

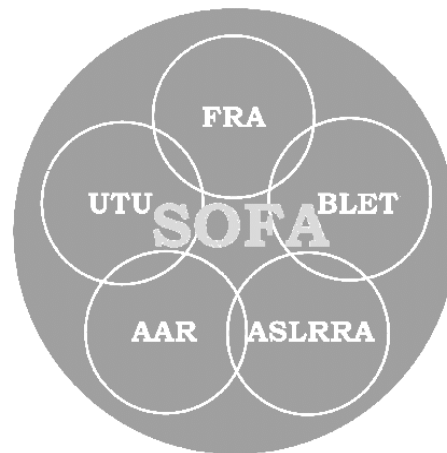
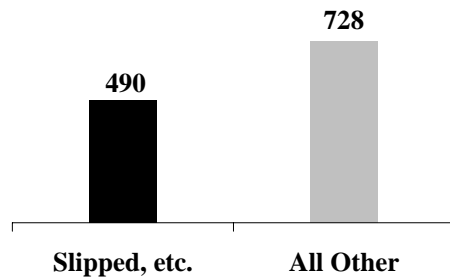
# PLEASE POST IMMEDIATELY

*When Work Ends, All Should Return Safely:*

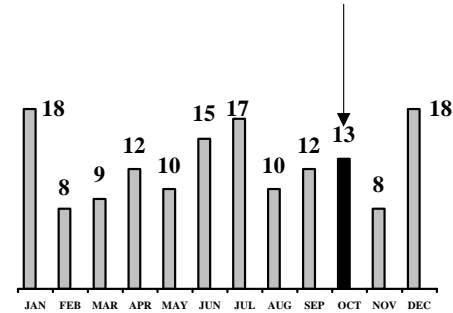
*Apply SOFA Operating Recommendations – Recognize Special Switching Hazards*

## Slipped, Fell, Stumbled, etc.

490 of 1,218 Severe Injuries – 40.2 percent – resulted from slipped, fell, stumbled, etc. (FRA Circumstance Event Codes # 51-54, 70), January 1997 through June 2006. Injuries resulting from these events increase in upcoming winter months. *see pages 2 and 3*



Since 1992, 13 Switching Fatalities have occurred in October.



### Four Switching Fatalities in 2006:

- April 2, at Palmer, MI
- August 21, at Bonaventure, FL
- August 25, at Chicago, IL
- September 10, East St. Louis, IL

Note how quickly Fatalities can occur – 3 within 20 days.

## October 2006 Switching Fatality and Severe Injury Update

(Feel free to use, reproduce, and circulate this information in your safety efforts)

# SOFA-defined Severe Injuries Resulting from Slipped, Fell, Stumbled, etc.



**5 FRA Event Circumstance Codes account for 40.2 percent of all Severe Injuries:**

52: Slipped, fell, stumbled, etc. due to climatic condition (rain, snow, ice, etc.)

51: Slipped, fell, stumbled, etc. due to irregular surface, e.g., depression, slope, etc.

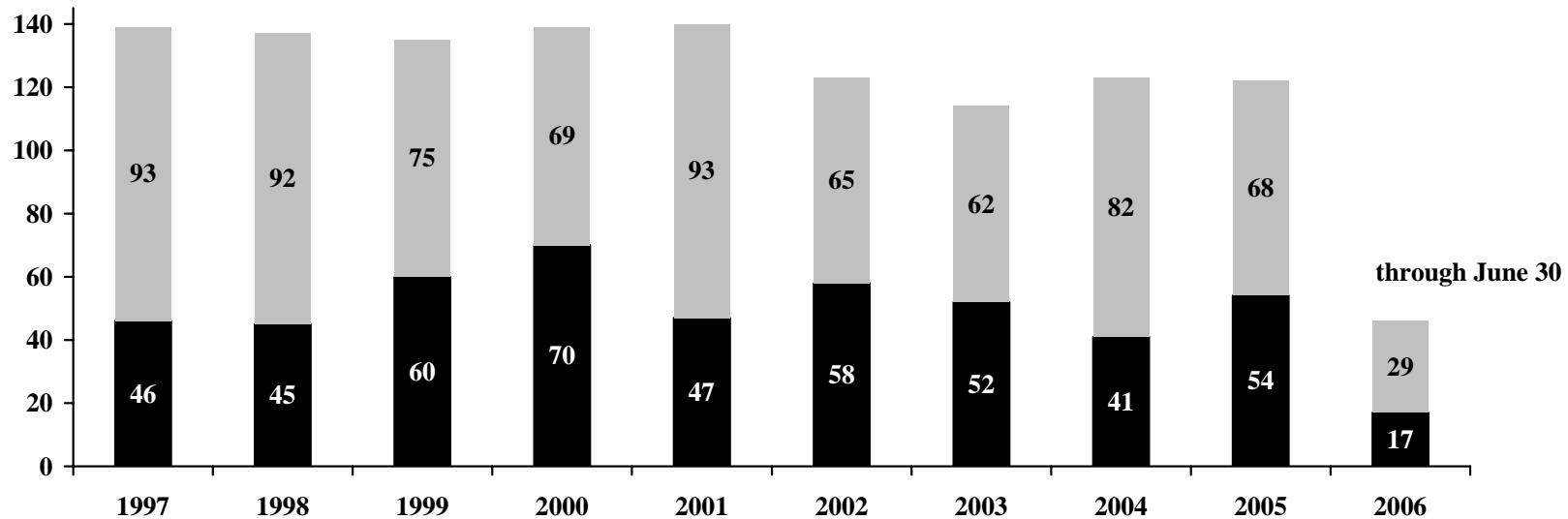
54: Slipped, fell, stumbled, etc. due to object, e.g., ballast, spike, material, etc.

