



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Part 493

[CMS-3485-NC]

RIN 0938-AW01

Request for Information; Clinical Laboratory Improvement Amendments of 1988 (CLIA)

Regulations

AGENCY: Centers for Medicare & Medicaid Services (CMS) and Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS)

ACTION: Request for information.

SUMMARY: Clinical laboratory testing technology has advanced significantly since the Clinical Laboratory Improvement Amendments of 1988 (CLIA) regulations were implemented in 1992. This request for information (RFI) seeks input from the public regarding various topics related to the CLIA regulations, including: breath testing; laboratory processes and procedures; emergency preparedness, biosafety and biosecurity, and cybersecurity; and specialty testing areas. Responses to this RFI may be used to help inform CMS and the CDC as to what types of action, if any, should be taken to update the existing CLIA regulations through future notice and comment rulemaking.

DATES: To be assured consideration, comments must be received at one of the addresses provided below, by [Insert date 60 days after date of publication in the **Federal Register**].

ADDRESSES: In commenting, refer to file code CMS-3485-NC.

Comments, including mass comment submissions, must be submitted in one of the following three ways (please choose only one of the ways listed):

1. *Electronically.* You may submit electronic comments on this regulation at <https://www.regulations.gov/docket/CMS-2026-2345>. Follow the "Submit a comment" instructions.

2. *By regular mail.* You may mail written comments to the following address ONLY:

Centers for Medicare & Medicaid Services,
Department of Health and Human Services,
Attention: CMS-3485-NC,
P.O. Box 8016,
Baltimore, MD 21244-8016.

Please allow sufficient time for mailed comments to be received before the close of the comment period.

3. *By express or overnight mail.* You may send written comments to the following address ONLY:

Centers for Medicare & Medicaid Services,
Department of Health and Human Services,
Attention: CMS-3485-NC,
Mail Stop C4-26-05,
7500 Security Boulevard,
Baltimore, MD 21244-1850.

For information on viewing public comments, see the beginning of the "SUPPLEMENTARY INFORMATION" section.

FOR FURTHER INFORMATION CONTACT:

Penny Keller at penny.keller@cms.hhs.gov, 410-786-2035.

Jake D. Bunn at jbunn@cdc.gov, 404-498-4493.

SUPPLEMENTARY INFORMATION:

Inspection of Public Comments: All comments received before the close of the comment period are available for viewing by the public, including any personally identifiable or confidential business information that is included in a comment. We post all comments received before the close of the comment period on the following website as soon as possible after they have been received: <https://www.regulations.gov>. Follow the search instructions on that website to view public comments. CMS will not post on Regulations.gov public comments that make threats to individuals or institutions or suggest that the commenter will take actions to harm an individual. CMS continues to encourage individuals not to submit duplicative comments. We will post acceptable comments from multiple unique commenters even if the content is identical or nearly identical to other comments.

I. Background

On October 31, 1988, Congress enacted the Clinical Laboratory Improvement Amendments of 1988 (CLIA) (Pub. L. 100-578), which amended section 353 of the Public Health Service Act (PHSA). CLIA requires all facilities that examine materials derived from the human body for purposes of providing information for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings to obtain a certificate from HHS. CLIA also requires such facilities to meet certain requirements such as maintaining a quality assurance and quality control program adequate and appropriate for the validity and reliability of the laboratory examinations and other procedures of the laboratory and maintaining laboratory personnel standards. The implementing regulations at 42 CFR part 493 specify, in part, the conditions and standards that a clinical laboratory must meet to achieve and maintain CLIA certification. These conditions and standards strengthen Federal oversight of clinical laboratories and help ensure the accuracy and reliability of patient test results.

II. Solicitation of Public Comments

This RFI seeks public comments on various topics related to the CLIA regulations. CMS and the CDC are issuing this RFI to gather input from the public regarding the following topics

related to the CLIA regulations: (A) breath testing; (B) laboratory processes and procedures; (C) emergency preparedness, biosafety and biosecurity, and cybersecurity; and (D) specialty testing areas. CMS, the CDC, interested parties, and State Agency surveyors identified the topics in this RFI as areas in which the CLIA regulations may need to be updated to better reflect current knowledge and advancements in laboratory testing. Commenters are encouraged to identify the specific section and question number(s) (for example, Section A. Breath Testing, Question 1; Section B. Laboratory Processes and Procedures, Subsection 2. Specimen Preparation Activities and Personnel, Question 2) addressed in each portion of their submission and to organize comments consistent with the structure of this RFI. We encourage input from a wide variety of interested parties on the questions set forth in this RFI.

