classifies Kratom as a "Drug of Concern" similar to heroin or ecstasy. Kratom is NOT banned in Georgia, and it is not illegal to possess or use kratom.

### NORTHEAST

#### SEIZURES OF COCAINE MIXED WITH FENTANYL ON THE RISE

As the incidence in drugs laced with fentanyl has evolved, the GBI Crime Lab continues to track and publish trends to equip the police and citizens with critical developments. In late 2018, the GBI analysis confirmed the presence of cocaine in combination with fentanyl had been processed by crime lab personnel, indicating the deadly combination's presence in Georgia.

While analysis of other opioid categories including heroin and drugs like methamphetamine have previously documented the presence of fentanyl; finding the deadly opioid in conjunction with cocaine was a concerning development. At least one drug seizure from metro-Atlanta included fentanyl laced cocaine. A similar combination is possibly related to the string of Camden County overdoses briefed in the Southeast sector (below).

#### FIVE MILLION DOLLAR DRUG BUST IN METRO-ATLANTA

In September 2018, investigators with a DEA task force dismantled a major metro-Atlanta drug operation in Lawrenceville, Georgia. The operation was run out of a hidden basement in the home where officials found cocaine, meth, and approximately \$850,000 in cash. More than a million dollars of fentanyl-laced heroin was also seized. Investigators said the subjects were part of a Mexican drug cartel who transported drugs through a business in metro-Atlanta and operated out of the Gwinnett County residence.

### SOUTHWEST

#### FENTANYL PATCHES SEIZED DURING ARRESTS

While overdose incidents first and foremost involve emergency and medical personnel, it is important to understand a more long-term criminal investigation is also underway. Recalling the case study from the feature article on page 3, the middle Georgia overdose cluster had cases extending from Atlanta into the middle of the state with dozens of incidents in the greater Warner Robbins area. These cases ultimately extended into Southwest Georgia as well. The GA Department of Health (DPH) confirmed the same counterfeit Percocet pills that hospitalized more than two dozen people in Middle and South Georgia was linked to at least one overdose death in Albany.

In this case, the criminal investigation into the pills' production and distributors took diligent and cooperative effort. GBI Agents and Drug Task Force investigators worked for months to follow-up on leads, identify other overdose cases outside the initial outbreak area, and tie those incidents back to the specific counterfeit Percocet source. The outbreak was on such a significant scale that even national media outlets picked up the story. Oftentimes, media focuses solely on urban areas or major cities; neglecting to mention the reach or impact to small town or rural communities.

However, opioids are a reality in all communities, not just cities and suburbs. In fact, just this past December 2018 the Lee County Sheriff's Office Unit Patrol and Narcotics Divisions made multiple arrests tied to various drug and firearm charges. Investigators seized around 200 pills of various Schedule II and IV controlled substances, eight firearms, marijuana and drug-related objects. Of specific note, prescription fentanyl patches were one of the drugs seized from the residence.

### SOUTHEAST

#### CAMDEN COUNTY OVERDOSE STRING

On Thursday, November 8, 2018, law enforcement agencies in Camden County responded to three separate deaths. The Georgia Bureau of Investigation, along with the St. Marys Police Department, the Kingsland Police Department and the Camden County Sheriff's Office launched an investigation into the deaths in an effort to determine the cause and if there is a connection between the deaths.

The investigation has revealed that the cause of deaths was linked to drug usage. Toxicology reports from the GBI crime lab revealed cocaine and high levels of fentanyl in the victims. Alonzo Davis, 39 years old, has been arrested and charged with the distribution of cocaine and distribution of fentanyl along with felony murder in relation to one of the deaths. Rashaad Hines was arrested January 15th, 2019 on one count each of felony murder and distribution of fentanyl and cocaine in one of the deaths. Additional arrests are possible as this is still an ongoing investigation.

The overdose connections prompted local officials to issue public appeals warning people about the potential for tainted drugs. "Consumers of illegally purchased substances of this nature should be aware of the extreme danger," District Attorney Jackie Johnson was quoted in her release. The GBI and local agencies continue to work together to conduct interviews and gather intelligence in order to complete a thorough investigation.



