**NOTICE OF AWARD**

**AUTHORIZATION (Legislation/Regulations)**

SEC 301, 317, 6391A 42USC241, 2478k-280B-B3

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**Enhanced State Surveillance of Opioid-Involved Morbidity and Mortality**

**9a. GRANTEE NAME AND ADDRESS**

HEALTH AND SENIOR SERVICES, MISSOURI DEPARTMENT OF
920 Wildwood Dr
-DUP3
Jefferson City, MO 65109-5796

**9b. GRANTEE PROJECT DIRECTOR**

Andrew Hunter
920 Wildwood Drive
Jefferson City, MO 65102-0570
Phone: 573-526-0444

**10a. GRANTEE AUTHORIZING OFFICIAL**

Ms. Patricia Bedell
920 WILDWOOD DR
Division of Administration
JEFFERSON CITY, MO 65109-5796
Phone: 573-751-6014

**10b. FEDERAL PROJECT OFFICER**

Terry Davis
4770 Buford Hwy
DUIP
Atlanta, GA 30341
Phone: 770-488-3940

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**11. APPROVED BUDGET** (Excludes Direct Assistance)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Salaries and Wages</td>
<td>163,656.00</td>
</tr>
<tr>
<td>b. Fringe Benefits</td>
<td>86,738.00</td>
</tr>
<tr>
<td>c. Total Personnel Costs</td>
<td>250,394.00</td>
</tr>
<tr>
<td>d. Equipment</td>
<td>0.00</td>
</tr>
<tr>
<td>e. Supplies</td>
<td>1,334.00</td>
</tr>
<tr>
<td>f. Travel</td>
<td>19,630.00</td>
</tr>
<tr>
<td>g. Construction</td>
<td>0.00</td>
</tr>
<tr>
<td>h. Other</td>
<td>8,808.00</td>
</tr>
<tr>
<td>i. Contractual</td>
<td>114,500.00</td>
</tr>
<tr>
<td>j. TOTAL DIRECT COSTS</td>
<td>394,666.00</td>
</tr>
<tr>
<td>k. INDIRECT COSTS</td>
<td>53,334.00</td>
</tr>
<tr>
<td>l. TOTAL APPROVED BUDGET</td>
<td>448,000.00</td>
</tr>
</tbody>
</table>

**12. AWARD COMPUTATION**

- a. Amount of Federal Financial Assistance (from item 11m) 448,000.00
- 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 448,000.00

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**13. Total Federal Funds Awarded to Date for Project Period** 1,216,000.00

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**14. RECOMMENDED FUTURE SUPPORT**

(Service to the availability of funds and satisfactory progress of the project):

<table>
<thead>
<tr>
<th>Year</th>
<th>TOTAL DIRECT COSTS</th>
<th>Year</th>
<th>TOTAL DIRECT COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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)

**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.
- e. 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.

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**REMARKS** (Other Terms and Conditions Attached) - Yes

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**17. OBJ CLASS** 41.51

**18a. VENDOR CODE**

<table>
<thead>
<tr>
<th>FY-ACCOUNT NO.</th>
<th>DOCUMENT NO.</th>
<th>CFDA NO.</th>
<th>ADMINISTRATIVE CODE</th>
<th>AMT ACTION FIN ASST</th>
<th>APPROPRIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 a. 7-93905UW</td>
<td>b. 16CE924884</td>
<td>c. 93.136</td>
<td>d. CE</td>
<td>e. $0.00</td>
<td>f. 75-17-0952</td>
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<tr>
<td>22 a. 7-93903R9</td>
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<td>c. 93.136</td>
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<td>e. $0.00</td>
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<tr>
<td>23 a. 6-93905UW</td>
<td>b. 16CE924884</td>
<td>c. 93.136</td>
<td>d. CE</td>
<td>e. $0.00</td>
<td>f. 75-16-0952</td>
</tr>
</tbody>
</table>

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**GRANTS MANAGEMENT OFFICER** Barbara (Rene) Benyard, Grants Management Officer, Team Lead
### Direct Assistance

<table>
<thead>
<tr>
<th>BUDGET CATEGORIES</th>
<th>PREVIOUS AMOUNT (A)</th>
<th>AMOUNT THIS ACTION (B)</th>
<th>TOTAL (A + B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
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<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Fringe Benefits</td>
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<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Travel</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Contractual</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Construction</td>
<td>$0.00</td>
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<tr>
<td>Other</td>
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<td>$0.00</td>
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<tr>
<td>Total</td>
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### Federal Financial Report Cycle

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<tr>
<th>Reporting Period Start Date</th>
<th>Reporting Period End Date</th>
<th>Reporting Type</th>
<th>Reporting Period Due Date</th>
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<td>09/01/2016</td>
<td>08/31/2017</td>
<td>Annual</td>
<td>11/29/2017</td>
</tr>
<tr>
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<td>Annual</td>
<td>11/29/2018</td>
</tr>
<tr>
<td>09/01/2018</td>
<td>08/31/2019</td>
<td>Annual</td>
<td>11/29/2019</td>
</tr>
</tbody>
</table>
1. Terms and Conditions
2. Technical Review
**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](https://www.cdc.gov/grants/federalregulationspolicies/index.html), the Centers for Disease Control and Prevention (CDC) hereby incorporates Notice of Funding Opportunity (NOFO) number CE16-1608, entitled Enhanced State Surveillance of Opioid-Involved Morbidity and Mortality, and application dated April 19, 2018, 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 $448,000 is approved for the Year 03 budget period, which is September 1, 2018 through August 31, 2019. 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.

