

Emergency Responder Training Benchmark Report

Industry benchmarking study of
Emergency Responder
refresher training frequencies,
methodologies and best
practices.

Explore More



Emergency Responder Refresher Training Benchmarking

Thank you for participating in the SGA Natural Gas Association (SGA) Emergency Responder Refresher Training benchmarking study. Your input has been instrumental in helping us assess industry training frequencies, methodologies, and best practices.

This report aggregates data from 36 participating companies across the natural gas industry and value chain, providing a comprehensive overview of how organizations structure and deliver refresher training for emergency responders. This study aimed to identify common training cadences, highlight trends, and support companies in optimizing their training programs for improved emergency preparedness and safety.



Suzanne Ogle

CEO - SGA Natural Gas Association



Executive Summary

In 2025, SGA Natural Gas Association (SGA) conducted a benchmarking study to evaluate best practices for Emergency Responder refresher training within the natural gas sector. The study examined the frequency, methodologies, and effectiveness of training programs to ensure emergency responders remain well-prepared for potential incidents.

Data was collected from SGA's membership base, with 36 survey responses received, including two partially completed submissions. The findings represent a diverse range of operational models and training approaches. While training frequencies vary, most organizations conduct refresher training annually or biennially, utilizing a mix of in-person, virtual, and hands-on simulation methods. The study also identified key challenges, including compliance with industry regulations, resource constraints, and training standardization, all of which impact overall training effectiveness.

The study highlights industry-leading best practices, such as scenario-based exercises, cross-functional training partnerships, and the use of technology to enhance interactive learning. These insights provide a valuable resource for organizations looking to optimize their training programs and align with industry benchmarks.

As a trusted training partner for the natural gas industry, SGA offers customized training solutions to help organizations enhance, supplement, or outsource their refresher training needs. By leveraging these benchmarking insights, companies can strengthen their training programs, improve emergency preparedness, and enhance safety.



Introduction & Background

Emergency responders play a critical role in ensuring the safety and security of natural gas operations, swiftly responding to incidents that could impact personnel, infrastructure, and communities. Given the evolving nature of emergency scenarios, responders' effectiveness is heavily dependent on ongoing training and skill reinforcement. Regular refresher training ensures that emergency response teams remain proficient in hazard recognition, incident management, communication protocols, and the latest safety regulations.

Recognizing the need for industry-wide insights into training frequencies, methodologies, and best practices, SGA Natural Gas Association (SGA) conducted this benchmarking study to assess how organizations across the natural gas sector structure their Emergency Responder refresher training. By identifying common practices and challenges, this study provides a comparative analysis that allows companies to evaluate their own training programs against industry standards and explore opportunities for improvement.

Objectives & Scope of the Benchmarking Study

The primary objective of this study is to gain a data-driven understanding of industry trends related to Emergency Responder refresher training. Specifically, this analysis seeks to:

- **Examine Training Cadence:** Identify how frequently companies conduct refresher training (e.g., annually, biennially, or on a different schedule).
- **Evaluate Training Methods:** Assess the effectiveness of various delivery formats, including in-person instruction, virtual training, hands-on simulations, and blended learning approaches.
- **Identify Industry Standards & Compliance Practices:** Understand how companies align their training with regulatory requirements and safety best practices.
- **Explore Common Challenges & Barriers:** Identify constraints such as resource limitations, scheduling conflicts, and regulatory complexities that impact training implementation.
- **Pursue Best Practices:** Determine if members would be interested in a subsequent meeting to showcase innovative and effective training strategies used by industry leaders to enhance emergency preparedness.

The Importance of Refresher Training for Emergency Responders

Emergency response is a high-stakes function where split-second decisions can determine outcomes. While initial training equips responders with fundamental knowledge, skills can degrade over time without regular reinforcement. Refresher training serves to:

- **Reinforce Critical Response Skills:** Ensuring that responders maintain proficiency in hazard assessment, response coordination, and emergency communication.
- **Adapt to Evolving Risks & Regulations:** Keeping teams updated on new safety standards, emerging threats, and regulatory requirements.
- **Enhance Coordination & Decision-Making:** Strengthening collaboration between responders, company personnel, and public safety officials through scenario-based drills.
- **Improve Overall Safety Performance:** Reducing response times, increasing situational awareness, and minimizing the risk of operational disruptions or safety incidents.