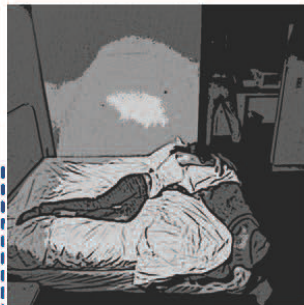
## CONNECTIONS



### GANGS

Criminal street gangs and larger drug trafficking organizations have long been fueling illicit drug markets. GBI-GISAC's analytic focus is not limited to the more recent opioid issue but encompasses intelligence and trends from all drug categories. In the context of discussing notable gang and drug trafficking incidents of late, *Operation Vanilla Gorilla* charged more than 40 defendants linked to the Ghost Face Gangster organization with drug trafficking and other firearms felonies. Laid out in a near 100-page indictment, the U.S. Attorney's Office Southern District of Georgia outlines the multi-year narcotics (meth and heroin) trafficking conspiracy operating in Bryan, Chatham, Effingham, Emanuel, Evans, and Tattnall Counties (among other areas). The indictment is one of the largest takedowns of the Ghost Face Gangsters, a prison-based gang with influence spanning outside prison walls. Ghost Face Gangster members are also tied to multiple violent incidents, including a June 2018 prison break during which two GA Department of Corrections officers were murdered.

Gang involvement specific to opioids is a topic of ongoing study and law enforcement focus. In the past few years, the federal government has worked to indict international drug trafficking organizations for their manufacturing and supply of drugs, specifically synthetic opioids. In August of 2018, the Department of Justice (DOJ) charged two Chinese foreign nationals with manufacturing and shipping deadly fentanyl analogues into the U.S., and the indictment directly linked the two subject's with specific overdose deaths in Ohio.



### HUMAN TRAFFICKING

Criminals have long used the power of addiction to coerce victims into sexual servitude or prostitution. However human trafficking survivors and stakeholders acknowledge an increasing trend in which traffickers are using opioid-specific addiction and withdrawal in various ways to facilitate their crimes, recruit new victims, and control existing victims.

Traffickers may use opioids as a way to control victims by dulling physical and emotional pain, essentially numbing victims to sex acts or violence. Police have seen cases ranging in severity from victims asking for such drugs to traffickers holding victims down to inject an opioid like heroin against the victim's will. Once victims are addicted and experiencing withdrawal symptoms, the trafficker can use the addiction to gain compliance. Victims may be more "willing" to engage in sex acts and the trafficker's demands in order to obtain more drugs. Traffickers also may provide the sole drug supply to a victim at a higher cost, resulting in a "debt" the trafficker makes a victim work off. When a single victim is unable to make up such an inflated debt, the trafficker may even force them to recruit other victims to make up the difference.

Traffickers will continue to use opioids as a way to facilitate their crimes and the national epidemic will fuel the supply of potential victims who are vulnerable to exploitation.

*"Since 2008, the Zheng drug trafficking organization engaged in this conspiracy from its base of operations in Shanghai. They claimed to ship 'over 16 tonnes of chemicals every month' from its 'own lab' and to 'synthesize nearly any chemical on a bespoke basis in any quantity.'"*

— DOJ Press Release, 22 August 2018



## CYBER

The “dark web” is essentially a part of the internet accessible only by special software that offers users and operators increased anonymity. This anonymity is attractive to some involved in illicit drug markets (buyers and sellers) because it makes it more difficult to be discovered by law enforcement.

Vendors setting up shop on the dark web establish marketplaces that resemble mainstream websites, but users can purchase illicit items ranging from fake identification and stolen merchandise to weapons or dangerous drugs.

The national opioid epidemic has fueled dark web market sales in which someone can mask their identity, pay in cryptocurrency, and receive stolen or synthetic opioids via mail services. The tradeoff is the extra steps and software involved in accessing the dark web may intimidate or discourage some buyers from accessing such markets.

Even dark web actors are doing something about the opioid epidemic. In 2018, major dark web suppliers started voluntarily “delisting” or banning the sale of synthetic opioids like fentanyl because it was viewed to be “too high of a risk.” It is likely those behind such bans are simply making an effort to avoid or divert law enforcement attention; as police will continue to triage enforcement efforts towards the sale of the most dangerous drugs and weapons. Markets who ban these dangerous opioids hope to continue their illicit sales of “less dangerous” or class C drugs that won’t attract proactive policework.



