1. DATE ISSUED *MM/DD/YYYY*
08/12/2019

1a. SUPERSEDES AWARD NOTICE dated
except that any additions or restrictions previously imposed remain in effect unless specifically rescinded

2. CFDA NO.
93.136 - Injury Prevention and Control Research and State and Community Based Programs

3. ASSISTANCE TYPE Cooperative Agreement

4. GRANT NO. 1 NU17CE925004-01-00
Formerly

5. TYPE OF AWARD
Other

4a. FAIN NU17CE925004

5a. ACTION TYPE New

6. PROJECT PERIOD *MM/DD/YYYY*
From 09/01/2019 **Through** *MM/DD/YYYY* 08/31/2022

7. BUDGET PERIOD *MM/DD/YYYY*
From 09/01/2019 **Through** *MM/DD/YYYY* 08/31/2020

8. TITLE OF PROJECT (OR PROGRAM)
Overdose Data in Action - NCIPC

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
CDC Office of Financial Resources

2939 Brandywine Road
Atlanta, GA 30341

NOTICE OF AWARD
AUTHORIZATION (Legislation/Regulations)
Section 311(c)(1) of the PHS Act (42 USC § 243(c)(1))

9a. GRANTEE NAME AND ADDRESS
HEALTH AND SENIOR SERVICES, MISSOURI DEPARTMENT OF
920 Wildwood Dr
Jefferson City, MO 65109-5796

9b. GRANTEE PROJECT DIRECTOR
Ms. Nicole Massey
920 Wildwood Dr
Jefferson City, MO 65109-5796
Phone: 573-751-6400

10a. GRANTEE AUTHORIZING OFFICIAL
Ms. Tonya R Loucks
920 WILDWOOD DR
Jefferson City, MO 65109-5796
Phone: 573-751-6014

10b. FEDERAL PROJECT OFFICER
Henrietta Kuoh
4770 Buford Hwy
DUIP
Atlanta, GA 30341
Phone: 770-488-7335

ALL AMOUNTS ARE SHOWN IN USD

11. APPROVED BUDGET (Excludes Direct Assistance)

I Financial Assistance from the Federal Awarding Agency Only		I
II Total project costs including grant funds and all other financial participation		
a. Salaries and WageS		680,401.00
b. Fringe Benefits		455,348.00
c. Total Personnel Costs		1,135,749.00
d. Equipment		0.00
e. Supplies		58,704.00
f. Travel		99,636.00
g. Construction		0.00
h. Other		816,025.00
i. Contractual		2,628,333.00
j. TOTAL DIRECT COSTS	4,738,447.00	
k. INDIRECT COSTS	184,428.00	
l. **TOTAL APPROVED BUDGET**	4,922,875.00	
m. Federal Share		4,922,875.00
n. Non-Federal Share		0.00

12. AWARD COMPUTATION

a. Amount of Federal Financial Assistance (from item 11m)	4,922,875.00
b. Less Unobligated Balance From Prior Budget Periods	0.00
c. Less Cumulative Prior Award(s) This Budget Period	0.00
d. **AMOUNT OF FINANCIAL ASSISTANCE THIS ACTION**	4,922,875.00
13. Total Federal Funds Awarded to Date for Project Period	4,922,875.00

14. RECOMMENDED FUTURE SUPPORT
(Subject to the availability of funds and satisfactory progress of the project):

YEAR	TOTAL DIRECT COSTS	YEAR	TOTAL DIRECT COSTS
a. 2		d. 5	
b. 3		e. 6	
c. 4		f. 7	

15. PROGRAM INCOME SHALL BE USED IN ACCORD WITH ONE OF THE FOLLOWING ALTERNATIVES:
a. DEDUCTION
b. ADDITIONAL COSTS
c. MATCHING
d. OTHER RESEARCH (Add / Deduct Option)
e. OTHER *(See REMARKS)*

b

16. THIS AWARD IS BASED ON AN APPLICATION SUBMITTED TO, AND AS APPROVED BY, THE FEDERAL AWARDING AGENCY ON THE ABOVE TITLED PROJECT AND IS SUBJECT TO THE TERMS AND CONDITIONS INCORPORATED EITHER DIRECTLY OR BY REFERENCE IN THE FOLLOWING:
a. The grant program legislation
b. The grant program regulations.
c. This award notice including terms and conditions, if any, noted below under REMARKS.
d. Federal administrative requirements, cost principles and audit requirements applicable to this grant.

In the event there are conflicting or otherwise inconsistent policies applicable to the grant, the above order of precedence shall prevail. Acceptance of the grant terms and conditions is acknowledged by the grantee when funds are drawn or otherwise obtained from the grant payment system.

REMARKS (Other Terms and Conditions Attached - ☒ Yes ☐ No)

GRANTS MANAGEMENT OFFICIAL:
Brownie Anderson-Rana, Grants Management Officer
2939 Flowers Road
Mailstop TV2
Atlanta, GA 30341-5509
Phone: 770-488-2771

17.OBJ CLASS 41.51	18a. VENDOR CODE [redacted]	18b. EIN [redacted]	19. DUNS 878092600	20. CONG. DIST. 03
FY-ACCOUNT NO.	**DOCUMENT NO.**	**ADMINISTRATIVE CODE**	**AMT ACTION FIN ASST**	**APPROPRIATION**
21. a. 9-939ZUCS	b. 19NU17CE925004OPCE	c. CE	d. $4,922,875.00	e. 75-19-0952
22. a.	b.	c.	d.	e.
23. a.	b.	c.	d.	e.