By conducting this benchmarking study, SGA aims to provide industry stakeholders with valuable insights to enhance their emergency preparedness strategies. The findings will serve as a guide for companies seeking to optimize their training programs, improve regulatory alignment, and ensure that emergency responders are equipped with the skills needed to handle critical situations effectively.



Reinforce critical response skills



Adapt to evolving risks & regulations



Improve overall safety performance

Scope & Methodolgy

The benchmarking study used a survey-based approach to assess Emergency Responder refresher training across the natural gas industry. It examined training frequencies, delivery methods, compliance, challenges, and best practices from diverse organizations.

Data Collection Process

To ensure broad participation, companies were invited via:

- Email invitations to the Emergency Response and Mutual Aid Committee members.
- Announcements on Connect@SGA, SGA Natural Gas Association's online platform.
- Direct outreach to the SGA Board of Directors, encouraging company participation.

The survey remained open for three weeks, with three reminder emails to boost responses.

Data Confidentiality & Reporting

All responses were aggregated and anonymized to maintain confidentiality. Findings provide industry-wide insights while protecting company identities.

This methodology ensures a clear, data-driven understanding of emergency responder training, equipping companies with valuable benchmarking insights to enhance safety and preparedness.

Participating Companies

36



Workforce
> 500

42%

Scope & Methodology

Participant Overview

A total of 36 companies participated in the benchmarking study, representing a diverse cross-section of the natural gas industry. Many organizations operate across multiple business segments—such as transmission, distribution, and storage. The breakdown of participating companies based on their primary identifying segment follows:

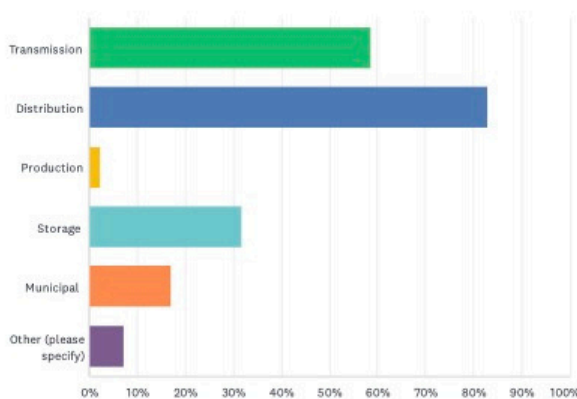
- 10 Local Distribution Companies (LDCs)
- 3 Municipal Gas Utilities
- 21 Natural Gas Transmission Companies
- 1 Power Generation Company
- 1 Producer

This variation in business models provides a comprehensive perspective on emergency responder training practices, capturing insights from companies with different operational complexities and regulatory requirements.

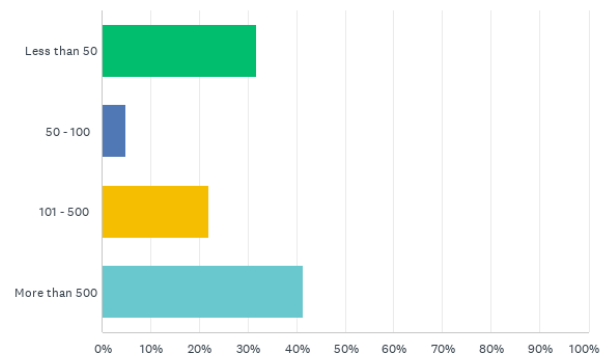
Workforce Size Classification & Analysis

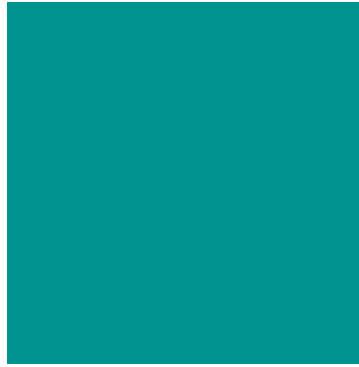
The benchmarking study categorized organizations based on workforce size to analyze trends in Emergency Responder refresher training. Workforce groups included Less than 50, 50-100, 101-500, and More than 500 employees. This classification enabled a comparative assessment of training challenges, engagement levels, and resource allocation across different-sized organizations.