A. Breath Testing

CMS and the CDC believe that testing using certain newer technologies may fall within the scope of CLIA and its implementing regulations because they may involve examination of “materials derived from the human body for purposes of providing information for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings.” For example, when the CLIA regulations were promulgated in 1992 (57 FR 7002),¹ breath testing had not yet been developed for clinical use and was only utilized for purposes of law enforcement. However, during the SARS-CoV-2 (COVID-19) Public Health Emergency (PHE), researchers and manufacturers developed breath tests for COVID-19, demonstrating an increased interest in expanding its clinical application. As breath testing is not specifically addressed in the current CLIA regulations, CMS has received inquiries regarding whether breath testing for cancer diagnosis, microbial identification, and gastrointestinal disorders is subject to CLIA and its implementing regulations.

¹ *Medicare, Medicaid and CLIA Programs; Regulations Implementing the Clinical Laboratory Improvement Amendments of 1988 (CLIA) Final Rule with Comment Period* (57 FR 7002, February 28, 1992), available at <https://tile.loc.gov/storage-services/service/ll/fedreg/fr057/fr057040/fr057040.pdf>.

CMS and the CDC seek public comments on breath testing used in clinical settings to inform whether updates to the CLIA regulations should be considered. In addition, we seek input on the following specific questions:

1. What breath tests are facilities performing for clinical use?
2. What methodologies and technologies do facilities use in breath testing for clinical use?
3. What type of facilities (such as hospitals, gastrointestinal clinics, and reference laboratories) perform breath testing for clinical use?
4. How do facilities collect, transport, and store clinical breath specimens? What challenges, if any, are encountered?

B. Laboratory Processes and Procedures

1. Pathology Specimen Block Retention

The CLIA regulatory requirement at § 493.1105(a)(7)(ii) currently stipulates that pathology specimen blocks must be retained for a minimum period of 2 years. However, advancements in molecular diagnostics now enable laboratories to perform retrospective testing on tissues more than 2 years old.

CMS and the CDC seek public comments on laboratories' experience with requests for additional testing on pathology specimen blocks beyond the required 2-year retention period. Specifically, we seek input on the following question:

1. What types of requests does the laboratory receive for additional testing on pathology specimen blocks after the required 2-year retention period, and how frequently does the laboratory receive them?

2. Specimen Preparation Activities and Personnel

The preanalytic phase of laboratory testing encompasses all processes that occur before the analytical testing, including specimen collection, preparation, and handling. The scope of specimen preparation activities is broad, encompassing processes such as centrifuging,

aliquoting, tissue processing, slide staining, inoculating culture plates, and extracting ribonucleic acid (RNA) and deoxyribonucleic acid (DNA). At § 493.2, the definition of “laboratory” provides that facilities only collecting or preparing specimens (or both) or only serving as a mailing service and not performing testing are not considered laboratories for CLIA certification purposes. Given the critical role that preanalytic processes play in ensuring accurate and reliable test results, and the potential impact of preanalytic errors on patient care, CMS and the CDC are soliciting public comment on the preanalytic practices currently employed by clinical laboratories, as well as the qualifications, education, and experience of personnel responsible for performing these activities. In addition, we seek input on the following specific questions:

1. What activities does the laboratory consider to be part of specimen preparation (for example, centrifuging, aliquoting, loading on analyzers, adding chemicals for preparation, tissue processing, slide staining, inoculating culture plates, DNA/RNA extraction)?

2. What is the education and experience of the personnel who perform specimen preparation activities for your laboratory?

3. What types of training does the laboratory provide for the personnel who perform specimen preparation activities?

4. How does the laboratory ensure that personnel who perform specimen preparation activities remain competent?

3. Suboptimal Specimens

Section 493.1242(a) of the CLIA regulations requires laboratories to establish and follow written policies and procedures for specimen acceptability and rejection. Clinical laboratories sometimes receive specimens in suboptimal conditions that do not meet their specimen acceptability policies and procedures and are asked by providers to perform testing. CMS has received inquiries regarding the handling of suboptimal specimens.

