

Hazardous Materials Roundtable

November 8, 2022

Virtual Meeting

Sponsored by the US DOT Pipeline and Hazardous Materials Safety Administration (PHMSA), the FEMA U.S. Fire Administration (USFA), and the International Association of Fire Chiefs (IAFC)

The Roundtable's positions do not necessarily reflect the views of PHMSA or USFA

January 30, 2023



PHMSA
Pipeline and Hazardous Materials
Safety Administration



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I. EXECUTIVE SUMMARY

Hazardous materials emergency response is a complex and evolving public and non-public safety service provided throughout the United States today. While the level of services offered may vary between communities and states, there is universal acceptance that hazardous materials preparedness (i.e., prevention, planning, and response) is a required public safety function. Periodic Roundtable meetings have been held to help guide this critical public safety function for hazardous materials (hazmat) response technical specialists and subject matter experts to identify critical issues and suggest plans of action to strengthen hazmat preparedness throughout the country.

Over the years, Roundtable members have included

- representatives of federal, state, and local governments;
- fire and emergency service agencies;
- private industry; and
- other key stakeholders from the hazardous materials community.



Before 2019, there was a several-year break in the Roundtable process, and the national hazmat community felt that the Roundtable's absence negatively affected hazmat preparedness nationally.

In 2019, the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) and the U.S. Fire Administration (USFA) partnered with the International Association of Fire Chiefs (IAFC) to continue the Roundtable process with a two-day meeting on February 5 and 6, 2019, at the IAFC Headquarters in Chantilly, Virginia. Roundtable member teams further examined several significant issues identified in that meeting in three concurrent assessment efforts in 2021.

The three assessment efforts focused on developing possible action options:

1. To improve LEPC/TERC performance.
2. To improve risk-based response and preparedness.
3. To improve hazmat prevention and mitigation programs. (NOTE: The report of these three assessment efforts is in the appendix of this report.)

The analysis of hazmat issues initiated in 2019 was continued at the Roundtable meetings held on October 26 and 27, 2021.

The Roundtable program involves a continuous assessment of hazmat preparedness issues, and the reports of the Roundtable meetings form a living document that tracks and reflects this continuing

assessment. This report complements that living document and reflects the discussions in the most recent virtual Roundtable meeting on November 12, 2022.

The purpose of the November 12, 2022, virtual Roundtable meeting was to review the issues and action recommendations made in the 2019 and 2021 Roundtable meetings, to report on ongoing work that has been done since 2021 to address those issues, and to thereby help prepare Roundtable members for the work to be done in the next in-depth Roundtable meeting that is planned for spring 2023.

Included below in this report are:

1. A summary of the action recommendations from the 2019 and 2021 Roundtable meetings that were reviewed in this meeting
2. Summaries of the reports from Roundtable attendees and participating federal agencies on work that has been ongoing since 2021 to address the 2019-2021 recommendations
3. Emerging hazmat issues that need to be addressed in future Roundtable discussions
4. Next steps in the continuous Roundtable initiative

II. MEETING PARTICIPANTS

Special Acknowledgments

- Gregory Noll, member, and past chairperson of the National Fire Protection Association (NFPA) Technical Committee on Hazardous Materials/Weapons of Mass Destruction Emergency Response and a member of the IAFC Hazardous Materials Committee, who acted as meeting leader and facilitator.
- The U.S. Department of Transportation—Pipeline Hazardous Materials Safety Administration, and the United States Fire Administration—National Fire Academy, without whose sponsorship, this Roundtable meeting would not have been possible.
- The International Association of Fire Chiefs, co-sponsor, and critical supporter of the hazmat Roundtable
- For a complete List of Participants please see page 17.

Disclaimer: Please note that governmental representatives observed the Hazardous Materials Roundtable process and provided agency subject matter expertise. They were not involved in drafting the report and neither they nor their agencies are responsible for any conclusions, suggestions, or recommendations contained within the report.

III. REVIEW OF 2019-2021 ROUNDTABLE RECOMENDATONS

Greg Noll presented a thorough review of the action recommendations of the 2019 Roundtable, of the 2021 Pre-Roundtable Feasibility Studies, and of the 2021 Roundtable meeting. These recommendations all were intended to address seven areas of national need that had been identified to improve national hazmat emergency preparedness. The seven areas of action recommendations are:

- Actions to Improve Hazmat Planning and LEPC/TERC Performance
- Actions to Improve Risk-Based Preparedness and Response
- Actions to Improve Hazmat Prevention/Mitigation
- Actions to Improve Hazmat Training
- Actions to Improve Hazmat Standard of Care
- Actions to Improve Hazmat Funding
- Actions to Improve Hazmat Information Sharing

The recommended actions for each of the seven areas of need are listed below.

