

# Fatality Analysis of Maintenance-of-way Employees and Signalmen



**National Railroad Construction and Maintenance  
Association Conference 2026**

**Cory Johnson - FRA**

# *FAMES Background*

- Started in 2009
- A committee consisting of
  - Rail Labor
  - Railroad Management
  - Railroad Contractors
  - Associations
  - Federal Regulators
- FAMES findings and recommendations are intended for education and prevention purposes.





U.S. Department of Transportation  
Federal Railroad Administration



## *Mission Statement*

The Mission of the Fatality Analysis of Maintenance-of-way Employees and Signalmen (FAMES) Committee is to analyze all fatalities and selected related incidents in order to make recommendations to reduce the risk of future occurrences and eliminate fatalities to roadway workers.

## *Reports and Recommendations*

- As a team, FAMES reviews an accident, looking for all possible contributing factors.
- With consensus of the team, FAMES develops data-driven reports.
- FAMES reports are intended as educational tools.

# Reports, Safety Alerts, and Alerts

## Reports

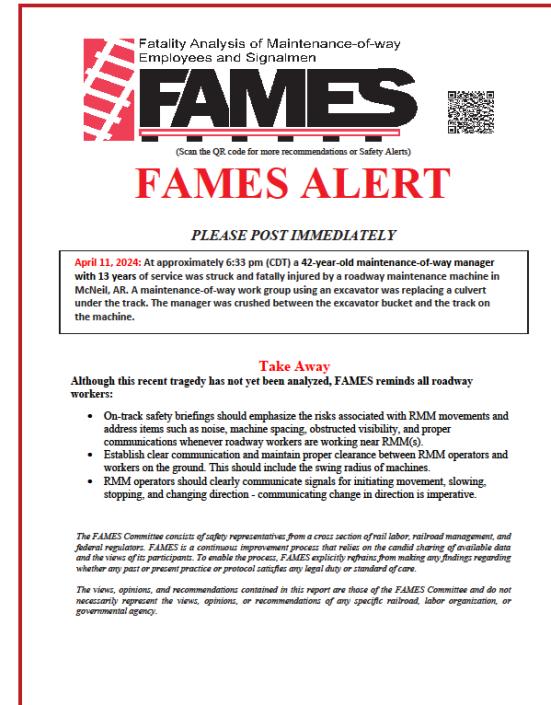


**Dedication:**  
The FAMES Committee dedicates its efforts to all roadway workers who have lost their lives in the performance of duty and to the families, loved ones, and coworkers they have left behind.

Safety  
on  
Railroad Bridges

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## FAMES Alerts



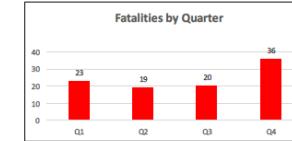
The template for a FAMES Alert features a red border. At the top is the FAMES logo and QR code. Below that is a large red header "FAMES ALERT". Underneath is a section titled "PLEASE POST IMMEDIATELY" containing a recent incident report. The report details a fatal accident on April 11, 2024, involving a maintenance-of-way manager struck by a roadway maintenance machine. Below the report is a "Take Away" section with recommendations for on-track safety. At the bottom is a note about the FAMES process and a disclaimer about the report's scope.

## Safety Alerts



### Fourth Quarter Safety Alert

Twenty-seven years of data show a 4th Quarter spike in fatal roadway worker incidents.



A comparison of roadway worker fatality data over a span of 27 years (1997-2023) indicates that the highest number of roadway worker incidents occur in the 4th Quarter.

- 96 roadway worker fatalities occurred between 1997-2023
- 36% (36 of 98) of the fatalities occurred in the 4th Quarter.
- 47% (17 of 36) of Q4 fatalities occurred in October

FAMES has not determined the reasons for the 4th Quarter spike in roadway worker fatalities, but the pattern is undeniable and alarming.

In recognition of these trends, FAMES takes this opportunity to remind all roadway workers to be hyper-vigilant with regards to the application of on-track safety procedures, especially during the 4th Quarter. If you see someone fouling a track without on-track safety protection, say something to them.

If you have concerns regarding the application of on-track safety at the job site, invoke your legally protected right to make a good faith challenge and remain clear of the tracks until the challenge has been resolved.