The following technical assistance will be provided to awardees by CDC to support Strategy 1:

- Share example drug overdose, opioid-involved overdose, and heroin related overdose ED case definitions that include text and ICD-10-CM text searches developed through work with states by Fall 2016
- Provide feedback on proposed case definitions, data reports, and validation study design
- Facilitate sharing of cases definitions and analytical approaches among awardees by providing states a summary of case definitions by Fall 2017
- When provided permission by an awardee, CDC will support the implementation, analysis, and sharing of information through the BioSense platform and infrastructure

The following technical assistance will be provided to awardees by CDC to support Strategy 2:

- Produce and share coding manual with awardees that will provide cases definitions and coding guidance. This will build on the NVDRS coding manual
- Provide access to the NVDRS web-based data entry program to enter date, to export date to the recipient, and to share date with CDC. The NVDRS web-based date entry system will also support data quality by providing data summaries and implementing data entry rules, including restricting data entry to valid values
  - Provide training on how to use the web-based date entry system
• Provide technical assistance in solving problems in all aspects of the system through monthly or bi-monthly conference calls, discussions with CDC staff, maintaining a help desk for abstraction questions and questions about the web-based data entry system, and periodic applicant site or reverse site visits as resources are available.
• If resources are available, CDC may provide tools to support efficient analysis of the date, such as standard strategies for coding toxicology panel finding.

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:
• Applicants may not use funds for research
• Applicants may not use funds for clinical care
• Applicants may use funds only for reasonable program purposes, including personnel, travel, supplies and services
• Generally, applicants may not use funds to purchase furniture or equipment. Any such proposed spending must be clearly identified in the budget
• Reimbursement of pre-award costs is not allowed
• Other than for normal and recognized executive-legislative relationships, no funds may be use for:
  o Publicity or propaganda purposes, for the preparation, distribution, or use of any material designed to support or defeat the enactment of legislation before any legislative body
  o The salary or expenses of any grant or contract recipient, or agent acting for such recipient, related to any activity designed to influence the enactment of legislation, appropriations, regulation, administration action, or Executive order proposed or pending before any legislative body
  o See Additional Requirement (AR) 12 for detailed guidance on this prohibition and additional guidance on lobbying for CDC awardees
• The direct and primary recipient in a cooperative agreement program must perform a substantial role in carrying out project outcomes and not merely serve as a conduit for an award to another party or provider who is ineligible.

Indirect Costs:

Indirect costs are approved based on the 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, 2018 to June 30, 2019.
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
LaQuanda Lewis, Grants Management Specialist
Centers for Disease Control and Prevention
OD, Environmental, Occupational Health & Injury Prevention Services Branch
2960 Brandywine Rd
Atlanta GA 30341
Email: hrf6@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))
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 hstips@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.

**Subaccount Title**: 16CE924884

**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**:
CDC, Office of Grants Services  
LaQuanda Lewis, Grants Management Specialist  
Centers for Disease Control and Prevention  
OD, Environmental, Occupational Health & Injury Prevention Services Branch  
2960 Brandywine Rd  
Atlanta GA 30341  
Email: hrf6@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**:
Terry Davis, Project Officer  
Centers for Disease Control and Prevention  
DUIP  
National Center for Injury Prevention and Control  
4770 Buford Hwy MS F-62  
Atlanta GA 30341  
Telephone: 770-488-3940  
Fax: 770-488-1317
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:
Barbara René Benyard, Grants Management Officer
Centers for Disease Control and Prevention
OD, Environmental, Occupational Health & Injury Prevention Services Branch
2960 Brandywine Rd
Atlanta GA 30341
Telephone: 770-488-2757
Email: bnb8@cdc.gov
Awardee’s Name: State of Missouri, Department of Health and Senior Services

Grantee #: NU17CE924884  
Budget Year: 9/1/2018 – 8/31/2019

FOA #: CDC-RFA-CE16-160803CONT18  
Title: Enhanced State Surveillance of Opioid-Involved Morbidity and Mortality

Requested Amount: $ 448,000 ($ 320,000 - base; 128,000 supplement)

Reviewed by: Alana Vivolo-Kantor, Rose Rudd and Terry Davis

A. Year 2 Progress Reporting:

Summary of Major Strengths:

Base
- Missouri has met all activities originally proposed in their application for strategy one. This includes (1) identifying and selecting three indicators (e.g., all drug overdoses, opioid overdoses, and heroin overdoses) for ED visits for rapid surveillance; (2) creating, validating, and modifying case definitions for all indicators based on CDC staff feedback; (3) sending CDC access to their case-level ED data from the Patient Abstract System (PAS); and (4) providing CDC information on data methodology for ED.
- For strategy one, Missouri has also increased the timeliness of aggregate nonfatal opioid overdose reporting by working closely with the Missouri Hospital Association’s (MHA) Hospital Industry Data Institute (HIDI) to gain access to emergency department data monthly as opposed to quarterly (which is required through their current regulation).
- For strategy two, MO has worked to expand the number of ME/C’s participating in ESOOS. They have increased from 19 participating counties in year 1 (representing approximately 80% of unintentional/undetermined opioid overdose deaths (UUDOs) in the state) to 37 participating counties representing approximately 86% coverage of UUDOs. MODHSS also successfully achieved a goal of 4 month initiation of records in SUDORS and has improved the writing of their abstracts, making them more concise and free of all personal identifying information.
- Missouri staff are engaged in many dissemination activities (i.e., strategy three), both ongoing and enhancing previously conducted activities, to new and varied audiences. MODHSS has had much success presenting at numerous national and local conferences and CDC appreciates their sharing of lessons learned at these conferences and on state work group calls. MODHSS is also refining and enhancing its opioid dashboard that went live in year 2 of the program (which contains data from vital records death certificates, Emergency Department (ED) and inpatient hospitalization data).
- ESOOS data has helped prioritize high-need communities in the state, for grants for naloxone distribution, targeted education efforts, and targeting treatment monies for those areas of the state with greatest need.
- Missouri has worked closely with CDC project staff on all strategies and maintains open dialogue and a collegial partnership that we hope will continue.

Supplement
- Missouri staff is using supplemental funding to both reimburse medical examiner/coroner (ME/C) offices for costs associated with toxicology testing but also to fund staff to assist in data linkage. These efforts are ongoing but will allow Missouri to get a better understanding
Summary of Major Weaknesses:

**Base**
- Due to contracting issues, Missouri was unable to meet the data submission deadline for SUDORS for deaths abstracted in the first half of 2017 (data call Feb. 2018). Records from counties could not be requested until contracts were signed, with contract signatures delayed into early 2018. As of March 2018, most of the contract issues have been resolved. ESOOS staff are now in the process of pulling records; MODHSS has completed abstraction on approximately 33% of records.

**Supplement**
- None noted

Other Relevant Comments:
- Missouri met the first data submission deadline for SUDORS (August 2017). As this submission deadline occurred after the year 1 APR review, this accomplishment had not yet been noted in an annual review.

Recommendations:

**Base**
- MO should report to CDC monthly the status of: contract completions with ME/C’s; receipt of records; and abstraction of records for the first half of 2017, until record abstraction is completed for that period.

**Supplement**
- N/A

B. Work Plan:

Summary of Major Strengths:

**Base**
- The proposed work plan for Project Year 3 is appropriate and will focus on maintenance and sustainability of the foundation built in Project Years 1 and 2 for all strategies and indicators.
- For strategy one, the data submission process for strategy one is now well established and no barriers are anticipated. The Missouri team will continue to work with CDC on journal publications.
- For strategy two, Missouri plans to be back on track with timely abstraction of death records and also will be increasing the number of records abstracted, through increased participation of coroner around the state. ESOOS staff have taken several steps in order to prevent contract and invoice delays this year that were experienced in year 2.
- For strategy three, Missouri will continue with dissemination activities initiated in the past two years, and plans to improve the functionality and capabilities of the opioid dashboard, which will help provide valuable data to their partners.

**Supplement**
- The proposed work plan for Project Year 3 is appropriate and will focus on continued used of supplement funds to increase toxicology testing for death investigations in the state as well as fund staff to assist in data linkage, allowing Missouri to get a better understanding of the opioids contributing to death and the type of drugs currently in their communities.
Summary of Major Weaknesses:

Base
- None noted

Supplement
- None noted

Other Relevant Comments:
- Continue to share case-level data via PAS, but consult with CDC on the best ways to integrate the text rich data from ESSENCE. Similarly, continue to discuss with CDC project staff the best ways to merge PAS and ESSENCE data.
- Please continue to keep CDC aware of personnel and staffing changes that impact the work.

Recommendations:

Base
- N/A

Supplement
- N/A

C. Budget:

Comments:
- The applicant has proposed a detailed budget that is reasonable and practical to support the proposed activities outlined in the work plan and in accordance with the strategies of CE16-1608.

Project Officer’s Name: Terry W. Davis

Project Officer’s Signature: Terry W. Davis, EdD  Date: 04/27/2018