Direct Assistance

BUDGET CATEGORIES	PREVIOUS AMOUNT (A)	AMOUNT THIS ACTION (B)	TOTAL (A + B)
Personnel	$0.00	$0.00	$0.00
Fringe Benefits	$0.00	$0.00	$0.00
Travel	$0.00	$0.00	$0.00
Equipment	$0.00	$0.00	$0.00
Supplies	$0.00	$0.00	$0.00
Contractual	$0.00	$0.00	$0.00
Construction	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00
Total	$0.00	$0.00	$0.00

AWARD ATTACHMENTS

Missouri Department of Health 1 NU17CE925004-01-00

1. FY19 Terms and Conditions CE925004 MO
2. CE19-1904_SpecialTermsandConditions
3. MO_Summary Statement
4. MO_PO Work Plan Recommendations

AWARD INFORMATION

Incorporation: In addition to the federal laws, regulations, policies, and CDC General Terms and Conditions for Non-research awards at https://www.cdc.gov/grants/federalregulationspolicies/index.html, the Centers for Disease Control and Prevention (CDC) hereby incorporates Notice of Funding Opportunity (NOFO) number CE19-1904, entitled "Overdose Data to Action", and application dated May 2, 2019, as may be amended, which are hereby made a part of this Non-research award, hereinafter referred to as the Notice of Award (NoA).

Approved Funding: Funding in the amount of $4,922,875 is approved for the Year 01 budget period, which is September 1, 2019 through August 31, 2020. All future year funding will be based on satisfactory programmatic progress and the availability of funds.

The federal award amount is subject to adjustment based on total allowable costs incurred and/or the value of any third party in-kind contribution when applicable.

Note: Refer to the Payment Information section for Payment Management System (PMS) subaccount information.

Financial Assistance Mechanism: Cooperative Agreement

Substantial Involvement by CDC: This is a cooperative agreement and CDC will have substantial programmatic involvement after the award is made. Substantial involvement is in addition to all post-award monitoring, technical assistance, and performance reviews undertaken in the normal course of stewardship of federal funds.

CDC program staff will assist, coordinate, or participate in carrying out effort under the award, and recipients agree to the responsibilities therein, as detailed in the NOFO.

- Providing cross-site and recipient-specific surveillance technical assistance, such as providing tools to identify nonfatal and fatal drug poisonings using ICD-9-CM, ICD-10-CM, text searches of ED chief complaint and ICD-10 cause of death codes;
- Providing technical assistance to revise annual work plans;
- Assisting in advancing program activities to achieve project outcomes;
- Providing scientific subject matter expertise and resources;
- Collaborating with recipients to develop evaluation plans that align with CDC evaluation activities;
- Providing technical assistance on recipient's evaluation and performance measurement plan;
- Providing technical assistance to define and operationalize performance measures;
- Facilitating the sharing of information among recipients;
- Participating in relevant meetings, committees, conference calls, and working groups related to the cooperative agreement requirements to achieve outcomes;

Objective/Technical Review Statement Response Requirement: The review comments on the strengths and weaknesses of the proposal are provided as part of this award. A response to the weaknesses in these statements must be submitted to and approved, in writing, by the Grants Management Specialist/Grants Management Officer (GMS/GMO) noted in the CDC Staff Contacts section of this NoA, no later than 30 days from the budget period start date. Failure to submit the required information by the due date, October 1, 2019, will cause delay in programmatic progress and will adversely affect the future funding of this project.

Budget Revision Requirement: By October 1, 2019 the recipient must submit a revised budget for total approved amount with a narrative justification and SF424A. Failure to submit the required information in a timely manner may adversely affect the future funding of this project. If the information cannot be provided by the due date, you are required to contact the GMS/GMO identified in the CDC Staff Contacts section of this notice before the due date.

Recipient must submit the following:

- Personnel:
  - Submit names of each staff member listed as TBD.
  - Provide more information about the fringe benefit rate. Include all components that are included in that rate.
  - Provide more detailed information on positions 4, 6-20 and 28.
  - Provide number of hours and hourly rate for these two positions 46 & 47. Please also justify why two, part-time, hourly positions with the same description are needed.
- Travel:
  - Provide all staff positions traveling, locations and budget breakdown of all travel costs (i.e. lodging, per diem, airfare etc.)
- Supplies:
  - Provide more details about this brochure. The purchase may not be allowable if drug overdoses are not mentioned. Provide additional information.
  - Prevention budget (pg. 63): item #15. Provide justification for this vehicle maintenance along with details about the maintenance agreement.
  - Provide the number of Research Analysts that will participate in this SAS training. Justify why SAS trainings are needed for several staff
- Contractual:
  - Provide all six elements to include name of contractor and an itemized budget for each contract; breakdown and justification for each.
- Other
  - Revise budget for additional funds.

Expanded Authority: The recipient is permitted the following expanded authority in the administration of the award.

☒ Carryover of unobligated balances from one budget period to a subsequent budget period. Unobligated funds may be used for purposes within the scope of the project as originally approved. Recipients will report use, or intended use, of unobligated funds in Section 12 “Remarks” of the annual Federal Financial Report. If the GMO determines that some or all of the unobligated funds are not necessary to complete the project, the GMO may restrict the recipient’s authority to automatically carry over unobligated balances in the future, use the balance to reduce or offset CDC funding for a subsequent budget period, or use a combination of these actions.

Program Income: Any program income generated under this grant or cooperative agreement will be used in accordance with the Addition alternative.

Addition alternative**:** Under this alternative, program income is added to the funds committed to the project/program and is used to further eligible project/program objectives.

Note: The disposition of program income must have written prior approval from the GMO.

FUNDING RESTRICTIONS AND LIMITATIONS

Notice of Funding Opportunity (NOFO) Restrictions:

Program funds cannot be used for purchasing naloxone, implementing or expanding drug "take back" programs or other drug disposal programs (e.g. drop boxes or disposal bags), purchasing fentanyl test strips, or directly funding or expanding direct provision of substance abuse treatment programs. Such activities are outside the scope of this NOFO.