Operation Sectors



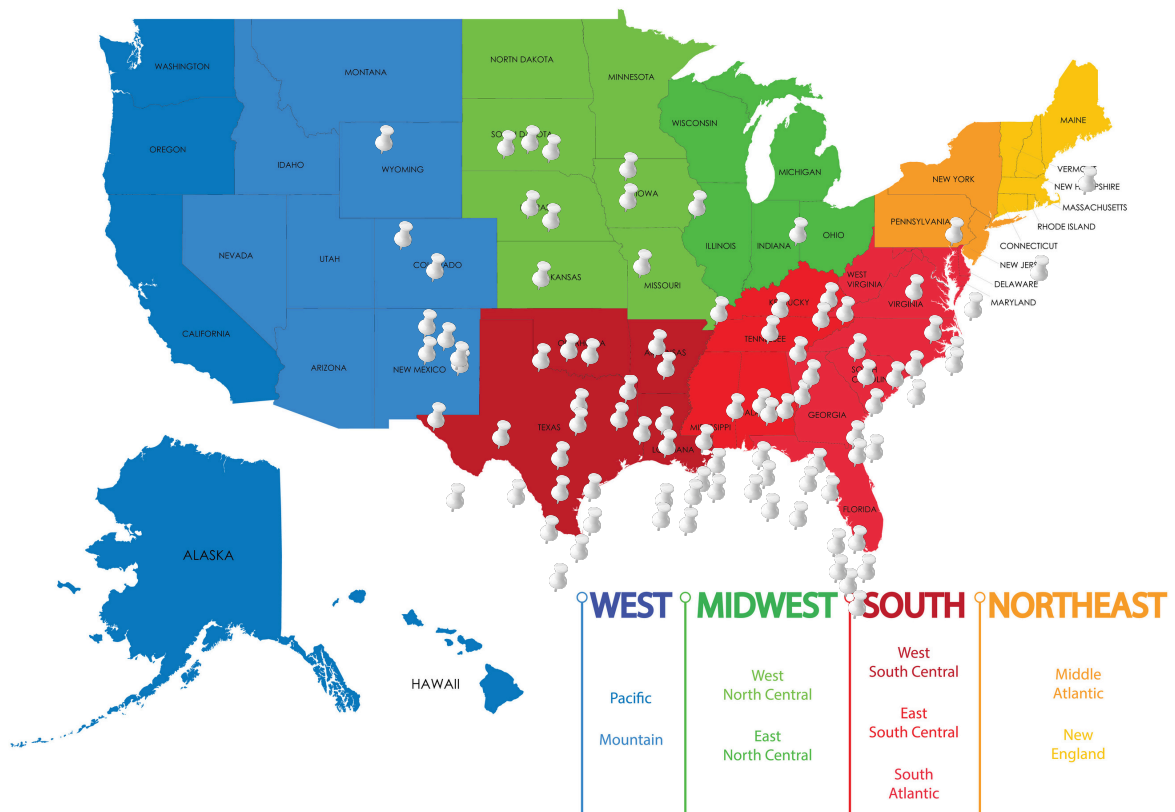
Designated Emergency Responders





Asset Geography

Reporting companies manage assets across multiple geographic regions, including the Northeast, Midwest, Central, Southwest, and Southeast. This geographic distribution significantly influences training cadences, regulatory compliance, and response preparedness. To address regional risks, infrastructure complexities, and local emergency response coordination requirements, companies tailor their refresher training programs accordingly.



Key Metrics

The benchmarking study evaluated Emergency Responder refresher training across organizations, examining key training practices, assessment methods, and influencing factors. These insights provide a comprehensive view of training frequency, effectiveness evaluation, engagement strategies, and resource allocation, helping organizations optimize their training programs.

Training Frequency

Survey responses indicate variability in refresher training schedules. While some organizations conduct annual refresher training, others follow a quarterly or ad-hoc approach based on operational needs, regulatory requirements, or incident-driven training demands.