## TERRORISM

While the connection between a narcotic like opioids and terrorism may not immediately be apparent, the two issues do in fact overlap. Drug trafficking is a lucrative business, and money obtained through criminal means can be funneled into any variety of fronts, including the material support to terrorism. Terrorist organizations may be directly involved with drug cultivation and trafficking or profit indirectly by controlling and taxing the farmers growing crops and the traffickers moving the product.

Scholars and historians will continue to study the unique relationship between terrorist groups and drug trafficking for years to come. The reality is that members of the public safety community don’t have the luxury of that time. Police and those in a position to act need to be aware of the potential dynamic between drugs and terrorism so they can properly recognize indicators and share valuable intelligence.

For instance, citizens or business owners are in a position to recognize when something is not right. By relaying this information to authorities, a Suspicious Activity Report, also known as a SAR, should be generated by law enforcement or private sector security initiatives. While such activity may ultimately prove to be innocent, proper suspicious activity reporting mechanisms ensure law enforcement authorities can vet the information and review potential indicators in consultation with existing intelligence.

*“While it is difficult to establish how widely terrorist groups are involved in the illicit drug trade, or the breadth and nature of cooperation between these two criminal groups, the magnitude of the numbers involved make the relationship worrisome.”*

—Irka Kuleshnyk, United Nations Office of Drugs & Crime



## COUNTERTERRORISM

### WHAT IS A SAR AND WHY DO I CARE?

Day to day community interactions put citizens in a unique position to know what is out of place for their routine or surroundings. Nationwide "See Something, Say Something" campaigns encourage persons to get involved in reporting suspicious activity. In preparation for major events (like Superbowl LIII), information sharing, and suspicious activity reporting are more critical than ever.

*On any given day, the calls may come in...a man in a dark sedan is taking photos of a research facility. The man is using a high-powered camera and wearing sunglasses even though it is "nowhere near sunny" as one witness describes. The man reportedly sped away when he realized he was being watched...*

The man taking the photos is conspicuous enough for two different agencies to receive reports about him. While police acknowledge the incident as abnormal, it is unclear whether any crime has been committed or what to do about it. This type of suspicious activity is exactly what Fusion Centers across the nation need. Fusion Centers were established after September 11th to review activity that might indicate emerging terrorist attacks. The GBI's Georgia Information Sharing & Analysis Center (GISAC) is the statewide Fusion Center and reviews singular reports in combination with other such reporting and uses various investigative tools to determine if a potential threat exists.

Suspicious Activity Reports (SARs) are designed to be a primary tool of terrorism prevention. The reasoning behind this is simple: anyone who plans an attack must first conduct some type of surveillance on their specific target. Federal reporting has analyzed major terrorist cases and noted surveillance occurred during each plot. When terrorists conduct surveillance on a target, they are by necessity exposing themselves to detection. This is the golden opportunity that law enforcement and intelligence stakeholders have to uncover a plot, but can only be done if citizens, private sector entities and local first responders actually understand what types of activity to look for, how to report any suspicious activity and why they need to report it. GBI-GISAC has a number of various SAR reporting mechanisms for public safety partners, the private sector, and the public at large. One such mechanism is the See Something, Send Something initiative.



See Something, Send Something is a nationwide smartphone app (SeeSend) that allows citizens to report suspicious activity and concerns of potential terrorism or crime to local law enforcement. The application allows users to capture a photo of suspicious



(Above, multi-agency press conference prior to Superbowl LIII)

activity or send in written text. Information received in the app is sent directly to the Georgia Information Sharing and Analysis Center (GISAC) where the tips can be evaluated and provided to law enforcement across the state as needed. The SeeSend application is available at no cost for iPhone and Android phone users, as well as iPad users.

Federal partners have studied thwarted plots and carried out terrorist attacks to better understand the "pre-operational indicators" that include, but are not limited to<sup>1</sup>:

- **UNUSUAL ITEMS OR SITUATIONS:** Vehicles parked in odd locations, unattended packages or luggage, items that seem out-of-the-ordinary for the setting.
- **ELICITING INFORMATION:** A person questions individuals at a level beyond curiosity about a building's purpose, operations, security procedures and/or personnel, shift changes, etc.
- **OBSERVATION/SURVEILLANCE:** Unusual attention to buildings beyond a casual or professional interest. This includes extended loitering without explanation or while hiding; unusual, repeated, and/or prolonged observation of a building; taking notes or measurements; sketching floor plans, etc.

