



Mississippi COAP 2018

Comprehensive Opioid Abuse Program

Final Evaluation Report



OCTOBER 2022



Table Of Contents

<u>Executive Summary</u>	<u>03</u>
<u>Introduction</u>	<u>04</u>
<u>Major Milestones</u>	<u>05</u>
<u>Additional Achievements</u>	<u>07</u>
<u>Framing the Future</u>	<u>08</u>



Executive Summary

Mississippi COAP (Comprehensive Opioid Abuse Program) 2018 was a data quality improvement initiative funded by the Office of Justice Programs. Opioid-related diagnoses and deaths remain prevalent across Mississippi. COAP enhanced the quality of Mississippi's data on state-level opioid overdoses and related risk factors. Such data are necessary to conduct ongoing monitoring of the impact of opioid overdoses and related challenges within the state. They also provide opportunities for data-driven opioid problem mitigation. This report summarizes key program activities and results, with an emphasis on capstone achievements that were completed during the final grant year (October 1, 2020 – September 30, 2021) as well as the no-cost extension year (October 1, 2021 – September 30, 2022).

COAP was organized around four principal aims.

1. The improvement of law enforcement data collection systems with Mississippi Bureau of Narcotics and public health data collection systems through enhanced data management and data governance
2. The implementation of processes that make opioid and related data easier to identify, locate, request, and integrate
3. The establishment of a Data Governance Office
4. The creation of an agency-wide data catalog

Efforts are encouraged to support the continued implementation of the following data-driven successes achieved by Mississippi COAP 2018 in grant programs that can complement and extend this project's achievements. Significant computer hardware, storage, and related upgrades have been integrated based on a comprehensive technology needs assessment for Mississippi Bureau of Narcotics. A back-up (emergency) system was installed to expand data capture capabilities, provide additional storage, and enhance data security. Think Pads operate in conjunction with each other to enhance the integrity of the new devices as they will utilize the network from remote locations, and the mapping software is being used to identify hotspots and the illicit use/abuse of pharmaceuticals, to include fentanyl.

A Data Governance Office was established at the Mississippi State Department of Health (MSDH). The primary focus of Data Governance officials was to create, implement, and update an agency-wide online data catalog. This office and the data catalog will be long-term assets for many groups in Mississippi, especially those who rely on ready access to valid opioid and related data for program planning, resource allocation, and problem mitigation.

The Mississippi Opioid and Heroin Data Collaborative (MOHDC), initially authorized and funded through DOJ/BJA COAP 2017 remained active throughout COAP 2018. Its mission is to evaluate the scope of the opioid epidemic in the state and build surveillance systems utilizing different data sources. The MOHDC features representation from a wide variety of health-focused sectors (various state government offices, leading nonprofits, etc.) and continues to function effectively. All of these resources are infrastructure gains initiated or enhanced by COAP 2018.

Public health crises posed significant program implementation challenges, but those hurdles were effectively addressed by the project team. COVID-19 required the pandemic response activation of state health workers. The Data Governance Office was under limited MSDH personnel capacity to explore EMS (Emergency Medical Services) primary data for opioid-related EMS activity and a lingering impact of prolonged EMS and Pharmacy staff deployment on COVID response. The Jackson, Mississippi water crisis poses a persistent obstacle for first responders, healthcare providers, and data analytics. COAP has helped to lay a foundation for responding effectively to such challenges in a data-driven fashion.

Executive Summary

[Introduction](#)

[Major Milestones](#)

[Additional](#)

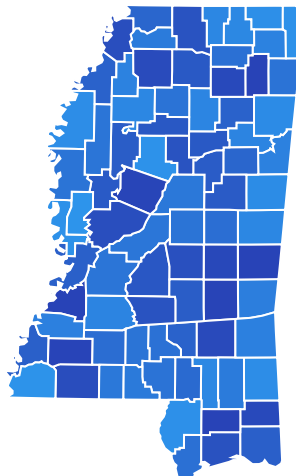
[Achievements](#)

[Framing the Future](#)

Introduction

Increasingly, Mississippians are hospitalized with opioid-related diagnoses. Despite the 2018 adoption of “Start low and go slow” prescription regulations, problems persist. Comprehensive data for the entirety of 2022 was not yet available at the time of this report. Data collected from January through June of 2021 and 2022, respectively, were referenced to provide a threat context assessment.