Indirect Costs:
Indirect costs are approved based on the negotiated indirect cost rate agreement dated March 9, 2018, which calculates indirect costs as follows, a Provisional is approved at a rate of 21.30% of the base, which includes, direct salaries and wages including all fringe benefits. The effective dates of this indirect cost rate are from July 1, 2019 to June 30, 2021.

REPORTING REQUIREMENTS

Required Disclosures for Federal Awardee Performance and Integrity Information System (FAPIIS): Consistent with 45 CFR 75.113, applicants and recipients must disclose in a timely manner, in writing to the CDC, with a copy to the HHS Office of Inspector General (OIG), all information related to violations of federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the federal award. Subrecipients must disclose, in a timely manner in writing to the prime recipient (pass through entity) and the HHS OIG, all information related to violations of federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the federal award. Disclosures must be sent in writing to the CDC and to the HHS OIG at the following addresses:

CDC, Office of Grants Services
Julie Davis, Grants Management Specialist
Centers for Disease Control and Prevention
OD, Environmental, Occupational Health & Injury Prevention Services Branch
2939 Flowers Rd, MS TV-2
Atlanta, GA 30341
Email: xxg6@cdc.gov (Include "Mandatory Grant Disclosures" in subject line)

AND

U.S. Department of Health and Human Services
Office of the Inspector General
ATTN: Mandatory Grant Disclosures, Intake Coordinator
330 Independence Avenue, SW
Cohen Building, Room 5527
Washington, DC 20201

Fax: (202)-205-0604 (Include "Mandatory Grant Disclosures" in subject line) or
Email: MandatoryGranteeDisclosures@oig.hhs.gov

Recipients must include this mandatory disclosure requirement in all subawards and contracts under this award.

Failure to make required disclosures can result in any of the remedies described in 45 CFR 75.371. Remedies for noncompliance, including suspension or debarment (See 2 CFR parts 180 and 376, and 31 U.S.C. 3321).

CDC is required to report any termination of a federal award prior to the end of the period of performance due to material failure to comply with the terms and conditions of this award in the OMB-designated integrity and performance system accessible through SAM (currently FAPIIS). (45 CFR 75.372(b)) CDC must also notify the recipient if the federal award is terminated for failure to comply with the federal statutes, regulations, or terms and conditions of the federal award. (45 CFR 75.373(b))

PAYMENT INFORMATION

The HHS Office of the Inspector General (OIG) maintains a toll-free number (1-800-HHS-TIPS [1-800-447-8477]) for receiving information concerning fraud, waste, or abuse under grants and cooperative agreements. Information also may be submitted by e-mail to hhstips@oig.hhs.gov or by mail to Office of the Inspector General, Department of Health and Human Services, Attn: HOTLINE, 330 Independence Ave., SW, Washington DC 20201. Such reports are treated as sensitive material and submitters may decline to give their names if they choose to remain anonymous.

Payment Management System Subaccount: Funds awarded in support of approved activities have been obligated in a newly established subaccount in the PMS, herein identified as the "P Account". Funds must be used in support of approved activities in the NOFO and the approved application. All award funds must be tracked and reported separately.

The grant document number identified on the bottom of Page 1 of the Notice of Award must be known in order to draw down funds.

CDC Staff Contacts

Grants Management Specialist: The GMS is the federal staff member responsible for the day-to-day management of grants and cooperative agreements. The GMS is the primary contact of recipients for business and administrative matters pertinent to grant awards.

GMS Contact:
Julie Davis, Grants Management Specialist
Centers for Disease Control and Prevention
OD, Environmental, Occupational Health & Injury Prevention Services Branch
2939 Flowers Rd MS TV-2
Atlanta, GA 30341
Telephone: 770-488-2936
Email: xxg6@cdc.gov

Program/Project Officer: The PO is the federal official responsible for monitoring the programmatic, scientific, and/or technical aspects of grants and cooperative agreements, as well as contributing to the effort of the award under cooperative agreements.

Programmatic Contact:
Henrietta Kuoh, Project Officer
Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
4770 Buford Hwy S106-8
Chamblee GA 30341
Telephone: 770-488-7335
Email: ilq7@cdc.gov

Grants Management Officer: The GMO is the federal official responsible for the business and other non-programmatic aspects of grant awards. The GMO is the only official authorized to obligate federal

funds and is responsible for signing the NoA, including revisions to the NoA that change the terms and conditions. The GMO serves as the counterpart to the business officer of the recipient organization.

GMO Contact:
Brownie Anderson-Rana, Grants Management Officer
Centers for Disease Control and Prevention
OD, Environmental, Occupational Health & Injury Prevention Services Branch
2939 Flowers Rd, MS TV-2
Atlanta, GA 30341
Telephone: 770-488-2771
Email: bandersonrana@cdc.gov

CE19-1904 Overdose Data to Action
Terms and Conditions

Surveillance Activities

Recipients must meet reporting timelines for the Surveillance Strategies as outlined in the NOFO. Failure to meet reporting timelines for the selected tier and selected optional activities will result in a corrective action letter from the CDC Project Officer. Failure to meet reporting timelines may also result in a restriction of funds equal to the difference between the selected surveillance tier level and the level that reflects the recipients' reporting capabilities, or for the amount of the optional activity.

Unallowable Activities

Please note that regardless of the reviewer comments on the quality of a project proposal, the following activities are NOT allowable:

- Prohibited purchases: Naloxone/Narcan, syringes, fentanyl test strips, harm reduction kits, furniture or equipment (generally, but note that vehicles may be allowable expenses for linkage to care activities). Harm reduction and linkage to care activities are acceptable as long as they are not prohibited purchases.
- HIV/HCV/other STD/STI testing.
- Drug disposal. This includes Implementing or expanding drug disposal programs or drug take back programs, drug drop box, drug disposal bags.
- The provision of medical/clinical care.
- Wastewater analysis, including testing vendors, sewage testing and wastewater testing.
- Research.
- Direct funding or expanding the provision of substance abuse treatment.
- Development of educational materials on safe injection.
- The prevention of Adverse Childhood Experiences (ACEs) as a stand-along activity. However, activities related to ACEs are allowable if they pertain to establishing linkage to care, or to providing training to public safety and first responders on trauma-informed care.
- Public safety activities that do not include clear overlap/collaboration with public health partner and objectives.

