The Zero Switching Fatality Goal Remains

While elusive, the SOFA Working Group’s vision of Zero Switching Fatalities remains:

*When work is done, all should return home safety...and return again to their proud tradition of performing service essential to economic growth.*

**Zero Switching Fatality Goal**

**Zero Switching Fatalities in 2010 through March 15**

**Release of new SOFA Report in Fall 2010**

**SOFA Working Group activities page 4**

**Declines in SOFA-defined Severe Injuries**

*Now at a 13-year low pages 8-10*

**Switching Fatality and Severe Injury Update – 2010 First Quarter**

SOFA Working Group current through March 15, 2010
Preliminary Summaries of 8 Switching Fatalities in 2009
(March 15, 2010: Information is preliminary, and not based on investigation)

1. January 16 – BNSF – Fort Sumner, NM
A locomotive engineer operating a moving train was later found dead by the crew of a following train. He was lying along the right of way near the 17th Street crossing east of town.

Near-by train movements were involved in the next three Fatalities:

2. January 28 – UP – Council Bluffs, IA
A 41-year-old switch foreman was working in the yard when he was struck and killed by a passing mainline train moving on an adjacent track.

3. February 7 – BNSF – Holbrook, AZ
A conductor was releasing hand brakes on his train when he was struck and killed by another train moving on the adjacent track.

4. February 8 – UP – Harrington, KS
A 26-year-old conductor was using hand signals to bring his engines back onto his train when he was struck and killed by another train moving on the adjacent track.
5. **February 28 – BNSF – Buchanan, NM**
A 59-year-old conductor was riding the side of the leading end of a shove move into a siding when he was knocked from the side of the car near a pile of cross ties stacked too close to the siding track.

6. **May 10 – CSX – Selkirk, NY**
A 32-year-old yard foreman operating a one-person remote control locomotive went in between the equipment to make an adjustment after the equipment had started back toward the car he intended to couple up to. The yard foreman was not able to get out from between the cars in time and was crushed between the standing equipment and the equipment he was operating.

7. **June 24 – ATR – Albertville, AL**
A 33-year-old conductor was riding the leading end of 75 car cut (his train) to a position where he intended to spot the first—or leading 12 cars. As he was riding the car to the spot, it struck a piece of metal near the location of the intended spot crushing him between the tank car railing and the end dome of the tank car.

8. **December 29 – BNSF – Minneapolis, MN**
A two-person RCL crew shoved five empty cars into a snow-covered industry track. Ice build-up on the track caused the lead car of the movement to derail. The RCL operator, riding the lead car and controlling the move, was crushed against the side of an industry building and fatally injured.
Recent SOFA Working Group Activities

Recent SOFA Working Group (SWG) activities include:

- Review of an additional 55 cases (2004 through 2009), bringing the total number of cases reviewed to 179 (1992 through 2009)

  Review of each case included (1) transcription of factual content into a database, (2) full discussion of events and circumstances, and (3) consensus agreement on Possible Contributing Factors (PCF). (Note: 466 PCFs have been associated with the 179 cases.)

  Then, each case was classified into one of three types (discussed in this Update). Classification helps link cases by commonalities. Finally, and importantly, findings were made to help in prevention efforts

- Held a SOFA Safety Forum (February 25 in Washington, DC) for union, government, and industry representatives. SWG discussed its review process, presented findings; and invited and received comments that will prove helpful to prevention

- The SWG is now in the process of writing a final report to be released this Fall. This report will be the fourth released by the SWG since 1999

- Summary: Based on efforts by all stakeholders, the SWG believes progress has been made in reducing risk associated with some types of Switching Fatalities. However, additional efforts are needed

  The Zero Switching Fatality Goal Remains
179 Switching Fatalities by SOFA Type
January 1, 1992 through March 15, 2010

Recently, the SOFA Working Group (SWG) developed a new classification system for Switching Fatalities. Under the old system, Switching Fatalities were classified either as a SOFA 1-5 (based on SWG findings), or a Special Switching Hazard (SSH). The new classification recognizes that some Fatalities involve both types. Hence, now the classification of Fatalities is not necessarily mutually exclusive. The new system provides additional specificity to the mechanisms descriptive of events associated with Fatalities. And, hopefully, will aid preventive efforts. Release of a new SOFA Report (Fall 2010) will provide more detail about the new classification system.

Directly below, is a display of 179 Switching Fatalities by year. Also, shown is a listing of SOFA 1-5, and Special Switching Hazards. Displays on subsequent pages, decompose the yearly and monthly counts of Fatalities into the three possible categories: ‘Special Switching Hazards only,’ ‘Special Switching Hazards and SOFA 1-5,’ and ‘SOFA 1-5 only.’

SOFA 1-5 (based on SWG findings)

| SOFA 1: Adjusting knuckles, adjusting drawbars, or installing EOT |
| SOFA 2: Struck by equipment other than their own on yard or industry track |
| SOFA 3: Lack of or inadequate job safety briefing |
| SOFA 4: Move controlled by a combination of hand and radio signals or specific distances were not given |
| SOFA 5: FE (Employee, Fatality) had 1.5 years of experience or less or had inadequate training. |

15 Special Switching Hazards

| SSHCC: Close Clearance | SSHET: Employee Tripping | SSHEV: Environment |
| SSHDA: Drugs and Alcohol | SSHEV: Environment |
| SSHDR: Derailment | SSHEV: Environment |
| SSHED: Electronic Device | SSHEV: Environment |
| SSHEQ: Equipment | SSHEV: Environment |

179 Switching Fatalities: January 1, 1992 through March 15, 2010

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179 Switching Fatalities by SOFA Type (continued)
By Year: January 1, 1992 through March 15, 2010

Note: While cluttered, this display decomposes total yearly Fatality counts into three groups based on the new SWG classification system. At least two facts are apparent: (1) Special Switching Hazards (bars with darker colors) are involved in a large number of Fatalities; and (2) in more recent years fewer Fatalities involved SOFA 1-5.
179 Switching Fatalities by SOFA Type (continued)
by Month: January 1, 1992 through March 15, 2010

Note: In the three months with the largest number of Switching Fatalities – January, July, and December – there are high numbers of Fatalities involving only Special Switching Hazards (SSH only).
Declines in SOFA-defined Severe Injuries
Full Year: 1997 through 2009

- Beginning in 2002, Severe Injuries began to decline, although not consistently year-to-year
- Now, in 2009, these Injuries are at a 13-year low

