As a cross-industry collaboration for over 20 years, the SOFA Working Group has identified the Possible Contributing Factors for more than 210 switching operations fatalities since 1992. The SOFA Working Group reports its findings and emerging data trends with the goal of zero fatalities in the railroad industry.

Why Prevent Industry Hazards?
1 in 5 switching operations fatalities due to an industrial track hazard

What?
• An industry hazard includes cases where a structure, vehicle, or temporary obstruction on industrial track played a significant role in a switching operation fatality. It can include cases where the action of industrial plant employees played a role.

When?
• Outdated “Industry Track Agreements” may allow conditions to become unsafe due to changes over time. Review of agreements is inconsistent across the railroad industry.
• Fatal collisions with motor vehicles while riding railroad equipment during a shove move over a grade crossing.
• An unfamiliar employee at an industrial property may not be aware of the industrial hazards. Job aids, such as maps usually do not exist. Training in plant characteristics may be inconsistent.

How?
• Prepare employees to identify and avoid industry hazards, such as:
  o Discuss the location and potential for industry hazards in job briefings.
  o Assist employees with little or no familiarity with the location physical characteristics, such as working with a person familiar with that location.
• Oversee and enforce industry track agreements. Agreements, practices, or policies should include the following provisions:
  o Maintenance of track and walkways.
  o Removal of close/no clearance conditions.
  o Marking of public and private industry road crossings clearly.
  o Needs assessment for lighting installation and maintenance.
  o Definition and control of the separation of road and plant vehicle operations from rail traffic.
  o Definition and control of the separation of non-railroad personnel from railroad switching operations.
  o Notification to appropriate railroad personnel of a change in conditions.

✓ Empower employees to stop work when hazards are identified that endanger the crew. Notify the proper authority immediately. Safety concerns must override the desire to complete a task.

✓ Dismount equipment over grade crossings; do not ride equipment through a grade crossing during a shove move.

✓ Inspect the work site before acting, and job brief about any industry hazards.

✓ Provide job aids about industry hazards, such as maps highlighting the hazards.

✓ Share near-miss & close-call experiences among employees and management.

Most Common Findings in Switching Operations Fatalities*

<table>
<thead>
<tr>
<th></th>
<th>Close / No Clearance</th>
<th>Inexperienced Employee</th>
<th>Industry Hazard</th>
<th>Inadequate Job Briefing</th>
<th>Struck by Mainline Train</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>22%</td>
<td>21%</td>
<td>20%</td>
<td>17%</td>
</tr>
</tbody>
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*a SOFA case may have more than one PCF, thus the Most Common Findings total greater than 100%