Medication Assisted Treatment (MAT) Waivers

Funds can be used to support training and education around MAT waivers, **however**, OD2A funds cannot be used to pay for fees associated with providers obtaining waived status. This applies to both direct reimbursements and contracts. If training and waiver fee activities occur together, it must be clear that OD2A funds are not being used to cover the waiver fee itself. Other funding sources can be used to cover waiver fees.

Neonatal Abstinence Syndrome (NAS)

Please note that certain activities that cover neonatal abstinence syndrome (NAS) are allowable, while others are not. In particular certain NAS-related surveillance and prevention activities may be allowable; however funding collection of NAS surveillance data is not allowable. Some examples of what would be allowable (noted in the FAQs) include:

- Surveillance of linkage to care during or after pregnancy for mothers who use opioids during pregnancy.
- Tracking drug use patterns, overdose history, and linkage to treatment and risk reduction services for pregnant women.
- Linking data sources on pregnant women available at the state and local level.
- Prevention strategies and activities for pregnant women, infants born with NAS, and for healthcare provider/clinician support and education.

Control of Prescription Drug Monitoring Program (PDMP) Data

The recipient shall comply with Additional Requirement 25 and submit and comply with a Data Management Plan (DMP), which includes plans for archiving and long-term preservation of the data collected or acquired under this award. The recipient shall also retain all title held in controlled substance- or prescription data ("PDMP data"), collected or acquired with federal funds, that are stored in a database operated by or under the oversight of the recipient, whether or not the PDMP data are in existence at the date of award acceptance or compiled thereafter during this award's performance period. Upon request by the recipient at any time, all contractors and subrecipients (at any tier) shall promptly deliver to recipient the PDMP data in electronic format as exists on the date of the request by the recipient. The recipient shall ensure that any and all contractors and subrecipients (at any tier) acknowledge that the recipient retains ownership of and control over the PDMP data.

Prescription Drug Monitoring Program (PDMP) Data Sharing System:

For the purposes of this condition, a "PDMP system" is a local- or state-based data system that received federal financial assistance since 2002 under an award under this program for the reporting, collection, and use of PDMP data. "PDMP data" means controlled substance- or prescription data. "The PDMP hub" means Bureau of Justice Assistance (BJA) designated PDMP data sharing system.

The recipient must ensure that the recipient's PDMP system has the capacity to exchange data with other PDMP systems via the PDMP hub.

The recipient must allow other PDMP systems to exchange data via a direct connection to the PDMP hub with the recipient's system at no cost to the other PDMP systems or the federal government and regardless of what interstate data exchange system the recipient chooses to use.

The recipient must ensure that this requirement is reflected in all contracts or subawards, at any tier, with any vendor or subrecipient, at any tier, under this award.

The recipient must ensure that all contracts or subawards, at any tier, with any vendor or subrecipient, at any tier, working on the recipient's PDMP system provides the recipient with the option to use and connect to the PDMP hub to exchange PDMP data at the lower of—(1) actual cost; or (2) what would be (or in fact is) charged by the vendor or subrecipient for the use of any data exchange hub substantially equivalent to the PDMP hub.

Within ninety (90) days of accepting this award, the recipient must inform BJA of whether its PDMP system is connected to the PDMP hub or not. Failure to connect to BJA's designated PDMP data sharing hub may result in a failure to comply with the terms and conditions of the award. Additional conditions, and possibly other actions, such as temporary withholding of payments pending correction, may be imposed in accordance with applicable award regulations.

The recipient must notify BJA in writing within seven (7) business days if the connection to the PDMP hub experiences a sustained interruption of service lasting longer than six (6) hours.

Nothing in this condition prohibits the recipient from using or not using any data exchange system that is otherwise consistent with the requirements of this award (including those contained in this condition).

The provisions of this condition must be included in any subaward (at any tier).

National Center for Injury Prevention and Control
Notice of Funding Opportunity CE19-1904
Overdose Data to Action (OD2A)

SUMMARY STATEMENT

Date Reviewed: 6/4/19
Applicant Name: Missouri Department of Health and Senior Services
Application Number: NU17CE2019001984
Score: 77 out of 100

This summary statement reflects comments from three distinct objective reviewers. Please address weaknesses and recommendations noted by program and these reviewers.

Unallowable Activities

Please note that regardless of the reviewer comments on the quality of a project proposal, the following activities are NOT allowable:

- Prohibited purchases: Naloxone/Narcan, syringes, fentanyl test strips, harm reduction kits, furniture or equipment (generally, but note that vehicles may be allowable expenses for linkage to care activities). Harm reduction and linkage to care activities are acceptable as long as they are not prohibited purchases.
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- The provision of medical/clinical care.
- Wastewater analysis, including testing vendors, sewage testing and wastewater testing.
- Research.
- Direct funding or expanding the provision of substance abuse treatment.
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- The prevention of Adverse Childhood Experiences (ACEs) as a stand-along activity. However, activities related to ACEs are allowable if they pertain to establishing linkage to care, or to providing training to public safety and first responders on trauma-informed care.
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Neonatal Abstinence Syndrome (NAS)
Please note that certain activities that cover neonatal abstinence syndrome (NAS) are allowable, while others are not. In particular certain NAS-related surveillance and prevention activities may be allowable; however funding collection of NAS surveillance data is not allowable. Some examples of what would be allowable (noted in the FAQs) include:

- Surveillance of linkage to care during or after pregnancy for mothers who use opioids during pregnancy.
- Tracking drug use patterns, overdose history, and linkage to treatment and risk reduction services for pregnant women.
- Linking data sources on pregnant women available at the state and local level.
- Prevention strategies and activities for pregnant women, infants born with NAS, and for healthcare provider/clinician support and education.