- Opioid Prescriptions – Throughout 2022, 1,151,495 opioid prescriptions were dispensed in Mississippi. On average, 6,321 opioid prescriptions were dispensed every day during the year. A 4.2% decrease in the number of opioid prescriptions was observed from April 2021 to June 2022. In total, there were enough opioid prescriptions dispensed for 19.29% of Mississippians to have a prescription.
- Opioid Dosage Units – In 2022, over 30 million opioid dosage units (e.g., pills) were dispensed in Mississippi. Compared to June 2021, the number of dosage units dispensed decreased by 2.3%, approximately 700,000 pills between April and June of 2022. On average, approximately 336,000 dosage units were dispensed each day during the April through June period. There were enough opioid dosage units dispensed for each Mississippian to have a supply of 10.3 dosage units.
- Suspected Opioid Overdose Deaths – In 2022, 121 (76.1%) of the 159 suspected overdose deaths reported to Mississippi Bureau of Narcotics (MBN) were opioid-related. The number of opioid-related deaths decreased by 8% from June 2021 to June 2022, and the total number of overdose deaths decreased by 15.2%. The number of deaths involving fentanyl remained generally stable from June 2021 (42 deaths) to June 2022 (41 deaths) decreasing slightly by 2.38%. There were 1.8 opioid-related overdose deaths per 100,000 persons reported to the MBN in 2022.
- Naloxone Administration – Naloxone is a life-saving drug, an opioid antagonist, used to reverse opioid overdoses. Emergency Medical Services (EMS) data revealed that naloxone was administered 1,292 times during 2022, which is a 12.1% decrease compared to 2021. On average, between 201 and 229.7 naloxone administrations were reported in Mississippi each month during 2022. As of June 2022, of the individuals to whom naloxone was administered, 62.5% were male, and 62.8% were non-Hispanic white. The median age was 46 years. Approximately 85% of the 590 individuals who provided residence information were administered naloxone in their home county.
- County Information – The top counties accounting for 37.1% of the 159 suspected overdose deaths in 2022 included Harrison (28), Pearl River (15), Desoto (12), and Adams (4). The top counties accounting for 32% of the 1,292 EMS naloxone administrations in 2022 included Harrison (186), Hinds (132), Desoto (48), and Rankin (48).



[Executive Summary](#)

[Introduction](#)

[Major Milestones](#)

[Additional](#)

[Achievements](#)

[Framing the Future](#)

Major Milestones

COAP has supported a variety of opioid-related data success.

- A backup emergency system was installed by Mississippi Bureau of Narcotics to expand data capture capabilities, provide additional storage, and enhance data security. The new system acts as a reserve for the original cloud system and relies on virtualization capabilities (VMware). The **VMware upgrade** resolves risks associated with the loss of sensitive data through **significant enhancement of data security**. The new VMware system will provide for substantial growth over the next 10 years. Overall, the upgrade will significantly extend the life of the current technology.
- Official Data Governance policies generated with COAP funding established a **Data Review Panel** to oversee data requests and review data publications. A **Data Governance Council** supervising all Data Governance activities was also created through COAP. An **enhanced process of receiving and filling data requests and creating data agreements** (DUAs, BAAs, MOUs, etc.) was implemented at the launch of the online data request process in November 2020. These same policies fostered more consistent inclusion of the Data Governance Director in the **official internal review of all data use agreements (DUAs)** and many contracts, subgrants, and memoranda of understanding (MOUs) at MSDH.



Data Governance Council

- State Health Officer (Chairperson)
- Senior Deputy
- State Epidemiologist
- Chief of Health Data, Operations and Research
- Director of Communications
- IT Security Officer
- Director of Data Governance
- Director of Office of Health Data and Research
- Legal staff representative
- State Registrar



Data Review Panel

- Director of Data Governance
- Privacy Officer
- MSDH workforce member with master's level expertise in biostatistics, data analysis, or a similar field
- Legal staff representative

- The **online data request portal** was officially launched for public and internal use in November 2020. Funded in tandem with another DOJ grant (2017-PM-BX-K036), this online data portal represents an important step in establishing a formalized data dissemination process. The development of the data portal helped to **centralize the data and public records request process at the agency**. The portal further encourages collaboration among internal agency programs and between MSDH and its external partners.