CMS and the CDC seek public comments on how laboratories address suboptimal specimens. In addition, we seek input on the following specific questions:

1. What are the circumstances under which the laboratory tests suboptimal specimens?
2. How often does your laboratory test suboptimal specimens annually?
3. How does the laboratory document and report results from suboptimal specimens?
4. How does the laboratory communicate with ordering providers regarding suboptimal specimens?
5. What quality assurance measures does the laboratory apply to the testing of suboptimal specimens?
6. What challenges does the laboratory face in managing suboptimal specimens while ensuring test result quality?

4. Establishment and Verification of Performance Specifications

The CLIA regulatory requirement at § 493.1253 requires laboratories to verify performance specifications when introducing any unmodified Food and Drug Administration (FDA)-cleared or approved test system, and to establish performance specifications when introducing any test system that is not FDA-cleared or approved, or that is a modification to an FDA-cleared or approved test system. The performance specifications required to be established at § 493.1253(b)(2) include accuracy, precision, analytical sensitivity, analytical specificity to include interfering substances, reportable range of test results for the test system, reference intervals (normal values), and any other performance characteristics required for test performance. CMS has received inquiries regarding the performance specifications of tests that are not FDA-cleared or approved, including modifications to FDA-cleared or approved tests.

CMS and the CDC seek public comments on how laboratories establish performance specifications for tests that are not FDA-cleared or approved, including modifications of FDA-cleared or approved tests. In addition, we seek input on the following specific questions:

1. For tests that are not FDA-cleared or approved, including modifications of FDA-cleared or approved tests, what challenges does the laboratory encounter when establishing

adequate performance specifications and appropriate acceptance criteria? Specify the relevant test or procedure associated with such challenges.

2.a. What testing methods (for example, toxicology and next-generation sequencing (NGS)), and/or specific applications of those methods (for example, use of NGS to test for somatic or germline variants, minimal residual disease, methylation, bacterial resistance mutations, viral identification, or HLA matching), have unique performance characteristics that need to be established and are not already addressed in the CLIA regulations or guidance?

2.b. What are those performance characteristics (for example, stability studies, carry-over, internal standards, ionization, and clinical validity)?

3. How does the laboratory currently design, develop, and prepare reagents for tests developed in-house?

4. What types of modifications does the laboratory commonly make to FDA-cleared or approved test systems?

5. Calibration Verification

Calibration verification procedures are critical to ensuring the accuracy and reliability of clinical laboratory test systems. Section 493.1255 requires laboratories performing nonwaived testing to substantiate the continued accuracy of their test systems throughout the laboratory's reportable range of results. Specifically, § 493.1255(b)(1) requires laboratories to follow the manufacturer's calibration verification instructions.

Manufacturers design factory-calibrated, non-adjustable instruments, including closed systems and cartridge-based analyzers such as point-of-care test systems, with embedded reagents and calibration parameters that are locked at the time of manufacture. CMS has received inquiries regarding calibration verification for test systems that manufacturers entirely calibrate, and that end users cannot adjust.

CMS and the CDC seek public comments on calibration verification practices for factory-calibrated, non-adjustable instruments. In addition, we seek input on the following specific question:

1. What technical and operational challenges does the laboratory face when performing calibration verification on FDA-cleared or approved manufacturer-calibrated devices?

6. Postanalytic Interpretation and Use of Artificial Intelligence (AI)

CMS has received multiple inquiries regarding which postanalytic activities CMS considers part of the testing process. Test systems are becoming increasingly complex and integrated with advanced technology and AI systems. Certain software and software functions are subject to regulation as medical devices under the Federal Food, Drug, and Cosmetic Act.

As test systems become increasingly complex, CMS and the CDC seek public comments on the use of advanced technology or AI-assisted interpretation in clinical laboratories and the testing process. In addition, we seek input on the following specific questions:

1. How does the laboratory use software algorithms or AI tools in the postanalytic process?

2. Under what circumstances are software functions, including certain AI tools, used for the interpretation of the results of a test? For example, NGS, histocompatibility, and pharmacogenomics testing.

3. What roles do software functions, including certain AI tools, currently play in the interpretation of histopathology slides or results?

4. What methods do laboratories use to verify the performance of the software functions (including image resolution accuracy and quality, and AI tools as well as the performance of computers and monitors) used with a test system?

