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Meeting Goals and Objectives

The Centers for Disease Control and Prevention (CDC) Division of Preparedness and Emerging Infections (DPEI) and the National Center for Environmental Health (NCEH) in collaboration with the Association of Public Health Laboratories (APHL) is pleased to convene the 2018 Laboratory Response Network (LRN) National Meeting from September 5-7, 2018 in Atlanta, GA.

The purpose of this meeting is to provide LRN stakeholders with current information on:

- Preparedness Collaborations among LRN National, Reference and Sentinel Clinical Laboratories and First Responders
- Emerging Technologies
- New LRN Policies
- Model Practices
- Solutions to Ongoing Challenges
- Training Needs
- Future of the LRN

The LRN National Meeting is an ideal combination of science, policy, networking and partnerships, with a focus on innovation and emerging technologies.
Dear Colleagues:

On behalf of the 2018 Laboratory Response Network (LRN) National Meeting Planning Committee, I am pleased to welcome you to Atlanta and we are very grateful to CDC for hosting the LRN National Meeting again. For almost 20 years, the LRN has set the standard for sustainable and flexible partner laboratory cooperation and to acknowledge this, the theme of this year’s meeting is *Agile, Adept, All-Hazards*.

It has been three years since the previous LRN National Meeting was held and during that time the LRN played a key role in the public health response to the threat posed by the emergence of Zika virus, once again demonstrating the qualities that make the LRN a centerpiece in the nation’s laboratory response activities to biological, chemical or radiological threats. This year’s meeting is comprised of plenary sessions, breakouts, and poster presentations providing opportunities to meet with colleagues and share best practices across an array of areas including laboratory testing, biosafety, informatics, and outreach to LRN partners. If we are to continue to sustain and enhance the LRN so that it can be better prepared to meet the next threat, then it is the strengthening of partnerships that will be the key to the ongoing success of the LRN.

I would like to thank the Planning Committee for their efforts in developing this year’s timely program; abstract submitters, moderators, and presenters for sharing their experiences and knowledge as well as the Association of Public Health Laboratories (APHL) and CDC staff, LRN members and partners who assisted with a myriad of logistical issues to make this year’s LRN National Meeting a success. I would like to extend a special thank you to Mr. Tyler Wolford, APHL’s Senior Specialist, Laboratory Response Network for all of his hard work in “making it happen” to ensure another successful meeting!

Again, welcome and enjoy your stay in Atlanta!

Scott Hughes, PhD
Chair, LRN National Meeting Planning Committee
2018 LRN National Meeting Planning Committee

Planning Committee Chair
Scott Hughes, PhD
Associate Director, Environmental Sciences
Responsible Official, Select Agent Program
Public Health Laboratory
New York City Department of Health and Mental Hygiene
New York, NY

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Public Health Science Section/Health Readiness and Response Section
Wyoming Public Health Laboratory
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Senior Specialist, Laboratory Response Network
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Deputy Chief, Laboratory Preparedness and Response Branch
Centers for Disease Control and Prevention
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General Information
Location Information

Tom Harkin Global Communications Center
Building 19
Centers for Disease Control and Prevention
1600 Clifton Road, N.E.
Atlanta, GA 30333 USA
404.639.3311
General Information

Event Check-In and Information Desk Hours
Located in the Tom Harkin Global Communications Center Lobby
Building 19

Wednesday, September 5       Thursday, September 6
9:00 a.m. – 5:00 p.m.          9:00 a.m. – 5:00 p.m.

Friday, September 7
9:00 a.m. – 1:00 p.m.

Continuing Education Credits
APHL is an approved provider of continuing education programs in the clinical laboratory sciences through the American Society of Clinical Laboratory Science (ASCLS) P.A.C.E.® program. Contact hours are available for the entire conference. The contact hours to be awarded to participants who successfully complete the sessions are as follows: Day 1 of the conference – 5.75 contact hours, Day 2 of the conference (either Biological OR Chemical track) – 5.75 contact hours and Day 3 of the conference 2.75 contact hours for a total of 14.25 contact hours. Contact hours will only be provided for full day attendance. On Day 2, the maximum contact hours is 5.75 and you must sign in on the sign-in sheets in front of the session room(s).

Tell Us What You Think!
We take your evaluation of the LRN National Meeting seriously. Please plan on providing your feedback in an online survey provided after the meeting via email. Your feedback is vital to helping us plan a better and more beneficial meeting in the future.

Emergency Procedures for Attendees
CDC and APHL encourage all attendees to review and be familiar with CDC emergency procedures, including emergency exits for all meeting rooms. Please pre-identify a location away from the Tom Harkin Global Communications Center where you and your colleagues will meet in the event of an emergency.
About LRN
The Laboratory Response Network (LRN) was established in 1999 through a collaborative effort involving founding partners, Centers for Disease Control and Prevention (CDC), Federal Bureau of Investigation (FBI), Association of Public Health Laboratories (APHL) and Department of Defense (DoD) to ensure an effective laboratory response to bioterrorism. Today, the LRN is an integrated network of local, state and federal public health, hospital-based, food testing, veterinary, environmental testing and international laboratories providing laboratory diagnostics and capacity for biological and chemical threats and other public health emergencies. The LRN is a unique asset in the nation’s growing preparedness for biological and chemical threats. The linking of state and local public health laboratories, veterinary, agriculture, military and water and food testing laboratories is unprecedented.

About APHL
APHL is a national non-profit organization dedicated to working with members to strengthen governmental laboratories that perform testing of public health significance. Working at the national and international level, APHL advances laboratory systems and practices, promotes policies that support laboratories as a vital component of the public health system, provides a nexus for crisis response and exchange among laboratory systems, and links APHL member laboratories with federal partners, including the CDC, the Department of Defense (DoD), the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), the Department of Homeland Security (DHS) and the FBI.