"2018 COAP further solidified relationships between public health and law enforcement. Five years after inception through 2017 COAP funding, the Opioid and Heroin Data Collaborative still convenes and produces quarterly shared data reports. COAP funding was the cornerstone funding in Mississippi to launch a public health opioid program."
(Meg Pearson, Director of MSDH Pharmacy)

"[Through COAP, we created] the Data Governance Office and an online process for the public and internal staff to request data and public records ... Also, [we are] very proud of the meetings conducted with many of the MSDH programs to gather information regarding their data practices and resources. This information has been vital to processing data and public records requests."
(COAP Team Member)

[Executive Summary](#)

[Introduction](#)

[Major Milestones](#)

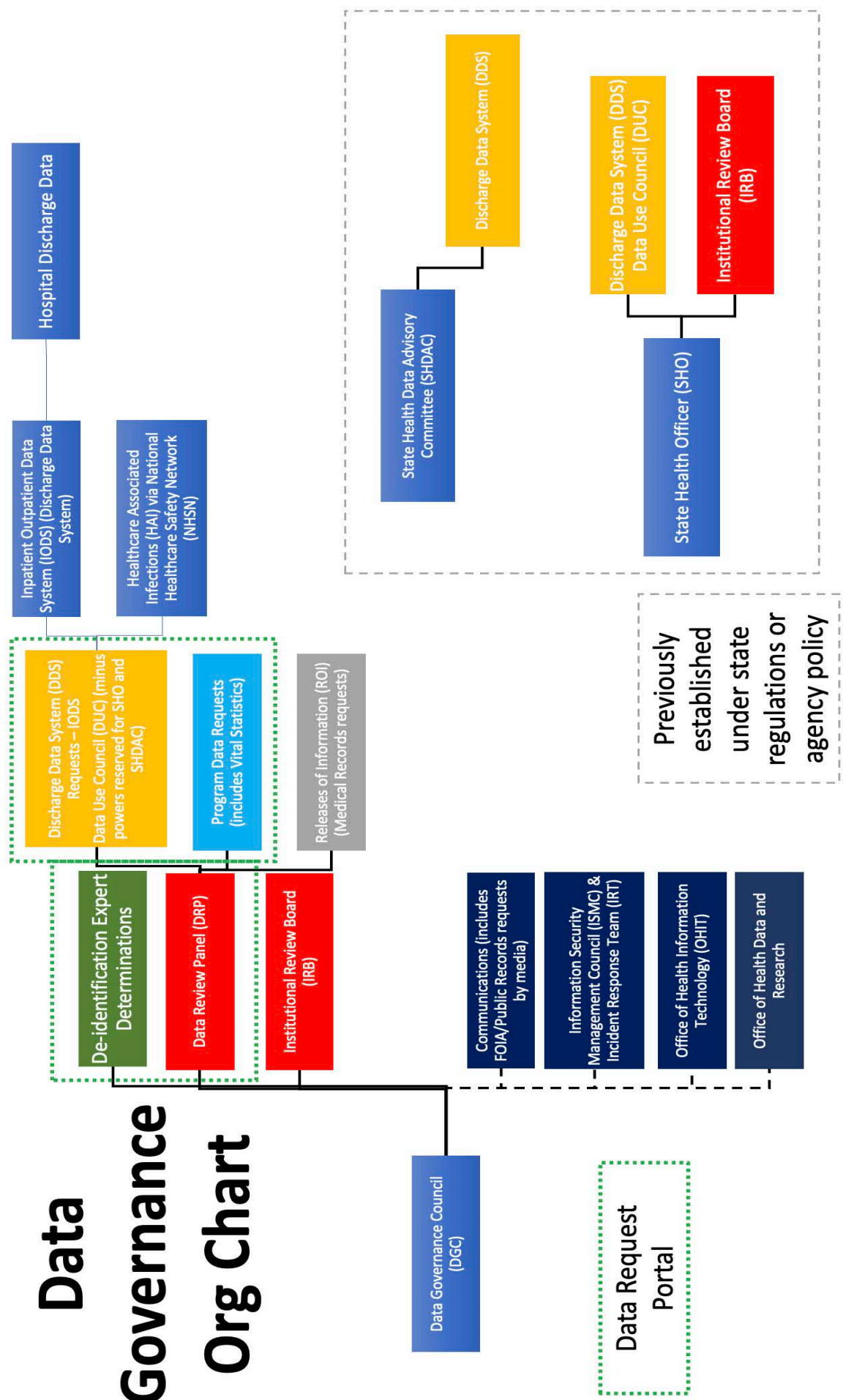
[Additional](#)

[Achievements](#)

[Framing the Future](#)



Data Governance Org Chart



Additional Achievements

Several supporting achievements were accomplished under COAP 2018.