5. Are there additional technology considerations for high complexity tests, including but not limited to laboratory use of automation, laboratory use of cloud analytics, and laboratory use

of artificial intelligence, that CMS and the CDC should consider incorporating into the CLIA regulations?

7. Data-Only Facilities

Section 493.2 of the CLIA regulations defines a “laboratory” as a facility for the biological, microbiological, serological, chemical, immunohematological, hematological, biophysical, cytological, pathological, or other examination of materials derived from the human body for the purpose of providing information for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings. In addition, § 493.2 defines “distributive testing” as laboratory testing performed on the same specimen, or an aliquot of it, that requires sharing it between two or more laboratories to obtain all data required to complete an interpretation or calculation necessary to provide a final reportable result for the originally ordered test. When such testing occurs at multiple locations with different CLIA certificates, CMS considers it distributive testing.

Facilities that only process analytical data or provide specialized data interpretation, some of which may be manufacturers of medical device software, have emerged. CMS has received inquiries on whether these types of data-only facilities require a CLIA certificate. These inquiries have in part focused on facilities that review and interpret genetic data, digital images, and perform calculations of risk factors.

CMS and the CDC seek public comments on data-only facilities. In addition, we seek input on the following question:

- What activities do data-only facilities perform to generate, or help to generate, test results and interpretations?

8. Remote Direct Observation Competency Assessment

Sections 493.1413(b)(8)(i) and (iv) and 493.1451(b)(8)(i) and (iv) of the CLIA regulations include direct observation of routine patient test performance and instrument maintenance and function checks as part of the evaluation of testing personnel competency by

the technical consultant or technical supervisor. CMS has received requests from laboratories to include remote technology solutions in their competency assessment processes. Interested parties have advocated for the use of virtual competency assessments, particularly noting that facilities in rural areas would benefit from such remote assessment capabilities. At its November 2024 meeting, the Clinical Laboratory Improvement Advisory Committee (CLIAC) recommended that CMS allow remote assessment to be used for the direct observation component of competency assessment.² This recommendation included using both on-site and virtual access technology to assess laboratory personnel competency, especially in remote or rural areas where in-person assessments are difficult or expensive.

CMS and the CDC seek public comments, including evidence, research, and trends on the use of remote technology to conduct the direct observation component of competency assessments for laboratory personnel. In addition, we seek input on the following specific questions:

1. How does the laboratory currently use remote direct observation for competency assessment?
2. What types of devices (for example, smartphones, tablets, virtual reality devices/glasses, and dedicated video systems) does the laboratory currently use for remote direct observation for competency assessment?
3. What challenges or limitations does the laboratory encounter with remote direct observation for competency assessment?

C. Emergency Preparedness, Biosafety and Biosecurity, and Cybersecurity

1. Emergency Preparedness

In 2016, CMS issued the Medicare and Medicaid Programs; Emergency Preparedness

² CLIAC November 2024 Meeting Summary, <https://www.cdc.gov/cliac/php/meetings/index.html#cc-widget-e3e3>.

Requirements for Medicare and Medicaid Participating Providers and Suppliers final rule,³ which established national emergency preparedness requirements for certain healthcare provider types to ensure adequate planning for natural disasters, human-caused disasters, facility emergencies, and emerging infectious diseases. However, this rule did not include CLIA-certified independent laboratories in its scope.

A 2025 Office of Inspector General (OIG) Report recommended that CMS consider requiring independent laboratories that participate in Medicare to have emergency preparedness plans to better ensure that Medicare enrollees have access to diagnostic testing related to an emerging infectious disease or a biological toxin in the event of a future PHE.⁴ CLIA and its implementing regulations encompass a broad spectrum of laboratories, ranging from physician offices to large reference laboratories. CLIA regulations apply to laboratories, as defined at § 493.2, regardless of their Medicare participation.

CMS and the CDC seek public comments on how laboratories prepare for emergencies and any associated operational challenges. In addition, we seek input on the following specific questions:

1. What are the best practices for laboratory emergency preparedness? Indicate the type of laboratory, for example, hospital-based or independent laboratory.
2. What challenges does the laboratory face in maintaining operations during emergencies such as natural and human-caused disasters, facility emergencies, and emerging infectious diseases?

³ *Medicare and Medicaid Programs; Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule*, 81 FR 63860 (September 16, 2016), available at <https://www.federalregister.gov/documents/2016/09/16/2016-21404/medicare-and-medicare-programs-emergency-preparedness-requirements-for-medicare-and-medicare>.