53: Slipped, fell, stumbled, etc. on oil, grease, other slippery substance

70: Slipped, fell, stumbled, other

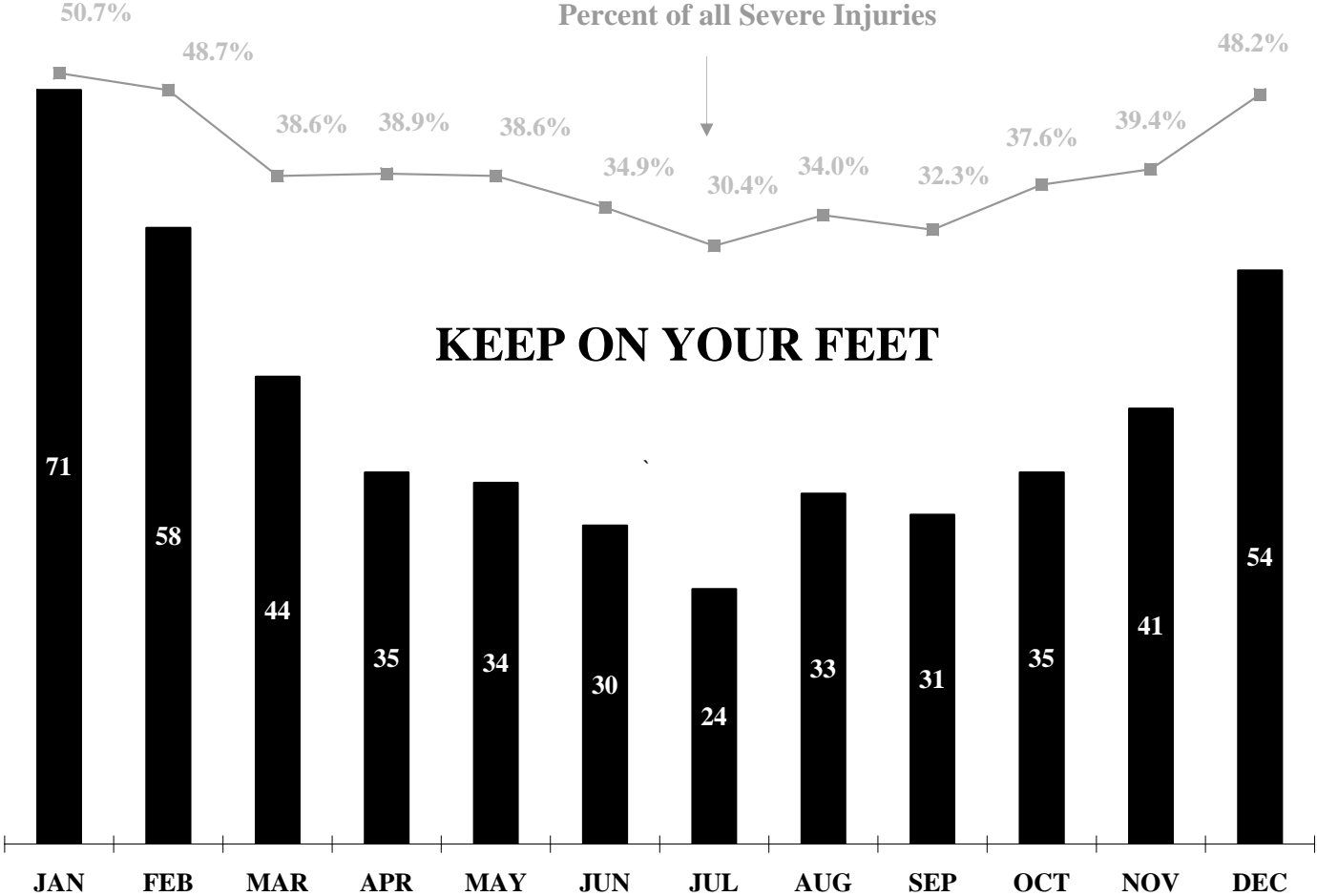


**All Other Severe Injuries – multiple causes**



490 Severe Injuries from Slip, Fell, Stumbled, etc. FRA Event Circumstance Codes, January 1997 to June 2006

# SOFA-defined Severe Injuries Resulting from Slipped, Fell, Stumbled, etc. by Month, January 1997 through June 2006



# Test Your Knowledge of SOFA-defined Severe Injuries

Mark correct answer(s)

1) Severe Injuries include?

- a) amputations of any body part and loss of eye(s)
- b) fracture of any bone except in the lower arms, fingers, feet, and toes<sup>1</sup>
- c) crushing trauma, neck dislocation, shock, and burns

2) On average how many Severe Injuries occur each year?

- a) 138.0 from 1997 to 2001
- b) 120.5 from 2002 to 2005