Evaluation Methods

Organizations assess training effectiveness using various methods, including:

- Supervisor evaluations to gauge performance in real-world scenarios.
- Employee feedback surveys to measure engagement and perceived effectiveness.
- Competency tests to ensure skill retention and compliance.

Engagement Levels

Participation rates varied, with challenges reported in maintaining engagement, particularly in larger organizations. Interactive training formats, virtual sessions, and hands-on drills were identified as methods to improve engagement and retention.

Budget Allocation for Training

Budget allocation differs across workforce sizes, with larger organizations typically having more structured training budgets. Smaller organizations reported financial constraints impacting training frequency and resource availability.

Key Metrics

The biggest challenges organizations face in refresher training include:

- Scheduling & logistics issues, affecting organizations of all sizes, not just smaller teams.
- Employee availability, with nearly half of respondents citing difficulty in balancing training with operational demands.
- Budget constraints, which limit training frequency and the ability to incorporate more advanced learning tools.
- Engagement and content retention, highlighting the need for more interactive training methods.

To address these challenges, organizations have implemented:

- Flexible training schedules to accommodate shift work and reduce scheduling conflicts.
- Blended learning approaches, combining hands-on exercises with online training for greater accessibility.
- Stronger leadership support, ensuring that emergency response training is prioritized and integrated into company-wide safety programs.

However, despite recognizing these challenges, most organizations have not made significant recent changes to their training programs. This suggests an opportunity for greater innovation in training delivery methods to improve engagement, retention, and participation.



Scheduling & Logistics



Engagement



Budget
Constraints



Data Analysis & Findings

Scheduling Issues Are Universal:

- 73% of respondents cited scheduling/logistics as a challenge.
- This suggests that even larger organizations struggle with coordinating training sessions, not just smaller teams.

Employee Availability is a Significant Factor:

- 45% of organizations report employee availability as a barrier, reinforcing that workforce demands limit training participation.

Recent Training Adjustments Are Limited:

- 33.33% of respondents reported recent changes to their training programs.

“ This suggests that while organizations recognize training challenges, many have not yet adapted their programs to address them.

”

Employee Availability

45%



Scheduling

73%

Challenges by Workforce Size

The effectiveness of Emergency Responder refresher training varies across organizations based on workforce size. Smaller teams face different constraints than larger organizations, influencing how training is conducted and retained. Below is a breakdown of the predominant challenges reported by each workforce size:

Less than 50 Employees

- Scheduling & logistics issues (9 mentions) – Limited personnel availability makes it difficult to coordinate training sessions.
- Employee availability (7 mentions) – Small teams struggle to allocate time for training without disrupting daily operations.
- Engagement and retention of training content (3 mentions): Fewer resources for interactive training methods impact knowledge retention.
- Budget constraints (2 mentions) – Limited funding affects training frequency and format options.

50 - 100 Employees

- Scheduling and logistics issues (1 mention): While still a challenge, it is less of a barrier than smaller teams.
- Employee availability (1 mention) – Availability concerns are less pronounced than in smaller organizations.

101 - 500 Employees

- Scheduling and logistics issues (7 mentions): Larger teams require more coordination to ensure all responders receive training.
- Engagement and retention of training content (5 mentions): Training effectiveness declines as organizations grow, requiring more engaging formats.
- Employee availability (4 mentions) – Even with larger teams, conflicts remain challenging.
- Budget constraints (2 mentions) – Some organizations in this range still struggle with financial allocations for training.
- Participation from external emergency responders (1 mention) – Collaboration with outside agencies complicates training efforts.