1. Improve LEPC/TERC Performance

1a. 2021 Working Group Recommendations

- Assist LEPCs Transition to All-Hazard Preparedness
- Improve Access to Hazard Mitigation Grants
- Improve Community Awareness and Education
- Improve LEPC Membership and Leadership
- Improve LEPC Funding

1b. 2021 Roundtable Recommendations

- Strong concurrence and better integration of LEPC into local planning process
- Improved integration of environmental issues into Threat and Hazard Identification and Risk Assessment (THIRA) process
- Enhanced state and national-level training efforts for LEPC members
- Need for clear and improved metrics of success for LEPC performance, as much of current federal doctrine on HM planning is based on 1980 – 1990 vision

2. Improve Risk-Based Preparedness and Response

1a. 2021 Working Group Recommendations

- Strengthen national recognition and support for risk-based response (RBR)
- Improve science and evidence-based data for RBR
- Improve RBR training strategies similar to the ICS/NIMS concept



- Strengthen emergency response systems

1b. 2021 Roundtable Recommendations:

- We need to clarify what RBR is and what it is not and help ensure that responders can apply risk-based skills and competencies.
- There needs to be a development of a national curriculum to support RBR.
- Update current federal planning and response guidance on risk-based methods and processes.
- While the number of HM incidents has decreased, the importance of RBR decision-making processes has increased.



3. Improve Hazmat Prevention/Mitigation

1a. 2021 Working Group Recommendations:

- Improve local HM prevention/mitigation policies and metrics.
- Improve local zoning, transportation routing, and land-use planning.
- Mitigate risks caused by natural disasters.
- Improve HM facility operations, inspections, and code enforcement activities.

1b. 2021 Roundtable Recommendations:

- Federal, state, local, and tribal risk reduction priorities should be expanded to include prevention and mitigation.
- National planning guidance should recognize that risk assessment is essential for effective community prevention and mitigation.
- National planning requirements should strongly discourage “cookie-cutter planning requirements.” Recognize the relationship between prevention, mitigation, planning, and response.
- Inspectors and Code Enforcement personnel should be trained in HM risk recognition and identification to strengthen the early identification of risks that can be addressed by timely prevention interventions.



4. Improve Hazmat Training

- There needs to be an emphasis on diverse learning delivery methods. The emergency service community includes a wide range of learners from different generations with different learning styles.
- Reduced incidents and generational turnover in emergency services = less field experience.
- RBR training must include more advanced and immersive simulations that are sufficiently realistic.

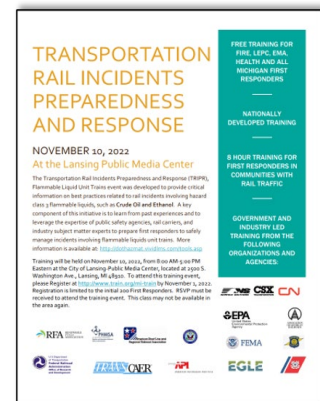
- An increasing number of emergency service personnel has decreased their time for training.
- Volunteer Organizations and their corresponding challenges
- Career and Combination Agencies challenges
- What are the metrics for measuring the quality of training?
- Most curricula and requirements focus on baseline standards
- What are the metrics for higher-level/advanced training?

5. Improve Hazmat Standard of Care (SOC)

- SOC should apply to response training as well as HM preparedness and response
- The AHJ is responsible for determining the level of HM services to be provided
- Must have open and transparent communications with the public on community risks, services required, what is available, and how the gaps should be addressed
- Attendees noted concepts and processes outlined in NFPA 1710/1720 – Standard for Organization and Deployment of Fire Suppression Ops by Career and Volunteer Fire Departments as a possible path forward.

6. Improve Hazmat Funding

- Provide enhanced flexibility on the application and use of grant funds.
- Georgia Experience – provide a playbook for how to apply for each type of grant funding available.
- The federal equivalent is on grants.gov.
- Ultimately all responses are local. Local elected officials must be better informed of operational needs and capabilities presented by HM risks and the corresponding gaps.



7. Improve Hazmat Information Sharing

- Revitalize the concept of the HM Fusion Center.
- The initial focus was too broad.
- The focus should be on information sharing both to/from the emergency preparedness community to federal agencies.
- Given PHMSA's role, the initial focus should be HM transportation focused.
- It differs from the national fusion center network focused on LE and intel needs. Is NOT the same as national fusion center network focused on LE and intel needs.

IV. WORK BEING DONE FOLLOWING 2021 ROUNDTABLE

After reviewing the needs and action recommendations made in the 2019 and 2021 Roundtable meetings, attendees at this virtual Roundtable presented overviews of ongoing work in their respective organizations to help address national needs. Below are summaries of each of these presentations.

1. Federal HazMat Partners Meeting March 29, 2022

Eddie Murphy, PHMSA, presented an overview of the virtual Federal Hazmat Partners meeting that was held on March 29, 2022. In the meeting, attendees reviewed the findings from Roundtable 2021 in detail and discussed the action recommendations in detail. Attendees discussed possible federal projects and support initiatives to help address the needs identified in the Roundtable. Agencies participating in the meeting included EPA, SOL/OSHA, FEMA, USFA/FEMA, DOT/FRA, DOT/PHMSA, and others.