Importance of SOFA-defined Severe Injuries: Since 1997, there have been 1,522 of these Injuries, 201 of which were amputations. (Note: 1997 is the first year these Injuries to train and engine employees can be determined as defined by the SOFA Working Group.) While in recent years these Injuries have declined, the continuing existence of these Injuries indicates the importance of safety efforts devoted towards complete elimination.
SOFA-defined Severe Injuries*
January 1997 through December 2009
(Note: Among SOFA Updates, counts previously presented may change based on revisions to FRA data)

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- **138.0** Severe Injuries per year on average: January 1997 through December 2001
- **115.3** Severe Injuries per year on average: January 2002 through December 2007
- **87** Severe Injuries per year: in 2008
- **53** Severe Injuries per year: in 2009

*Severe Injuries* are defined by the SOFA Working Group as (1) potentially life threatening; (2) high likelihood of permanent loss of function, permanent occupational limitation, or other permanent disability; (3) likely to result in significant work restrictions; and (4) result from a high-energy impact to the human body. ‘Severe Injuries’ include amputation, dislocation of the neck, loss of eye, electric shock or burn, and fracture to any bone except the lower arm, fingers, foot, and toes. See *Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics.* July 2001. [http://www.fra.dot.gov/Pages/1781.shtml][1] [accessed March 15, 2009]
Amputations
January 1997 through December 2009
(Note: Among SOFA Updates, counts previously presented may change based on revisions to FRA data)

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- 20.6 Amputations per year on average: January 1997 through December 2001
- 14.0 Amputations per year on average: January 2002 through December 2007
- 8 Amputations per year: in 2008
- 6 Amputations per year: in 2009

A type of SOFA-defined Severe Injury, Amputations are displayed separately because of the extreme trauma to employees engaged in switching, and the likelihood of permanent occupational and lifestyle limitations.
Switching Fatality Review Section

This section contains:

Switching Fatality Cases for Review: March, April, and May. The Switching Fatality narrative summaries are from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information about each Fatality is taken from the *SOFA Matrix*, the SOFA Working Group’s electronic database. Note: the ‘SOFA type of event’ is based on the older system of classifying Switching Fatalities.

Intent is that review will prove preventive. In reviewing, please be mindful that these employees lost their lives in railroad service, an activity essential to economic growth.

SOFA reports, including a complete discussion of findings, are available at:

http://www.fra.dot.gov/Pages/1781.shtml

[accessed March 15, 2009]

The Zero Switching Fatality Goal Remains
# 10 March Switching Fatalities

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<td></td>
</tr>
<tr>
<td>7</td>
<td>03/03/01</td>
<td>BNSF</td>
<td>Willmar, MN</td>
<td>36</td>
<td>3.75</td>
<td>yard brakeman</td>
<td>standing</td>
<td>between cars/loc</td>
<td>struck by on-track equipment</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>03/21/02</td>
<td>NS</td>
<td>Claymont, DE</td>
<td>45</td>
<td>13</td>
<td>road engineer</td>
<td>getting on</td>
<td>near on-track equip-on ground</td>
<td>struck by on-track equipment</td>
<td>Close Clearance and Struck by Mainline Trains</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>03/10/04</td>
<td>MNCW</td>
<td>Stamford, CT</td>
<td>46</td>
<td>na</td>
<td></td>
<td></td>
<td></td>
<td>(Information is preliminary, and not based on investigation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>03/05/08</td>
<td>WSOR</td>
<td>Random Lake, WI</td>
<td>50</td>
<td>na</td>
<td></td>
<td></td>
<td></td>
<td>(Information is preliminary, and not based on investigation)</td>
<td>Special Switching Hazard</td>
<td></td>
</tr>
</tbody>
</table>

The Zero Switching Fatality Goal Remains
No. 1 of 10: March 11, 1992 – FEC – Fort Pierce, FL
This case involved the conductor riding a car into Track 8. The car derailed at the spiked switch and the conductor was subsequently killed. The conductor’s last radio transmission was “…we’re lined in eight rail, three or four cars to a joint.” Movement stopped after car had derailed and side swiped adjacent car.

SOFA Finding(s):
Possible Contributing Factor: Switch point gapped (between switch point and stock rail)
Possible Contributing Factor: Damaged flange or tread (build up)
External Circumstances: Track conditions

Day of Week: Wednesday
Time of Fatal Event: 1:15 AM
Time on Duty (hours: minutes): 6:15
Temperature (Fahrenheit): 71
Direction of Movement: shoved
Crew’s Next Move: couple
Death Result of Train Movement?: yes
Other Movements Nearby?: no
Track Type: yard/classification/flat
Hit by Own Equipment?: yes
Striking Train Within Rules?: yes
Speed of Equipment (mph): 5
Deceased Regular Job?: no
Had Deceased Worked There Before?: no
Crew Size: 2
Drugs Present?: no
Drugs a Factor?: no
Emergency Response Procedures Followed?: yes

No. 2 of 10: March 27, 1993 – SP – Guadalupe, CA
A four-person crew (engineer, conductor, 2 brakemen) were in the process of pulling one track out and then intended to shove back into another track to pick up more cars. The head brakeman was in control of the move. The rear brakeman was found dead adjacent to the track that was pulled. Evidence suggests that the rear brakeman may have mounted, or tried to mount the car that ran him over as the cut was pulled out of the track.

Special Switching Hazard(s):
Possible Contributing Factor: Employee Tripping
External Circumstances: Employee on or fouling track

Day of Week: Saturday
Time of Fatal Event: 12:30 PM
Time on Duty (hours: minutes): 1:00
Temperature (Fahrenheit): 60
Direction of Movement: pulled
couple track
Crew's Next Move:
Death Result of Train Movement?: yes
Track Type: yard/classification
Hit by Own Equipment?: yes
Striking Train Within Rules?: no
Speed of Equipment (mph): 2
Crew Size: 4
Drugs Present?: no
Drugs a Factor?: no
Emergency Response Procedures Followed?: yes

SOFA Working Group
No. 3 of 10: March 02, 1995 – NS – Aiken, SC

Switch crew was pulling a cut of cars out of an industry. Brakeman stepped in track gauge to open knuckle on the rear car at the same time crew shoved back to kick two cars that ran over the brakeman.