Brief Summary of Application

Summary of Project and Overall Comments:

- There was a general lack of clarity on the requested funding level (i.e., tiers, supplemental funds for hospital discharge data (HDD) request) within the application, which often made it challenging to assess which specific level of funding – and therefore timeliness and reporting guidelines – needed to be met to fulfill the requirements of the NOFO. Although the project work plan eventually identified the ED Tier as Tier I, there was no mention of the SUDORS Tier in the application, nor of specific requests for supplemental funds for HDD.
- Although the applicant has important systems in place for data collection, there was not information provided about baseline timeliness, which makes it difficult to determine feasibility for how reporting timelines outlined in the NOFO will be reached. This is not to say that the applicant cannot meet the requested timelines, but it was unclear what would need to be done to scale up systems and whether this was feasible. Prior to determining funding level, if funded, determining baseline timeliness could be helpful to determine feasibility at varied Tiers.
- Generally, the reviewer noticed that several areas for prevention strategies were particularly strong – for example, linkage to care and state-local partnerships – but other prevention strategies did not appear to be well formulated or necessarily feasible/well-described (e.g., public safety, PDMP). CDC could help provide additional clarity and technical assistance in guiding strong, evidence-based plans in these areas.
- The applicant has intentions to utilize OD2A application funding to reimburse all costs associated with toxicology testing in post-mortem exams. Although it is a bit unclear, this appears to be beyond the scope of the NOFO, as it funds individual testing and not structural or process support.
- Although the applicant attached a draft monitoring and evaluation plan, the plan appeared incomplete and narrow given the vast scope of the NOFO. Additional support in this area from CDC, as well as their contracted evaluator, will be necessary.
- Applicant includes a line-item budget, divided by prevention and surveillance activities, with the bulk of the budget going towards contractual work.

Reviewers' Comments on Approach

Strengths of Section:

- The applicant describes the problem of fatal and non-fatal drug overdoses and drug use in their jurisdiction, as well as trends over time, illustrating the public health problem. The applicant also provides clear ability to monitor trends for different substances within their jurisdiction (e.g., increases in fentanyl), which have important implications for prevention.
- The purpose of the application is directly in line with the long-term outcomes set forth by CDC in the NOFO, and includes actionable language related to how the applicant seeks to help achieve these outcomes in their jurisdiction through putting data into action.
- The applicant provides a list of tailored outcomes that align with the spirit of this NOFO and their work-plan, and that cut across surveillance and prevention strategies included.
- For Surveillance Strategy #1, ED Tier I, the applicant clearly has the capacity to report >75% of all ED visits statewide, as current capacity exceeds this amount (79.6% of ED visits). Plans exist to expand the ED visits covered in data collection by expanding hospitals reporting. The applicant currently reports data via NSSP ESSENCE, uses CDC case definitions, can provide case-level data, and appears able to provide other aggregate data and respond to CDC data quality inquiries, as outlined in the NOFO.
- For Surveillance Strategy #2, the applicant has done substantial work to incorporate the SUDORS platform into the NVDRS system, and has expertise in abstracting and entering cause of death and death certificate data into this system.
- For Surveillance Strategy #3, the applicant provides information about innovative surveillance projects that align with the spirit of the NOFO. Some projects clearly build and expand existing, previously funded work (illustrating feasibility) and others expand into new areas of interest for the jurisdiction related to opioid-related harms (e.g., NAS).
- The applicant proposes work in all required and optional Prevention Strategies (#4-10). The applicant has clear capacity to expand upon their existing work relative to linkages to care, and state-local coordination and

partnerships. The applicant also has many key partnerships established in order to impact prevention efforts for many activities.

- The applicant has clearly identified ways in which data will be targeted for prevention, with particular specificity related to linkages to care and state-local coordination and partnerships. These data will clearly be used to impact referrals to services and address specific populations which may have opioid and other comorbid health problems.
- The applicant provides a targeted list of populations at risk, which are informed by data within their jurisdiction (e.g., demographic (i.e., racial and gender disparities), geographic (i.e., concerns with a large city), and concomitant heath behaviors (e.g., HIV/STD)).
- The work-plan outlined is very detailed, including building in time to hire staff, and identifies individual steps that are in line with attaining desired objectives of the NOFO.
- The applicant has provided all CDC-funded required letters of support, as well as additional letters of support, as required by the NOFO.
- For the Background section of the application, Missouri did a good job at defining what their problems were, such as how opioid-related ER visits in their state have double over the course of 14 years. They also did a good job at defining what their demographics are and which parts of the state were affected by opioid usage the most.
- Missouri's work plan used SMART objectives for each of the strategies and did a good job and detailing the different activities they want to do for Year 1. They also included barriers and facilitators for these objectives as well.
- In their target population section, Missouri has talked about the areas in which there are high levels of poverty and low rates of health insurance- two of many reasons why opioid-related deaths are increasing in the state.
- In the collaboration section, Missouri listed the Letters of Support (LOS) form their partners, but also included an explanation about some partners that did not have an LOS. Missouri mentioned this and the role that they have in opioid response.
- Applicant clearly addresses their projects' purpose, strategies 1-10 along with short, intermediate and long-term outcomes.
- Work plan includes SMART objectives.
- 13+ letters of support were included.
- "Missouri (MO) is applying for ED Tier 1. MO recently calculated that 79.6% of all ED visits occurring in the state were reported to NSSP in 2018 and no facilities have stopped sending data since that calculation was completed."
- Applicant clearly mentions their target population, along with strong data to support
- The applicant describes the problem of fatal and non-fatal drug overdoses and drug use in their jurisdiction, clearly stating the public health problem. The applicant is also clear that they are monitoring trends for different substances. For instances, the applicant specifically mentions fentanyl.
- The purpose of the application is in-line with long term outcomes set forth by the NOFO. The applicant specifically included actionable language on how they will meet the outcomes.
- The applicant's tailored outcomes that align with the spirit of the NOFO and the work plan.
- For Surveillance Strategy 1, the applicant is able to meet the requirements of 75% of ED visits statewide as they're currently at 79 – 80%. The applicant is also planning to expand the ED visits covered in the data function by expanding hospital reporting.
- The applicant currently reports data to NSSP-ESSENCE UCC Case Definition and can provide case level data. This suggests that they're able to meet the requirements outlined in the NOFO for Tier 1.
- For surveillance strategy 2, the applicant has done the work to incorporate the SUDORS platform into NVDRS and has experience in entering and extracting cause of death data.
- For surveillance strategy 3, the applicant provided information about innovative surveillance projects that aligns with the spirit of the NOFO. Some of the projects clearly build and expand upon previously funded work, which suggests feasibility while others are related to areas of interest related to opioid related harms.
- The applicant proposed work in all required and optional prevention strategies. The applicant has clear capacity to expand their work to linkage of care and state/local referrals.