2. HazMat Response Teams and Training Toolkit

John Wolfe and Jeff Dulin of the IAFC presented an overview of the new prototype Hazmat Response Teams and Training Toolkit website that IAFC is developing in partnership with PHMSA, DOT. The website will use data input by approved personnel, including hazmat officers and HMEP training managers, and will display the data on a website. The website will have two major sections: (1) information on Training and (2) information on Hazmat Response Teams. The Training section will include information regarding HMEP-funded course deliveries, the courses in use, and information about the student audience attending the training. The Hazmat Response Teams section consist of information on HMRT type, FEMA typing, location and response coverage area, level of training, level of staffing, organization and team discipline, and team contact information. Each of the two sections will have input tools, information summary dashboards, and the data displays themselves. The initial prototype has been built and populated with limited information for testing and review purposes. Input is sought from Roundtable attendees about possible applications for this data and about additional data sets that might be included to enhance the site and better address information needs.



3. FEMA Programs Update

Captain Janice McCarroll, Tom Warnock, and Ward Quayle of FEMA presented an update on current FEMA programs and hazmat-related guidance and support services.

- Update on the status of the proposed Technological Hazards Preparedness and Training Act of 2022 (proposed bill sponsored by Senator Portman (OH), passed the Senate in September). Bill potentially will expand FEMA's work in this area, including additional funding and expansion of service to help FEMA address many of the Roundtable needs. The bill, as currently drafted, also supports increased collaboration with technological hazard preparedness partners and programs, notably including this Hazmat Roundtable initiative. The link to the proposed

legislation is [S.4166 - 117th Congress \(2021-2022\): Technological Hazards Preparedness and Training Act of 2022 | Congress.gov | Library of Congress](#).

- Update on Chemical Stockpile Emergency Preparedness Program, including the close-out status and treaty timeline for the two remaining stockpiles in CO and KY. At this time, the project is going very well and will be completed on schedule and no significant issues with this close-out are currently anticipated.
- Update on FEMA CBRN Planning Guidance for chemical, biological, and radiological/nuclear events. The following new guidance documents have been released and are available online at [Chemical, Biological, Radiological and Nuclear \(CBRN\) Office | FEMA.gov](#):
 - *Key Planning Factors for Response and Recovery to A Chemical Incident*
 - *Key Planning Factors for Response and Recovery to A Biological Incident.*
 - *Planning Guidance for Response to a Nuclear Detonation.*
 - *Chemical Incident Response Management Document*

As an additional note, Roundtable attendees were reminded that the Naval Post Graduate School Radiological Specific Training Course application deadline is in mid-December, and attendees were encouraged to apply to this or other related opportunities.

4. NFA HazMat Curriculum Update

Dave Donohue, NFA, provided an update on the NFA hazmat curriculum. NFA has long-standing hazmat training mission for the emergency response, planning, and prevention community and currently has 21 different hazmat courses in its active curriculum. Current plans for new courses and course revisions include four new and revised courses that will be piloted in the spring of 2023, four new courses that will be piloted in the second half of 2023, and several new and revised courses planned for the 2024-2025 cycle. Specific course titles include

1. Courses to pilot in the spring 2023

- New all-hazards planning course: *Planning for Unusual Incidents and Catastrophic Events*
- Revision to *Chemistry for Emergency Response*, with a focus on making the course more scenario-based)
- Revision to *Special Operations Program Management and Leadership Course* to make the course more in-line with relevant NFPA standards (NFPA 470 and 475)
- Revision to the *Hazmat Incident Management Course*

2. Courses to be piloted later in 2023 include the following

- *New Hazmat Safety Officer program*
- *New Incident Response to Terrorism and WMD*
- Two new online micro courses (proof of concept tests)

3. Courses to be piloted in the 2024-2025 cycle



- *Local Emergency Planning Committee (LEPC) Best Practices*
- Series of Two-Day *Chemistry of Hazmat* courses
- Revisions to the Terrorism curriculum

5. HAMMER Work on HMEP Grant Gap Analysis

Nancy Ness and Nicole Zawadzki, DOE Hazardous Materials Management & Emergency Response (HAMMER), presented an overview of a new PHMSA initiative to conduct a gap analysis of the HMEP grant program. HAMMER will lead an effort to capture data from HMEP grantees and from reviews of the capabilities of local hazmat preparedness programs served by the HMEP grant program to assess the effectiveness of the utilization of HMEP grant funds. Project goals will be:

- To determine how well local activities funded by the HMEP program align with actual hazmat preparedness needs at the local level.
- To determine the cost-effectiveness of utilizing funds to support Hazmat response and training needs.
- To identify any underserved communities that need to be better addressed by allocating HMEP support.
- To identify any other program gaps that need to be addressed to ensure that the HMEP grant program more effectively supports national hazmat preparedness.
- To identify best practices in using HMEP funds that can be shared with other grantees to improve the effectiveness of their HMEP-related preparedness expenditures.



This work is just beginning; expect the results of this analysis at the summer 2023 Roundtable.

6. EPA - Highlights of the State Emergency Response Commission (SERC) Survey Responses

Sicy Jacob, EPA, provided an update on the SERC Survey Project with highlights on the survey responses. In the 35 years since EPCRA was passed, this is the first survey that has been conducted of all SERCs.