- c) 46 in 2006 through June 30

3) Severe Injuries are important?

- a) involve potentially life-threatening trauma
- b) likelihood of permanent loss of function, resulting in occupational and lifestyle restrictions
- c) when work ends, all should return safely

4) Prevention of Severe injuries?

- a) not all causes are completely understood, and more study is warranted
- b) necessary to act on what is known
- c) important to raise awareness of these extreme casualty events

5) Severe Injury information is available?

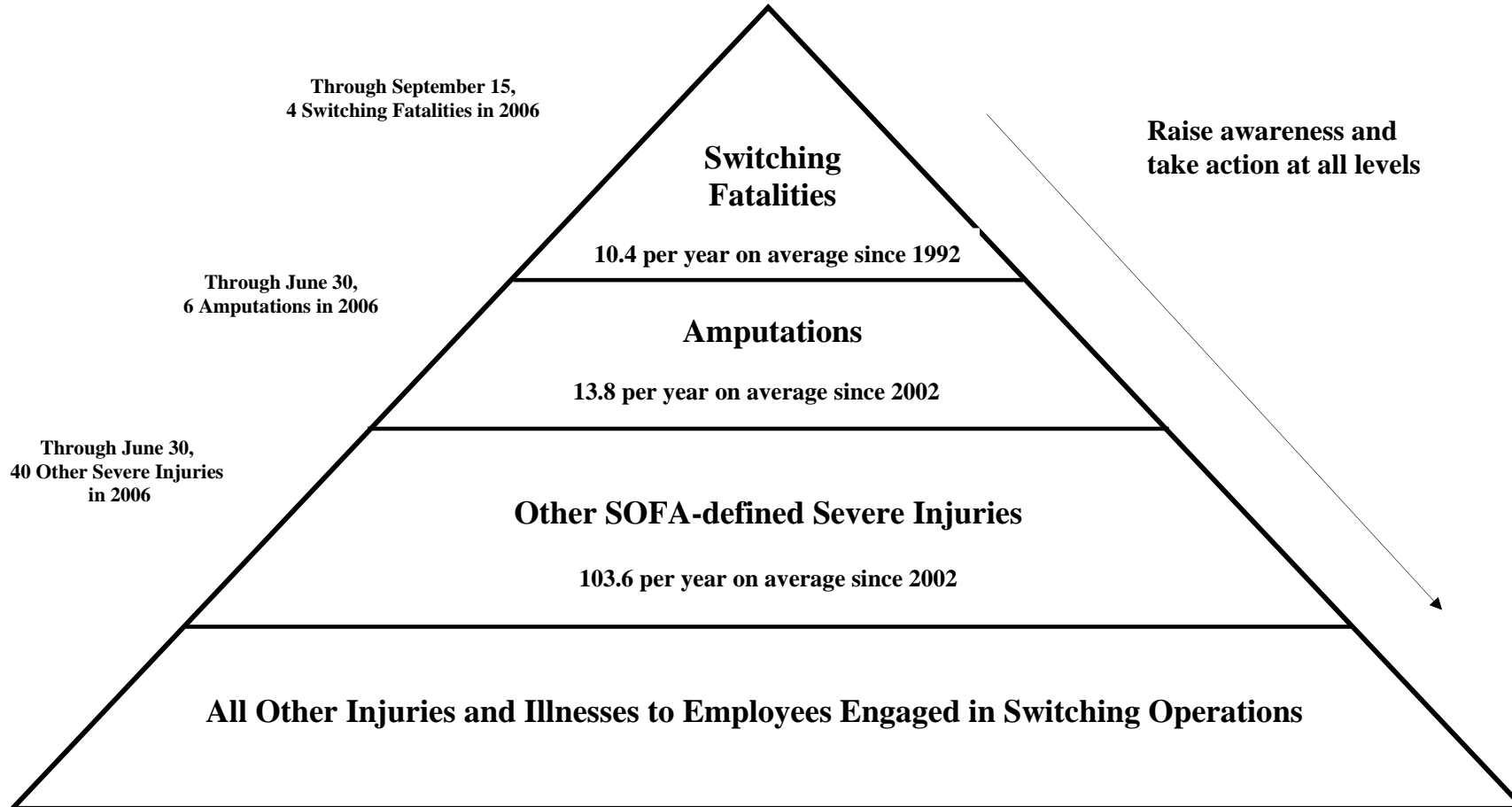
- a) *Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics. July 2001.*  
<http://www.fra.dot.gov/us/content/102>
- b) monthly *SOFA Switching Fatality and Severe Injury Update*
- c) FRA, SOFA Working Group, other safety groups, labor, and railroads. (Note: Definitions of ‘Severe Injuries’ may vary among groups.)

