

**Requesting Laboratory Input to Evaluate Assay
Performance Following Implementation of
Standardization and Manufacture (Phase 2, 3) of the CDC
Zika MAC-ELISA**

Request for OMB approval of a New Generic Information Collection Request
OMB Control No. 0920-0881

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Supporting Statement A

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- **Goal of the study:** The goal of this study is to ensure LRN laboratories performing the CDC Zika MAC-ELISA have received and successfully implemented the CDC Zika MAC-ELISA assay negative control and calibrators (phase 2) as well as the final standardized assay (phase 3) to ensure continued assay accuracy and precision across LRN laboratories.
- **Intended use of the resulting data:** The resulting data collected will confirm precision and accuracy of the CDC Zika MAC-ELISA across all testing laboratories when the standardized negative calibrator and independent negative control (phase 2) and standardized CDC Zika MAC-ELISA (phase 3) are implemented.
- **Methods to be used to collect:** After phase 2 and phase 3 are complete, data will be collected using a questionnaire sent electronically to LRN labs performing the Zika MAC-ELISA. The spreadsheet form will require each lab to provide its results (final results as well as raw data) from the verification panel provided by CDC.
- **The subpopulation to be studied:** LRN laboratories performing the CDC Zika MAC-ELISA.
- **How data will be analyzed:** Data will be submitted to the Zika MAC ELISA Implementation Team (referencereagents@cdc.gov) and will be analyzed to ensure continued assay accuracy and precision across LRN laboratories.

1. Circumstances Making the Collection of Information Necessary

The Centers for Disease Control and Prevention (CDC) is submitting a new request under generic package 0920-0881, “Data Calls for the Laboratory Response Network,” to survey LRN laboratories performing the CDC Zika MAC-ELISA to ensure continued assay accuracy and precision across all laboratories.

The Laboratory Response Network (LRN) was established by the Department of Health and Human Services (HHS), in accordance with Presidential Decision Directive 39, which outlined national anti-terrorism policies and assigned specific missions to Federal Departments and agencies. The LRN’s mission is to maintain an integrated national and international network of laboratories that can respond to suspected acts of biological, chemical, or radiological terrorism and other public health emergencies.

CDC has implemented a phased approach to improve the performance of the CDC Zika MAC-ELISA assays.

- Phase 1 of this plan includes the distribution of instructions for additional primary (plate) and secondary (clinical sample) acceptance criteria. These instructions are designed to enhance the precision and accuracy of the assay across all testing laboratories, supplemental to previously established good laboratory practices (i.e., proper training and competency of testing personnel, lab specific safety and quality metrics and workflow, maintenance and calibration of equipment according to manufacturer’s instructions, etc.). Updated QC recommendations were sent out to labs performing MAC ELISA through the LRN on August 2, 2017, and more detailed guidance on performing QC calculations was distributed on August 29, 2017.

- Phase 2 (following OMB approval) will include the evaluation and distribution of a standardized Calibration Control Serum and independent negative control, as well as recommendations for reagent reconstitution and a fully updated set of EUA Instructions for Use (IFU).
- Phase 3 (anticipate completion will be September 2018) will include the manufacture of a complete MAC-ELISA kit and submission of a new EUA.

CDC, as part of phase 2 and 3, will distribute a verification panel that includes seven samples which have been fully characterized at CDC and will be used to help assess performance of the new assay reagents. CDC is requesting data on all aspects of the testing performed on the distributed seven member verification panel. We will ask for information on the reagents used for the testing as well as the raw optical density values for each of the individual repeats that are used to calculate the final result.

CDC will use these data to track data performance between phase 2 and 3 of the assay improvement process. Correlating this data to CDC established ranges will ensure assay accuracy and precision across all testing laboratories. The questionnaire will be distributed via broadcast email after getting OMB approval for phase 2 and following the roll-out of phase 3.

In October 2017, OMB approved a gen-IC entitled “Requesting Laboratory Input to Evaluate Assay Performance Following Implementation of Updated QC Recommendations (Phase 1) and Standardization (Phase 2, 3) of the CDC Zika MAC-ELISA.” This initial gen-IC was used to ensure the implementation of the new QC recommendations. This data will also be used alongside this new information request to ensure that the new reagents are contributing to the improvements in the performance of the assay.

Federal, state, and local public health laboratories join the LRN voluntarily. When laboratories join, they assume specific responsibilities and are required to provide facility information to the LRN Program Office at CDC as well as test results for real samples or proficiency tests. LRN laboratories participate in Proficiency Testing Challenges, Exercises and Validation Studies each year. This special data call will be conducted via broadcast email/questionnaire (Attachment 1) asking respondents to send information via email to the Zika MAC ELISA Implementation Team after phases 2 and 3.

Data collection for this project is authorized under Section 301 of the Public Health Service Act (42 U.S.C. 241).

2. Purpose and Use of Information Collection

The Zika MAC ELISA Implementation Team is requesting electronic submission of:

- A. Reagent information (including source, catalog number, lot number and dilution used) for all assay components
- B. Raw data in the form of optical density values for all values generated during the performance of the assay

All of this information will be compared to existing CDC data as well as between Phase 2 and Phase 3 to ensure assay accuracy and precision across all testing laboratories.

3. Use of Improved Information Technology and Burden Reduction

This data call will be conducted using a spreadsheet sent to all LRN laboratories conducting the CDC Zika MAC-ELISA (Attachment 2). All information is reported electronically. Thus, 100% of information is collected electronically. CDC will collect the minimum information necessary for this assay accuracy and precision analysis.