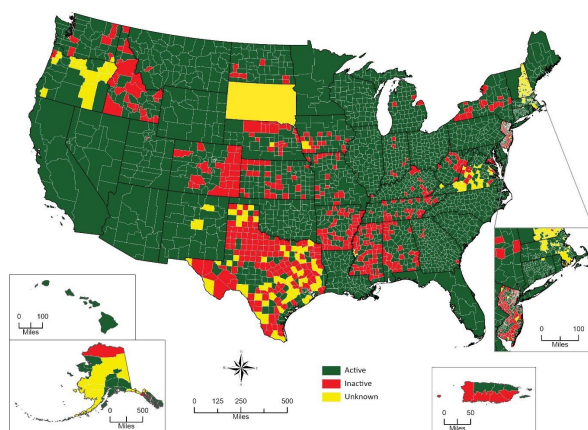
The survey consisted of 86 Questions on SERCs priorities, challenges SERCs have been experiencing, and LEPC status (active/inactive). Survey questions provided to SERCs included information on the current data EPA had on LEPCs, primarily from the results of the 2008 LEPC survey previously conducted.

Responses were received from all 50 states and 2 territories (Puerto Rico and the Virgin Islands). LEPC status was received from all but 1 state. An extension on completing the survey was provided to some states until summer 2022 due to COVID and other priority conflicts.

Highlight of results:

1. **Priorities:** SERCs reported their Top 3 SERC priorities as (1) managing and analyzing Tier II data, (2) assisting LEPCs in developing and/or exercising response plans, and (3) assisting facilities in complying with EPCRA.

2. **LEPC Status:** Out of approximately 4,000 LEPCs that have been established, 2,750 are active, 1,200 are inactive or unknown, ten were reconfigured into a single LEPC, and a few LEPCs either joined neighboring one or no longer exist. SERCs reported that lack of staffing/funding is a significant factor hindering LEPC performance.
3. **Types Of Response Plans:** Most LEPCs have free-standing or all-hazard plans, with the minority of LEPCs having hazmat-only plans.
4. **Number Of Facilities:** There are approximately 640,000 Tier II facilities and approximately 107,000 facilities that handle extremely hazardous substances (EHS).



The final report is being drafted and will be released and shared soon.

7. HazMat Funding Resource Information

Kinha Lester presented an update on a new PHMSA project to provide hazmat funding resource information. This project is based upon the previous need identified in the Roundtable process to provide better information to local emergency preparedness on the wide range of options to access supplemental hazmat funding. Work is in progress to design a national hazmat funding resource guide/local playbook, to build a parallel updatable online resource, and to perform a training needs assessment for possible guidance/training on seeking alternative non-fed funding. Initial drafts of this material will be prepared for Roundtable member reviews in Spring, 2023.



8. NASTTPO Update

Tim Gablehouse presented an update on activities in the National Association of State Title III Program Officials (NASTTPO). NASTTPO has long been a national leader in national hazmat preparedness efforts and has a special interest in the goal of improving LEPC performance. Since the 2021 Roundtable, NASTTPO has been reaching out to SERCs and promoting the Roundtable report, with emphasis on the all-hazards planning approach and methodologies to show success in planning programs. NASTTPO supports states who provide LEPC conferences and training, including topics such as environmental justice, climate change, etc., as well as hazmat. The special focus of NASTTPO efforts is to help local communities understand what they cannot handle and what they need to do to address those challenges. The next NASTTPO meeting will be in April 2023. As a special note to Roundtable members, NASTTPO is also very interested in hearing about and helping promote new LEPC training being undertaken by any organizations or groups in the national hazmat community.

5. TRANSCAER Update

Erica Bernstein presented an update on TRANSCAER (Transportation Community Awareness Emergency Response) hazmat training activities. TRANSCAER is a national outreach program focused on assisting



communities to prepare for and respond to a possible hazmat transportation incident. It offers a high-end curriculum of classroom and online courses in a wide variety of rail transportation-related and hazardous product-related emergency response instruction. Currently, there are many new activities in the works. TRANSCAER has expanded its curriculum into augmented reality experiences with new, highly realistic rail safety training on chlorine releases. TRANSCAER is also working on a new course on lithium-ion batteries and, for those audiences in small rural jurisdictions with limited classroom access, building a hazmat training trailer to support outreach to those audiences. For more information on the new curriculum programs, access our website at [Free Hazmat Training Courses | TRANSCAER](#).

6. Jack Rabbit Trials Update

Andy Byrnes presented an update on the plans for Jack Rabbit III trials.

BACKGROUND: The Jack Rabbit (JR) trials began in April 2010, when the Transportation Security Administration (DHS) collaborated with the Chemical Security Analysis Center (CSAC) and sponsored a series of 1- & 2-ton atmospheric releases of Toxic Inhalation Hazard (TIH) materials, specifically chlorine and ammonia in the Utah desert at the U.S. Army Dugway Proving Grounds. These tests were conducted to determine the Nation's vulnerability to TIH's in transport near sensitive populations and areas.

In both 2015 and 2016, Subject Matter Experts (SMEs) in hazardous materials emergency response designed and conducted experiments at Dugway as part of the Department of Homeland Security's (DHS) research project on catastrophic releases of chlorine named the "Jack Rabbit Program." Emergency Response SMEs worked collaboratively with project scientists to ensure meaningful outcomes during chlorine releases ranging from 7 to 20 tons. The overall objective for the SMEs was to answer questions for the emergency planning and response community regarding planning for, tactical and operational considerations of, and public protection actions during a catastrophic chlorine release or a release of any other TIH material in any jurisdiction.