SOFA Finding(s):
Possible Contributing Factor: 1, 3
Possible Contributing Factor:

Day of Week: Thursday
Time of Fatal Event: 9:44 AM
Time on Duty (hours: minutes): 2:15
Temperature (Fahrenheit): 45
Direction of Movement: shoved
Death Result of Train Movement? yes
Other Movements Nearby? no
Track Type: main
Hit by Own Equipment? yes
Striking Train Within Rules? yes
Speed of Equipment (mph): 1
Crew Size: 3
Drugs Present? no
Drugs a Factor? no
Emergency Response Procedures Followed? 6 minutes to tell dispatcher, 30 min. for EMS arrival

No. 4 of 10: March 21, 1995 – SP – Bassett, CA

A three-person crew was called to operate a road local and arrived at a location where some plant switching was to take place. After lining up their cars, the two locomotives and two cars began a shove move on the brakeman’s radio command. The brakeman was walking adjacent to the track on which the cars were being shoved and had his back to the move. He was killed when he suddenly crossed the tracks in front of the movement and was struck. The move stopped immediately. Post accident investigation revealed that the brakeman was concerned about the results of a medical examination that were due the next day.

Special Switching Hazard(s):
Possible Contributing Factor:
External Circumstances:

Day of Week: Friday
Time of Fatal Event: 8:40 AM
Time on Duty (hours: minutes): 1:40
Direction of Movement: shoved
Crew’s Next Move: coupling
Death Result of Train Movement? yes
Other Movements Nearby? no
Track Type: industrial/outside/stub/track
Hit by Own Equipment? yes
Striking Train Within Rules? yes
Speed of Equipment (mph): 4
Deceased Regular Job? yes
Crew Size: 3
Drugs Present? no
Drugs a Factor? No

Other Special Hazard or Event (fouling track)
Employee on or fouling track
Employee physical condition, other
No. 5 of 10: March 20, 1996 – BRC – Bedford Park, IL

Three-person crew was switching in class yard, coupling between sixth and seventh car failed to couple. Conductor stopped locomotive and went between the cars to straighten the drawbar, and twenty-three cars rolled in behind him and coupled him up.

**SOFA Finding(s):**
- Possible Contributing Factor: Employee on or fouling track
- Possible Contributing Factor: Failure to apply handbrakes on car(s)
- External Circumstances: Crew experience

**1, 5**
- Day of Week: Wednesday
- Time of Fatal Event: 11:25 PM
- Time on Duty (hours: minutes): 0:25
- Temperature (Fahrenheit): 28
- Direction of Movement: free-running
couple track
- Crew's Next Move: couple track
- Death Result of Train Movement? yes
- Track Type: classification
- Hit by Own Equipment? yes
- Striking Train Within Rules? yes
- Speed of Equipment (mph): 1
- Crew Size: 3
- Drugs Present?: no
- Drugs a Factor?: no
- Emergency Response Procedures Followed?: yes

---

No. 6 of 10: March 09, 2000 – IHB – Riverdale, IL

The employee was struck by an unsecured cut of cars that rolled into him while he was attempting to adjust the coupler or drawbar.

**SOFA Finding(s):**
- Possible Contributing Factor: Failure to provide adequate space between equipment
- Possible Contributing Factor: Failure to apply handbrakes on car(s)
- Possible Contributing Factor: Employee on or fouling track

**1**
- Day of Week: Thursday
- Time of Fatal Event: 4:20 AM
- Time on Duty (hours: minutes): 5:05
- Temperature (Fahrenheit): 54
- Direction of Movement: free-running
- Crew's Next Move: pull track
- Death Result of Train Movement? yes
- Other Movements Nearby? no
- Track Type: hump/classification
- Hit by Own Equipment? yes
- Striking Train Within Rules? no
- Speed of Equipment (mph): 1
- Deceased Regular Job? yes
- Crew Size: 3
- Drugs Present?: no
No. 7 of 10: March 03, 2001 – BNSF – Willmar, MN
The switchman of a three-person yard switching crew made a cut on a block of cars sitting on a yard track and told the engineer to pull the cars out. Apparently, as the cars were being pulled out, the switchman stepped between the gauge of the track and was struck and killed by the remaining cars on the track that had begun to roll in the same direction as the cars being pulled out of the track.

<table>
<thead>
<tr>
<th>SOFA Finding(s):</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Contributing Factor:</td>
<td>Employee on or fouling track</td>
</tr>
<tr>
<td>Possible Contributing Factor:</td>
<td>Snow, ice, mud, gravel, coal etc. on the track</td>
</tr>
<tr>
<td>External Circumstances:</td>
<td>3' of snow</td>
</tr>
<tr>
<td>Day of Week:</td>
<td>Saturday</td>
</tr>
<tr>
<td>Time of Fatal Event:</td>
<td>7:15 PM</td>
</tr>
<tr>
<td>Time on Duty (hours: minutes):</td>
<td>3:45</td>
</tr>
<tr>
<td>Temperature (Fahrenheit):</td>
<td>30</td>
</tr>
<tr>
<td>Direction of Movement:</td>
<td>pulled/free-running</td>
</tr>
<tr>
<td>Crew's Next Move:</td>
<td>couple to another track</td>
</tr>
<tr>
<td>Death Result of Train Movement?</td>
<td>yes</td>
</tr>
<tr>
<td>Other Movements Nearby?</td>
<td>no</td>
</tr>
<tr>
<td>Track Type:</td>
<td>yard/flat/classification</td>
</tr>
<tr>
<td>Hit by Own Equipment?</td>
<td>yes</td>
</tr>
<tr>
<td>Speed of Equipment (mph):</td>
<td>7</td>
</tr>
<tr>
<td>Deceased Regular Job?</td>
<td>yes</td>
</tr>
<tr>
<td>Crew Size:</td>
<td>3</td>
</tr>
<tr>
<td>Drugs Present?</td>
<td>no</td>
</tr>
<tr>
<td>Drugs a Factor?</td>
<td>no</td>
</tr>
<tr>
<td>Emergency Response Procedures Followed?</td>
<td>yes</td>
</tr>
</tbody>
</table>

No. 8 of 10: March 21, 2002 – NS – Claymont, DE
A locomotive engineer had been dropped off at the head end of his train while the conductor was taken to the rear to check on the REM. After crossing over the ATK corridor mainline tracks, and beginning to board his locomotive, the engineer was dragged off the stairs of the locomotive and killed by a passing 110 MPH passenger train.

