Short Line Safety Institute

RAILROAD INCIDENT AND ACCIDENT PREVENTION

Track Defects

Listed below are the most prevalent causes of railroad incidents and accidents:

- Human Error – 33.5%
- ***Track Defects*** – 27.9%
- Miscellaneous Causes – 15%
- Faulty Equipment – 13.3%
- Train-Vehicle Collisions – 8.3%
- Signal Errors – 1.9%

According to FRA statistics, the most common track defects resulting in derailments are:

- Broken rails or welds 15.3%
- Track alignment 7.3%
- Wide gauge 3.9%
- Buckled track 3.4%

How can track-related incidents be reduced?

Well trained and qualified track inspectors are the first line of defense in reducing track defect derailments. Their extensive training, knowledge and keen eyes supply them with the proper tools to identify and react to track and structure defects rapidly. In the short line industry, due to sometimes limited manpower, it may be beneficial to train all levels of management and employees in the basics of track structures, maintenance, and what to look for while working on or near the rail.

Employees who work daily around track structures switching cars or operating trains many times recognize differences in track structures from one day to the next. These employees should be strongly encouraged to stop movements if necessary and to always report any suspected defects immediately, per the railroad's rules or policies.

Refresher training is a necessary aspect of any program to ensure that inspectors and other employees remain aware of any changes in Federal, State or Company policies and procedures pertaining to proper rail maintenance.

Well maintained track structures are large part of a railroad's safety culture. The Short Line Safety Institute defines a strong safety culture as "the shared values, actions and behaviors that demonstrate a commitment to safety over competing goals and demands."

In any workplace, teamwork is the primary key to success. Senior leaders, managers and employees who work together towards common goals create the most successful companies in any industry.