- The MSDH Bureau of EMS Services contracted with a vendor for **Biospatial analysis and mapping of EMS data**. This contract provided the establishment of data pathways for non-fatal overdoses, geographic locality of non-fatal overdoses, and overdose risk factors. In collaboration with the MSDH IT Security Officer, Privacy Officer, and Pharmacy and Opioid programs, the Data Governance Council developed and obtained agency approval of amendment language for MSDH. The finalized Biospatial agreement allows for **analysis of opioid-related EMS data beyond naloxone administrations**. The MSDH implementation plan for analyzing opioid-related EMS data beyond naloxone administration was approved by the DOJ during grant year 4.
- The Data Governance Paralegal, IT Security, and Privacy Manager assumed leadership from the Data Governance Director in reviewing all **public records requests** submitted through the online portal, as well as managing the **MSDH IT security training program**. Attorneys assigned to the agency by the Attorney General's Office were also enlisted in the review of two large requests for public records submitted by media seeking emails related to the Jackson (MS) water crisis.

IT Security and Privacy Manager

Full management of the MSDH IT security training program.

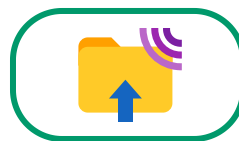
Paralegal

Primary manager of the online request application for public records requests.

Data Governance Director

Manages data requests (i.e., requests for data protected under HIPAA).

- In the future, the hope is for the online data request portal to also work in tandem with a **searchable inventory of all data elements and publicly available data reports** (i.e., an agency wide data catalog). An updated version of the Mississippi Statistically Automated Health Resource System (MSTAHRS) vital statistics database is expected to ultimately be included on the data portal website as well. MSTAHRS is a publicly available MSDH data resource provides the ability to **create instant custom data reports** through user queries connected to health-related topics.
- A **list of agency-hosted databases** was finalized for greater transparency with the current data infrastructure. This list offers up-to-date information presented during Data Governance meetings. Any databases not hosted by MSDH but addressed in meetings are also included as part of the overall inventory of MSDH data resources.



569
Databases



21
Servers

- Prolonged activation of MSDH EMS and pharmacy staff for coordination of COVID response temporarily limited MSDH personnel capacity. The exploration of EMS primary **data for opioid-related emergency services was re-initiated** among MSDH, EMS, and Pharmacy personnel in recent months. Through COAP, the **MSDH team actively engaged alternative venues** (i.e., CDC Foundation and Gulf Coast HIDTA) to secure staff support.

[Executive Summary](#)

[Introduction](#)

[Major Milestones](#)

[Additional](#)

[Achievements](#)

[Framing the Future](#)

Additional Achievements

- As some technology project costs were less than anticipated by Mississippi Bureau of Narcotics, agents were able to redirect funds for **additional ThinkPads**, thus **expanding the geographic reach** utilizing the network from remote locations. Think Pads operate in conjunction with each other to enhance the integrity of the new devices; agents no longer have to travel long distances to their offices because this technology can be used in the field as a **more efficient operating system**.
- Courage Technology was enlisted to complete **significant computer hardware, storage, and related upgrades** based on a **comprehensive technology needs assessment** for Mississippi Bureau of Narcotics (MBN).



There is buy-in on improving data systems, particularly with ongoing OHDC participation, that these achievements are furthered in new grant opportunities. I believe long-term impacts are state-level identification, response to vulnerable areas/persons, and more robust prevention components.

Meg Pearson, Director
of MSDH Pharmacy



The Data Governance Office, along with the centralized supervision of data and public records request processes, have shown their worth to MSDH's data and compliance responsibilities. These achievements will be sustainable as long as proper staffing is available and trained.

COAP Team Member

Framing the Future

The Sustainability Side of COAP

The Data Governance Office established increased data collaboration with sustainability at the forefront. Efforts to implement and maintain a monitoring surveillance technology for overdose data spikes across the state will persist. The **Mississippi Opioid and Heroin Data Collaborative**, initially established through COAP 2017, continues to provide timely and accurate information to the public and policymakers on key indicators measuring the scope and severity of the opioid epidemic in Mississippi. The **online data portal** initiated and implemented by the MSDH Data Governance Office streamlines the data-sharing process within and between agencies, which can also lead to tremendous gains for opioid-related EMS data to be replicable across national institutions. The integration of **VMware** (virtualization software) not only improves data storage capacity but enhances data security by creating a virtual safe for data cloud storage. In an age of ransomware attacks and other cloud-based hacks, VMware is a logical and compelling line of defense for protecting sensitive data.