<table>
<thead>
<tr>
<th>Special Switching Hazard(s):</th>
<th>Close Clearance and Struck by Mainline Trains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Contributing Factor:</td>
<td>Close or no clearance</td>
</tr>
<tr>
<td>Possible Contributing Factor:</td>
<td>Other miscellaneous causes</td>
</tr>
<tr>
<td>Possible Contributing Factor:</td>
<td>Speed, other</td>
</tr>
<tr>
<td>External Circumstances:</td>
<td>Struck by 111 mph train at night</td>
</tr>
<tr>
<td>Day of Week:</td>
<td>Thursday</td>
</tr>
<tr>
<td>Time of Fatal Event:</td>
<td>12:24 PM</td>
</tr>
<tr>
<td>Time on Duty (hours: minutes):</td>
<td>2:26</td>
</tr>
<tr>
<td>Direction of Movement:</td>
<td>pulled</td>
</tr>
<tr>
<td>Crew's Next Move:</td>
<td>brake test</td>
</tr>
<tr>
<td>Death Result of Train Movement?</td>
<td>yes</td>
</tr>
<tr>
<td>Other Movements Nearby?</td>
<td>yes</td>
</tr>
<tr>
<td>Track Type:</td>
<td>main</td>
</tr>
<tr>
<td>Hit by Own Equipment?</td>
<td>no</td>
</tr>
<tr>
<td>Striking Train Within Rules?</td>
<td>yes</td>
</tr>
<tr>
<td>Speed of Equipment (mph):</td>
<td>110</td>
</tr>
<tr>
<td>Deceased Regular Job?</td>
<td>yes</td>
</tr>
<tr>
<td>Crew Size:</td>
<td>2</td>
</tr>
<tr>
<td>Drugs Present?</td>
<td>no</td>
</tr>
<tr>
<td>Drugs a Factor?</td>
<td>no</td>
</tr>
</tbody>
</table>

No. 9 of 10: March 10, 2004 – MNCW – Stamford, CT
(Information is preliminary, and not based on investigation)
A 46-year old Metro North Commuter Rail (MNCW) conductor, with 27-years service, killed when struck by his own equipment at the Metro North Stamford Yard, Stamford, CT.

No. 10 of 10: March 05, 2004 – WSOR – Random Lake, WI
(Information is preliminary, and not based on investigation)
A 50-year-old conductor was riding the side of a car into an industry when the car derailed, struck a car on an adjacent track, and resulted in the death of the employee.
<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>RR</th>
<th>Location</th>
<th>Age</th>
<th>Service (yrs)</th>
<th>Employee's Job</th>
<th>Employee Act</th>
<th>Employee Location</th>
<th>Fatal Event</th>
<th>SOFA Finding(s)</th>
<th>Special Switching Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04/09/92</td>
<td>ATSF</td>
<td>Cheto, AZ</td>
<td>54</td>
<td>13</td>
<td>road engineer</td>
<td>opening/closing angle cock</td>
<td>near on-track equip-on ground</td>
<td>struck by on-track equipment</td>
<td></td>
<td>Free-Rolling Railcars</td>
</tr>
<tr>
<td>2</td>
<td>04/13/93</td>
<td>CSX</td>
<td>Dwale, KY</td>
<td>44</td>
<td>16</td>
<td>road brakemen</td>
<td>walking</td>
<td>on track</td>
<td>struck by on-track equipment</td>
<td></td>
<td>Struck by Mainline Trains</td>
</tr>
<tr>
<td>3</td>
<td>04/12/94</td>
<td>SP</td>
<td>Houston, TX</td>
<td>62</td>
<td>37</td>
<td>yard conductor</td>
<td>riding</td>
<td>on side of car</td>
<td>struck against object</td>
<td></td>
<td>Close Clearance</td>
</tr>
<tr>
<td>4</td>
<td>04/06/95</td>
<td>WC</td>
<td>Argoe, WI</td>
<td>45</td>
<td>7</td>
<td>road conductor</td>
<td>riding</td>
<td>on end of car</td>
<td>collision between on-track equipment</td>
<td></td>
<td>Unsecured Cars</td>
</tr>
<tr>
<td>5</td>
<td>04/02/99</td>
<td>DME</td>
<td>Waseca, MN</td>
<td>54</td>
<td>21</td>
<td>yard brakeman</td>
<td>coupling air hose</td>
<td>between cars/loc</td>
<td>struck by on-track equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>04/09/99</td>
<td>UP</td>
<td>Richland, WA</td>
<td>58</td>
<td>39</td>
<td>road conductor</td>
<td>standing</td>
<td>in/on loc</td>
<td>collision between on-track equipment</td>
<td></td>
<td>Equipment</td>
</tr>
<tr>
<td>7</td>
<td>04/21/00</td>
<td>BNSF</td>
<td>Galesburg, IL</td>
<td>60</td>
<td>32</td>
<td>yard conductor</td>
<td>standing</td>
<td>beside track</td>
<td>struck by on-track equipment</td>
<td></td>
<td>Free-Rolling Railcars</td>
</tr>
<tr>
<td>8</td>
<td>04/08/01</td>
<td>BNSF</td>
<td>Clark, OK</td>
<td>35</td>
<td>3.75</td>
<td>road conductor</td>
<td>riding</td>
<td>on side of car</td>
<td>collision between on-track equipment</td>
<td></td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>9</td>
<td>04/11/03</td>
<td>UP</td>
<td>Pocatello, ID</td>
<td>55</td>
<td>23</td>
<td>road conductor</td>
<td>riding</td>
<td>on end of car</td>
<td>derailments</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>04/06/05</td>
<td>NS</td>
<td>Selma, AL</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>(Information is preliminary, and not based on investigation)</td>
<td></td>
<td>Special Switching Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>04/11/05</td>
<td>UP</td>
<td>Ogden, UT</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>(Information is preliminary, and not based on investigation)</td>
<td></td>
<td>Special Switching Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>04/02/06</td>
<td>LSI</td>
<td>Palmer, MI</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>(Information is preliminary, and not based on investigation)</td>
<td></td>
<td>Tripping, Slipping, Falling</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No. 1 of 12: April 09, 1992 – ATSF – Cheto, AZ
A three-person crew was called to operate a road local and arrived at a location where an eight-car drop would be necessary. After a job briefing, the engineer was at the throttle, the conductor at the switch and the brakeman was riding the first car of the drop, “A” end. The engineer began to pull, the brakeman lifted the pin, the engineer accelerated the locomotive beyond the switch, the conductor got the switch and the cars began free rolling into the yard. However, the speed of the movement would not allow the brakeman to safely dismount and, just before impact with another cut of cars, the brakeman attempted to dismount from the car he was riding and was killed as the cars rolled over him.