- The data will be used to impact targeted populations with demographic details and health status such as those with HIV and STDs.
- The applicant provided all CDC required letters of support were included along with additional letters.

Weaknesses of Section:

- Although the objectives are clearly outlined and in line with the spirit of the NOFO, there are some inconsistencies across the Projective Narrative, work-plan, and monitoring and evaluation plan regarding the objectives proposed. Each surveillance strategy also has only one of the relevant outcomes listed, whereas in actuality these outcomes should be achieved through good surveillance across all three outlined surveillance strategies.
- Although the applicant eventually identifies which ED Tier they will implement in the work-plan (Tier I), this information is not readily apparent through the application, making it difficult to access feasibility and alignment with the NOFOs goals. In addition, the applicant does not identify which SUDORS Tier they are applying for, or identify explicitly which supplemental funds are being requested (e.g., HDD) or which of the 7 CDC goals for innovative surveillance are being addressed in their specified surveillance projects. This makes it very challenging to assess whether the applicants reported timelines and expectations align with the required components of the NOFO related to surveillance.
- The applicant does not provide baseline information about current reporting timelines for Surveillance Strategy #1 or #2, which, if identified, which help assess feasibility for this NOFO. In addition, there is no information provided about the baseline "coverage" of the SUDORS system for identifying UUDOs, and whether the applicant will be able to meet the census or minimum population coverage as outlined by CDC in the NOFO
- Although the applicant indicates processes to incentivize post-mortem toxicology testing, it is unclear whether toxicology panels meet recommended standards as outlined in the NOFO (i.e., fentanyl analogs, beyond the pilot study). Moreover, it is unclear what the baseline for toxicology testing is in the jurisdiction, and what the goal target coverage is.
- For Surveillance Strategy #3, some aspects of the work-plan appear very aggressive and need additional information to demonstrate feasibility (e.g., matching HIV/STD data with SyS data daily to identify co-occurrence of new injections with opioid use).
- For Surveillance Strategy #3, there is substantial attention focused on developing surveillance strategies for NAS (which is appropriate). However, focus on NAS as an outcome of interest are limited elsewhere in the application and should tie in throughout.
- Although details for some Prevention Strategies are well-delineated and clear, some could use additional clarity. For example, it is unclear how PDMP data will be used to also inform and monitor prescribing behaviors, beyond identifying extreme providers that require regulatory action. In addition, for those prescribers, it is unclear what capacity the jurisdiction has to impact regulatory action either alone or with their partners (and therefore feasibility is unclear).
- Critical details and additional description would also be useful for Public Safety Partnerships, and Providers and Health Systems Support. The currently proposed plans appear very narrow in scope, and it is unclear whether the proposed strategies align with the highest jurisdictional need
- Although the applicant identifies populations-at-risk based on available data, there are populations that are often discussed throughout the application (e.g., pregnant women) that are not targeted as part of the populations of interest (i.e., lack of consistency).
- Although the work-plan is very detailed, the "responsible party" identified is quite broad; additional identification of who might conduct the specific work would aid in determining feasibility. In addition, although the objectives outlined are labeled as "SMART", not all objectives meet this criteria and could use additional refinement.
- Although the applicant appears to provide all required letters of support given the objectives outlined, it is often unclear which agency maps to which jurisdiction (e.g., who is the public safety agency?); additional clarity in this area would be helpful.
- Details about how existing collaborations will be leveraged moving forward to achieve the goals of the NOFO, and how these collaborations will be leveraged to avoid duplication of efforts, would be useful

- I think that the approach should have been in the beginning of the application. Missouri went straight to the Evaluation and Performance Measurement Plan without talking about their background information, purpose, outcomes, etc.
- Missouri did not also specify whether or not they were using Tier 1 and Tier 2 in their approach. The only time that the tier was mentioned was in the surveillance component portion of their application.
- SUDORS tier is not explicitly stated, apart from on page 18: Syndromic surveillance (SyS), PAS (inpatient and ER), and SUDORS data will be submitted to CDC on the schedule established based on the selection of the respective strategy tier (Tier 1).
- There was a general lack of clarity on the project funding level, specifically which Tiers and if they were requesting supplemental funding. For example, for the hospital discharge data requesting. Which made it really challenging to assess which specific level of funding and therefore, reporting guidelines and timeliness needed to be met. The work plan did eventually mention the ED Tier 1 as the applicant's Tier.
- There was no mention of the SUDORS Tier they will implement nor the supplemental funding requests but it became clear later in the narrative that they did intend to apply for the funding.
- There were several areas for prevention strategies were very strong but there were several that were not fully described.
- There were some inconsistencies across the work plan, narrative, and monitoring and evaluation plan. Each surveillance strategy only had one of the relevant outcomes listed as opposed to realizing that all the outcomes should be achieved with good surveillance across all three tiers.
- The applicant does not provide baseline information about current reporting timelines for surveillance strategy one or two.
- The applicant did not provide information about the baseline coverage for their SUDORS system for identifying unintentional opioid deaths.
- It is unclear if the toxicology panels will meet the recommend standards as outlined in the NOFO.
- Several prevention strategies need more clarity.
- Some of the objectives are not in fact "SMART" objectives.
- The applicant provides the letters of support but it's unclear which agency maps to each jurisdiction. The applicant also provides limited details about role of collaborators.