⁴ U.S. Department of Health and Human Services, Office of Inspector General. *By Requiring Emergency Preparedness Plans for Independent Labs, CMS Could Better Ensure That Medicare Enrollees Have Access to Infectious-Disease Diagnostic Testing During a Public Health Emergency*, OIG Report. 2025, available at <https://oig.hhs.gov/reports/all/2025/by-requiring-emergency-preparedness-plans-for-independent-labs-cms-could-better-ensure-that-medicare-enrollees-have-access-to-infectious-disease-diagnostic-testing-during-a-public-health-emergency/>.

3. What elements does the laboratory include in its current emergency preparedness plans and protocols?

4. What lessons has the laboratory learned from recent emergency situations (for example, natural disasters, pandemics, and power outages)?

2. Biosafety and Biosecurity

The CLIA regulatory requirement at § 493.1101 requires laboratories to, among other things, establish appropriate safety procedures and comply with applicable Federal, State, and local requirements. Sections 493.1407(e)(2) and 493.1445(e)(2) assign laboratory directors the responsibility for ensuring that physical plant and environmental conditions provide a safe environment in which employees are protected from physical, chemical, and biological hazards.

During the COVID-19 PHE, the CDC provided comprehensive guidance on biosafety and biosecurity protocols, risk assessments, and safety practices for laboratory personnel handling infectious materials.⁵ This guidance highlighted the essential role of proper biosafety and biosecurity training in ensuring that laboratory personnel could safely conduct testing procedures while minimizing risks to themselves, their colleagues, and the broader community. This training was essential at the beginning of the COVID-19 PHE, when patient testing volumes and operational demands increased, along with exposure risks for personnel. Throughout the COVID-19 PHE, the CDC received numerous inquiries from laboratories regarding biosafety and biosecurity knowledge and training.

CMS and the CDC seek public comments on biosafety and biosecurity protocols, risk assessments, and safety practices for laboratory personnel handling infectious materials. Respondents should not include any information that might be considered proprietary or confidential. In addition, we seek input on the following specific questions:

1. What challenges does the laboratory face in biosafety and biosecurity?

⁵ Centers for Disease Control and Prevention (CDC), Laboratory Biosafety Guidelines for *Working* with SARS-CoV-2. U.S. Department of Health and Human Services, <https://www.cdc.gov/covid/php/lab/index.html>

2. What elements or best practices does the laboratory include in its current biosafety and biosecurity plans and protocols?

3. How does the laboratory train personnel on biosafety and biosecurity plans and protocols?

3. Cybersecurity

Cybersecurity threats across the healthcare sector have expanded in both scope and severity.⁶ As clinical laboratories increasingly rely on digital systems and connected technologies—such as Laboratory Information System (LIS), Electronic Health Record (EHR) integration, automated diagnostic devices, and virtual or remote access to laboratory and patient data—new cybersecurity risks have emerged. Various HHS agencies have a role in cybersecurity.

CMS and the CDC seek public comments on laboratory cybersecurity practices and experiences. Respondents should not include any information that might be considered proprietary or confidential. In addition, we seek input on the following specific questions:

1. What cybersecurity protocols/policies does the laboratory have in place to protect patient data and laboratory operations?

1.a. What is the frequency and process you follow to verify new or existing user identity and access requirements?

1.b. Are individuals, entities, or both outside the U.S. and its Territories ever allowed to access your lab systems that contain personal information? If so, when and under what conditions?

1.c. How does your laboratory system(s) restrict ports and/or internet protocol (IP) addresses used to access the environment?

1.d. What elements are included in your cybersecurity incident response plan?

⁶ U.S. Department of Health and Human Services, Office for Civil Rights (OCR), *Breach Portal: Notice to the Secretary of HHS – Breach of Unsecured Protected Health Information*.
https://ocrportal.hhs.gov/ocr/breach/breach_report.jsf.

2. What challenges or experiences has the laboratory faced in maintaining cybersecurity?
3. Which laboratory job position(s) is responsible for cybersecurity in the laboratory?
4. How does the laboratory train personnel on cybersecurity?

D. Specialty Testing Areas

1. General

CMS has received inquiries about adding additional specialties to the CLIA regulations, including, but not limited to, Mohs testing, andrology, and molecular testing.