<table>
<thead>
<tr>
<th>Special Switching Hazard(s):</th>
<th>Free-Rolling Railcars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Contributing Factor:</td>
<td>Switching movement, excessive speed</td>
</tr>
<tr>
<td>External Circumstances:</td>
<td>Walkway conditions</td>
</tr>
</tbody>
</table>

Day of Week:
Thursday
Time of Fatal Event:
2:39 PM
Time on Duty (hours: minutes):
4:39
Direction of Movement:
free-running
couple to train
Crew's Next Move:
yes
Death Result of Train Movement?
Other Movements Nearby?
no
Track Type:
main/storage
Hit by Own Equipment?
yes
Striking Train Within Rules?
no
Speed of Equipment (mph):
10
Crew Size:
3
Drugs Present?
no
Drugs a Factor?
no
Emergency Response Procedures Followed?
yes

No. 2 of 12: April 13, 1993 – CSX - Dwale, KY
A three-person crew reported for duty and was transported to a location where they took control of a mainline train. En-route, their work included swapping rear end marking devices. The brakeman apparently became confused, stepped into and began walking within the gauge of the main track, and was struck in the back by a passing mainline train.

<table>
<thead>
<tr>
<th>Special Switching Hazard(s):</th>
<th>Struck by Mainline Trains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible Contributing Factor:</td>
<td>Employee on or fouling track</td>
</tr>
<tr>
<td>External Circumstances:</td>
<td>Shocked by crossing gate arm</td>
</tr>
</tbody>
</table>

Day of Week:
Tuesday
Time of Fatal Event:
6:40 PM
Time on Duty (hours: minutes):
5:25
Direction of Movement:
pulled
Crew's Next Move:
run around train
Death Result of Train Movement?
yes
Other Movements Nearby?
yes
Track Type:
main
Hit by Own Equipment?
no
Striking Train Within Rules?
yes
Speed of Equipment (mph):
18
Crew Size:
3
Drugs Present?
no
Drugs a Factor?
no
No. 3 of 12: April 12, 1994 – SP – Houston, TX
A three-person switching crew was in the process of switching out the car repair shop. The foreman had taken a position on the trailing end of the third leading car as the move was being shoved into a track having a close clearance condition that involved a protective grate that covered a winch. The foreman was knocked off the car by the covering, fell in front of the leading wheels of the forth leading car, and was later pronounced dead at the hospital.

Special Switching Hazard(s):
Possible Contributing Factor:
Day of Week: Tuesday
Time of Fatal Event: 7:45 AM
Time on Duty (hours: minutes): 8:45
Direction of Movement: pulled
Crew's Next Move: make cut
Death Result of Train Movement? yes
Other Movements Nearby? no
Track Type: repair/storage/inside
Hit by Own Equipment? yes
Striking Train Within Rules? yes
Speed of Equipment (mph): 5
Deceased Regular Job? yes
Crew Size: 3
Drugs Present? no
Drugs a Factor? no
Emergency Response Procedures Followed? yes

No. 4 of 12: April 06, 1995 – WC – Argoe, WI
A two-person crew was switching at a siding in single-track territory. The conductor left a portion of his train on the mainline and went into the siding with a cut of cars. While in on the siding, the cars left on the mainline and, as post accident investigation revealed, had been left with the air “bottled”, rolled away. The crew chased the runaway cars with the conductor riding the leading end of the lead car and the engineer, 23 cars away, shoving as directed by radio commands from the conductor. The shove move struck the runaway cars and the conductor was crushed to death as a result of the collision.

Special Switching Hazard(s):
Possible Contributing Factor: employee
Possible Contributing Factor: improper operation of train line air connections (bottling the air)
Possible Contributing Factor: Failure to comply with restricted speed (engineer had history of speeding)

Unsecured Cars: Failure to properly secure hand brake on car(s) railroad

Possible Contributing Factor:
Day of Week: Thursday
Time of Fatal Event: 1:56 AM
Time on Duty (hours: minutes): 7:11
Temperature (Fahrenheit): 18
Direction of Movement: shoved
Crew's Next Move: coupling
Death Result of Train Movement? yes
Other Movements Nearby? no
Track Type: main
Hit by Own Equipment? yes
Striking Train Within Rules? no
Speed of Equipment (mph): 14
Deceased Regular Job? yes
Crew Size: 2
Drugs Present? yes
Drugs a Factor? yes; 30 min. EMS response time
Emergency Response Procedures Followed? yes
No. 5 of 12: April 02, 1999 – DME – Waseca, MN
A three-person yard switching crew was switching and the conductor was pulling pins while the brakeman was taking orders from him and working the yard tracks during a flat switching operation. The conductor cut off three cars that rolled into other cars on the track. The brakeman was run over by these cars.

**SOFA Finding(s):**

<table>
<thead>
<tr>
<th>Possible Contributing Factor:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of Week:</td>
<td>Monday</td>
</tr>
<tr>
<td>Time of Fatal Event:</td>
<td>1:03 PM</td>
</tr>
<tr>
<td>Time on Duty (hours: minutes):</td>
<td>6:38</td>
</tr>
<tr>
<td>Temperature (Fahrenheit):</td>
<td>60</td>
</tr>
<tr>
<td>Direction of Movement:</td>
<td>free-running</td>
</tr>
<tr>
<td>Crew’s Next Move:</td>
<td>switch cars</td>
</tr>
<tr>
<td>Death Result of Train Movement?</td>
<td>yes</td>
</tr>
<tr>
<td>Other Movements Nearby?</td>
<td>no</td>
</tr>
<tr>
<td>Track Type:</td>
<td>yard/flat/classification</td>
</tr>
<tr>
<td>Hit by Own Equipment?</td>
<td>yes</td>
</tr>
<tr>
<td>Speed of Equipment (mph):</td>
<td>1</td>
</tr>
<tr>
<td>Deceased Regular Job?</td>
<td>yes</td>
</tr>
<tr>
<td>Crew Size:</td>
<td>3</td>
</tr>
<tr>
<td>Drugs Present?</td>
<td>no</td>
</tr>
<tr>
<td>Drugs a Factor?</td>
<td>no</td>
</tr>
<tr>
<td>Emergency Response Procedures Followed?</td>
<td>yes</td>
</tr>
</tbody>
</table>

No. 6 of 12: April 09, 1999 – UP – Richland, WA
A three-person road switcher was in the process of dropping a car into a track. However, the locomotive was fouling the track the car was to enter. The brakeman, realizing this, jumped from the trailing end of the car and ran to the leading end to try and stop the car. The conductor, who was standing near the fouling corner of the locomotive, started up the stairwell of the locomotive when he realized what was happening. However, the stairwell was obstructed with a metal rod that had been welded into place and prevented the conductor an escape route. He was subsequently crushed between the striking car and the metal rod.