In August of 2017, key contributors to the JR Project, environmental systems researchers, plume modelers, Hazmat SMEs, and atmospheric scientists were invited to Utah Valley University (UVU) to formulate conclusions based on the JR data. *The Final Report - The Jack Rabbit II Project's Impacts on Emergency Responders*, includes the outcomes that should be used for training and educating the nation's emergency responders and planners.

FUTURE JACK RABBIT III PLANS: In the coming years 2022 – 2025, a follow-up JR III program will be conducted, involving the planning, protection, and response to large-scale releases of Ammonia, similar to the earlier experiments involving Chlorine. The project working group is the "end user" of the possible trial's findings, and the goal is to provide the nation's emergency preparedness community with important outcomes from the program. The team will look at multiple releases and variations in environmental conditions, with the next field trials likely conducted in 2025. Concurrently, the team is working on tabletop exercises to apply the JR I and II chlorine release findings and apply them to anhydrous ammonia applications. The focus will be on three areas: the technology for detection and

monitoring of Ammonia, PPE selection and use for different environments, and response-related mitigation efforts for the releases. More information on this effort will be provided at the next Roundtable meeting.

9. Transport Canada (TC) Update

Fady Al Zarka (Transport Canada) presented an update on TC's current ERG-related work TC is conducting a review of the LNG information in the ERG, including a gap analysis on what information is available academically and whether the ERG information is sufficient regarding LNG during transport. TC is also closing off a stakeholder survey on user satisfaction regarding the ERG. More information on this stakeholder survey and the ERG LRG review will be available in the next Roundtable meeting.

V. OTHER EMERGING HAZMAT ISSUES

There was a brief discussion of emerging issues that may need to be addressed in the next full Roundtable meeting. These issues included

- Alternative energy response,
- The impact of climate change on hazmat risks and challenges,
- Batteries and associated emergency response concerns,
- Labeling and placarding of used auto batteries that still have stranded energy charge,
- LNG by rail issues, concerns, and myths,
- Impact of international events on US concerns and risk perceptions, and
- Large scrap vehicles that are CNG powered often have fuel tanks that are not fully evacuated, presenting potential risks to responders.

These and other emerging national issues will be addressed in the 2023 Roundtable meeting.

1. Next Steps

Greg Noll reviewed the next steps.

- Please provide any supplemental inputs to the Roundtable discussions by Friday 18, November.
- Please notify Kinha Lester if interested in participating in any of the projects discussed.
- Fall 2022 Roundtable Update
 - *Draft sent to meeting attendees by 16 December with feedback by 6 January 2023.*
 - *Final report to be released January 30, 2023.*

Closing comments by Eddie Murphy

- Next Roundtable is planned for May 9 – 10, 2023.

Meeting closing by Dave Donahue.


VI. APPENDIX: MEETING POWERPOINT PRESENTATION

1



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Virtual Meeting November 8, 2022

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Findings
2021 Feasibility Studies and the 2019-21 Roundtable Meetings

National Issues and Concerns grouped into seven areas

Recommended Actions in each area to address the issues and concerns

1. Planning & LEPC/TERC Performance
2. HM Prevention
3. Risk-Based Response
4. HM Training
5. HM Standard of Care
6. HM Funding
7. Information Sharing

2



Welcome

- Opening Comments
- Participant Introductions

Agenda

- Review of 2021 Roundtable & Feasibility Assessment Recommendations
- Actions and Work Being Done by Roundtable Members and Federal Partners since the 2021 Roundtable Meeting
- Emergent Issues
- Next Steps
- Final Comments / Closing


6

2021 Working Group Recommendations to Help Improve LEPC / TERC Performance

- Assist LEPCs Transition to **All-Hazard Preparedness**
- Improve Access to **Hazard Mitigation Grants**
- Improve **Community Awareness and Education**
- Improve **LEPC Membership and Leadership**
- Improve **LEPC Funding**



3



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Hazardous Materials Grants Program Overview

Hazardous Materials Emergency Preparedness (HMEP) Grant

Assistance for Local Emergency Response

2021 Hazardous Materials Emergency Response Roundtable Report


[2021 Hazardous Materials Emergency Response Roundtable Report.pdf](#)

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7

2021 Roundtable Recommendations to Improve Planning and LEPC / TERC Performance

- **Strong concurrence** better integration of LEPC into local planning process
- Improved integration of environmental issues into THIRA process
- Enhanced state & national-level training efforts for LEPC members
- Need for clear and improved metrics of success for LEPC performance
- Much of current federal doctrine on HM planning based on 1980 – 1990 vision



4

Review of the 2019-2021 Roundtable Meetings


Emergent Issues and Actions Needed

2019-2021 HazMat Roundtable

- Planning
- Prevention
- Response
- Training
- Standard of Care
- Funding
- Information Sharing

Pre-Roundtable 2021 Feasibility Studies

- Improve LEPC/TERC Performance
- Improve Risk-Based Preparedness/Response
- Improve Hazmat Prevention/Mitigation



8

2021 Working Group Recommendations to Improve Risk-Based Preparedness & Response

- Strengthen **national recognition and support** for risk-based response (RBR)
- Improve **science and evidence-based data** for RBR
- Improve **RBR training strategies** similar to the ICS / NIMS concept
- Strengthen **emergency response systems**



9

2021 Roundtable Recommendations to Improve Risk-Based Preparedness & Response

- Need to clarify what is RBR and what is not, and to help ensure that responders are able to apply risk-based skills and competencies.
- Development of a national curriculum to support RBR.
- Update current federal planning and response guidance on risk-based methods and processes.
- While number of HM incidents has decreased, importance of RBR decision-making processes has increased.