About CDC
CDC is one of the major operating components of the Department of Health and Human Services (HHS). CDC’s top organizational components include the Office of the Director, Coordinating Centers and Offices and the National Institute for Occupational Safety and Health. These components collaborate to create the expertise, information and tools that people and communities need to protect their health through health promotion, prevention of disease, injury and disability and preparedness for new health threats. In addressing the preceding components of health, decisions are based on scientific excellence, requiring well-trained public health practitioners and leaders dedicated to high standards of quality and ethical practice.
LRN Structure for Biological Threats Preparedness

The LRN for Biological Threats Preparedness (LRN-B) is composed of three levels: Sentinel, Reference and National Laboratories. Reference laboratories are further subdivided into Reference, Standard and Advanced. The following are the capabilities for each level:

**National Laboratories:** there are three national laboratories (1) Centers for Disease Control and Prevention, (2) United States Army Medical Research Institute for Infectious Diseases and (3) the Naval Medical Research Center. These laboratories have specialized testing capabilities (e.g. Biosafety Level 4 facilities, strain characterization) and provide test development and agent specific subject matter expertise which can be leveraged when needed by the network.

**Reference Laboratories:** over 130 laboratories, categorized as Reference, Standard and Advanced, provide testing for high priority threat agents in a variety of matrices. In addition to their testing function, these laboratories also conduct outreach to sentinel clinical laboratories, first responders and other partners.

**Sentinel Laboratories:** thousands of laboratories, notably hospital based, work closely with local and state public health and federal laboratories to recognize and rule-out potential biological threat agents and other emerging threats to public health. Sentinel laboratories are an integral part of the LRN with the system relying heavily on their ability to recognize, rule-out and/or refer potential threats.

LRN Structure for Chemical Threat Preparedness

The LRN for Chemical Threats Preparedness (LRN-C) is composed of 53 laboratories and is categorized into three distinct levels: one, two and three. Starting with level three and building upward, each designation carries additional safety requirements and testing capabilities, in addition to the duties and requirements of the preceding level. The following are minimum capabilities required at each level:

**CDC Laboratories** provide a high level of analysis, including a rapid toxicology screen to detect exposure to chemical threats. Further, they maintain a quality system within the LRN-C by developing methods and providing proficiency testing and exercises. **Level 1 Laboratories** provide surge capacity for CDC and can detect exposure to an expanded number of chemicals, including mustard agents, nerve agents and toxic industrial chemicals. **Level 2 Laboratories** are trained to detect exposure to a number of chemical threat agents, including cyanide, nerve agents and toxic metals. **Level 3 Laboratories** work with hospitals and first responders to maintain competency in clinical specimen collection, packaging and shipment.
Featured Events
**LRN 2018: Agile, Adept, All-Hazards**

**Program At- A- Glance**

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<th>Events</th>
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| **Wednesday, September 5** | Event Check-In and Badge Pick-Up  
                           | Welcome Addresses  
                           | Keynote Address  
                           | Plenary Sessions |
| **Thursday, September 6** | Event Check-In  
                           | Breakout Sessions (Biological, Chemical, Radiological)  
                           | Roundtable Sessions  
                           | Poster Session |
| **Friday, September 7** | Event Check-In  
                           | Awards Ceremony  
                           | Plenary Sessions  
                           | Closing Remarks |
Wednesday
LRN 2018: Agile, Adept, All-Hazards

Wednesday, September 5

8:00 a.m. - 9:00 a.m. Arrive at Centers for Disease Control and Prevention Campus

8:00 a.m. - 5:00 p.m. Event Check-In and Badge Pick-Up
Tom Harkin Global Communications Center Lobby

C.E.U.s and Objectives 5.75 contact hours for today’s sessions (588-879-18)
At the conclusion of Day 1, the participant will be able to:

- Describe the evolving role of the LRN and articulate its past accomplishments and future vision.
- Discuss how the LRN supports public health.
- Describe partnerships, coordination and response efforts involved in international and domestic laboratory preparedness.
- Explain how CDC, APHL and other organizations are working to advance public and private laboratory biosafety nationwide.

10:45 a.m. – 5:00 p.m. Posters Available for Viewing
Tom Harkin Global Communications Center Lobby

Welcome Panel and Opening Address
Auditorium B1/B2/B3

9:00 a.m. - 9:30 a.m. Scott Hughes, PhD, Planning Committee Chair, Associate Director, Environmental Sciences, Responsible Official, Select Agent Program, Public Health Laboratory, New York City Department of Health and Mental Hygiene
Elizabeth Franko, DrPH, Laboratory Director, Georgia Public Health Laboratory, Georgia Department of Public Health
Scott Becker, MS, Executive Director, Association of Public Health Laboratories

Keynote Address
Auditorium B1/B2/B3

Introduction: Scott Becker, Executive Director, Association of Public Health Laboratories

9:30 a.m. - 10:30 a.m. Robert Redfield, M.D., Director, Centers for Disease Control and Prevention

10:30 a.m. - 10:45 a.m. Break
Tom Harkin Global Communications Center Lobby

Leadership in Biosafety
Auditorium B1/B2/B3

CDC and APHL are collaborating with several partners to improve biosafety practices in public and private laboratories across the country. This session will focus on efforts to strengthen biosafety and biosecurity in public and private laboratories as well as discuss the importance of leadership in improving biosafety and biosecurity practices. The session
will also discuss partnership initiatives to engage all levels of labs and address key gaps such as the need for equipment decontamination guidance, stronger linkages with clinical labs and evaluation of activities.

Moderator: Toby Merlin, MD, Director, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Disease, Centers for Disease Control and Prevention

10:45 a.m. - 12:00 p.m.  
*Steve Monroe, PhD, Director, Office of Associate Director for Laboratory Science and Safety, Centers for Disease Control and Prevention*

*Michael A. Pentella, PhD, D(ABMM), Director, State Hygienic Laboratory at the University of Iowa*

*Reynolds Salerno, PhD, Director, Division of Laboratory Systems, Centers for Disease Control and Prevention*

*Sean Kaufman, MPH, CHES, CPH, CIC, MBTI Certified Provider, Chief Executive Officer, Behavioral-Based Improvement Solutions*

12:00 p.m. - 1:00 p.m.  
**Lunch**  
Provided in the Tom Harkin Global Communications Center Lobby

12:15 p.m. - 12:45 p.m.  
CDC LRN-B Leadership Meet and Greet [Meeting Room 245]

CDC LRN-C Leadership Meet and Greet [Meeting Room 246]

**Preparing for Radiological Threats: A Federal Perspective**  
Auditorium B1/B2/B3

This session will provide attendees with an overview of the steps taken at the federal level and the tools available to respond to a variety of radiological emergencies. Participants will also learn about the challenges associated with effectively responding to a radiological emergency.