**Special Switching Hazard(s):**

<table>
<thead>
<tr>
<th>Possible Contributing Factor:</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Failure to stop locomotive in clear</td>
</tr>
<tr>
<td></td>
<td>Locomotive defect</td>
</tr>
<tr>
<td></td>
<td>Failure to communicate unsafe condition</td>
</tr>
</tbody>
</table>

| Day of Week:                 | Friday |
| Time of Fatal Event:         | 9:30 PM |
| Time on Duty (hours: minutes):| 3:30 |
| Temperature (Fahrenheit):    | 45 |
| Direction of Movement:       | free-running |
| Crew’s Next Move:            | line switch |
| Death Result of Train Movement? | yes |
| Other Movements Nearby?      | yes |
| Track Type:                  | main/lead/industrial |
| Hit by Own Equipment?        | yes |
| Striking Train Within Rules? | no |
| Speed of Equipment (mph):    | 8 |
| Deceased Regular Job?        | yes |
| Crew Size:                   | 3 |
| Drugs Present?               | no |
| Drugs a Factor?              | no |
| Emergency Response Procedures Followed? | yes |
No. 7 of 12: April 21, 2000 – BNSF – Galesburg, IL

A three-person switching crew was in the process of hauling cars over the hump and the foreman of the crew was observing the move from between his track and another track that was being used by another yard job. The foreman was killed when he fouled and then was struck by a free rolling car on the adjacent track.

**Special Switching Hazard(s):**
- Possible Contributing Factor: Free-Rolling Railcars (Employee on or fouling track)
- External Circumstances:
  - Day of Week: Friday
  - Time of Fatal Event: 9:28 AM
  - Time on Duty (hours: minutes): 1:29
  - Temperature (Fahrenheit): 43
  - Direction of Movement: free-running
  - Crew's Next Move: pull track
  - Death Result of Train Movement?: yes
  - Other Movements Nearby?: yes
  - Track Type: yard/hump/classification
  - Hit by Own Equipment?: no
  - Striking Train Within Rules?: yes
  - Speed of Equipment (mph): 7
  - Deceased Regular Job?: yes
  - Crew Size: 3
  - Drugs Present?: no
  - Drugs a Factor?: no
  - Emergency Response Procedures Followed?: yes

No. 8 of 12: April 08, 2001 – BNSF – Clark, OK

The conductor of a road switcher pulled his train into a yard, got off, made a cut behind three cars and told the engineer to pull ahead to clear a crossover switch he intended to use. After getting the crossover, he mounted the leading end of the move and told the engineer to come back seven cars. Three car lengths later, the movement passed through one end of another crossover switch in reverse position and diverted the movement into the side of a standing cut of cars crushing the conductor to death.

**Special Switching Hazard(s):**
- Possible Contributing Factor: Miscellaneous (Switch improperly lined
- Possible Contributing Factor: Shoving movement, man on or at leading end of movement, failure to control

**Miscellaneous**
- Day of Week: Sunday
- Time of Fatal Event: 9:18 PM
- Time on Duty (hours: minutes): 1:48
- Temperature (Fahrenheit): 70
- Direction of Movement: shoved
- Crew's Next Move: couple to standing cars
- Death Result of Train Movement?: yes
- Other Movements Nearby?: no
- Track Type: yard/flat/industrial
- Hit by Own Equipment?: no
- Striking Train Within Rules?: no
- Speed of Equipment (mph): 1
- Deceased Regular Job?: yes
- Crew Size: 3
- Drugs Present?: no
- Drugs a Factor?: no
- Emergency Response Procedures Followed?: yes
A road conductor was riding the point of a 122-car shove down a track that was partially out of service. The out of service portion was marked by a red flag and derail. The crew was not able to stop the movement before the car being ridden by the conductor went over the derail, landed on its side and crushed the conductor to death.

**SOFA Finding(s):**

**Possible Contributing Factor:**
- Shoving movement, man on or at leading end of movement, failure to control
- Emergency brake application to avoid accident
- Poor intra-crew communication about work in progress
- Buffing or slack action excessive, train make-up

**Day of Week:** Friday
**Time of Fatal Event:** 10:43 PM
**Time on Duty (hours: minutes):** 10:39
**Temperature (Fahrenheit):** 55
**Direction of Movement:** shoved
**Crew's Next Move:** spot train
**Death Result of Train Movement?** yes
**Other Movements Nearby?** no
**Track Type:** main
**Hit by Own Equipment?** yes
**Striking Train Within Rules?** no
**Speed of Equipment (mph):** 8
**Deceased Regular Job?** yes
**Crew Size:** 2
**Drugs Present?** no
**Drugs a Factor?** no

---

A Norfolk Southern (NS) brakeman, part of a road crew, was assisting in and working with the local yard assignment in putting his train away. During a shove move, the brakeman was struck and killed by the leading end of a cut of cars the local yard assignment was moving.

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An Union Pacific (UP) switchman was riding on a car that was located at other than the leading end of a shove move and giving radio commands to the RCL operator who was controlling the locomotive being used to shove the cars into a track. Radio communication ceased, the move stopped and the switchman was found dead adjacent to the track being shoved.

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A conductor, while riding the leading end of a shove move, fell off and was struck and killed by the car he had been riding.