Given the rapid advancements in laboratory medicine, diagnostic technologies, and clinical practice patterns, CMS and the CDC are seeking public comments on operational challenges that laboratories encounter with specialties or subspecialties that are governed by the current CLIA regulations. In addition, we seek input on the following specific questions:

1. What specific challenges or limitations, if any, does your laboratory currently experience with the test specialty and subspecialty categories in the CLIA regulations? For example, are there areas where existing CLIA test specialty and subspecialty categories could be revised to better reflect current laboratory testing practices?

2. Are there additional specialties or subspecialties that CMS and the CDC should consider incorporating into the CLIA regulations to ensure comprehensive oversight of laboratory testing as specialties evolve? Provide evidence-based rationale supporting their inclusion, including considerations related to patient safety, testing complexity, and public health impact.

2. Clinical Cytogenetics

If a laboratory provides services in the specialty of clinical cytogenetics, in addition to requirements in other subparts of Part 493, the laboratory must meet the requirements set forth in §§ 493.1225, 493.1230 through 493.1256, 493.1276, and 493.1281 through 493.1299 of the CLIA regulations.

Clinical cytogenetics provides genetic testing for chromosome abnormalities associated with congenital disorders and cancer. Laboratories employ both conventional cytogenetic and molecular cytogenomic approaches, including fluorescence in situ hybridization (FISH), to analyze genomic abnormalities at chromosomal and subchromosomal levels. Cytogenetic test results are important in managing patients with constitutional genetic conditions and cancer, as well as providing risk assessments for genetic counseling.⁷ Over the last 30 years, the field of clinical cytogenetics has seen significant technological advances, including molecular testing.⁸

CMS and the CDC seek public comments on technical advancements in clinical cytogenetic testing. In addition, we seek input on the following specific questions:

1. What clinical cytogenetics test procedures and technologies does the laboratory currently use?

2. What, if any, challenges does the laboratory face with existing CLIA regulations applicable to clinical cytogenetics?

3. Immunohematology

Immunohematology is an area of laboratory medicine that involves the selection and preparation of blood and blood components for transfusion as well as the monitoring of those components following transfusion.⁹ Electronic crossmatching systems use computer algorithms to compare patient blood type information and antibody screening results with donor blood characteristics stored in Blood Establishment Computer Systems (BECS). The distinction between traditional serologic crossmatching and electronic crossmatching represents a fundamental shift in laboratory methodology. Serologic crossmatching involves the physical

⁷ National Institute of Health (NIH), National Library of Medicine, Muhammad Zubair, et.al., *Genetics, Cytogenetic Testing and Conventional Karyotype*, <https://www.ncbi.nlm.nih.gov/books/NBK563293/>.

⁸ Anniker Biliard, *Advances in Cytogenetic Technologies, types and their Applications*, Perspective, J Clin Exp Oncol, Vol: 13 Issue:2; [https://www.scitechnol.com/peer-review/advances-in-cytogenetic-technologies-types-and-their-applications-uNFB.php?article_id=26372#:~:text=Fluorescence%20In%20Situ%20Hybridization%20\(FISH,and%20studying%20complex%20genomic%20rearrangements.](https://www.scitechnol.com/peer-review/advances-in-cytogenetic-technologies-types-and-their-applications-uNFB.php?article_id=26372#:~:text=Fluorescence%20In%20Situ%20Hybridization%20(FISH,and%20studying%20complex%20genomic%20rearrangements.)

⁹ National Institute of Health (NIH), National Library of Medicine, Edward C C Wong, *Blood banking/immunohematology: special relevance to pediatric patients*, Pediatr Clin North Am, 2013 Dec;60(6):1541-68; <https://pubmed.ncbi.nlm.nih.gov/24237987/>.

mixing of a patient specimen with donor red blood cells to directly test for compatibility reactions. Electronic crossmatching, by contrast, relies on validated computer systems that must receive FDA clearance, for which laboratories must verify performance specifications, with qualified technologists reviewing and approving all results despite the automated nature of the compatibility determination.¹⁰ Since the CLIA regulations were promulgated, the field of immunohematology testing has seen significant medical and technological advancements.¹¹

CMS and the CDC seek public comments on technical advancements in immunohematology. In addition, we seek input on the following specific questions:

1. What immunohematology practices and technologies does the laboratory currently use?
2. What, if any, challenges does the laboratory face with existing CLIA regulations for immunohematology?
3. What operational challenges does the laboratory face with electronic crossmatches?
4. What type of quality assurance issues does the laboratory encounter in electronic crossmatch compared to the traditional serologic crossmatch?