13

2021 Roundtable Recommendations to Improve Hazardous Materials Training

- Emergency service community includes **wide range of learners** from different generations with different learning styles. Emphasis upon having diverse and range of delivery methods.
- Reduced incidents and generational turnover in emergency services = **less field experience**.
- RBR training must include more **advanced and immersive simulations** that are sufficiently realistic.



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2021 Working Group Recommendations to Improve HazMat Prevention / Mitigation

- Improve **local** HM prevention / mitigation policies and metrics
- Improve **local** zoning, transportation routing, and land-use planning
- Mitigate **risks caused by natural disasters**
- Improve **HM facility operations, inspections and code enforcement activities**.



14

2021 Roundtable Recommendations to Improve Hazardous Materials Training

- Increasing number of emergency service personnel have **decreased time for training**
 - Volunteer Organizations
 - Career and Combination Agencies
- What are the **metrics** for measuring the quality of training?
 - Most curricula and requirements focus on baseline standards.
 - What are metrics for higher level / advanced training?



11

2021 Roundtable Recommendations to Improve HazMat Prevention / Mitigation

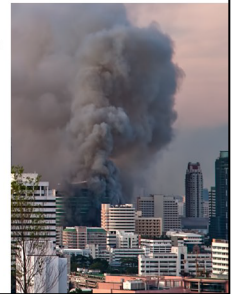
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- National planning guidance should recognize that **risk assessment is essential** for effective community prevention and mitigation.



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2021 Roundtable Recommendations to Improve HazMat Standard of Care

- SOC should apply to response training as well as HM preparedness and response
- The AHJ is responsible for determining the level of HM services to be provided
- Must have open and transparent communications with public on services required and what is available
- Attended noted processes outlined in NFPA 1710 / 1720 – Standard for Organization and Deployment of Fire Suppression Ops by Career and Volunteer Fire Departments.



12

2021 Roundtable Recommendations to Improve HazMat Prevention / Mitigation

- National planning requirements should strongly **discourage "cookie cutter planning requirements."** Recognize the relationship between prevention, mitigation, planning and response
- Inspectors and Code Enforcement personnel should be **trained in HM risk recognition and identification** to strengthen early identification of risks that can be addressed by timely prevention interventions.



16

2021 Roundtable Recommendations to Improve HazMat Funding

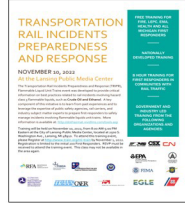
- Provide enhanced flexibility on application and use of grant funds
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- Ultimately all response is local. Local elected officials must be better informed of operational needs and capabilities presented by HM risks, and the corresponding gaps



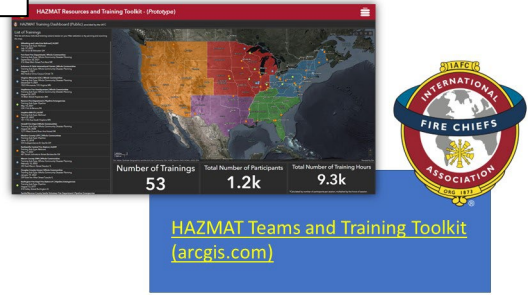
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- Is NOT the same as national network focused on LE and intel needs



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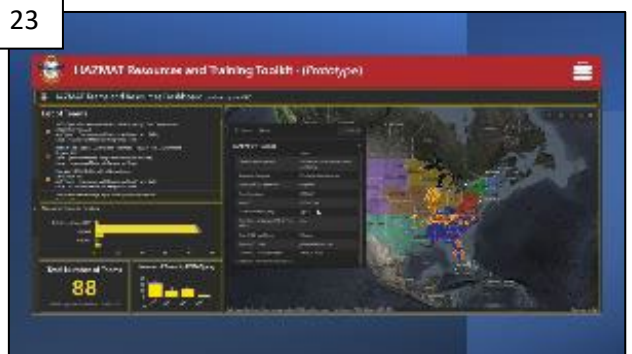
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Federal HazMat Partners Meeting

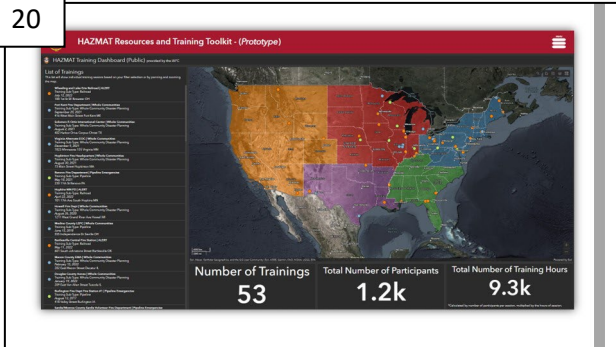
- Virtual meeting March 29, 2022
- Attendees reviewed and concurred with findings from Roundtable 2021. Discussed possible federal projects to help address needs identified.
- Federal agencies included:
 - EPA
 - DOL/OSHA
 - FEMA
 - USFA/FEMA
 - DOT/FRA
 - DOT/PHMSA
 - Other Partners