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<sup>1</sup> In its definition of Severe *Injuries*, the SOFA Working Group recognizes that fractures of the lower arms, fingers, hands, feet, and toes are also hardships to employees. SOFA urges awareness and action at all levels of the Switching Casualty Pyramid (page 3).

# Switching Casualty Pyramid

Engaged in switching operations, an activity critical to the modern economy, employees are exposed daily to risk of fatality, life-long disability, and injury and illness.



# SOFA-defined Severe Injuries

January 1992 to June 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	totals	average
<b>JAN</b>	11	13	16	15	21	12	11	11	20	10	140	14.0
<b>FEB</b>	17	15	9	9	9	13	17	14	10	6	119	11.9
<b>MAR</b>	14	12	17	11	10	10	13	10	9	8	114	11.4
<b>APR</b>	8	10	6	10	12	6	9	13	10	6	90	9.0
<b>MAY</b>	6	12	8	8	12	14	9	6	6	7	88	8.8
<b>JUN</b>	9	10	8	11	8	5	10	9	7	9	86	8.6
<b>To date</b>	<b>65</b>	<b>72</b>	<b>64</b>	<b>64</b>	<b>72</b>	<b>60</b>	<b>69</b>	<b>63</b>	<b>62</b>	<b>46</b>		<b>63.7</b>
<b>JUL</b>	9	14	10	8	10	7	6	10	5		79	8.8
<b>AUG</b>	13	10	11	14	8	10	7	14	10		97	10.8
<b>SEP</b>	10	11	15	10	20	12	5	4	9		96	10.7
<b>OCT</b>	12	12	16	10	5	11	9	7	11		93	10.3
<b>NOV</b>	12	9	12	11	13	14	10	10	13		104	11.6
<b>DEC</b>	18	9	7	22	12	9	8	15	12		112	12.4
<b>totals</b>	<b>139</b>	<b>137</b>	<b>135</b>	<b>139</b>	<b>140</b>	<b>123</b>	<b>114</b>	<b>123</b>	<b>122</b>		<b>1,218</b>	

historically low

**138.0 Severe Injuries occurred on average per year from 1997 through 2001**

**120.5 Severe Injuries occurred on average per year from 2002 through 2005**

*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. Available at: <http://www.fra.dot.gov/us/content/102>

# Amputations

## A type of SOFA-defined Severe Injury

Amputations are shown separately because of the extreme trauma to employees engaged in switching, and the likelihood of permanent occupational and lifestyle limitations.