Moderator: Jennifer Buzzell, MS, Health Physicist, Emergency Management, Radiation, and Chemical Branch, Division of Environmental Health, Science and Practice, National Center for Environmental Health, Centers for Disease Control and Prevention

1:00 p.m. - 2:15 p.m.  
*James McDonnell, Assistant Secretary, Countering Weapons of Mass Destruction Office, Department of Homeland Security*

*Lynne Wathen, MS, PhD, Biomedical Advanced Research and Development Authority, Office of the Assistant Secretary for Preparedness, U.S. Department of Health and Human Services*

*Robert Jones, PhD, Chief, Inorganic and Analytical Toxicology Branch, Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention*

2:15 p.m. – 2:30 p.m.  
**Break**  
Tom Harkin Global Communications Center Lobby

**Clinical Laboratory and Public Health Partner Engagement**  
Auditorium B1/B2/B3

This session will discuss clinical laboratory engagement including model practices for biosafety outreach, partner collaboration efforts with poison control centers and adaptive preparedness based on experiences with risk assessments.
Moderators: Jerry Thomas, MD, National Center for Environmental Health, Centers for Disease Control and Prevention and Rob Nickla, BS, M(ASCP), Oregon State Public Health Laboratory

2:30 p.m. – 3:45 p.m. Erin Bowles, Laboratory Network Coordinator, Co-Biosafety Officer, Wisconsin State Laboratory of Hygiene

Jason Mihalic, Chemistry Office Chief, Arizona Bureau of State Laboratory Services, Arizona Department of Health Services

Peter Iwen, PhD, MS, D(ABMM), Laboratory Director, Biosafety Officer, Nebraska Public Health Laboratory

TBD

3:45 p.m. – 4:00 p.m. Break

Tom Harkin Global Communications Center Lobby

Data Information Science: Driving Response Decision

Auditorium B1/B2/B3

This session will provide an overview of the current landscape of data exchange, electronic laboratory reporting and HL7 messaging for preparedness and response and discuss strategies employed to improve data exchange in LRN member laboratories.

Moderator: Joanne Andreadis, PhD, Senior Advisor for Laboratory Preparedness, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

4:00 p.m. – 5:00 p.m. Jasmine Chaitram, MPH, Associate Director for Laboratory Preparedness, Chief, Informatics and Data Science Branch, Division of Laboratory Systems, Center for Surveillance, Epidemiology, and Laboratory Service, Centers for Disease Control and Prevention

Jennifer McGehee, MSCS, MA, Emergency Preparedness and Public Health Support Team, Information Systems Branch, Division of Health Informatics and Surveillance, Center for Surveillance, Epidemiology, and Laboratory Services, Office of Public Health Scientific Services

Wisconsin Speaker for LRN-C Data Integration/Wadsworth Speaker (IT Staff, Egan, or Perry)

5:00 p.m. Adjourn for Day 1

Note: When you exit CDC, please retain your meeting badge.
Thursday (Tab 4)
**LRN 2018: Agile, Adept, All-Hazards**

**Thursday, September 6**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 a.m. - 9:00 a.m.</td>
<td>Arrive at Centers for Disease Control and Prevention Campus</td>
</tr>
<tr>
<td>9:00 a.m. - 5:00 p.m.</td>
<td>Event Check-In and Badge Pick-Up</td>
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</table>

**C.E.U.s and Objectives**

**5.75 contact hours for today’s Biological Breakout session (588-881-18)**

At the conclusion of Day 2, the participant of the Biological Breakout session will be able to:
- Describe lessons learned from real cases and exercises.
- Describe new technologies and capabilities of the LRN for Biological Threats Preparedness (LRN-B) as well as initiatives for assay development.
- Describe steps taken to establish appropriate testing capabilities for emerging threats.
- Discuss partnerships and communication strategies after a threat is detected.

**5.75 contact hours for today’s Chemical Breakout session (588-882-18)**

At the conclusion of Day 2, the participant of the Chemical Breakout session will be able to:
- Describe lessons learned from real cases and exercises.
- Outline public health laboratory preparedness and response capabilities for drug threats.
- Describe new technologies and capabilities of the LRN for Chemical Threats Preparedness (LRN-C).
- Discuss state, local and federal strategies for partnerships and communication.

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9:00 a.m. – 5:00 p.m.</td>
<td>Posters Available for Viewing</td>
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<td>Tom Harkin Global Communications Center Lobby</td>
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**LRN-B Breakout Session – Laboratory Response Network Response to Zika Virus**

Auditorium B3

Recently, public health laboratories across the US responded to an outbreak of Zika virus. The sudden and sustained influx of specimens required a significant change in daily operations, additional staffing, and new instrumentation to provide timely information to all involved stakeholders. This session will describe the dynamic efforts taken by public health laboratories to assess, triage, test and track patients. The session will also highlight the partnerships with epidemiologists and local health departments during the response.

Moderator: William Nauschuetz, PhD, Clinical Laboratory Biopreparedness Coordinator, Allied Clinical Services Medical Command

<table>
<thead>
<tr>
<th>Time</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>9:00 a.m. – 10:15 a.m.</td>
<td>Stephen White, MS, Medical Laboratory Scientist IV, Bureau of Public Health Laboratories – Miami, Florida Department of Health</td>
</tr>
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<td></td>
<td>Latoya Griffin-Thomas, PhD, Lead Scientist, Biological Threat/Special Pathogens Response Coordinator, Virginia Division of Consolidated Laboratory Services</td>
</tr>
<tr>
<td></td>
<td>Sharon Messenger, PhD, Section Chief, Zoonotic and Vector-borne Diseases Section, California Department of Public Health Laboratory</td>
</tr>
</tbody>
</table>
Opioid abuse is a serious public health problem affecting many areas in the nation. Prescription opioids and synthetic fentanyls are responsible for thousands of fatal and non-fatal overdoses annually. Building upon advanced analytical capabilities acquired through toxicology and other clinical chemistry programs and knowledge of public health surveillance systems, the governmental public health laboratories are exploring how they might be able to contribute to the opioids response. This session will address the laboratory response to the opioid epidemic.