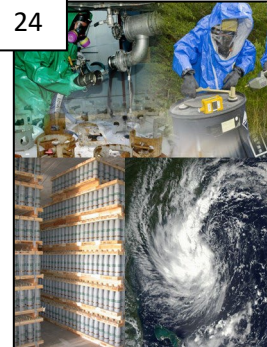
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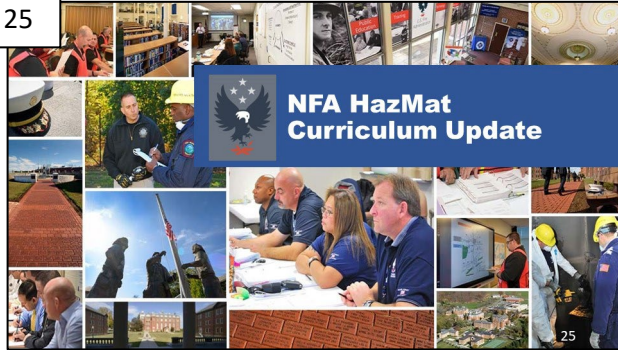


FEMA Update

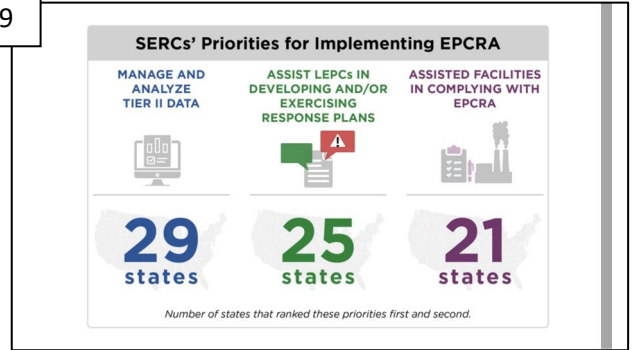
- Overview of proposed Technological Hazards Preparedness and Training Act of 2022 (proposed bill sponsored by Senator Portman, passed the Senate in September)
- Update on Chemical Stockpile Emergency Preparedness Program (close out status and treaty timeline for the two remaining stockpiles in CO and KY)
- Update on FEMA CBRN Planning Guidance for chemical, biological and radiological/nuclear events



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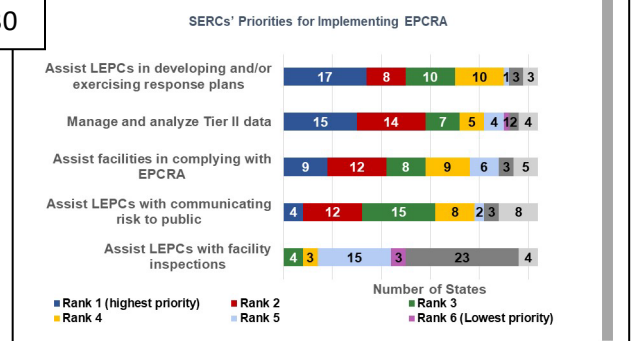
26

HAMMER – HMEP Grant Gap Analysis

PHMSA has partnered with HAMMER to conduct a HMEP grant program analysis with a special focus on:

- Utilization of funds to support needs for Hazmat response and training
- Feedback on utilization funds in underserved communities
- Program gaps
- Sharing of best practices

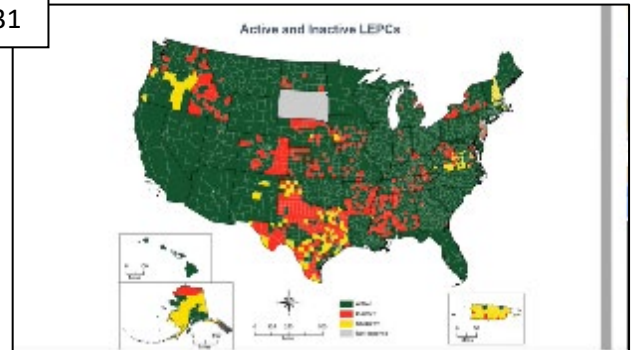
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Survey of the State Emergency Response Commissions (SERCs)

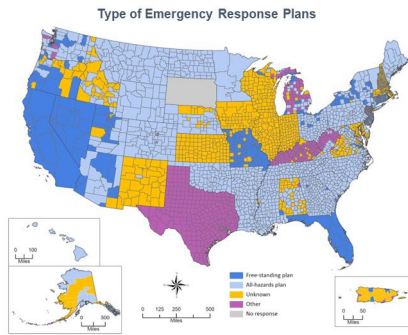
- First survey of the SERCs
- October 2021 – 35 Years after EPCRA was passed
- Questions: SERCs priorities, challenges, LEPC status (active/inactive)
- Responses received: 50 states + 2 Territories (PR, VI)
- LEPC Status received: 49 states + 2 Territories (PR, VI)
- Provided extension to some states until summer to respond to the survey due to COVID and other priorities.
- Report – December 2022

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LEPC Status

- Inception of the EPCRA Program: 4,000 (approx.) LEPCs established.
- Survey responses:
 - 2,750 – Active
 - 1,175 – Inactive/Unknown
 - 1 state – Did not provide their LEPC status (61 LEPCs) due to lack of resources
 - 1 state – reconfigured from 10 to 1 state-wide
 - A handful of LEPCs either joined neighboring ones or no longer exist.
- SERCs reported - lack of staffing/funding hinder LEPC performance

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Total Number of Tier II Facilities (CY20 Reports)

Planning for hazardous chemicals/materials is crucial for protecting the community and first responders.