### January 1992 to June 2006

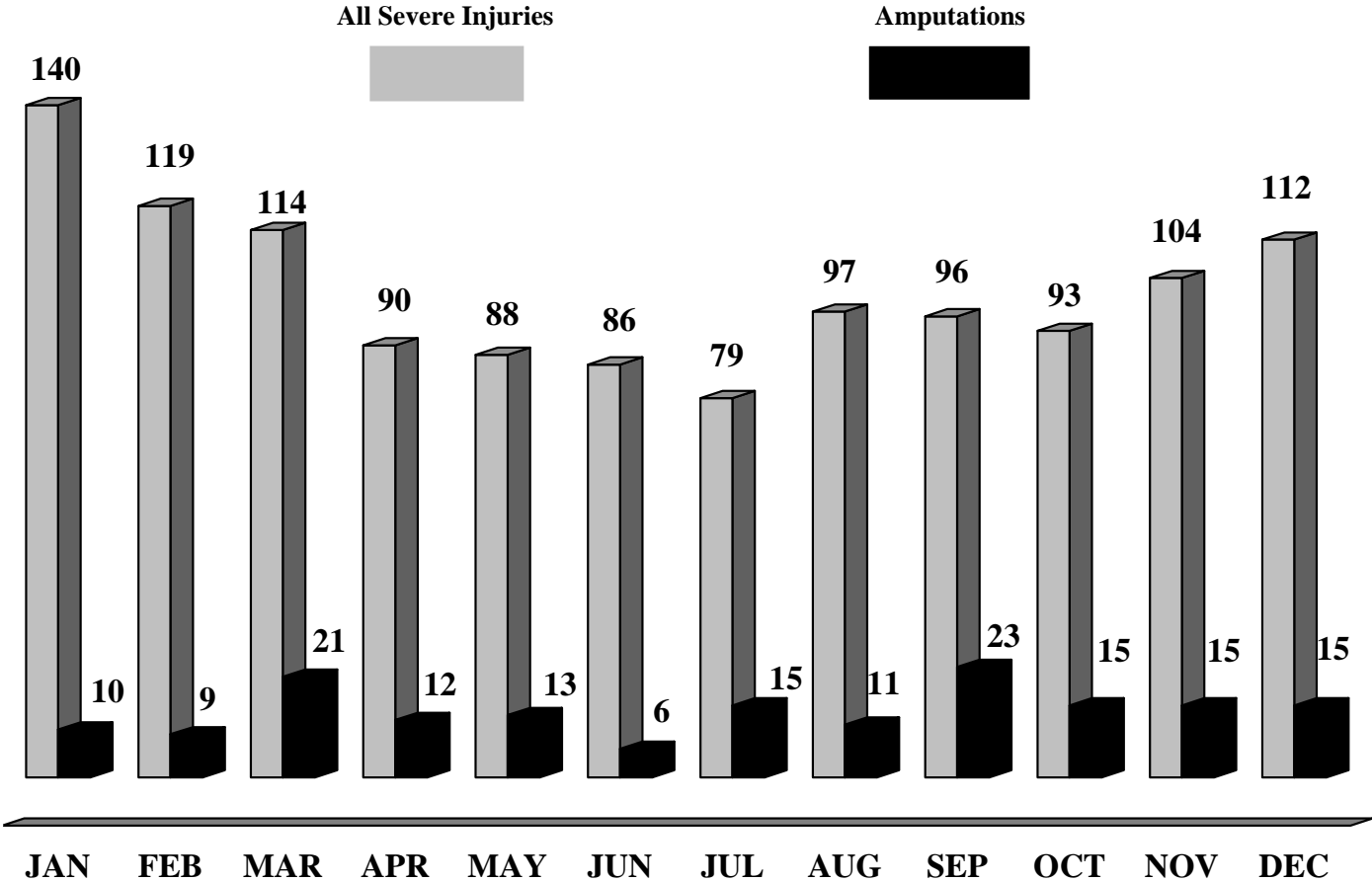
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	totals	average
<b>JAN</b>	1	0	2	1	0	0	2	2	2	0	10	1.0
<b>FEB</b>	0	1	0	1	0	2	1	2	0	2	9	0.9
<b>MAR</b>	3	4	3	2	1	1	3	1	2	1	21	2.1
<b>APR</b>	1	2	0	1	2	0	1	1	2	2	12	1.2
<b>MAY</b>	1	2	3	0	2	2	2	0	0	1	13	1.3
<b>JUN</b>	2	1	1	0	1	0	0	1	0	0	6	0.6
<b>to date</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>6</b>		<b>7.1</b>
<b>JUL</b>	1	5	1	0	4	0	1	2	1		15	1.7
<b>AUG</b>	1	0	1	4	0	1	0	2	2		11	1.2
<b>SEP</b>	2	4	3	2	5	4	0	0	3		23	2.6
<b>OCT</b>	2	5	2	2	0	0	2	2	0		15	1.7
<b>NOV</b>	2	2	2	2	3	0	1	1	2		15	1.7
<b>DEC</b>	4	1	0	4	1	1	2	1	1		15	1.7
<b>totals</b>	<b>20</b>	<b>27</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>11</b>	<b>15</b>	<b>15</b>	<b>15</b>		<b>165</b>	