More than 500 Employees

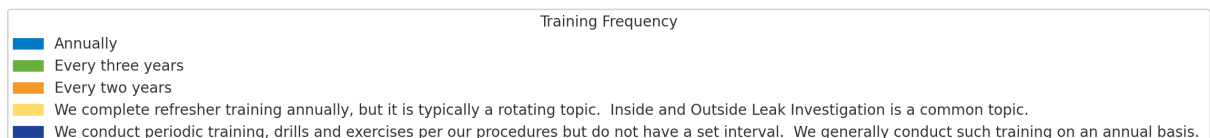
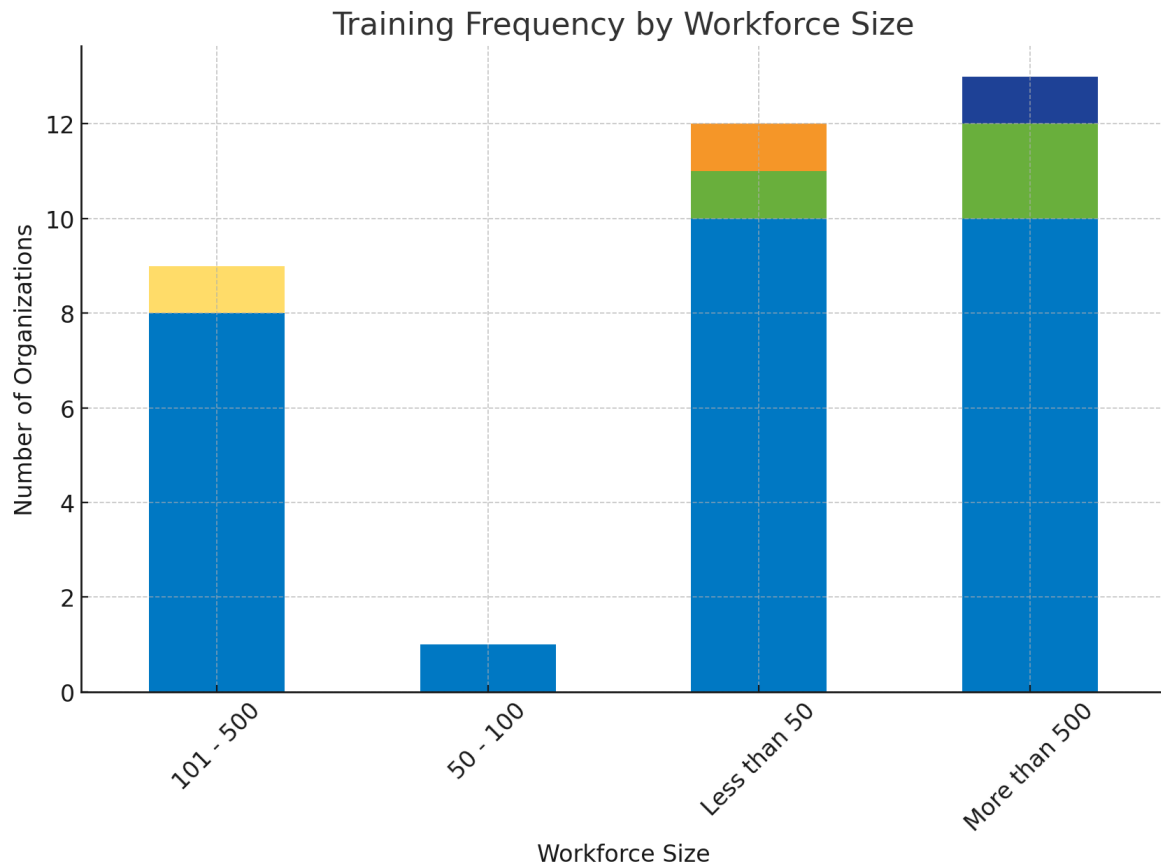
- Scheduling and logistics issues (7 mentions): Managing training across large teams remains challenging.
- Engagement & retention of training content (4 mentions) – Larger organizations face difficulties in keeping employees engaged.
- Employee availability (3 mentions) – Despite having more personnel, scheduling remains a factor.



Training Frequency

Organizations that conduct annual refresher training reported higher engagement rates, mainly through practical skills demonstrations, supervisor evaluations, and structured feedback mechanisms.

These methods ensure that emergency responders not only complete training but also effectively retain and apply their knowledge. Regular training cycles allow for consistently reinforcing critical skills, reducing the risk of knowledge gaps over time. Additionally, frequent training fosters a culture of preparedness, where employees remain actively engaged in learning and improvement.