Survey Responses:

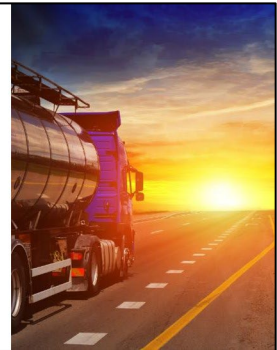
- 640,000 facilities submitted Tier II reports (hazardous chemicals present on-site) in CY20.
- 107,000 facilities handle Extremely Hazardous Substances in CY20.

All-hazards plan must include potential chemical emergencies as required under EPCRA Section 303. LEPCs were created under EPCRA to focus on potential chemical emergencies.

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Next Steps

- Please provide any supplemental inputs to the Roundtable discussions by Friday 18, November.
- Please notify Kinha Lester if interested in participating in any of the projects discussed.
- Fall 2022 Roundtable Update
 - Draft will be sent to meeting attendees by 16 December. Please provide feedback by 6 January 2023.
 - Final report to be released January 30, 2023.



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HazMat Funding Resource Information

- Work in progress now. USDOT doing initial design work on information/support tools.
 - National hazmat funding resource guide/local playbook
 - Possible guidance/training on seeking alternative non-fed funding
- Initial drafts for Roundtable member reviews in Spring, 2023.



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Final Comments

- Roundtable meeting participants

Closing

VII. LIST OF PARTICIPANTS

The following is the list in alphabetical order of participants in the 2022 Virtual Roundtable. Of special recognition is given to the PHMSA leadership team of William Schoonover, Aaron Mitchell, Eddie Murphy, Greg Noll, and the Bloomsburie team of Kinha Lester and Bill Lewis.

Fady	Al Zarka	<i>Transportation of Dangerous Goods at Transport Canada</i>
Erica	Bernstein	<i>Chemtrec</i>
Andy	Byrnes	<i>Utah Valley University Emergency Services</i>
Sean	Carroll	<i>National Fallen Firefighters Foundation</i>
N.	Cassels	<i>National Fire Protection Association</i>
Lorraine	Churchill	<i>Ammonia-Safety & Training Institute</i>
Art	Deyo	<i>Utah Department of Public Safety</i>
Deidre	Dockery	<i>International Association of Fire Chiefs</i>
David	Donohue	<i>Federal Emergency Management Agency</i>
Jeff	Dulin	<i>International Association of Fire Chiefs</i>
Rick	Edinger	<i>NFPA Hazardous Materials Response Personnel Committee Chair</i>
Manny	Ehrlich	<i>U.S. Chemical Safety and Hazard Investigation Board</i>
Richard	Emery	<i>Emery & Associates Inc.</i>
Rebecca	Fontenot	<i>Department of Homeland Security</i>
Timothy	Gablehouse	<i>National Association of SARA Title III Officers (NASTTPO)</i>
Christina	Garrard	<i>Department of Transportation</i>
Greg	Noll	<i>NFPA Hazardous Materials Response Personnel Committee & Interagency Board for Emergency Preparedness and Response</i>
Rebecca	Harned	<i>International Association of Fire Chiefs</i>
Mark	Kirk	<i>Department of Homeland Security</i>
Kinha	Lester	<i>Bloomsburie LLC</i>

Mark	Mayday	<i>Department of Transportation</i>
Janis	McCarroll	<i>Federal Emergency Management Agency</i>
Joseph	Milazzo	<i>Chemtrec</i>
Richard	Miller	<i>International Association of Fire Chiefs</i>
Eddie	Murphy	<i>Department of Transportation</i>
Nancy	Ness	<i>HAMMER Federal Training Center</i>
David	Pstrak	<i>Nuclear Regulatory Commission</i>
William	Quade	<i>Department of Transportation</i>
Ward	Quayle	<i>Federal Emergency Management Agency</i>
Bob	Royall	<i>Harris County Fire Marshal Office</i>
William	Schoonover	<i>Department of Transportation</i>
Sicy	Jacob	<i>Environmental Protection Agency</i>
Victor	Stagnaro	<i>National Fallen Firefighters Foundation</i>
Dante	Stellar	<i>FEMA</i>
Jonathan	Szalajda	<i>Centers For Disease Control and Prevention/National Institute for Occupational Safety and Health</i>
Benoit	Turcotte	<i>Transportation of Dangerous Goods at Transport Canada</i>
Thomas	Warnock	<i>Federal Emergency Management Agency</i>
John	Woulfe	<i>International Association of Fire Chiefs</i>
Nicole	Zawadzki	<i>HAMMER Federal Training Center</i>