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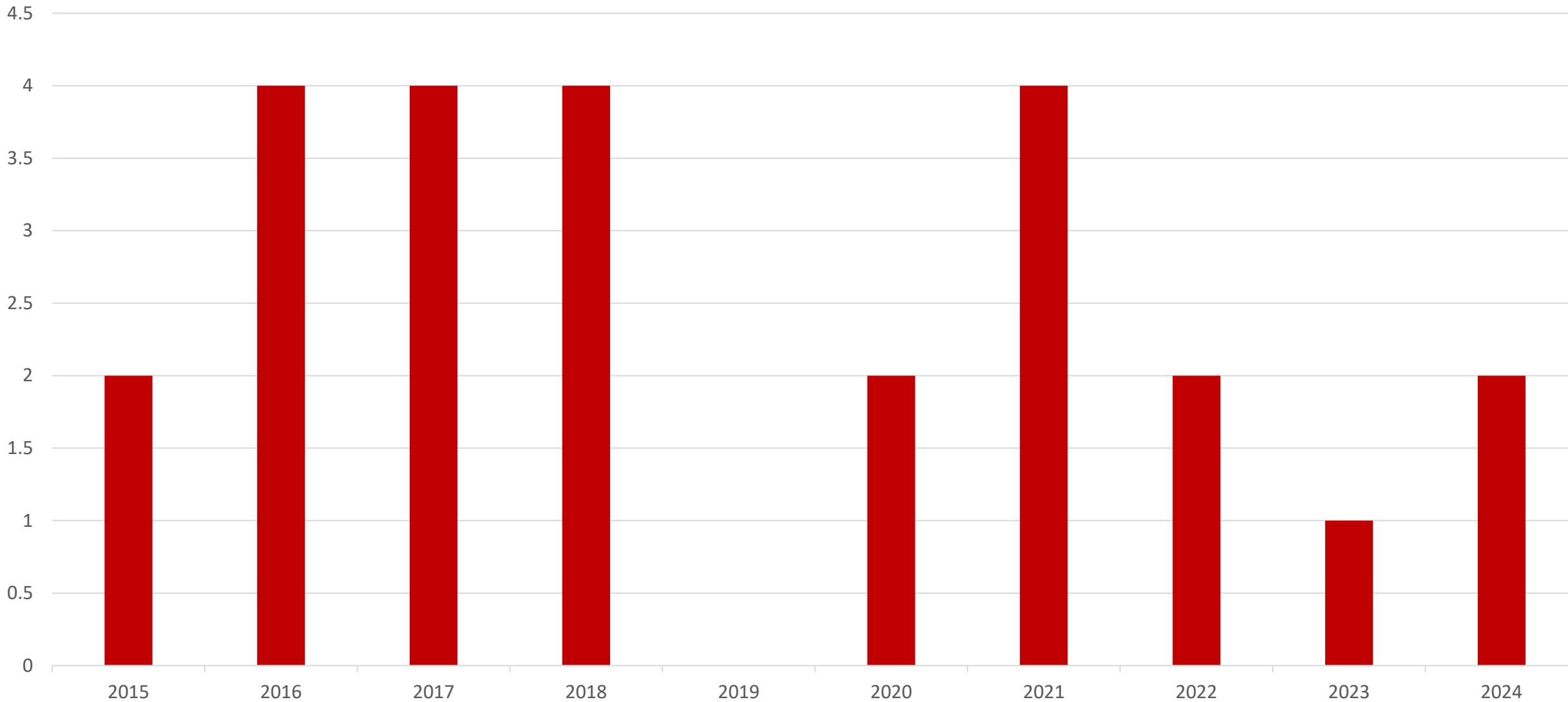
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# *FAMES Information*

All FAMES Reports, Safety Alerts and Alerts can be found at the FAMES webpage



# 25 Roadway Worker Fatalities 2015-2024



Focus on safety around and operation of Roadway Maintenance Machines (RMM) through the following three elements:

- Quarterly communications
- A social media campaign.
- Site visits across the nation.

## *Roadway Maintenance Machine (RMM) Striking Roadway Workers*

14 individuals fatally struck by RMMs from February 1997 to May 2024. (13.7%)

6 fatalities from January 2020 to May 2024 involved being struck by RMMs. (42.9%)

3 fatalities in 2023-2024 struck by an RMM. (100%)

## *FAMES - Focus on RMM*

- Aim for zero RMM related fatalities through:
  - Consistent communication,
  - Effective teamwork, and
  - Strict adherence to established safety protocols.
- Goal
  - Ongoing education,
  - Proactive safety measures,
  - Continuous improvement in safety practices.