---

**The Zero Switching Fatality Goal Remains**
## 12 May Switching Fatalities

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>RR</th>
<th>Location</th>
<th>Age</th>
<th>Service (yrs)</th>
<th>Employee’s Job</th>
<th>Employee Act</th>
<th>Employee Location</th>
<th>Fatal Event</th>
<th>SOFA Finding(s)</th>
<th>Special Switching Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>05/22/93</td>
<td>ATSF</td>
<td>El Paso, TX</td>
<td>46</td>
<td>27</td>
<td>yard conductor</td>
<td>standing</td>
<td>near on-track equip-on ground</td>
<td>collision/impact-auto, truck, bus, van, etc.</td>
<td></td>
<td>Other Special Hazards or Events</td>
</tr>
<tr>
<td>2</td>
<td>05/03/95</td>
<td>CSXT</td>
<td>Evansville, IN</td>
<td>52</td>
<td>32</td>
<td>yard conductor</td>
<td>standing</td>
<td>between tracks</td>
<td>struck by on-track equipment</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>05/26/98</td>
<td>BRC</td>
<td>Bedford Park, IL</td>
<td>57</td>
<td>36</td>
<td>yard conductor</td>
<td>adjusting coupler</td>
<td>on track</td>
<td>sudden/unexpected movement of on-track equipment</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>05/19/99</td>
<td>NS</td>
<td>Cincinnati, OH</td>
<td>36</td>
<td>1</td>
<td>road conductor</td>
<td>riding</td>
<td>other location on loc</td>
<td>collision between on-track equipment</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>05/22/00</td>
<td>CSX</td>
<td>Richmond, VA</td>
<td>38</td>
<td>2</td>
<td>road brakeman</td>
<td>riding</td>
<td>on side of car</td>
<td>struck against object</td>
<td></td>
<td>Close Clearance</td>
</tr>
<tr>
<td>6</td>
<td>05/31/00</td>
<td>UP</td>
<td>Pine Bluff, AR</td>
<td>47</td>
<td>2</td>
<td>yard conductor</td>
<td>riding</td>
<td>other location on loc</td>
<td>collision between on-track equipment</td>
<td></td>
<td>Other Special Hazards or Events</td>
</tr>
<tr>
<td>7</td>
<td>05/14/02</td>
<td>UP</td>
<td>Pine Bluff, AR</td>
<td>53</td>
<td>2.5</td>
<td>yard brakeman</td>
<td>adjusting coupler</td>
<td>on track</td>
<td>struck by on-track equipment</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>05/13/04</td>
<td>MSO</td>
<td>Sturgis, MI</td>
<td>38</td>
<td>na</td>
<td></td>
<td></td>
<td>(Information is preliminary, and not based on investigation)</td>
<td>Special Switching Hazard</td>
<td></td>
<td>Special Switching Hazard</td>
</tr>
<tr>
<td>9</td>
<td>05/18/04</td>
<td>NS</td>
<td>Elwood, IN</td>
<td>35</td>
<td>na</td>
<td></td>
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<td>(Information is preliminary, and not based on investigation)</td>
<td>Special Switching Hazard</td>
<td></td>
<td>Special Switching Hazard</td>
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<tr>
<td>10</td>
<td>05/13/05</td>
<td>DCRR</td>
<td>Detroit, MI</td>
<td>24</td>
<td>na</td>
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<td>(Information is preliminary, and not based on investigation)</td>
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<td></td>
<td>Special Switching Hazard</td>
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<tr>
<td>11</td>
<td>05/26/08</td>
<td>CSX</td>
<td>Lumberton, NC</td>
<td>45</td>
<td>na</td>
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<td>(Information is preliminary, and not based on investigation)</td>
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<td></td>
<td>Special Switching Hazard</td>
</tr>
<tr>
<td>12</td>
<td>05/29/08</td>
<td>UP</td>
<td>Amarillo, TX</td>
<td>na</td>
<td>na</td>
<td></td>
<td></td>
<td>(Information is preliminary, and not based on investigation)</td>
<td>Special Switching Hazard</td>
<td></td>
<td>Special Switching Hazard</td>
</tr>
<tr>
<td>13</td>
<td>05/10/09</td>
<td>CSX</td>
<td>Selkirk, NY</td>
<td>32</td>
<td>na</td>
<td></td>
<td></td>
<td>(Information is preliminary, and not based on investigation)</td>
<td>Special Switching Hazard</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

The Zero Switching Fatality Goal Remains

SOFA Working Group
No. 1 of 13: May 22, 1993 – ATSF – El Paso, TX
A three-person switching crew was in the process of shoving cars into a track in the TOFC yard. The switch foreman was directing the move when he was struck from behind by the left front fender of a hostler truck and run over by its rear wheels.

Special Switching Hazard(s):
Possible Contributing Factor:
Possible Contributing Factor:

Other Special Hazards or Events
Highway user inattentiveness
Interference (other than vandalism) with railroad operations by non-railroad employee

Day of Week:
Time of Fatal Event:
Time on Duty (hours: minutes):
Temperature (Fahrenheit):
Crew's Next Move:
Death Result of Train Movement?
Track Type:
Hit by Own Equipment?
Speed of Equipment (mph):
Crew Size:
Emergency Response Procedures Followed?

Saturday
10:30 AM
4:00
82
spot cars
no
spot(load/unload)/outside/stub track
no
0
3
yes

No. 2 of 13: May 03, 1995 – CSX – Evansville, IN
Conductor was struck and killed by a shove move on the track adjacent to where he was working. Communication about the move on that adjacent track had been conveyed to the conductor via the “bleeder,” a utility type employee.

SOFA Finding(s):
Possible Contributing Factor:
External Circumstances:

2
Employee on or fouling track
Two radio channels used

Day of Week:
Time of Fatal Event:
Time on Duty (hours: minutes):
Temperature (Fahrenheit):
Direction of Movement:
Crew's Next Move:
Death Result of Train Movement?
Other Movements Nearby?
Track Type:
Hit by Own Equipment?
Speed of Equipment (mph):
Crew Size:
Drugs Present?
Drugs a Factor?
Emergency Response Procedures Followed?

Wednesday
5:55 PM
3:00
60
shoved
switch car
yes
yes
yard/lead/classification
no
5
3
no
no
yes
No. 3 of 13: May 26, 1998 – BRC – Bedford Park, IL
Crew was working in one track in class yard with helper controlling engine moves, conductor was adjusting coupler when three free rolling cars struck him from behind and coupled him up.

**SOFA Finding(s):**
Possible Contributing Factor: Employee on or fouling track
Possible Contributing Factor: Instructions to train/yard crew improper
Possible Contributing Factor: Failure to apply handbrakes on car(s)
Possible Contributing Factor: Failure to provide adequate space between equipment

Day of Week: Tuesday
Time of Fatal Event: 7:33 AM
Time on Duty (hours: minutes): 1:03
Temperature (Fahrenheit): 8
Direction of Movement: free-running
couple track
Crew's Next Move: yard/hump/classification
Death Result of Train Movement?: no
Track Type: yes
Hit by Own Equipment?:
Striking Train Within Rules?: yes
Shoving Movement, man on or at leading end of movement, failure to control
External Circumstances: Lack of defined foul point
Deceased Regular Job?: yes
Crew Size: 3
Drugs Present?: no
Drugs a Factor?: no
Emergency Response Procedures Followed?: yes

No. 4 of 13: May 19, 1999 – NS – Cincinnati, OH
A conductor with one year of service was riding in the stairwell of the leading locomotive. He was directing the move by radio when he realized to late that the move would not clear the standing equipment. He was crushed between the handrail of his locomotive and the standing locomotive.