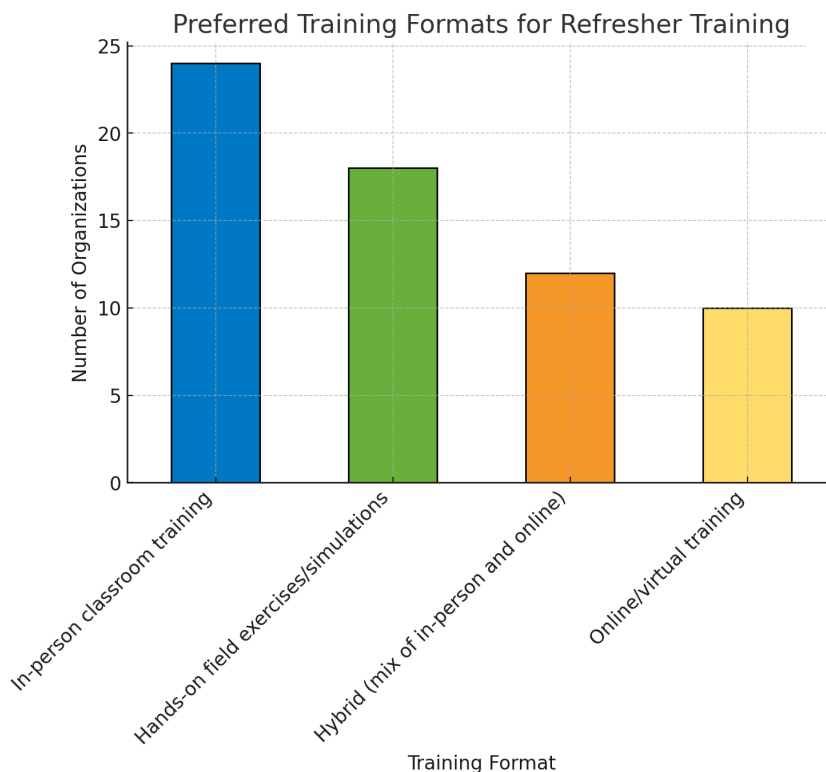


Training Formats

The survey data reveals that organizations use a variety of training formats for emergency responder refresher training:

- The most commonly used format is in-person classroom training (24 mentions), highlighting a preference for structured, instructor-led learning.
- Hands-on field exercises/simulations (18 mentions) are widely utilized, emphasizing the importance of practical, real-world training scenarios.
- Hybrid training (12 mentions), which combines in-person and online learning, is gaining traction as a flexible approach.
- Online/virtual training (10 mentions) is the least common but still an important component, providing accessibility for remote learners.

These findings suggest that while traditional in-person and hands-on training remain dominant, there is a growing shift toward blended and online learning approaches to improve accessibility and flexibility. Organizations looking to enhance engagement and retention may benefit from integrating more interactive digital elements alongside traditional methods.

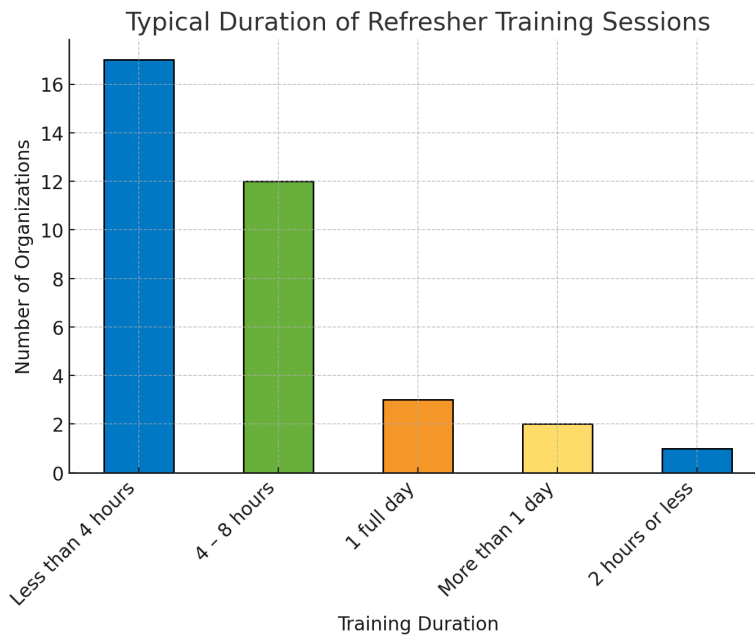


“Over 70% of organizations incorporate hands-on field exercises or simulations in their refresher training, reinforcing the importance of real-world practice in emergency preparedness.”

