**Maternal Mortality Review Information Application (MMRIA)**

New Information Collection Request

**Supporting Statement**

**Part B**

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**Attachments**

Attachment 1a. Section 301 of the Public Health Service Act (42 U.S.C. 241)

Attachment 1b. Preventing Maternal Deaths Act

Attachment 2. Data Flow Diagram

Attachment 3a. Data Abstraction MMRIA Screenshots

Attachment 3b. Case Narrative MMRIA Screenshots

Attachment 3c. Committee Decision MMRIA Screenshots

Attachment 4. Authorization to Operate

Attachment 5. Privacy Impact Assessment

Attachment 6. Memorandum of Understanding

Attachment 7. Estimates of Pregnancy-Associated Deaths

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## B. Collection of Information Employing Statistical Methods

### 1. Respondent Universe and Sampling Methods

An evaluation of all pregnancy-associated deaths within the awardee**’s** (i.e., respondent’s**)** jurisdictions is being sought; thus**,** no sampling methods will be employed. Estimates of the anticipated number of pregnancy-associated deaths each year (based on a 3-year average) were derived for each of the 25 states covered by funding from 24 awards under CDC-RFA-DP19-1908 and using CDC Wonder[[1]](#footnote-2) data (2014-16) (**Attachment 8**). CDC Wonder is an online database for the analysis of public health data. From this approach, we estimate a total of 757 pregnancy-associated deaths on average. Annually, this equates to an average of 30 response for each of the 25 states, per year.

### 2. Procedures for the Collection of Information

### Through their existing Maternal Mortality Review Committees (MMRCs), awardees will compile data for a defined set of variables and enter them into the applicable forms within the Maternal Mortality Review Information Application (MMRIA). MMRIA is a standardized data system designed to collect timely, accurate, and standardized information about deaths to women during pregnancy and the year after the end of pregnancy, including opportunities for prevention, within and across jurisdictions.

### Information pertaining to pregnancy-associated deaths entered into MMRIA may include data from death certificates, autopsy reports, birth certificates, prenatal care records, emergency room visits records, hospitalization records, records for other medical office visits, medical transport records, social and environmental profiles, mental health profiles, and informant interviews (Attachment 3a). Case narratives are auto-populated to facilitate committee review (Attachment 3b). MMRCs (with a team of persons with relevant clinical and non-clinical expertise, such as state health personnel, maternal fetal medicine, perinatal psychologists, substance use experts, social service representatives, and community partners) will review the case narratives developed from MMRIA to understand the circumstances around and preventability of the deaths. Committee decisions will then be entered into MMRIA (Attachment 3c). Each case record may contain up to 1000 data elements. A full list of all data elements collected is currently available at demo.mmria.org/data-dictionary. Approximately 30 fields should be completed for each case after the committee review.

### 3. Methods to Maximize Response Rates and Deal with Nonresponse

Efforts are made to maximize the response rate (i.e., completeness of data for each case). CDC provides guidance to awardees on strategies to minimize missing or unknown responses to MMRIA variables. These methods include building the capacity of abstractors that collect the data and providing feedback to these abstractors so they might improve the completeness case information entered into MMRIA. As outlined in the funding announcement, CDC will work in partnership with awardees on quality assurance processes to improve data quality, completeness, and timeliness. This will allow CDC and the awardee to track the outcome of data improvement strategies and to follow the awardee’s progress over time. This in turn results in reduced missing and unknown responses in the data system. The goal for the system is to capture complete information from the abstracted data to allow awardees to determine pregnancy-relatedness of and understand the circumstances around and preventability of maternal deaths in order to prevent future ones from occurring.

### 4. Tests of Procedures or Methods to be Undertaken

There are no statistical aspects related to MMRIA. MMRIA was created using lessons learned from a prototype system, the Maternal Mortality Review Data System (MMRDS). Over several years of working closely with the early adopter states of MMRDS, it became clear that states wanted a more complex, flexible, and adaptable data system than what MMRDS provided. As part of the initiative [*Building U.S. Capacity to Review and Prevent Maternal Deaths*](https://www.cdcfoundation.org/pr/2016/cdc-foundation-partnership-help-reduce-maternal-mortality-united-states), MMRIA was created and released in April 2017. Compared to MMRDS, MMRIA provided multiuser capability, ability to operate on web servers, more timely corrections to errors, and expansion of quality location-based information. Ongoing improvements to the system are undertaken based on informal user feedback.

### 5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

A number of representatives from MMRCs and stakeholders were consulted on identifying the in initial content of MMRIA and its precursor, the Maternal Mortality Review Data System (MMRDS). Since identification of the initial content, additional changes to the content have occurred based on informal user feedback.

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| ***Maternal Mortality Review Committees (MMRC) Initially Consulted (2013-14)*** | |
| *MMRC* | |
| *California* | *Michigan* |
| *Colorado* | *New Jersey* |
| *Delaware* | *New York (State)* |
| *Florida* | *Ohio* |
| *Georgia* | *Philadelphia* |
| *Iowa* | *Utah* |
| *Louisiana* | *Virginia* |
| *Massachusetts* | *Wisconsin* |
| ***Additional Maternal Mortality Review Committees (MMRC) Consulted (2015 to present)*** | |
| *MMRC* | |
| *Hawaii* | *North Carolina* |
| *Illinois* | *Oklahoma* |
| *Maryland* | *South Carolina* |
| *Mississippi* | *Tennessee* |
| *New Mexico* | *Texas* |
| *New York City* | *Washington (State)* |
| ***Additional Stakeholder Organizations Consulted (2013-present)*** | |
| *Name/Organization* | *Subject Matter Expertise Provided* |
| *American College of Obstetricians and Gynecologists* | *Obstetric care* |
| *Association of Maternal and Child Health Programs* | *Title V Maternal and Child Health Block Grants and associated programs in states* |
| *CDC, Division of Reproductive Health* | *Maternal Mortality Measurement and Surveillance* |
| *CDC, Center for Global Health* | *Maternal Mortality Measurement and Surveillance* |
| *CDC, Center for Surveillance, Epidemiology, and Laboratory Services* | *EpiInfo 7* |
| *Society for Maternal and Fetal Medicine* | *High risk obstetric care* |

1. <https://wonder.cdc.gov/> [↑](#footnote-ref-2)