While such activity may prove to be innocent, proper SAR mechanisms ensure law enforcement authorities are notified and able to determine whether an incident warrants investigation.



## PERSONNEL SPOTLIGHT

### FEATURE COLLABORATION: DPH, GISAC & HIDTA

The collaborative efforts of the Georgia Department of Public Health (DPH), the Atlanta Carolinas HIDTA (AC HIDTA), and the Georgia Bureau of Investigation's GISAC (GBI-GISAC), specifically those featured below, have resulted in programmatic and educational initiatives within the last year. Their efforts and progress are noted and appreciated by stakeholders throughout the system.

#### TERRI ST. ROMAIN

Terri St. Romain is a Supervisory Intelligence Analyst at the Georgia Bureau of Investigation. She is assigned to the Georgia Information Sharing and Analysis Center (GISAC) and works closely with DPH and HIDTA to implement the statewide Drug Overdose Notification System to increase awareness of overdose activity across multiple jurisdictions and support public safety and law enforcement response to overdose clusters.

#### STEPHANIE GITUKUI, MPH

Stephanie Gitukui is a Public Health Analyst for the Atlanta-Carolinas High Intensity Drug Trafficking Area Program (HIDTA). Under the Heroin Response Strategy (HRS), she is responsible for assessing the current epidemiology of opioid use and overdose in Georgia and facilitating collaboration across public health and public safety agencies to reduce drug overdoses in the state. She works closely with the Prescription Drug Management Program at the Georgia Department of Public Health (DPH) to collect, analyze, and disseminate opioid-related mortality and morbidity data.

#### BILL TRIVELPIECE

William E. (Bill) Trivelpiece, Drug Intelligence Officer, Atlanta-Carolinas High Intensity Drug Trafficking Area program (HIDTA), came to that position in January 2017, after over 29 years of experience in local and federal law enforcement and private consulting. This position is through the Heroin Response Strategy, an initiative out of the Office of National Drug Control Policy (ONDCP). This initiative consists of partnering public health and law enforcement personnel for working on the opioid issue.



ABOVE: (from Left) Terri St. Romain, Stephanie Gitukui, and Bill Trivelpiece

BELOW: Terri St. Romain supervises personnel at joint command post for SB LIII



As outlined in the feature article, GBI-GISAC in partnership with DPH and the AC HIDTA created the Drug Overdose Notification (DON) System, an "early warning system" to directly alert affected law enforcement and public safety personnel when DPH determines a drug overdose cluster or 'spike' has occurred in their area of responsibility. As the opioid crisis continues, this will trigger notifications to nearby public safety and law enforcement and supplements the notices with appropriate recommendations to prepare their personnel. The OD Mapping application developed through HIDTA is also promoted through this critical three-way partnership.

## IN THE NEWS

### OFFICER USE OF FORCE STATISTICS

Law enforcement agencies have been dealing with various drug trends and their respective consequences for decades. While the opioid epidemic presents several unique complications within today's community, it is certainly not the only drug of concern to police. As a collective, the public safety community works to better understand drug and crime issues in order to develop effective best practices.

One potential consequence of drug use is violence, and of immediate concern is the escalating statistics on officer involved shootings. An important factor to examine is to what extent drugs play a role in behaviors, especially those that attract law enforcement intervention and potential use of force. Using data from 2012 through 2018, the GBI Crime Lab analyzed the toxicology reports of those killed during altercations with Georgia Police Officers. The study found:

- 66% of the officer involved fatalities<sup>1</sup> tested positive for drugs.
- The drugs included cocaine, methamphetamine, and marijuana.
- Marijuana was the most common drug found in toxicology reports of those killed during police altercations.
- Meth was found in nearly 20% of the cases analyzed.
- In addition to drugs, toxicology reports analyze blood alcohol levels. The average blood alcohol level (of the 44% who tested positive for alcohol) was .150 grams per 100 mL.



(above, GBI Agents respond to officer-involved shooting / Crime Lab employee runs tests)

The Georgia Bureau of Investigation is requested to investigate police shootings or use of force incidents in which someone is seriously injured or killed for most agencies statewide. It should be noted, agencies are not required to request assistance in review of police shootings, but most choose to do so.