Training Duration

The survey data highlights variability in refresher training session length, with a strong preference for shorter, more efficient training formats:

- The most common duration is less than 4 hours (17 mentions), indicating a focus on concise, targeted training sessions.
- 4-8 hours (12 mentions) is also widely used, allowing for more in-depth coverage of emergency response topics.
- Full-day (3 mentions) and multi-day training (2 mentions) are less frequent, likely due to scheduling constraints and resource allocation.
- A small number (1 mention) reported sessions of 2 hours or less, suggesting some organizations prioritize microlearning approaches.



Recommendation: Organizations may consider microlearning strategies to enhance knowledge retention and cater to modern learning preferences, such as delivering training in short, focused segments.

This approach aligns with Gen Z's preferences, with 67% favoring mobile-based learning, which makes training more accessible and engaging. By integrating microlearning, companies can improve engagement and ensure that training is effective and adaptable to the workforce's evolving needs.

Refresher Training Topics

The survey data reveals key themes in refresher training, reflecting industry priorities and regulatory requirements:

Most Common Training Topics:

- Gas leak response protocols (30 mentions) – The most frequently covered topic, emphasizing its critical role in emergency preparedness.
- Coordination with local emergency services (28 mentions) – Highlights the importance of collaboration with external agencies for effective incident response.
- Incident Command System (ICS) (27 mentions) – A fundamental framework for emergency response, ensuring structured decision-making and communication.
- Fire suppression techniques (11 mentions) – Included in some training programs, but less frequent, possibly due to specialized fire response teams.
- Hazardous Materials (HAZMAT) handling (7 mentions) – Covered in fewer training programs, likely because not all responders deal directly with hazardous materials.



Refresher Topic Insights

Key Findings on Training Topics by Workforce Size

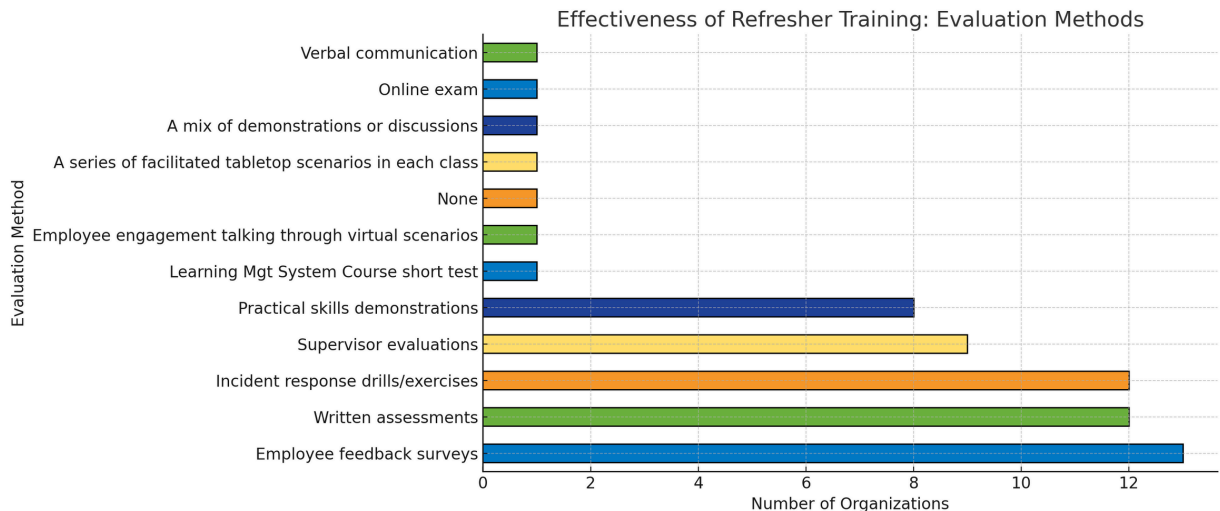
- **Gas Leak Response is a Universal Priority:**
 - Less than 50 (12 mentions) and More than 500 employees (10 mentions) focus heavily on gas leak response, highlighting its critical role.
 - Mid-sized organizations (101-500: 8 mentions) also emphasize it but slightly less than smaller teams.
- **Coordination with Local Emergency Services Increases with Workforce Size:**
 - More than 500 employees (11 mentions) prioritize coordination the most.
 - Less than 50 employees (10 mentions) also emphasize collaboration, showing its importance across organization sizes.
 - 101-500 employees (7 mentions) rely more on internal response teams.
- **Fire Suppression Training Peaks in Mid-Sized Organizations:**
 - 101-500 employees (5 mentions) focus the most on fire suppression.
 - Less than 50 (2 mentions) and More than 500 employees (4 mentions) train on it less frequently, possibly relying on external fire response teams.
- **HAZMAT Training is a Lower Priority Across All Sizes:**
 - 101-500 (3 mentions) and More than 500 employees (3 mentions) include it in training.
 - Less than 50 employees (1 mention) show minimal focus, while 50-100 employees reported none, suggesting lower exposure to hazardous materials.
- **ICS (Incident Command System) is Consistently Important:**
 - 101-500 (8 mentions), Less than 50 (9 mentions), and More than 500 employees (9 mentions) all prioritize ICS.
 - 50-100 employees (1 mention) show the lowest engagement, likely due to fewer emergency responders.
- **Larger Organizations Cover More Non-Emergency Topics:**
 - Over 500 employees have internal/external communication protocols not found in smaller organizations.
 - One 101-500 employee organization reported training on broader safety and compliance topics.