Moderator: Amy Watson, PhD, Laboratory Response Network for Chemical Threats Response (LRN-C) Program Coordinator, Emergency Response Branch, Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention

9:00 a.m. – 10:15 a.m.

Rebecca Shaner, MS, Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention

Jason Peterson, MS, Chemical Threat Preparedness Coordinator, Minnesota Department of Health, Public Health Laboratory

Luke Short, PhD, Chemistry Section Manager, District of Columbia Public Health Laboratory

10:15 a.m. - 10:30 a.m. Break

Tom Harkin Global Communications Center Lobby

Once the LRN laboratories detect a threat agent, it’s simply the beginning of the response. Typically, LRN member laboratories notify CDC and other partners as well as message data to CDC. These laboratories are also at the forefront, coordinating across local, state, federal, private and other non-governmental agencies to shape the response. This session will share unique case stories, outlining challenges and successes with each response.

Moderator: Marcella Odle, Laboratory Response Network Operations Team Lead, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Disease, Centers for Disease Control and Prevention

10:30 a.m. – 12:00 p.m.

Rob Nickla, BS, M(ASCP), Laboratory Response Network Coordinator, Responsible Official, Oregon State Public Health Laboratory

Megan Price, PhD, Biological Threat Principal Scientist, Molecular Detection, Virginia Division of Consolidated Laboratory Services

Christina Egan, PhD, Director, Biodefense Laboratory, Wadsworth Center, New York State Department of Health, Wadsworth Center

LRN-C Breakout Session – Public Health Response to Emerging Drug Crisis in America

Auditoriums B1/B2

In early March, a case of abnormal bleeding was associated with synthetic cannabinoid use in the Chicago area. The cases rapidly expanded, and now stand at approximately 250 cases spread over 10 states. There have been six documented fatalities associated with the outbreak. The powerful anticoagulant brodifacoum was found to be the causative agent. This session will follow the chronology and characteristics of the outbreak, describe the effects and required treatment for
brodifacoum exposure, and describe the efforts of two LRN laboratories that developed methods to test for exposure and for the presence of brodifacoum in the products themselves.

Moderator: Luke Yip, MD, Medical Toxicologist, Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention

10:30 a.m. – 12:00 p.m.  
Noel Stanton, M.S., Chemical Response Coordinator, Wisconsin State Laboratory of Hygiene  
Mary Hagerman, M.S., Division Director, Chemistry, Indiana State Department of Health

12:00 p.m. – 1:00 p.m.  
Lunch  
Provided in the Tom Harkin Global Communications Center Lobby

12:15 p.m. - 12:45 p.m.   CDC LRN-B Leadership Meet and Greet [Meeting Room 245]  
CDC LRN-C Leadership Meet and Greet [Meeting Room 246]

LRN-B Breakout Session – Science and Safety: Mass Spectrometry Technology to Detect Toxins  
Auditorium B3

Protein toxins such as botulinum neurotoxin and ricin are deadly proteins whose confirmatory detection is often complex. For public health purposes, it is important to have a measure of toxicity of these proteins, yet measuring toxicity of these proteins often involves live animal testing. CDC laboratories have developed mass spectrometric methods to detect botulinum neurotoxin and ricin based on their enzymatic activity, yielding a measure of toxicity. To date, CDC has completed analytical validation of the method to detect botulinum neurotoxin and partnered with APHL to provide training to LRN laboratories participating in a multicenter evaluation study. This session will discuss the newly developed method, as well as provide an overview of the use of matrix assisted laser desorption/ionization – time of flight (MALDI-TOF) mass spectrometry technology in public health laboratories, including efforts to assess safety and accuracy of the technology and databases.

Moderator: Julie Villanueva, PhD, Chief, Laboratory Preparedness and Response Branch  
Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention

1:00 p.m. – 2:30 p.m.  
Suzanne R. Kalb, PhD, Research Chemist, Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention  
Carolina Luquez, PhD, Division of Foodborne, Waterborne, and Environmental Diseases, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention  
Tricia Aden, Project Manager, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention.  
Michael Perry, MS, Associate Director, Biodefense Laboratory, Wadsworth Center, New York State Department of Health

LRN-C Breakout Session – Developing New Methods in an Evolving Chemical Threat Landscape  
Auditoriums B1/B2

The LRN-C is a unique asset positioned to support large scale responses to chemical threats. Additionally, the network leverages its extensive scientific expertise to respond to emerging and unique threats. This session will discuss LRN-C programmatic activities, the smart design of opioid reference materials, laboratory testing to quantify marijuana in food products, and the development of an analytical method for amanitin poisoning.
Moderator: Rudolph Johnson, PhD, Chief, Emergency Response Branch, Division of Laboratory Science, National Center for Environmental Health, Centers for Disease Control and Prevention

1:00 p.m. – 2:30 p.m.
Rudolph Johnson, PhD, Chief, Emergency Response Branch, Division of Laboratory Science, National Center for Environmental Health, Centers for Disease Control and Prevention

Melissa Carter, PhD, Division of Laboratory Science, National Center for Environmental Health, Centers for Disease Control and Prevention

James Eaton PhD, Chemist II, Maine Health and Environmentally Testing Laboratory

William Draper, PhD, Drinking Water and Radiation Laboratory Branch, California Department of Public Health

2:30 p.m. - 3:30 p.m. Poster Presenters Available for Discussion
Tom Harkin Global Communications Center Lobby

LRN-B Breakout Session – Scientific and Engineering Controls to Improve Response
Auditorium B3

As technology evolves, laboratories must have the necessary training to safely implement new methods and adopt new technologies while complying with regulatory requirements. This session will describe efforts to strengthen field collection and transport of samples, evaluation of methods to inactivate biological threats and studies to improve the remediation of biological threats.