<sup>1</sup> OIS fatalities in which toxicology was requested, 173 of 188 cases.  
**16**

### MASS DRUG OVERDOSE AT HOUSE PARTY IN CALIFORNIA

In January of 2019, one man died and twelve others were hospitalized as the result of a mass opioid overdose during a house party in Chico, California. Local authorities responded to a 9-1-1 call around 9:00 AM and found more than a dozen persons in need of medical treatment, many requiring simultaneous CPR and naloxone doses. According to witnesses, at some point during the party, people started collapsing throughout the yard and home. In addition to the party-goers, two police officers who responded to the incident were also affected. Medical tests, interviews, lab analysis, and autopsy reports will all be completed before officials can definitively link fentanyl or a synthetic opioid to this mass overdose incident. However such reports are what law enforcement and first responders in Georgia prepare for daily.

### GEORGIA DEPARTMENT OF CORRECTIONS TRAINS & EQUIPS PERSONNEL TO TREAT OPIOID OVERDOSES

One popular initiative amongst law enforcement and emergency service agencies has been to equip their first responder personnel with courses of a medication called naloxone. **Naloxone is a synthetic drug that blocks the central nervous system's opioid receptors that is used in order to reverse or temporarily counteract an opioid overdose<sup>1</sup>.** Essentially it works to quickly restore normal breathing to someone whose breathing has slowed or even stopped as a result of an opioid overdose and can be administered multiple ways.

Prison and jail populations are not immune from the lure of addiction and the danger of opioid overdose. While officials and personnel work diligently to prevent contraband from entering the prison system, there are a variety of ways inmates can get their hands on banned items and substances. With dangerous opioids like fentanyl for example, trace amounts that are practically invisible to the naked eye are all it takes to overdose. Furthermore, persons who have recently been released from incarceration are increasingly vulnerable to overdose risks. In fact a 2018 study in North Carolina found former inmates are more than 40 times more likely to die of an opioid overdose within two weeks of their release than inmates in general population<sup>2</sup>.

As such, the Georgia Department of Corrections (GDC) is taking a proactive approach to this issue in 2019. GDC correctional officers and criminal investigations staff are being trained to administer doses of naloxone products, "to protect themselves, and any community members that need assistance." More than 350 employees have already taken the training as the GDC looks to best serve its populations.

<sup>1</sup> National Institute on Drug Abuse [www.drugabuse.gov/related-topics/opioid-overdose-reversal-naloxone-naicon-nexo](http://www.drugabuse.gov/related-topics/opioid-overdose-reversal-naloxone-naicon-nexo)  
<sup>2</sup> Ranapurwala, S., Shanahan, M., Alexandris, A., Proescholdbell, S., Naumann, R., Edwards, D., & Marshall, S. (2018). Opioid overdose mortality among former North Carolina inmates: 2000-2015.





#### STATE OF GEORGIA SUES PHARMACEUTICAL COMPANIES FOR ACCOUNTABILITY IN OPIOID OVERDOSE DEATHS

On 3 January 2019, Attorney General, Chris Carr, representing the State of Georgia, filed suit against specific opioid manufacturers and distributors. Nearly thirty other states have taken similar legal action alleging drug companies ‘perpetuated a nationwide opioid crisis and encouraged doctors to over-prescribe, leading to patients getting addicted and prescription drugs being sold on the streets,’<sup>1</sup>. Dozens of city and county officials have filed similar suits in their local court systems and the State of Ohio leads a similar multi-state federal lawsuit. Specifically, the Georgia A.G.’s lawsuit seeks to recover funds from certain companies in order to treat victims. The suit also seeks to put an injunction on deceptive marketing practices within the industry.

On 19 January 2019, A.G. Chris Carr penned an opinion piece in the Atlanta Journal Constitution (AJC article [here](#)) detailing the motivation and force behind the lawsuit.

*“We believe that the manufacturers named in the lawsuit made deceptive and misleading claims about the safety and efficacy of opioids so that the medical community would reverse its previous understanding that opioids were unsafe for the treatment of chronic pain. The manufacturers we investigated allegedly played down the dangerous addiction risks of opioids, overstated their benefits and even paid people who appeared to be unbiased experts in the field to promote these deceptive claims.”*

- A.G. Chris Carr in AJC Opinion

A copy of the lawsuit filed by A.G. Carr is available online ([link](#)).