## *FAMES - Focus on RMM - Site Visits*

Currently

17 FAMES members have volunteered

Eight (8) railroads consisting of Class I and short lines



## *FAMES - Focus on RMM Site Visits*

The site visits are voluntary for members and railroads

It is strictly non-punitive

Goal is to bring awareness to RMM safety.

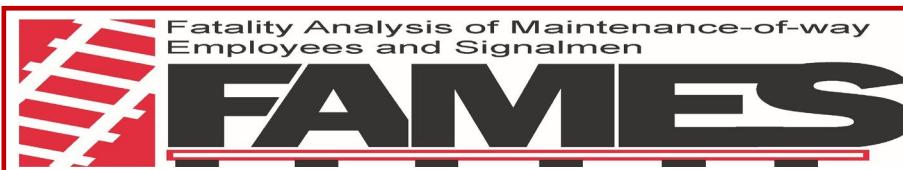


# *RMM – 1234 Talking Points*

1. Communication
2. Teamwork - Operator and Ground Personnel
3. Lockout/Tagout - Torch Cylinders
4. Operation



# RMM – 1234 Talking Points



## RMM – 1234 Talking Points

**PLEASE POST IMMEDIATELY**

### 1. Communication

- Emphasize the importance of clear and continuous communication between ground personnel and operators.
- Ground personnel should proactively communicate with all operators who could potentially come into contact with them, exceeding the railroad's required distance guidelines when necessary.
- Clearly communicate the responsibility of ground workers to avoid entering the red zone.
- Recommend conducting individual briefings between operators and ground workers, with additional re-briefings as needed addressing new hazards or changes.
- Highlight the significance of job briefings, encouraging the use of safety-related questions to ensure comprehensive understanding rather than just confirming acknowledgment.

### 2. Teamwork - Operator and Ground Personnel Team Up - Inspection/Blind Spots

- Stress the necessity of collaboration between operators and ground personnel to ensure a safe working environment during RMM operations.
- Emphasize the importance of thorough RMM maintenance and inspections, including:
  - Proper functioning of safety appliances (e.g., change of direction alarms, back-up alarms, collision avoidance systems, strobe lights).
  - Cleanliness and operability of radio equipment and ensuring the operator's manual is readily available on the machine.
  - Highlight the need for prompt identification and repair of defects.
- Emphasize the importance of understanding and awareness of the red zone (line of fire zone) for each machine.
- Encourage ground personnel to view their work environment from the operator's perspective to better understand blind spots and visibility limitations.

### 3. Lockout/Tagout - Torch Cylinders

- Reinforce the critical importance of adhering to LOTO procedures during RMM inspections and maintenance.
- Ensure all personnel are thoroughly trained and consistently follow LOTO protocols to prevent accidental machine start-ups.
- Discuss the detailed process for repairing identified defects, including specific timelines and the consistent application of LOTO procedures throughout the repair process.
- Ensure torches and cutting cylinder tanks and fittings are free from leaks and employees should transport these cylinders properly. Don't throw sparks towards any potential combustible source.

### 4. Operation

- Focus on the proper use/inspection of safety appliances by operators, ensuring they respond appropriately when prompted by safety devices.
- Highlight the necessity for regular maintenance and cleanliness of RMM equipment to ensure optimal operation and safety.
- Ensure operators are knowledgeable about how to safely stop the machine if the main brakes fail.
- Review and adhere to railroad safe traveling and working distances between machines to maintain a safe operational environment.
- For the safety of yourself and others, verify the route is safe before traversing any grade crossing and proceed with caution.
- Lifting and rigging – ensure all employees involved in lifting and rigging are trained on the lifting and rigging procedures and ensure proper inspections are being conducted of all lifting components.

#### Conclusion

Aim for zero RMM related fatalities by the end of the focus year through consistent communication, effective teamwork, and strict adherence to established safety protocols. This goal will be supported by ongoing education, proactive safety measures, and a culture of continuous improvement in safety practices.

# Fatality Analysis of Maintenance-of-way Employees and Signalmen (FAMES) | FRA (dot.gov)



# Roadway Worker Contacts

- Just over 5,000 Roadway Workers
- In 33 different locations





Congratulations!!! The FAMES Committee would like to congratulate the railroad industry for having **ZERO** Roadway Worker fatalities in 2025