As the research, development, and evaluation agency of the Department of Justice, the National Institute of Justice (NIJ) plays an important role in the Administration’s efforts to combat the epidemic of heroin and other opioid abuse. The following provides an updated overview of NIJ’s Drugs and Crime Research Portfolio that addresses drug trafficking, markets, and use of illegal drugs including prescription drug diversion through research and capacity building for law enforcement, forensic laboratories, medical examiners and coroners, prosecutors, and other public safety and public health stakeholders.

NIJ’s Drugs and Crime Research Portfolio

NIJ furthers DOJ’s priorities to combat the Nation’s opioid epidemic, and reduce violent and other drug-related crime, through research that promotes effective law enforcement, court, and corrections responses to illegal drug markets. This includes research on ways to deter, investigate, and disrupt drug markets, as well as to prevent or reduce drug-related crime and violence. The current drug priority is heroin and other opioids such as fentanyl, diverted pharmaceuticals, synthetic drugs, and analogues.

For more information on this portfolio, visit NIJ’s website at https://www.nij.gov/topics/drugs/Pages/welcome.aspx

NIJ Drugs & Crime Research

The portfolio studies crime reduction through:

• Epidemiology – patterns among drugs, violence, and crime to inform communities and service providers.
• Prevention and Intervention – policies and programs to prevent or reduce drug-related crime and violence.
• Drug Markets – drug production and distribution information to support law enforcement.
• Market Disruption – drug interdiction and other strategies to disrupt or deter markets.
• Forensic Science – drug recognition and detection, and support of medicolegal death investigation.

Photo Sources: Emerging synthetic opioid U-47700, ©Keck Graduate Institute; Example of law enforcement seizure of opioid drugs and paraphernalia,©DEA.gov; Triangular crystals resulting from a positive microcrystal test for codeine using Fulton’s C-3 reagent, ©McCrone Research Institute, Chicago.
Research on Illegal Prescription Drug Market Interventions

Collaborations across NIJ science offices have produced research on deterrence, investigation, and disruption of illegal prescription drug markets:

- Strategies and Resources for High Intensity Drug Trafficking Areas
- Using the North Carolina Controlled Substances Reporting System to Identify Providers Manifesting Unusual Prescribing Practices
- Optimizing Prescription Drug Monitoring Programs (PDMPs) to Support Law Enforcement Activities
- Policy Analysis of Florida House Bill 7095 for Diversion of Psychoactive Prescription Drugs

For more on this research, visit NIJ’s webpage at https://www.nij.gov/topics/drugs/Pages/illegal-prescription-drug-markets.aspx

Drug Recognition and Impairment Research Meeting

Partnering with the National Highway Traffic Safety Administration and the National Institute of Drug Abuse, NIJ led a 2015 meeting on drug recognition and impairment research. The meeting allowed dissemination of information on projects to active practitioners, an exchange of information with other agencies, and an opportunity to solicit feedback. This informs federal plans for future research that are responsive to the field’s information and practice needs. Discussion topics were detection of illegal drugs, including quantitation (purity) of drug seizures; forensic toxicology post-use; reliable measurement of drug impairment; investigative leads for case building; collection and submission of drug evidence for laboratory analysis; tools for drug detection in the field; expert witness/testimony; confirmation of toxicological and chemical analysis; and protocols for prosecution and court case management.

For more on this meeting, visit NIJ’s webpage at https://www.nij.gov/topics/drugs/Pages/drug-recognition-and-impairment-research-meeting.aspx

NIJ Research on Heroin and Other Opioids

NIJ currently supports research on evidence-based tools, protocols, and policies for state, local, and tribal law enforcement and other criminal justice agencies, including:

Narcotics Law Enforcement and Prosecution

- Using Artificial Intelligence Technologies to Expose Darknet Opioid Traffickers
- Building Drug Intelligence Networks to Combat the Opioid Crisis in Rural Communities: A Collaborative Intelligence-Led Policing Strategy
- Heroin and Crime Initiative: Informing the Investigation and Prosecution of Heroin-Related Overdose

Controlled Substances and Forensic Toxicology

- High Resolution Mass Spectrometry Screening in Forensic Toxicology: Cost Benefit Analysis
- Structural Characterization of Emerging Synthetic Drugs
- The Use of Gas Chromatography With Tandem Ultra Violet and Mass Spectrometric Detection for the Analysis of Emerging Drugs Application to Synthetic Cathinones and Fentanyl Analogs
- Novel Quantitation Workflow for Improved Drug Surveillance
- Toxicological Time Travel: Retrospective Datamining of Analytical Time-of-Flight Mass Spectrometry Data for Evaluating the Rise and Fall of Novel Opioid and Fentanyl Analog Use in the United States
- Signature Profiling of Illicit Fentanyl

Drug Intelligence and Community Surveillance

- Delaware Opioid Metric Intelligence Project
- Identifying and Informing Strategies for Disrupting Drug Distribution Networks: An Application to Opiate Flows in Pennsylvania

Corrections

- Evaluation of Using Telehealth for Opioid Use Disorders in a Correctional Setting