4. Efforts to Identify Duplication and Use of Similar Information

There is no similar data collection conducted either within the Federal government or privately. There is no overlap or duplication of specific projects. CDC is not aware of the availability of any similar information.

5. Impact on Small Businesses or Other Small Entities

This data collection will not involve small businesses. Respondents are other federal, state, or local governmental laboratories. The data requested has been held to the absolute minimum required for its intended use.

6. Consequences of Collecting the Information Less Frequently

There are no legal obstacles to reduce the burden. This is a one-time information collection.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This request fully complies with the regulation 5 CFR 1320.5.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A. A 60-day Federal Register Notice for the generic package (0920-0881) was published in the *Federal Register* on November 17, 2016, vol. 81, No. 222, pp. 81146-81147. One public comment was received. However, because there was no return mailing address, no response was sent.

B. FDA was consulted on this data collection effort and they are supportive.

9. Explanation of Any Payment or Gift to Respondents

There will be no remuneration for participants.

10. Protection of the Privacy and Confidentiality of Information Provided by Respondents

This information collection request has been reviewed by NCEZID who has determined that the Privacy Act does not apply. Individuals responding to this request are doing so as part of their job. Although participation in the Laboratory Response Network is voluntary, member laboratories are requested to provide information to improve program activities at CDC. Personal identifiable information will be collected for this data call.

Personal identifiable information is collected as a condition of membership in the LRN as a mechanism to maintain communication with members. The collection of personal identifiable information to maintain communication with members was approved in OMB 0920-0850, The Laboratory Response Network. Examples of personal identifiable information would include work phone number and address and birthday and birth month.

Information that is collected from LRN members is restricted to program staff. Individuals outside of the program that request access to data must provide justification to see data and sign nondisclosure agreements. Data is contained electronically on program staff personal computers that are password protected.

Respondent consent is not needed for special data calls. LRN member laboratories have the option to respond or decline response.

Questionnaires will be sent via broadcast email that asks respondents to send information via email to the Zika MAC ELISA Implementation Team (referencereagents@cdc.gov).

11. Institutional Review Board (IRB) and Justification for Sensitive Questions

Institutional Review Board

This submission was reviewed by NCEZID’s human subjects advisor who determined that the project does not meet the definition of research under 45 CFR 46.102(d). IRB review is not required (Attachment 3).

Justification for Sensitive Questions

LRN does not have questions of sensitive nature (i.e. individual identifiers such as race, medical history or patient information related to laboratory samples).

12. Estimates of Annualized Burden Hours and Costs

A. Estimated Annualized Burden Hours

The total response burden for data collections under this generic clearance is estimated at 110 hours. The questionnaire will take an estimated 30 minutes to complete and will be completed twice (following Phase 2 and Phase 3).

Type of Respondent	Form Name	No. of Respondents	No. Responses per Respondent	Avg. Burden per response (in hrs.)	Total Burden (in hrs.)
Public Health Laboratorians	Special Data Call – Verification panel	110	2	30/60	110
Total					110

B. Estimated Annualized Burden Costs

The estimated annualized costs were determined by using the 2017 General Schedule Pay Tables for a GS-11, Step 5 scientist. The total respondent costs are estimated at \$3,397.90.

Type of Respondent	Form Name	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
Public Health Laboratorians	Special Data Call – Verification Panel	110	\$30.89	\$3,397.90
Total				\$3,397.90

13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

There are no costs to respondents other than their time to participate.

14. Annualized Cost to the Government

Estimated annualized costs were determined by using the 2017 General Schedule Pay Tables of a GS-12, Step 4 scientist. Approximately 20 hours will be needed for collecting and analyzing the results. No other expense will be incurred for this collection.

Estimated Annualized Cost to the Government per Activity	
Cost Category	Estimated Annualized Cost
Direct Cost to the Federal Government	\$798

15. Explanation for Program Changes or Adjustments

This is a new information collection.

16. Plans for Tabulation and Publication and Project Time Schedule

There are no plans for publication of this data.

CDC has implemented a phased approach to improve the performance of the CDC Zika MAC-ELISA assays.

- Phase 1 of this plan includes the distribution of instructions for additional primary (plate) and secondary (clinical sample) acceptance criteria. These instructions are designed to enhance the precision and accuracy of the assay across all testing laboratories, supplemental to previously established good laboratory practices (i.e., proper training and competency of testing personnel, lab specific safety and quality metrics and workflow, maintenance and calibration of equipment according to manufacturer’s instructions, etc.). Updated QC recommendations were sent out to labs performing MAC ELISA through the LRN on August 2, 2017, and more detailed guidance on performing QC calculations was distributed on August 29, 2017.
- Phase 2 (following OMB approval) will include the evaluation and distribution of a standardized Calibration Control Serum and independent negative control, as well as recommendations for reagent reconstitution and a fully updated set of EUA Instructions for Use (IFU).

- Phase 3 (anticipate completion will be September 2018) will include the manufacture of a complete MAC-ELISA kit and submission of a new EUA.

17. Reason(s) Display of OMB Expiration Date is Inappropriate

The display of the OMB Expiration date is not inappropriate.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification.

Attachments

1. Broadcast email
2. MAC ELISA Verification Panel Results
3. Non-research determination