Many occupational hazards exist for roadway workers on or about railroad tracks. Even though there have been significant reductions in fatalities over the years, accidental deaths still occur. Most of the recent incidents could have been avoided if situational awareness was improved and good communication practices were utilized. FRA issued Roadway Worker Protection Life Tips following an increase in roadway worker protection fatalities during 2003. FRA strongly believes that in light of recent events, these safety tips should be reissued and given new attention and emphasis.

1. A current copy of the railroad’s on-track safety rules must be readily available.
2. Never foul a track unless it’s necessary in the performance of duty. In other words, do not walk or stand in the fouling space to conduct work unless you are absolutely certain that on-track safety has been positively established.
3. You have the right to challenge the on-track safety procedures applied at the job location if you believe that they do not comply with the rules of the railroad. All workers should remain clear of the track until the challenge is resolved.
4. An on-track safety job briefing must be conducted before fouling the track, and you should understand all aspects of your on-track safety to ensure that you are adequately protected. The on-track safety briefing must be appropriate for the work that you are about to perform and you must acknowledge that you understand the briefing.
5. Remind the person providing you the on-track safety job briefing that you must be notified of any changes in the on-track safety procedures or conditions that may occur throughout the day.
6. You must know the identity of the worker who is in charge of the on-track safety procedures.
7. It is critical to know the type of on-track safety for the track(s) you are to foul.
8. The specific working limits must be clearly defined. Otherwise, train approach warning must be provided and, when clearing the track, the designated place of safety must be known by all in the work group. It is imperative that you are clear of the track before any train is no less than 15 seconds from your work location.
9. If the work activity is likely to foul adjacent track(s) or it is large scale, you must know what type of on-track safety is provided on those adjacent track(s).
10. If you are a lone worker using individual train detection:
   - The on-track safety statement must be completed.
   - You have the right to use an alternate form of on-track safety other than individual train detection.
   - You cannot be working where there is noise (e.g., environmental, power tools, machines, etc.), other impediments, or impairments interfering with your ability to detect approaching trains.
   - You must be outside a manual interlocking, controlled point, or remote hump yard facility.
   - You must have the ability to clear to a protected area.
   - The required sight distance must be available in order for you to be in the clear before any train is not less than 15 seconds away from your work location.
   - Only minor repairs, inspection, or correction work may be performed, as long as they do not interfere with your ability to detect approaching trains.
11. If the task involves RMM, you must know the RMM procedures to ensure your safety.
12. The required on-track safety training and/or qualification must be completed before you perform your duties.
13. If required, railroad communication (e.g., radio) must be available.
14. Stop, look, and listen before crossing any track, regardless of the on-track safety status of the track(s). Expect the movement of trains, engines, cars, or other moveable equipment at any time, on any track, from either direction.

All of us can benefit greatly by following these FRA life tips and learning from the incidents listed above. We are all responsible for our own safety.
Roadway Maintenance Machines (RMM)

Most roadway workers will tell you that they use on-track safety to protect themselves from being struck by a train. How often does an employee think of their co-worker as a danger? The truth is that on-track safety needs to be utilized to protect roadway workers from all types of on-track equipment, including maintenance-of-way equipment. Since the RWP regulation was implemented in 1997, there have been numerous incidents and injuries involving maintenance-of-way equipment, including five roadway worker fatalities occurring when these employees were struck by maintenance-of-way equipment. Machine operators can have limited visibility and are often engaged in tasks that require them to look at the work they are doing and not the track ahead. For example, a ballast operator that is engaged in regulating a ballast section needs to look at the plows to ensure he/she regulates the ballast properly. The operator glances at the track ahead from time to time, but is sometimes more focused on the task at hand. This activity can be hazardous when roadway workers are present.

FRA’s post-accident analysis has found improper communication between ground forces and machine operators.

If a RMM is working in close proximity to a work group, it must be discussed during the job briefing and proper on-track protection must be established to protect employees.

Eliminating Shortcuts:

Many of us have seen the diagram below. We understand that for every one fatality there may be 100 reportable injuries, another 10,000 near misses, or 100,000 unsafe acts. By starting at the bottom of the pyramid and reducing the number of unsafe acts, the industry can lower the probability of an accident occurring. It takes all members of the industry to accomplish this task.

A key component in the reduction of fatalities is the reduction of shortcuts and unsafe acts. If unsafe acts and shortcuts were not taken, it naturally reduces the probability of an accident or incident occurring. Roadway workers need to take an active approach and use safe workplace practices to reduce the risk of personal injury and death.

Recent Fatalities:

- **October 23, 2007–Martinez, CA**
  On October 23, 2007, at approximately 12:37 p.m., a freight train struck a bridge inspector on the west end of a bridge approach near Martinez, CA, resulting in a fatality. The employee was using individual train detection while engaged in inspection activity, and was unable to occupy a place of safety prior to the arrival of the train.

- **February 10, 2008–Ridgewood, NJ**
  On February 10, 2008, a track gang was working on a crossover switch on the center track of a three-track interlocking utilizing an out-of-service authority. Shortly after foul time was released on the adjacent track, a passenger train entered the work area. As the train approached the work area, the engineer saw a track worker moving westward on the center track, then stepping over to the adjacent track. The worker was struck at 33 mph and was fatally injured.

- **March 13, 2008–Providence, RI**
  On March 13, 2008, three roadway workers inspecting concrete ties in a curve were hit by a passenger train. One fatality occurred, while the other two received injuries. Exclusive track occupancy was used earlier during the inspection but not at the time of the incident. The engineer saw the employees on the track prior to the incident but was unable to avoid them.