4. Microbiology

Blood culture contamination (BCC) represents a significant quality concern within microbiology specialty testing that directly impacts patient care outcomes, healthcare costs, and antimicrobial stewardship efforts. Contaminated blood cultures can lead to false-positive results, resulting in unnecessary antimicrobial therapy, extended hospital stays, additional diagnostic procedures, and increased healthcare expenditures. Furthermore, high contamination rates may mask true bacteremia cases and compromise the laboratory's ability to provide accurate diagnostic information to clinicians.

¹⁰ Food and Drug Administration (FDA), "Computer Crossmatch" (Computerized Analysis of the Compatibility between the Donor's Cell Type and the Recipient's Serum or Plasma Type); FDA, <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/computer-crossmatch-computerized-analysis-compatibility-between-donors-cell-type-and-recipients>.

¹¹ National Institute of Health (NIH), National Library of Medicine, Fernanda Morelati, et.al., *New technologies in immunohaematology*; <https://pmc.ncbi.nlm.nih.gov/articles/PMC2535883/#sec8>.

There are no specific CLIA regulations governing BCC rates or mandating systematic monitoring and corrective action protocols. At its November 2023 meeting, CLIAC recommended updating the CLIA regulations to include BCC rate monitoring within the laboratory quality management system.¹²

Considering the critical nature of blood culture testing in diagnosing life-threatening infections, CMS and the CDC seek public comments on how laboratories monitor BCC rates. In addition, we seek input on the following specific questions:

1. What best practices has the laboratory implemented to reduce and monitor BCC?
2. What challenges does the laboratory face in maintaining low blood culture contamination rates?

III. Collection of Information Requirements

This is an RFI only. In accordance with the implementing regulations of the Paperwork Reduction Act of 1995 (PRA), specifically 5 CFR 1320.3(h)(4), this general solicitation is exempt from the PRA. Facts or opinions submitted in response to general solicitations of comments from the public, published in the **Federal Register** or other publications, regardless of the form or format thereof, provided that no person is required to supply specific information pertaining to the commenter, other than that necessary for self-identification, as a condition of the agency's full consideration, are not generally considered information collections and therefore not subject to the PRA.

This RFI is issued solely for information and planning purposes; it does not constitute a Request for Proposal (RFP), applications, proposal abstracts, or quotations. This RFI does not commit the U.S. Government to contract for any supplies or services or make a grant award. Further, we are not seeking proposals through this RFI and will not accept unsolicited proposals. Responders are advised that the U.S. Government will not pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this

¹² CLIAC November 2023 Meeting Summary, <https://www.cdc.gov/cliac/php/meetings/index.html#cc-widget-e3e3>.

RFI will be solely at the interested party's expense. We note that not responding to this RFI does not preclude participation in any future procurement, if conducted. It is the responsibility of the potential responders to monitor this RFI announcement for additional information pertaining to this request. In addition, we note that CMS will not respond to questions about the policy issues raised in this RFI.

We will actively consider all input as we develop future regulatory proposals or future subregulatory policy guidance. We may or may not choose to contact individual responders. Such communications would be for the sole purpose of clarifying statements in the responders' written responses. Contractor support personnel may be used to review responses to this RFI. Responses to this notice are not offers and cannot be accepted by the U.S. Government to form a binding contract or issue a grant. Information obtained as a result of this RFI may be used by the U.S. Government for program planning on a non-attribution basis. Respondents should not include any information that might be considered proprietary or confidential. This RFI should not be construed as a commitment or authorization to incur cost for which reimbursement would be required or sought. All submissions become U.S. Government property and will not be returned. In addition, we may publicly post the public comments received, or a summary of those public comments.

Mehmet Oz, Administrator of the Centers for Medicare & Medicaid Services, approved this document on July 8, 2026.

Jay Bhattacharya, MD, PhD, Senior Official Carrying out the Delegable Duties of the Centers for Disease Control and Prevention Director, approved this document on July 13, 2026.

Robert F. Kennedy, Jr.,

Secretary,

Department of Health and Human Services

[FR Doc. 2026-14358 Filed: 7/15/2026 8:45 am; Publication Date: 7/16/2026]