

Funds awarded under this cooperative agreement should not be used to supplant existing State government expenditures in this area.

#### **Purpose**

The purpose of this cooperative agreement program is to provide assistance to quantitatively assess: Infectious disease morbidity (both in the child and the child's family) associated with out-of-home child care; associations between morbidity (e.g., days of illness, days of restricted activity, physician's visits, etc.) and the type of health care (i.e., health maintenance organizations, preferred provider organizations, fee-for-service, physician-hospital organizations, other integrated and/or managed care-type health provider networks or organizations) utilized by children and other family members. Health care provider-focused interventions that will have a measurable impact on morbidity among children and their families should also be assessed.

#### **Program Requirements**

In conducting activities to achieve the purpose of this program, the recipient will be responsible for the activities under A., below, and CDC will be responsible for activities listed under B., below:

##### **A. Recipient Activities**

1. Assess the health outcomes and health status of a population using specific health indicators (e.g., number of days of a specific illness, days of restricted activity, colonization or infection with antibiotic-resistant bacteria, other measures of health or wellness) and health care process measures (e.g., utilization and cost of health services, number of antibiotic prescriptions, immunization rate). Also study how the types and forms of health care services to which the study population has access may be mediating factors in both process and outcome measures.

2. Establish and monitor achievement of a series of measurable sub-objectives (e.g., recruitment of adequate sample size; development of data collection instruments; identification of adequate systems for data processing and analysis; establishment of evaluation mechanisms, including validation of data, etc.) so that progress toward accomplishing the defined objectives can be clearly assessed.

3. Enroll study subjects representing populations that appropriately address study objectives. For example, rates of illness can be compared among families with children in a variety of child care

settings (including family child care homes, family group homes, and child care centers), families with children not in out-of-home child care (as one comparison group), and families/ persons without children (as a second comparison group). Types of health care these populations receive that could be considered in comparing practices and in evaluating access include managed care (traditional HMO, point-of-service HMO, physician hospital organization), fee-for-service care, private insurance and government-supported health care (e.g., Medicaid). Study populations should include a reasonable demographic diversity by racial/ethnic composition, socio-economic status, etc.

4. Monitor and adhere to project timelines to ensure completion of data collection and analysis and reporting to the scientific community within a three-year project period.

5. Initiate and complete one or more of the following:

a. Surveillance for infectious disease morbidity, including information on antimicrobial drug use (e.g., pharmaceutical used, duration, dosage, indication and prescribing physician). When appropriate, assessment should include identification of risk factors for illness, collection of nasopharyngeal swabs and stool specimens for identification of respiratory and enteric pathogens, and evaluation of direct and indirect costs of illness among study subjects.

b. Definition of the impact of common respiratory illnesses, respiratory complications including otitis media and related antibiotic use on morbidity among children, family members and child care providers. When appropriate, studies should include assessment of the effectiveness of influenza vaccination in reducing influenza-related morbidity, and the costs and use of antibiotics among children in child care, their family members, and child care providers.

c. Assessment of the effectiveness of health education and its impact on antimicrobial use and antimicrobial resistance (e.g., education of parents regarding appropriate use of antimicrobial drugs in respiratory tract infections to decrease patient demand, handwashing for the prevention of enteric and respiratory infections).

##### **B. CDC Activities**

1. Provide technical assistance in the design and conduct of the projects.

2. Provide assistance in the evaluation and dissemination of the results of the projects.

#### **Evaluation Criteria**

Applications will be reviewed and evaluated based on the following weighted criteria:

A. The applicant's understanding of the purpose of the proposed activity and inclusion of appropriate background information demonstrating knowledge and understanding of the subject and rationale for the proposed objectives. (10 points)

B. The extent to which applicant's description of the methods to be used to assess health outcomes/health status of the population under study (including accurately defining and measuring health outcomes, characterizing exposures to risk factors, and assessing the impact of intervention strategies) is detailed and adequate to accomplish project objectives. The extent to which the applicant's description of the methods to be used to measure health care process activities such as site of service delivery, type of provider, financial mechanism (e.g., reimbursement, capitation), services provided, and the impact of these process measures on the outcomes under study is detailed and adequate to accomplish project objectives. (35 points)

C. The extent to which background information and other data demonstrate that the applicant has the appropriate organizational structure, administrative support, and ability to access appropriate target populations or study objects and that these target populations and study objects will ensure an adequate sample size and representativeness of the types of health care settings, of families with children in various types of child care settings, and reasonable demographic diversity. (20 points)

D. The extent to which applicant demonstrates capacity to achieve collaboration and participation of key groups, organizations, and agencies necessary for successful implementation of these projects. (10 points)

E. The degree to which the proposed objectives are specific, achievable, measurable and time-phased. (10 points)

F. The extent to which the applicant documents that professional personnel involved in the project are qualified and have experience and achievements in related research as evidenced by curriculum vitae, publications, etc., and to which the projected level of effort by all project personnel is adequate to accomplish the proposed activities. (10 points)

G. The degree to which appropriate staff are available, either through direct participation or through assured