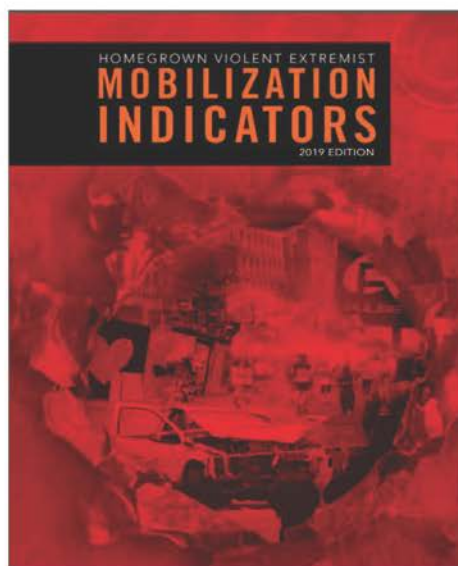
The Office of Attorney General Chris Carr’s website also lists opioid abuse as a key issue and provides relevant resources via their website at <https://law.georgia.gov/opioid-abuse>

<sup>1</sup> Niesse, M. Atlanta Journal Constitution article, 3 January 2019.

#### NEW REPORT ON HVE MOBILIZATION INDICATORS RELEASED

In the continued effort to mitigate future attacks, The Office of the Director of National Intelligence (ODNI) recently released the latest edition of the HOMEGROWN VIOLENT EXTREMIST MOBILIZATION INDICATORS. It discusses the heightened threat from homegrown violent extremists (HVEs) heeding the call to violence from foreign terrorist organizations. The list of indicators was developed based on dozens of FBI terrorism investigations, peer-reviewed research, and stakeholders from the Intelligence Community and law enforcement. Such indicators are observable behaviors that could help determine whether individuals or groups are preparing to engage in violent extremist activities, such as conducting an attack or traveling overseas to join a foreign terrorist organization. Indicators are grouped by diagnosticity—meaning how clearly we assess the behavior demonstrates an individual’s likelihood of engaging in terrorist activity.

This product (linked [here](#), pictured below) and other resources are unclassified and available for the public via the ODNI website at <https://www.dni.gov>.



## GISAC SERVICES

### MORE RESOURCES

#### UNDERSTANDING THE EPIDEMIC

- The Centers for Disease Control (CDC) have a substantial library of resources dedicated to opioid overdose issues, statistics, and prevention efforts available to the public via <https://www.cdc.gov/drugoverdose/>.
- PBS has a variety of resources regarding the epidemic. Their website includes video media and a 'Community Engagement Toolkit,' to supplement outreach and education initiatives. (<https://www.pbs.org/show/understanding-opioid-epidemic/>)
- The National Safety Council recently released a report stating for the first time in U.S. history, opioid overdoses surpassed vehicle crashes as a leading cause of preventable death. The data coincides with earlier CDC reporting that listed Fentanyl as the drug most often responsible for drug overdose deaths. The full report can be found on the NSF website [here](#).

**HUMAN TRAFFICKING** As victims find themselves increasingly addicted to the opioids, they oftentimes take more proactive roles in recruiting other victims and facilitating sex trafficking themselves. Such actions make it increasingly difficult for law enforcement and the legal system to differentiate victims from offenders, and the unique overlap between the two. For more information on the relationship between commercial sexual exploitation and substance abuse, browse the resource library at the National Human Trafficking Hotline's website (sponsored by the Polaris Project) at <https://humantraffickinghotline.org/resources> and see information about the human trafficking and opioid crisis webinar (at right). Also available is the U.S. Department of Education's report, "Human Trafficking in America's Schools," which is available for download [here](#) and a topic which will be discussed and updated at length in the next INTERFACE (vol. 2) due out in March.



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### TRAINING & EVENTS

#### HUMAN TRAFFICKING AND THE OPIOID CRISIS WEBINAR

1/31/2019 1:00 pm - 2:30 pm WEBINAR

The National Human Trafficking Hotline, sponsored by Polaris, is hosting a 90-minute webinar highlighting emerging trends, case studies, and research on the intersection between human trafficking and substance use with a specific focus on the opioid crisis. For more information, visit the website at [www.humantraffickinghotline.org/events](http://www.humantraffickinghotline.org/events).