Moderator: Shawna Dereemer, MT(ASCP), Laboratory Preparedness Supervisor, Public Health Science Section/Health Readiness and Response Section, Wyoming Public Health Laboratory

3:30 p.m. – 5:00 p.m.
Cary Rue, PhD, Microbiologist, Federal Bureau of Investigation Laboratory

Phil Lee, PhD, Lead Biological Defense Coordinator, Bureau of Public Health Laboratories – Jacksonville, Florida Department of Health

Eric Weening, PhD, IHRC Inc, Contractor to Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention

Samuel Edwin, PhD, Director, Division of Select Agents and Toxins, Office of Public Health Preparedness and Response, Centers for Disease Control and Prevention

LRN-C Breakout Session – Partnerships for a Coordinated Response to Toxin Exposure
Auditoriums B1/B2

The LRN-C tests for biomarkers of toxins such as ricin and other chemical threats but the capabilities of the laboratory is not always known by first responders or clinicians. This session will describe efforts to develop a database to capture toxic chemicals, toxins and metabolites as well as share outreach and educational materials developed for key partners.

3:30 p.m. – 5:00 p.m. Jason Mihalic, MBA, Chemistry Office Chief, Arizona Bureau of State Laboratory Services, Arizona Department of Health Services
Jocelyn Hover-Jeannsonne, MPH(c), Chemist V, Chemical Threat Coordinator, Texas Department of State Health Services

William Draper, PhD, Drinking Water and Radiation Laboratory Branch, California Department of Public Health

5:00 p.m.  Adjourn for Day 2
Note: When you exit CDC, please retain your meeting badge.
Friday
LRN 2018: Agile, Adept, All-Hazards

Friday, September 7

8:00 a.m. - 9:00 a.m.  Arrive at Centers for Disease Control and Prevention Campus

8:00 a.m. - 1:00 p.m.  Event Check-In and Badge Pick-Up

C.E.U.s and Objectives  2.75 contact hours for today’s sessions (588-883-18)
At the conclusion of Day 3, the participant will be able to:

- Describe some of the challenges associated with developing a state-wide response plan with first responders.
- Discuss how the CDC builds state and local public health laboratory capacity to prepare for threats.
- Provide recommendations to develop a policy framework for public health emergency preparedness and response.
- Highlight successful public health collaborations and understand how collaborations change over time as public health threats evolve.

9:00 a.m. – 1:00 p.m.  Posters Available for Viewing
Tom Harkin Global Communications Center Lobby

Regulatory and Public Policy Partnerships for Emergency Response
Auditorium B1/B2/B3

This session will discuss the policy infrastructure and systems in place to prepare for all-hazards threats and address gaps in the ability of the US to respond to emerging and other threats. Presenters will highlight efforts of the Tri-Agency Task Force for Emergency Diagnostics as well as hear from the Department of Defense on their approach to Emergency Use Authorizations.

Moderators: Jasmine Chaitram, MPH, Associate Director for Laboratory Preparedness, Chief, Informatics and Data Science Branch, Division of Laboratory Systems, Centers for Disease Control and Prevention

9:00 a.m. - 10:30 a.m.  Laura Rose, MS, Office of Associate Director for Laboratory Science and Safety, Centers for Disease Control and Prevention

Kim Sapsford, PhD, Scientific Reviewer, Office of In Vitro Diagnostics and Radiological Health US Food and Drug Administration

Amy Zale, BS, Centers for Medicare and Medicaid Services

LTC Bryan Gnade, PhD, Product Manager, US Army Medical Materiel Development Activity

10:30 a.m. - 10:45 a.m.  Break
Tom Harkin Global Communications Center Lobby

Awards Ceremony
Auditorium B1/B2/B3

10:45 a.m. - 11:30 a.m.  Presenters
Captivating Collaborations – Working Together to Improve Public Health Response
Auditorium B1/B2/B3

Since its inception in 1999, the LRN has relied on the expertise of the scientific community to promote innovation across the nation for both biological and chemical threat preparedness. As an important part of the National Response Framework, the LRN exemplifies a united system to respond to a variety of public health threats. Working together across scientific disciplines and at all levels from local to federal responders is an important aspect of the LRN. This session will highlight the successful collaborations that are essential to the success of the LRN.

Moderators: Laura Zambuto, MS, Deputy Chief, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention

11:30 a.m. - 12:45 p.m. Matthew Schaab, PhD, Food Emergency Response Network Manager, Arizona Bureau of State Laboratory Services
Sandra Smole, PhD, Director, Massachusetts State Public Health Laboratory, Bureau of Infectious Disease and Laboratory Sciences
Douglas Anders, PhD, Chief, Scientific Response and Analysis Unit, Federal Bureau of Investigation Laboratory
Bridgette M. Trela, Supervisory Special Agent, Criminal and Epidemiological Program Manager, Biological Countermeasures Unit, Weapons of Mass Destruction Directorate, Federal Bureau of Investigation

Closing Remarks
Auditorium B1/B2/B3

12:45 p.m. – 1:00 p.m. Scott Hughes, PhD, Planning Committee Chair, Associate Director, Environmental Sciences, Responsible Official, Select Agent Program, Public Health Laboratory, New York City Department of Health and Mental Hygiene

1:00 p.m. Adjourn 2018 LRN National Meeting
Posters
Poster Sessions
Tom Harkin Global Communications Center Lobby

To be displayed from Wednesday, September 5th at 10:45 a.m. to Friday, September 7th at 1:00 p.m. Poster presenters will be available for questions during on Thursday, September 6th from 2:30 p.m. – 3:30 p.m.