Recommendations for Section:

- Provide additional clarity about the requested funding Tiers for Surveillance Strategies #1 and #2, as well as supplemental funds for optional projects.
- The applicant should clarify the current timeliness of their existing reporting and data structures for surveillance, as well as provide additional information about what is needed to scale up their reporting on UUDOs via the SUDORS platform.
- The applicant should provide more specific details about some Prevention Strategies, particularly related to PDMP, Public Safety Partnerships, and Providers and Health Systems Support, and provide additional detail in the work-plan about how activities will result in feasible, data-driven results that will contribute to chosen outcomes of interest
- The applicant should provide additional detail about how new, expanded, and ongoing partnerships will be leveraged to create actionable, non-duplicative efforts related to the identified Surveillance and Prevention strategies. In addition, more clearly identifying where key data are located within bureaus or structures would aid in application clarity
- There are no major recommendations, Missouri's approach portion was very good. The only recommendation is to make sure that the pages are not off in a grant application next time. In page 190, where the strategies and activities section is, it was mentioned that "specific activities are detailed in the work plan below". The work plan was actually all the way up in page 144.
- Include more specific work experiences/accomplishments with collaborators
- The applicant should provide additional information around their funding tiers, the current timeliness and baseline and capacity for surveillance and more specific details about the prevention strategies.

Reviewers' Comments on Evaluation and Performance Measurement

Strengths of Section:

- The applicant provides an organized logic model that aligns with the short, intermediate, and long-term outcomes outlined in the NOFO.
- The applicant provides a draft Evaluation and Performance Measurement plan that includes information on several Surveillance and Prevention Strategies, including evaluation use, evaluation questions, indicators, and data collection methods.
- The applicant indicates that they will conduct ongoing evaluation of their proposed activities both internally and through an external evaluator to create an ongoing feedback loop from which to target quality improvement and prevention impact.
- For the Evaluation and Performance Measurement section of their application, Missouri included a logic model that provided a shortened version of their evaluation plan, while getting into more detail about their strategies later on. The logic model was clear and easy to follow.
- Missouri also divided their outcomes for each of their strategies into short-term, intermediate-term, and long-term outcomes.
- The surveillance and prevention components of the work plan were well-written, organized, and seemed feasible.
- Mentions that contractors will be used to support evaluation.
- The applicant provided an organized logic model that aligns with the short, medium and long-term outcomes.
- The applicant provided a draft performance and evaluation management plan that includes information on several of the prevention and surveillance strategies.
- The applicant states they will provide ongoing evaluation of the proposed activities, both with internal evaluation and through an external evaluator.

Weaknesses of Section:

- Although the applicant distinguishes between short, intermediate, and long-term outcomes, the outcomes selected are often inconsistent throughout various sections of the application (including in the logic model, work-plan, and Project Narrative).
- Although the applicant provides a draft Evaluation and Performance Measurement plan, the proposed plan is very narrow in scope, does not address all aspects of various Strategies, and does not include information on several of the Prevention Strategies. In some places, the plan outlined for evaluation does not align with the goal or activity proposed in the work-plan or in the Project Narrative. Substantially more specificity about evaluation plans are needed to effectively carry out evaluation of the Surveillance and Prevention Strategies and ensure data-driven action.
- Although the applicant indicates that evaluation results will be used to drive changes for Surveillance or Prevention Strategies, if needed, limited information about how frequently evaluation will be conducted is provided. It is also unclear how specifically this feedback will be incorporated, and whether there are benchmarks for ensuring ongoing fidelity for effectiveness of the Prevention Strategies.
- One weakness for the Missouri's evaluation and performance measurement plan was their data management plan. I felt that they should have given more explanations to about the datasets that they are using.
- While there is an evaluation section that follows the strategies, there are no evaluation activities connected to strategies 7, 8, or 10.
- Somewhat lacking in clear evaluation steps/goals and outcomes.
- The outcomes selected were often inconsistent across various sections of the application.
- The proposed plan is very narrow in scope and does not address all aspects of the strategies. It does not include information on several of the prevention strategies at all.
- The applicant is unclear about how frequently evaluations will be completed and how the feedback will be included to informing the programs.

Recommendations for Section:

- The applicant should carefully revisit their Evaluation and Performance Management plan such that evaluation plans carefully target all aspects of the Surveillance and Prevention Strategies (all 10), including with evaluation questions that target the essence of specific surveillance and prevention activities as outlined in the work-plan.
- The applicant should carefully revisit their Evaluation and Performance Management plan such that timelines for ongoing evaluation and benchmarks for fidelity to program implementation are clear.
- There are no recommendations, I thought that this was a good Evaluation and Performance Measurement Plan from Missouri.
- The applicant should carefully review their evaluation and performance plan.