#### CENTERS FOR DISEASE CONTROL LEARNING CONNECTION

[www.cdc.gov/learning/](http://www.cdc.gov/learning/)

The CDC has a wealth of online training resources available via their **Learning Connection** page (link above). The site features 'quality public health learning opportunities from CDC, other federal agencies, and federally funded partners. Through monthly website features, social media, and an e-newsletter, the CDC Learning Connection keeps you informed about public health trainings, including many that offer free continuing education (CE). Their current "Hot Training Topic" is opioids, and the site links to training courses for addressing the crisis and learning new strategies.

### WHAT'S NEXT?

**SCHOOL SAFETY** is more than fire drills and healthy lunch options. These days, school safety efforts involve countless stakeholders from a variety of disciplines to ensure physical safety and overall wellbeing of the faculty and students. Crisis mitigation, target hardening, and emergency response efforts thrive with the proper collaboration. Additionally, criminal issues like gangs, social media exploitation, and even human trafficking are unfortunate realities nowadays. Plans are developed from best practices, lessons learned, and emerging technology. These topics and more will be discussed.

GBI-GISAC is set to issue the next INTERFACE (vol. 2) regarding school safety efforts and considerations in March of 2018. Submissions or requests for consideration can be sent to GBI-GISAC via email at: [generalinfo@gbi.ga.gov](mailto:generalinfo@gbi.ga.gov)

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### REFERENCES

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**Georgia Bureau of Investigation Forensics Division**

**Georgia Bureau of Investigation Public Affairs Office**

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**U.S. Drug Enforcement Administration.** (2018). Atlanta-Carolinas High Intensity Drug Trafficking Area's 2018 Threat Assessment.

### GBI-GISAC SERVICES

**COLLABORATION** GBI-GISAC works closely with local, state, and federal public safety, law enforcement, and intelligence partners. Connectivity is at the core of GISAC's ability to analyze, correlate, validate, and disseminate critical intelligence.

**PRIVATE SECTOR** In addition to working with law enforcement agencies throughout the state, GISAC coordinates with private sector organizations, a critical component of the development of actionable intelligence. GBI-GISAC promotes confidential and secure paths to share critical information regarding cyber and other security threats to our private sector partners via numerous digital and working group means.

**EMERGENCY ALERTS SYSTEMS** GBI-GISAC facilitates a number of additional resources and critical programs including the coordination of the Child Abduction Response Team (CART) and Georgia's Emergency Alerts Systems. These alerts include:

- **LEVI'S CALL** - Georgia's AMBER Alert for confirmed abductions of children under the age of 17.
- **MATTIE'S CALL** - Georgia's alert for missing persons who are cognitively impaired.
- **KIMBERLY'S CALL** - Georgia's alert for information pertaining to suspects identified as having committed a murder or rape.
- **BLUE ALERT** - Georgia's alert for information pertaining to an officer who has been killed/injured in the line of duty or is missing in the line of duty.



### CONTACT US

Georgia Bureau of Investigation  
Georgia Information Sharing & Analysis Center  
<https://gbi.georgia.gov/>

3121 Panthersville Road,  
Decatur, GA 30034  
404-244-2600  
800-597-8477 (toll free)







Georgia Bureau of Investigation  
Georgia Information Sharing & Analysis Center  
[www.gbi.georgia.gov](http://www.gbi.georgia.gov)

Does not include results that are negative for common drugs of abuse

Reporting: 6/1/2018 to 6/30/2018

\*Note: Request date is not synonymous with seizure date.

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# Palantir - - NIBIN

The Department of Public Safety  
Utah Statewide Information and Analysis Center  
410 West 9800 South  
Suite #370  
Sandy, Utah 84070






## Palantir Analysis

Connected Four Shootings using Palantir and NIBIN technologies over a 1 year period.

Four different sets of suspects/victims involved in each incident (**indicates the gun being passed around between multiple shooters**)

**Palantir:**

- Identified law enforcement history for all individuals (victim, suspect, past arrests, probation, assaults)
- Identified associations (common vehicles, neighbors, guardians) 
- Identified the unknown link (Assault Case) 
- Revealed known gang involvement (Three Gangs) 

Once the SIAC Intelligence Analyst completed the Palantir analysis and report, it was then passed on to the appropriate law enforcement agency and used as an investigative tool to focus their investigation and enforcement efforts on the identified suspect.

Further investigation indicated this weapon was likely passed between shooters through a common girlfriend after Palantir revealed 2009 case, in which suspect and female were witnesses to an unrelated assault.