**SOFA Finding(s):**
Possible Contributing Factor: Car left afoul.
Possible Contributing Factor: Shoving movement, man on or at leading end of movement, failure to control
External Circumstances: Lack of defined foul point

Day of Week: Wednesday
Time of Fatal Event: 5:30 PM
Time on Duty (hours: minutes): 1:50
Temperature (Fahrenheit): 70
Direction of Movement: shoved
couple to train
Crew's Next Move:
Death Result of Train Movement?: yes
Other Movements Nearby?: no
Track Type: yard/flat/lead
Hit by Own Equipment?: yes
Shoving Movement, man on or at leading end of movement, failure to control
Crew Size: 3
Drugs Present?: no
Drugs a Factor?: no
Emergency Response Procedures Followed?: yes
No. 5 of 13: May 22, 2000 – CSX – Richmond, VA

A three-person road switching crew was in the process of spotting loaded coal cars at a unloading facility that was equipped with a “shaker” that helped empty each car. The shaker’s position causes a close clearance condition. The conductor was riding one side of the leading coal car and the brakeman was riding the other. Although having a clear view of the fouling equipment, the brakeman did not get off the car as the conductor had expected and was crushed between it and the fouling shaker equipment.

**Special Switching Hazard(s):**
- Possible Contributing Factor: Close Clearance
- Possible Contributing Factor: Poor intra-crew communication about work in progress
- Possible Contributing Factor: Failure to communicate unsafe condition
- Possible Contributing Factor: Shoving movement, man on or at leading end of movement, failure to control

**External Circumstances:**
- Day of Week: Monday
- Time of Fatal Event: 11:30 AM
- Time on Duty (hours: minutes): 10:30
- Temperature (Fahrenheit): 70
- Direction of Movement: shoved
- Crew's Next Move: spot cars

**Death Result of Train Movement?**
- yes

**Other Movements Nearby?**
- no

**Track Type:** main/industrial/spot(load/unload)/outside

**Hit by Own Equipment?**
- no

**Striking Train Within Rules?**
- no

**Speed of Equipment (mph):** 1

**Deceased Regular Job?**
- no

**Had Deceased Worked There Before?**
- no

**Crew Size:** 3

**Drugs Present?**
- no

**Drugs a Factor?**
- no

**Emergency Response Procedures Followed?**
- yes

No. 6 of 13: May 31, 2000 – UP – Pine Bluff, AR

A three-person yard switching crew was in the process of moving their light locomotives through a series of crossover switches however, the switchman had gone to the yard office for another list of cars to switch and the foreman, who had two (2) years of service, was directing the lite engine move by radio. The foreman told the engineer to stop, the foreman got off the leading end of the lead locomotive to line switches, he then told the engineer to continue backing up. Shortly thereafter, the foreman was crushed in a side collision between the locomotive consist he was directing and other cars standing on an adjacent track.

**Special Switching Hazard(s):**
- Possible Contributing Factor: Close Clearance
- Possible Contributing Factor: Close or no clearance
- Possible Contributing Factor: Poor intra-crew communication about work in progress
- Possible Contributing Factor: Failure to communicate unsafe condition
- Possible Contributing Factor: Shoving movement, man on or at leading end of movement, failure to control

**Other Special Hazards or Events**
- Switch improperly lined
- Shoving movement, man on or at leading end of movement, failure to control

**Day of Week:**
- Wednesday

**Time of Fatal Event:**
- 3:15 AM
- 3:16

**Temperature (Fahrenheit):**
- 70

**Direction of Movement:**
- shoved

**Crew's Next Move:**
- couple to track

**Death Result of Train Movement?**
- yes

**Other Movements Nearby?**
- no

**Track Type:** hump/rec/dept

**Hit by Own Equipment?**
- no

**Striking Train Within Rules?**
- no

**Speed of Equipment (mph):**
- 1

**Crew Size:**
- 3

**Drugs Present?**
- no

**Drugs a Factor?**
- no

**Emergency Response Procedures Followed?**
- yes
The switchman of a three-person yard switching crew asked the engineer to stretch a track. Noticing that there was a separation between the forth and fifth head cars, the switchman went in to align the couplers. The switchman was coupled up when unsecured cars rolled in on him.

**SOFA Findings(s):**
- Possible Contributing Factor: Employee on or fouling track
- Possible Contributing Factor: Failure to apply handbrakes on car(s)
- Possible Contributing Factor: Failure to provide adequate space between equipment
- Possible Contributing Factor: Poor crew utilization

**Day of Week:**
- Tuesday

**Time of Fatal Event:**
- 8:40 AM

**Time on Duty (hours: minutes):**
- 1:40

**Temperature (Fahrenheit):**
- 61

**Direction of Movement:**
- free-running

**Crew's Next Move:**
- couple track

**Death Result of Train Movement?**
- yes

**Other Movements Nearby?**
- no

**Track Type:**
- yard/hump

**Hit by Own Equipment?**
- yes

**Speed of Equipment (mph):**
- 1

**Deceased Regular Job?**
- yes

**Crew Size:**
- 3

**Drugs Present?**
- no

**Drugs a Factor?**
- no

**Emergency Response Procedures Followed?**
- yes

---

**The Zero Switching Fatality Goal Remains**
No. 8 of 13: May 13, 2004 – MSO – Sturgis, MI  
(Information is preliminary, and not based on investigation)  
A 38-year-old conductor was killed when he apparently slipped and fell from a car he was riding.

No. 9 of 13: May 18, 2004 – NS – Elwood, IN  
(Information is preliminary, and not based on investigation)  
A 35-year-old brakeman, with 6-years of service, was killed when the lead car he was riding was struck by a tractor-trailer.

No. 10 of 13: May 13, 2005 – DCRR – Detroit, MI  
(Information is preliminary, and not based on investigation)  
A 24-year-old conductor died of injuries sustained when the car he was riding derailed. He was crushed between the car and a cement abutment.

No. 11 of 13: May 26, 2008 – CSX – Lumberton, NC  
(Information is preliminary, and not based on investigation)  
A 45-year-old conductor was riding the leading end of 97 loaded coal hoppers and directing the move to the unloading spot by radio commands to his engine crew. Once the move was stopped, the conductor could not be contacted and was subsequently found dead, under a pile of coal located near the unloading area.

No. 12 of 13: May 29, 2008 – UP – Amarillo, TX  
(Information is preliminary, and not based on investigation)  
A brakeman was riding the leading end of a four car cut of cars that was free rolling into a track. As the brakeman went to position himself to begin controlling the speed of the free rolling cars by using the handbrake, the hand brake support gave way, the hand brake apparatus broke off and the employee fell under the leading end of the free rolling cars.

No. 13 of 13: May 10, 2009 – CSX – Selkirk, NY  
(Information is preliminary, and not based on investigation)  
A 32-year-old yard foreman operating a one-person remote control locomotive went in between the equipment to make an adjustment after the equipment had started back toward the car he intended to couple up to. The yard foreman was not able to get out from between the cars in time and was crushed between the standing equipment and the equipment he was operating.

The Zero Switching Fatality Goal Remains