DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Docket Number CDC–2016–0002; NIOSH–214]

Request for Information on NIOSH Center for Direct Reading and Sensor Technologies: Sensors for Emergency Response Activities

AGENCY: National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Request for information (RFI) and comment.

SUMMARY: The National Institute for Occupational Safety and Health (NIOSH), part of the Centers for Disease Control and Prevention (CDC), requests information to enhance the value of the NIOSH Center for Direct Reading and Sensor Technologies and is seeking input regarding specific issues on the availability, capability, suitability, barriers, limitations, and opportunities for current or future direct reading devices and sensor technologies that can be utilized for emergency response. This RFI is intended to inform the planning of a document to evaluate current and future sensor technologies used in emergency response.

Table of Contents

- **DATES:**
- **ADDRESSES:**
- **INSTRUCTIONS:**
- **FOR FURTHER INFORMATION:**
- **BACKGROUND:**
- **INFORMATION NEEDS:**
- **DATES:**
- **ADDRESSES:**

**FOR FURTHER INFORMATION CONTACT:**

D. Gayle DeBord, NIOSH, Division of Applied Research and Technologies, Robert A. Taft Laboratories, 1090 Tusculum Avenue, MS–R2, Cincinnati, Ohio 45226, Phone: (513) 841-4256 [not a toll-free number], Email: GDeBord@cdc.gov

**Background:** The NIOSH Center for Direct Reading and Sensor Technologies (http://www.cdc.gov/niosh/topics/drst/default.html) was created in May 2014 to coordinate the development of recommendations on the use of these 21st century technologies in occupational safety and health. The mission of the Center is to develop a national research agenda, provide guidance on the selection of sensors and direct-reading monitors and guidance for validation, quality control and training. Within the overall scope of its activities, the Center plans to develop a document to evaluate current and future sensor technologies used in emergency response.

Information Needs: Specifically, emergency responders are increasingly relying on direct-reading instruments and other sensor technologies to rapidly evaluate potentially life-threatening hazards and exposures. Recommendations to support the proper selection, use, validation, calibration and interpretation of these technologies are lacking. The use of new generations of sensors has increased exponentially in the past few years. While other Federal agencies and organizations have developed some recommendations on this topic, newer sensor technologies have not been thoroughly evaluated and guidance has not focused on interpretation of data or appropriate for the intended purpose. Other factors that need to be considered are that multiple strategies of environmental sampling will be necessary in any response effort; and that an understanding of the advantages and limitations of newer direct-reading and sensor technologies is needed to select the appropriate strategies. Additionally, training for these new sensor technologies and environmental sampling strategies may be lacking.

The National Institute for Occupational Safety and Health seeks public comments in response to the following questions. Please feel free to comment on any or all of the questions below:

**A. Utilization of Sensors in Emergency Response**

- A1. What sensors have the most immediate impact on emergency response?
- A2. What applications/situations such as determination of the need for evacuation, use of personal protective equipment, or end-of-service-life of protective equipment are particularly in need of sensors?
A.3. What are some advantages of newer generation sensors or direct reading devices for emergency response?
A.4. Could wearable or embedded sensors have a major contribution? How?
A.5. What are the primary stumbling blocks that impede sensor development and commercialization (e.g., reliability, potential market size, investment capital, etc.)?

B. Standards and Guidance
B.1. What existing standards or guidance are available with respect to sensor performance characteristics and validation of sensors?
B.2. What standards need to be developed (for performance or manufacturing) to meet industry and emergency responder expectations for emerging sensor technologies?
B.3. What guidance is needed with respect to sensors used in emergency response?

C. Training
C.1. What training is available on when and how to use sensors in emergency response? Who is developing this training and how is it accessed (print, via web, etc.)?
C.2. What additional training on sensors would be useful for emergency response?
C.3. What standards or guidance are available on how training should be developed and conducted?

D. Sensors
D.1. What capabilities would be highest priority for emergency response efforts? What are the current primary gaps in sensor functionality?
D.2. What are the largest technical challenges in manufacturing facing sensor development (e.g., integration, reliability)?
D.3. What are the new tools for integration/engineering (e.g., Wi-Fi, programmable logic, signal processing software, GPS/location services, development of multi-sensor networks, etc.) that will have the greatest impact on sensors used in emergency response?
D.4. What, if any, unique emergency response issues might be expected for sensor manufacturing?
D.5. What sample types have you used to demonstrate sensor performance (e.g., real clinical samples, environmental samples/sites)?
D.6. What procedures for standardized testing have you used to develop sensors?
D.7. What would aid the sensor development community?

E. Additional Considerations
E.1. What additional questions and considerations should be considered relevant to planning the development of a document to evaluate current and future sensor technologies used in emergency response?
E.2. What elements of the sensor lifecycle are either missing, in need of clarification, or of greatest importance?
Responses to this notice are not offers and cannot be accepted by the Government to form a binding contract or to issue a grant. Information obtained as a result of this RFI may be used by the government for program planning on a non-attribute basis. Please do not include any information that might be considered proprietary, confidential, or personally identifying (such as home address or social security number).

Dated: January 12, 2016.

John Howard,
Director, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention

BILLING CODE 4163–19–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention

[30Day–16–16CP]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The notice for the proposed information collection is published to obtain comments from the public and affected agencies.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address any of the following: (a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) Enhance the quality, utility, and clarity of the information to be collected; (d) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses; and (e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639–7570 or send an email to omb@cdc.gov. Written comments and/or suggestions regarding the items contained in this notice should be directed to: CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project

Community-based tick control for the prevention of Rocky Mountain spotted fever in Hermosillo, Mexico—New—National Center for Emerging and Zoonotic Diseases (NCEZID), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

The Centers for Disease Control and Prevention (CDC) Rickettsial Zoonoses Branch (RZB) requests approval of a public health intervention assessment tool to demonstrate the efficacy and impact of public health research related to the prevention of Rocky Mountain spotted fever [RMSF] in Hermosillo, Mexico. These activities include monitoring cases, conducting tick control interventions, and performing participant surveys to assess the knowledge, attitudes, and practices relating to tick control and prevention.

The information collection for which approval is sought is in accordance with RZB’s mission to reduce morbidity and mortality of rickettsial diseases and decrease the burden of disease through control and prevention methods.

Authorizing Legislation comes from Section 301 of the Public Health Service Act (42 U.S.C. 241).

Approval of this data collection tool will allow RZB to collect information related to risk of RMSF to improve and inform prevention activities. Successful execution of RZB’s public health mission requires the use of data collection activities in collaboration with multiple local and international partners. RZB proposes the use of pre/posttests to evaluate the changes in knowledge, attitudes, and practices relating to tick control as well as perceived impact of the intervention project. The project will collect basic