1. **Validation of Inactivation of Viable Cells Using Two Different Biological Rapid Response and Advanced Technology Laboratory DNA Extraction Methods Followed by 0.1 µm Filtration Procedures**
   
   *James Mock, Lynn Jefferson, Ann Mitulinsky, Eric Weening, PhD, Brad Bowzard, PhD, Mila Cohen, Julie Villanueva, PhD, Jennie Thomas, PhD*

   **Presenter:** James Mock, Centers for Disease Control and Prevention and Eric Weening, PhD, Centers for Disease Control and Prevention

2. **Testing of ticks for Rickettsial species in New York State using real-time PCR**
   
   *Mark A. Meola, B.A.S, Research Scientist, New York State Department of Health, Wadsworth Center*

   **Presenter:** Mark A. Meola, B.A.S, Research Scientist, New York State Department of Health, Wadsworth Center

3. **Method comparison of the Victor Nivo with the Victor X4 for ricin toxin detection**
   
   *Michael Perry, MS MSED, Associate Director Biodefense Laboratory, New York State Department of Health - Wadsworth Center*

   **Presenter:** Michael Perry, MS, MSED, Associate Director Biodefense Laboratory, New York State Department of Health - Wadsworth Center

4. **Whole Genome Sequencing of C. botulinum and C. baratii Isolates in New York State**
   
   *Dominick Centurioni, MS, Research Scientist I, New York State Department of Health - Wadsworth Center*

   **Presenter:** Dominick Centurioni, MS, Research Scientist I, New York State Department of Health - Wadsworth Center

5. **Performance of the QuantStudio Dx instrument for the Bacillus anthracis Real-time PCR Assay**
   
   *M. Cohen, MS, CDC, S. Courtney, PhD, CDC, A. Butler, MS, CDC, B. Bowzard, PhD, CDC, J. Villanueva, PhD, J. Thomas, PhD, CDC*

   **Presenter:** Mila Cohen, MS, Centers for Disease Control and Prevention

6. **A Ricin Story: Using a Training Module to Bridge the Gap between Public Health and Clinical Practice**
   
   *Jocelyn Hover-Jeansonne, BS, MPH(c), Chemist V, CT Coordinator, Texas Department of State Health Services*

   **Presenter:** Jocelyn Hover-Jeansonne, BS, MPH(c), Chemist V, CT Coordinator, Texas Department of State Health Services

   
   *B Page, KL Jenkins, SM Orton, and D Pettit, North Carolina State Laboratory of Public Health, Division of Public Health*
8. Strategies for Limiting Laboratory-Associated Exposures to Brucella in North Carolina
   SM Orton, K Long, B Page, KL Jenkins, Dee Pettit, M Haskell, and C Williams
   North Carolina State Laboratory of Public Health, Division of Public Health, Raleigh, NC.

   Presenter: Susan M. Orton, PhD, D(ABMLI), MT(ASCP), Manager, Bioterrorism and Emerging Pathogens Unit, North Carolina State Laboratory of Public Health

9. Resources for Sentinel Clinical Laboratory Outreach and Partnerships
   Rob Nickla, BS, M(ASCP), LRN Coordinator, Oregon State Public Health Laboratory

   Presenter: Rob Nickla, BS, M(ASCP), LRN Coordinator, Oregon State Public Health Laboratory

10. The Laboratory Response Network in Action: A Collaborative Effort to Revise the Original Bioterrorism Response Guide for Clinical Laboratories (Bioterrorism Blue Book)
    Rob Nickla, BS, M(ASCP), LRN Coordinator, Oregon State Public Health Laboratory

    Presenter: Rob Nickla, BS, M(ASCP), LRN Coordinator, Oregon State Public Health Laboratory

11. Determination of Microcystins (MCs) and Nodularin in Drinking Water by Automated 96-Well Plate Solid Phase Extraction (SPE) and Ultra High Pressure Liquid Chromatography/Tandem Mass Spectrometry (UPLC-MS/MS)
    Wenlu Song, PhD, Research Scientist Supervisor, Biomonitoring Unit, Drinking Water and Radiation Branch, California Department of Public Health

    Presenter: Wenlu Song, PhD, Research Scientist Supervisor, Biomonitoring Unit, Drinking Water and Radiation Branch, California Department of Public Health

12. Using Podcasts to tell Public Health Laboratory Stories
    Ona Adair, PhD, Chemistry Division Director, South Carolina Public Health Laboratory, Erin Bowles, MT (ASCP), Laboratory Network Coordinator & Co-Biosafety Officer, Wisconsin State Laboratory of Hygiene, Denny Russell, BS, Bioterrorism Coordinator, Washington State Department of Health, Dana J. White, BS/BA, Training Coordinator, Mississippi Public Health Laboratory

    Presenter: Dana J. White, BS/BA, Training Coordinator, Mississippi Public Health Laboratory

13. A Novel Product Design for Better Characterizing the Opioid Epidemic
    Michael Mojica, PhD, Centers for Disease Control and Prevention

    Presenter: Michael Mojica, PhD, Centers for Disease Control and Prevention

14. Orthopoxvirus Detection Utilizing the QuantStudio Dx
    Laurie Seigler, BS, Microbiologist, Poxvirus and Rabies Branch, Division of High Consequence Pathogens and Pathology, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Sean Courtney, PhD, Microbiologist, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Julie Villanueva, PhD, Branch Chief, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Christina Hutson, PhD, Virus Host Molecular Interactions Team Lead, Poxvirus and Rabies
15. Rapid Detection of Antimicrobial Resistance Markers in Bacillus anthracis by Nanopore Whole Genome Sequencing
Amy S. Gargis, PhD, Centers for Disease Control and Prevention, Blake Cherney, MS, Centers for Disease Control and Prevention, Andrew Conley, PhD, Bioinformatician, IHRC-Georgia Tech ABiL, Heather McLaughlin, PhD, Centers for Disease Control and Prevention, David Sue, PhD, Centers for Disease Control and Prevention
Presenter: Amy S. Gargis, PhD, Centers for Disease Control and Prevention

Pierre A. Michel, MS, Centers for Disease Control and Prevention, Christine Lascols, MS, Centers for Disease Control and Prevention, David Sue, PhD, Centers for Disease Control and Prevention
Presenters: Pierre A. Michel, MS, Centers for Disease Control and Prevention, Christine Lascols, MS, Centers for Disease Control and Prevention, David Sue, PhD, Centers for Disease Control and Prevention

17. Comparability of Solid Phase Extraction Format for Nerve Agent Metabolites in Urine
Alisha Henderson, Centers for Disease Control and Prevention
Presenter: Alisha Henderson, Centers for Disease Control and Prevention

18. Evaluation of the Rapid and Field Sequencing Kits for Whole Genome Sequencing to Detect Antimicrobial Resistance Markers in Yersinia pestis
Blake Cherney MS, Centers for Disease Control and Prevention, Amy Gargis PhD, Centers for Disease Control and Prevention
Presenter: Blake Cherney, MS, Laboratory Preparedness and Response Branch, Division of Preparedness and Emerging Infections, National Center for Emerging and Zoonotic Infectious Disease, Centers for Disease Control and Prevention