Measuring Effectiveness

Assessing the impact of refresher training is critical to ensuring emergency responders retain essential skills and knowledge.

The survey data reveals that organizations primarily rely on a mix of feedback, assessments, and practical evaluations to measure training effectiveness. Employee feedback surveys (most used method) highlight a strong focus on participant insights, while written assessments and incident response drills balance theoretical understanding with hands-on application. Supervisor evaluations and practical skill demonstrations further reinforce competency but are used less frequently.

This data suggests that while organizations value structured evaluation, greater emphasis on practical skill assessments could enhance real-world preparedness.



Alignments & Mismatches

The survey data highlights some key alignments and mismatches between how organizations conduct training and how they evaluate its effectiveness.

Alignments:

Annual training organizations use the broadest range of evaluation methods

- 11 mentions each for employee feedback surveys, written assessments, and incident response drills, which indicate a structured approach to evaluation.
- Supervisor evaluations (8 mentions) and practical skills demonstrations (6 mentions) reinforce engagement and competency tracking.
- These findings confirm that organizations that train more frequently measure effectiveness more comprehensively.

Organizations conducting periodic, drill-based training focus on practical assessments

- These organizations prioritize incident response drills and written assessments, aligning with their hands-on approach.
- This suggests a good match between training style and evaluation methods.

Mismatches:

Organizations conducting multi-year training rely on limited evaluation methods

- Training every three years or every two years has almost no formal evaluation methods except for occasional employee feedback surveys (2 mentions) and virtual scenario discussions (1 mention).
- This suggests that infrequent training may not be paired with robust assessments, potentially leading to gaps in skill retention.

Practical skills demonstrations are underutilized in evaluation

- Despite organizations frequently using hands-on training formats, practical skills demonstrations are used far less (only 6 mentions in annual training).
- This could indicate that real-world application is not being thoroughly tested, despite being a critical component of emergency response.

Heavy reliance on employee feedback surveys without competency testing

- Employee feedback is the most common evaluation method, yet fewer organizations use practical skill tests or supervisor evaluations to measure performance objectively.
- Best practice recommendations suggest balancing subjective feedback with competency-based assessments to ensure responders can perform effectively under pressure.



Thank You

At SGA, we are committed to linking people, ideas, and information to foster collaboration and continuous improvement. Your contributions play a vital role in shaping the future of emergency response training, ensuring that our industry remains resilient and prepared for any challenge.



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