Reviewers' Comments on Organizational Capacity to Implement the Approach

Strengths of Section:

- The applicant has clear capacity to access at least 75% of ED visits within their jurisdiction by first data submission to CDC, and has clear infrastructure in place to receive hospital discharge data to help improve overdose surveillance.
- The applicant has existing expertise in collecting ME/C and death certificate data on UUDO deaths, with data collection using the SUDORS platform within NVDRS, and has existing relationships with ME/Cs in large areas of the jurisdiction to improve reporting.
- The applicant has many critical data systems in place, including current use of NSSP ESSENCE and NVDRS/SUDORS. In addition, the innovative Surveillance Strategy #3 projects outlined often build upon and expand existing pilot projects and work already being undertaken in a smaller capacity within their jurisdiction (i.e., appear feasible).
- The applicant has clear partnerships with a number of other partners both within and across internal and external agencies, including with a number of local and state-level partners. Inclusion of letters of support from ME/Cs is also a strength of this application.
- Multiple key staff have expertise in surveillance methods and prevention specific to opioids and drug overdoses. In addition, there is clear justification for the importance of adding other key staff positions in how they align with achievement of selected Prevention or Surveillance Strategies and stated outcomes of interest
- The Organizational Capacity to Implement the Approach section for Missouri's application was very good. It was mentioned that the CDC would have the ability to access 79% of the Emergency Department visits in Missouri. They also mentioned that they would have the capacity to collect toxicology and death certificate data through the National Syndromic Surveillance Program (NSSP). Missouri also talks about how experienced their staff is, and how they have collected ED and death certificate data in the population level before.
- Applicant indicates strong organizational capacity (13 FTE's + additional support staff) and strong collaboration/community support (14+ letters of support)
- Indicate current access to 79% of ED reports, with prediction of improvement
- Indicates success with past CDC grants
- The applicant has clear capacity to assess the 75% of ED visits.
- The applicant has existing experience in collecting medical examiner/coroner and death certificate data on UDO deaths.
- The applicant has existing relationships with medical examiners and coroners.
- The applicant already has critical data systems in place and can build upon existing pilot projects.
- The applicant has clear partnerships with internal and external agencies, including at the state and local levels.
- Several of the key staff has expertise in surveillance methods and prevention strategies, specific to opioids and drug overdoses.
- The applicant has a strong capacity. They plan to hire 13 FTEs and a team of support staff.
- The applicant indicated success with past CDC grants. The applicant showed past experience

Weaknesses of Section:

- There was missing information about which SUDORS Tier was selected, and the current timeliness of overdose data reporting via NSSP ESSENCE and via death certificate data in SUDORS. This makes it difficult to assess

whether it is feasible for the jurisdiction to meet requirements for timeliness and data quality as outlined in the NOFO.

- Although there are clear partnerships established, it is often unclear in the application how these partnerships will be leveraged specifically to address NOFO strategies and meet the short, medium, and long-term objectives. In addition, there is sometimes a lack of clarity about where specific data or regulatory authority are housed, which is central to the jurisdiction's ability to achieve their planned activities and thus NOFO objectives Although many key staff are in place, the applicant indicates that there will be many additional staff hired. This is reasonable, but additional detail about how staff will be managed across 8 different units working on OD2A projects would be helpful to ensure that there is ongoing communication and limited duplication of efforts
- No weaknesses for this portion in the application. Missouri was able to demonstrate that had strong organizational capacity and an experience staff to help them reach the outcomes they set to achieve.
- Could have included more specifics on past partnerships and accomplishments
- The applicant was missing information about the SUDORS tiers and current timeliness.
- The applicant does not specify how the existing partnerships will be leveraged.
- There is a sometimes a lack of clarity about where data is housed.
- The applicant indicates there will be many additional staff hired. Additional information about the how the staff will be managed across the 8 different units would be helpful to ensure that it is managed in a reasonable way.
- The applicant could have included more about past partnerships.

Recommendations for Section:

- Provide additional detail about SUDORS reporting tier level, and current data timeliness.
- Provide additional detail about how specifically partnerships will be leveraged to meet objectives, particularly in Strategies where a critical partner is needed to provide regulatory authority (e.g., PDMP Strategy) or where partners are needed to access data.
- Provide information about how new and existing staff will be housed in an organizational unit such that there is limited duplication of effort and ongoing communication
- Missouri showed that they maintain effective relationships with their partners, but next time they should give examples of how these partners have supported them in the past.
- The applicant should provide additional details about the SUDORS tiers.
- The applicant should specify how partnerships will be leveraged to meet the objectives, in particular where partnerships are needed given the strategy.
- The applicant should provide information about where new and existing staff will be housed in an organizational unit.

NOFO: CDC-RFA-CE19-1904

Applicant Number: NU17CE2019001984

Applicant Name: Missouri Department of Health and Senior Services

The programmatic weaknesses and recommendations stated below are in addition to the weaknesses and recommendations stated in your application review Summary Statement. You will be expected to address these weaknesses in your revised Work Plan.

Overall

- Weakness: Prevention budget (pg. 65): item #1. The analysis of prescribing data to identify high-risk behaviors may be considered research, which is not allowable.
    - Recommendation: Please provide additional information so that a determination can be made. If it is research, please redirect funds to another allowable activity.
- Weakness: Prevention budget (pg. 65): item #3. Please provide additional information about the trainings. OD2A funds can be used to support training and education around MAT waivers, however, OD2A funds cannot be used to pay for fees associated with providers obtaining waived status, either via direct reimbursement or contracts.
    - Recommendation: Please specify how funds will be used.

Strategy 3:

- Weakness: Strategy 3 mentions the abstraction of NAS data and linkage to assist with treatment and service referrals.
    - Recommendation: More information about this activity is needed to determine whether it is allowable. Please provide additional details and refer to the list of allowable activities related to NAS.
- Weakness: Strategy 3 also mentions the following activity: link data on individuals newly diagnosed with HIV and syphilis and their partners to inform Disease Intervention Services (DIS) interventions, including substance use disorder (SUD) treatment referrals.
    - Recommendation: More information about this activity is needed to determine whether it is allowable. Please provide additional details and refer to the list of allowable activities. Please redirect these funds if the activity is not allowable.

Strategy 9:

- Weakness: Strategy 9 mentions LPHA contracts to address naloxone availability and HIV testing, among other things.
    - Recommendation: Please note that funds cannot be used for HIV testing or for the purchase of naloxone. Please provide additional information on how the funds will be used.