19. Rapid Automated Antimicrobial Susceptibility Testing of Burkholderia Species by Optical Screening
Heather McLaughlin, PhD, Microbiologist, Centers for Disease Control and Prevention, David Sue, PhD, Principal Investigator, Centers for Disease Control and Prevention
Presenter: Heather McLaughlin, PhD, Microbiologist, Centers for Disease Control and Prevention

20. Detection of Biothreat Agents in Potable Water Samples
Mia Mattioli, PhD, Environmental Engineer, Centers for Disease Control and Prevention and Kirsten Berling, MPH, Microbiologist, Centers for Disease Control and Prevention
Presenters: Mia Mattioli, PhD, Environmental Engineer, Centers for Disease Control and Prevention And Kirsten Berling, MPH, Microbiologist, Centers for Disease Control and Prevention
21. Evaluating Bacillus anthracis Inactivation and DNA Extraction Following Heat Stabilization Treatment by the Denator Stabilizor T1
Julia Bugrysheva, PhD, Microbiologist, Centers for Disease Control and Prevention, Pierre Michel, MS, Microbiologist, Centers for Disease Control and Prevention, Phalasy Juieng, Biologist, Centers for Disease Control and Prevention, Vladimir Loparev, PhD, Senior Service Fellow, Centers for Disease Control and Prevention, David Sue, PhD, Microbiologist, Centers for Disease Control and Prevention

**Presenter:** Julia Bugrysheva, PhD, Microbiologist, Centers for Disease Control and Prevention

22. An Analysis of Laboratory Response Network for Biological threat preparedness (LRN-B) Member Laboratory Test Data, 2009-2016
Julie Villanueva, PhD, Beth Schweitzer, MS, Marcella Odle, MS, Tricia Aden, MT(ASCP), Office of Infectious Diseases, National Center for Zoonotic and Emerging Infectious Diseases, Division of Emerging Infections, Laboratory Preparedness and Response Branch, Centers for Disease Control and Prevention

**Presenter:** Beth Schweitzer, MS, Office of Infectious Diseases, National Center for Zoonotic and Emerging Infectious Diseases, Division of Emerging Infections, Laboratory Preparedness and Response Branch, Centers for Disease Control and Prevention

23. Surge Capacity Drill with the Civil Support Team
Pascale Leonard, PhD, Molecular Biology Section Supervisor, New Mexico Department of Health, Scientific Laboratory Division, Allison Treloar, MS, CBA(ASQ), MB(ASCP), SLS, Director - Office of Quality, Safety, Security, & Emergency Preparedness, New Mexico Department of Health, Scientific Laboratory Division

**Presenter:** Pascale Leonard, PhD, Molecular Biology Section Supervisor, New Mexico Department of Health, Scientific Laboratory Division, Allison Treloar, MS, CBA(ASQ), MB(ASCP), SLS, Director - Office of Quality, Safety, Security, & Emergency Preparedness, New Mexico Department of Health, Scientific Laboratory Division

24. Improving Technologies for Biological Threat Detection
T. Wolford, Association of Public Health Laboratories, S. Abrams, Association of Public Health Laboratories, T Aden, Centers for Disease Control and Prevention

**Presenter:** Tyler Wolford, MS, Senior Specialist, Laboratory Response Network, Association of Public Health Laboratories.

25. APHL Biosafety Officer Leadership Workshop
Michael Marsico, MS, Senior Specialist, Association of Public Health Laboratories

**Presenter:** Michael Marsico, MS, Senior Specialist, Association of Public Health Laboratories

26. Biosafety Peer Network: Connecting the Dots in Biosafety
M. Marsico, C. Mangal and S. Page, Association of Public Health Laboratories

**Presenter:** Michael Marsico, MS, Senior Specialist, Association of Public Health Laboratories

27. Validation of a Real-time PCR Assay to Detect Francisella tularensis in Clinical Specimens
Lauren E. Andersen, PhD, Biologist, Centers for Disease Control and Prevention

**Presenter:** Lauren E. Andersen, PhD, Biologist, Centers for Disease Control and Prevention

28. Evaluation of Commercial MasterMix for the Use with LRN PCR Assays
Viny Bhullar, Microbiologist, Laboratory Preparedness and Response Branch, Centers for Disease Control and Prevention

**Presenter:** Viny Bhullar, Microbiologist, Laboratory Preparedness and Response Branch, Centers for Disease Control and Prevention

29. **Funding Laboratory Preparedness and Response**
   Samuel Abrams, MPH, PMP, Specialist, Public Health Preparedness and Response, Association of Public Health Laboratories

**Presenter:** Samuel Abrams, MPH, PMP, Specialist, Public Health Preparedness and Response, Association of Public Health Laboratories
Acronyms
Acronyms

AAVLD  American Association of Veterinary Laboratory Diagnosticians
AHRF  Assessment of Health Risks with Feedback
AML  Area Medical Laboratory
APHIS  Animal and Plant Health Inspection Service
APHL  Association of Public Health Laboratories
ASM  American Society for Microbiology
ASTM  American Society for Testing and Materials
BA  Bacillus anthracis
BAIT  Biological Agent Identification and Counterterrorism Training
BOTE  Bio-Response Operational Testing Exercise
BRRATL  Bioterrorism Rapid Response and Advanced Technology Laboratory
BSL  Biosafety Level
BTRA  Bioterrorism Risk Assessment
CAP  College of American Pathologists
CBCT  Confidence Building Competency Test
CBNR  Chemical, Biological, Nuclear, and Radiological
CBRNSU  Chemical Biological Radiological Nuclear Science Unit (FBI Laboratory)
CDC  Centers for Disease Control and Prevention
CLIA  Clinical Laboratory Improvement Amendments
CoC  Chain of Custody
COOP  Continuity of Operations Plan
CRCPD  Conference of Radiation Control Program Directors
CRP  Critical Reagents Program
CST  Civil Support Team (U.S. Army National Guard)
CWA  chemical warfare agents
DBPR  Division of Bioterrorism Preparedness and Response
DEOC  Director of the Emergency Operations Center (Federal)
DHS  Department of Homeland Security
DHS OHA  Department of Health and Human Services Office of Health Affairs
DHS S&T  Department of Health and Human Services Science and Technology
DLN  Defense Laboratory Network
DoD  Department of Defense
DoD GEIS  United States Department of Defense Global Emerging Infections Surveillance and Response System
DOE  Department of Energy
DOJ  Department of Justice
DSL  Division of Laboratory Systems
DTRA  Defense Threat Reduction Agency
EDD  Electronic Data Deliverable
EPA  Environmental Protection Agency
ERCL  Emergency Response Chemical Laboratory
ERLN  Environmental Response Laboratory Network
EUA  Emergency Use Authorization
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>FBI</td>
<td>Federal Bureau of Investigation</td>
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<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
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<td>FERN</td>
<td>Food Emergency Response Network</td>
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<td>FSIS</td>
<td>Food Safety and Inspection Service</td>
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<td>GC-MS</td>
<td>Gas chromatography-mass spectroscopy</td>
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<tr>
<td>H1N1</td>
<td>Hemoagglutinin and Neuroaminidase Influenza Virus</td>
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<td>HHA</td>
<td>Handheld Assay</td>
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<td>HHS</td>
<td>Department of Health and Human Services</td>
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<td>HMRT</td>
<td>Hazardous Materials Response Team (FBI field hazmat teams)</td>
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<td>HMSRU</td>
<td>Hazardous Materials Science Response Unit (FBI Laboratory)</td>
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<td>HSEEP</td>
<td>Homeland Security Exercise and Evaluation Program</td>
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<td>IAWG</td>
<td>Interagency Working Group</td>
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<td>IBRD</td>
<td>Interagency Biological Restoration Demonstration</td>
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<td>ICLN</td>
<td>Integrated Consortium of Laboratory Networks</td>
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<td>IRA</td>
<td>Integrated Response Architecture</td>
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<td>ISO</td>
<td>ISO International Organization for Standardization</td>
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<td>ITCC</td>
<td>Information Technology Communication Committee</td>
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<td>JBAIDS</td>
<td>Joint Biological Agent Identification and Diagnostic System</td>
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<td>JLC</td>
<td>Joint Leadership Council</td>
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<td>JPM CBMS</td>
<td>Joint Program Executive Office for Chemical and Biological Medical Systems</td>
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<tr>
<td>LIMS / LIS</td>
<td>Laboratory Information (Management) System</td>
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<td>LIMSi</td>
<td>Laboratory Information Systems Management integration</td>
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<td>LLNL</td>
<td>Lawrence Livermore National Laboratory</td>
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<td>LPX</td>
<td>Laboratory Preparedness Exercise</td>
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<td>LRN</td>
<td>Laboratory Response Network</td>
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<td>LRN-B</td>
<td>Laboratory Response Network for Biological Terrorism Preparedness</td>
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<td>LRN-C</td>
<td>Laboratory Response Network for Chemical Terrorism Preparedness</td>
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<td>LRN-R</td>
<td>Laboratory Response Network for Radiological Terrorism Preparedness</td>
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<tr>
<td>MCC</td>
<td>Method Coordination Committee</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>MSDS</td>
<td>Material Safety Data Sheet</td>
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<td>NAHLN</td>
<td>National Animal Health Laboratory Network</td>
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<tr>
<td>NCEH</td>
<td>National Centers for Environmental Health (under CDC)</td>
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<td>NCG</td>
<td>Network Coordinating Group</td>
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<td>NELAC</td>
<td>National Environmental Laboratory Accreditation Conference</td>
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<td>NGB</td>
<td>National Guard Bureau</td>
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<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
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<td>NLTN</td>
<td>National Laboratory Training Network</td>
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<td>NMRC</td>
<td>Naval Medical Research Center</td>
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<td>NPDN</td>
<td>National Plant Diagnostic Network</td>
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<td>NRC</td>
<td>Nuclear Regulatory Commission</td>
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<td>OHA</td>
<td>Office of Health Affairs</td>
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<td>OIG</td>
<td>Office of Inspector General</td>
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<tr>
<td>PCR</td>
<td>Polymerase Chain Reaction</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>PHAA</td>
<td>Public Health Actionable Assays</td>
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<td>PHEP</td>
<td>Public Health Emergency Preparedness</td>
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<tr>
<td>PHILIS</td>
<td>Portable High Throughput Integrated Laboratory Identification Systems</td>
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<tr>
<td>PHLIP</td>
<td>Public Health Laboratory Interoperability Project</td>
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<td>PSAA</td>
<td>Public Safety Actionable Assays</td>
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<td>PT</td>
<td>Proficiency Testing</td>
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<td>QA</td>
<td>Quality Assurance</td>
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<td>QAPP</td>
<td>Quality Assurance Program Plan</td>
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<tr>
<td>REEF</td>
<td>Radiological Evidence Examination Facility</td>
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<tr>
<td>RT-PCR</td>
<td>Real Time Polymerase Chain Reaction</td>
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<td>SAIC</td>
<td>Science Applications International Corporation</td>
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<td>SAP</td>
<td>Select Agent Program</td>
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<td>SARS</td>
<td>Severe Acute Respiratory Syndrome</td>
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<td>SOW</td>
<td>Statement of Work</td>
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<td>STP</td>
<td>Scenarios and Threat Prioritization</td>
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<tr>
<td>SVOC</td>
<td>semi volatile organic compounds</td>
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<tr>
<td>USAHA</td>
<td>United States Animal Health Association</td>
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<td>USAMRIID</td>
<td>U.S. Army Medical Research Institute for Infectious Diseases</td>
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<td>USDA</td>
<td>Department of Agriculture</td>
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<tr>
<td>VSP</td>
<td>Validate Sampling Plan</td>
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<td>WLA</td>
<td>Water Laboratory Alliance</td>
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<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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<td>WMDC</td>
<td>WMD Coordinator (FBI field office coordinator)</td>
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<tr>
<td>WMDD</td>
<td>Weapons of Mass Destruction Directorate</td>
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