**20.6 Amputations occurred on average per year from 1997 through 2001**

**14.0 Amputations occurred on average per year from 2002 through 2005**

# Severe Injuries and Amputations by Month, January 1997 to June 2006

Amputations are a type of Severe Injury and are contained in the Severe Injury counts



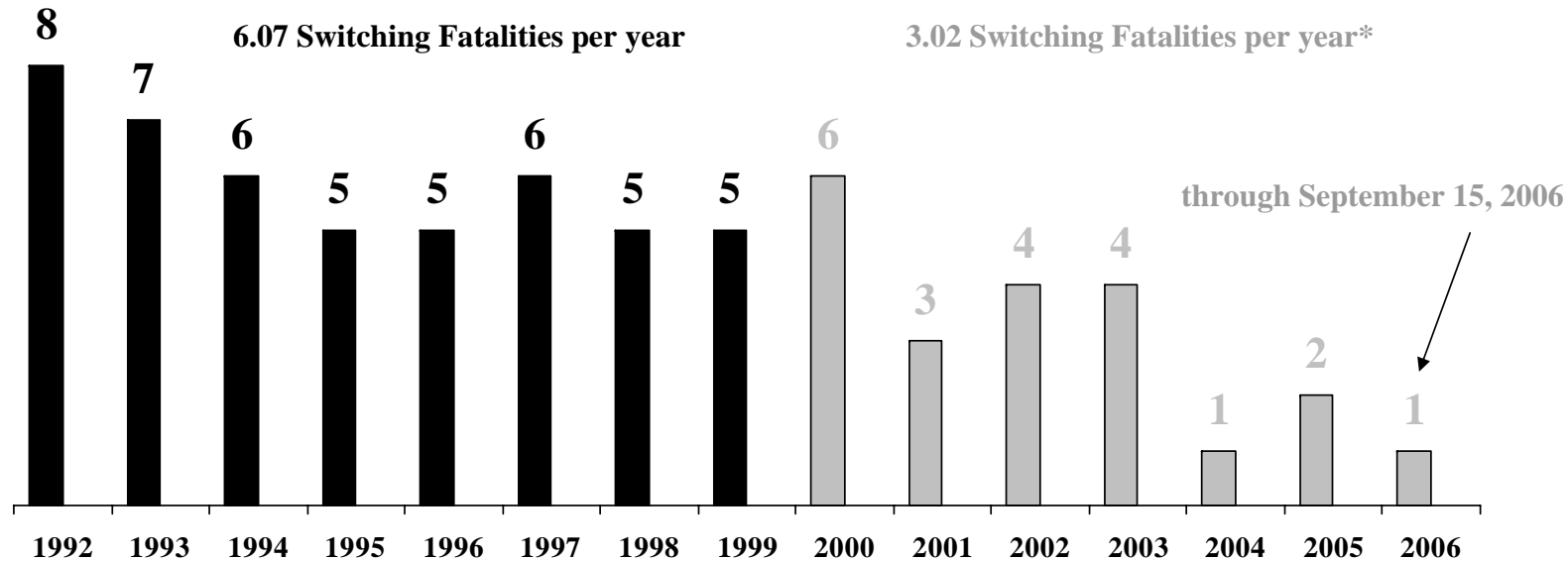
# Reduction is a Step Towards Elimination

## 50.2 percent decline in yearly rate – 6.07 vs. 3.02 deaths per year

The original *SOFA Report*<sup>2</sup> was released in October 1999. Prior to the release, there were 47 Switching Fatalities related to the Five Operating Recommendations in the 7.75-year period January 1992 through September 1999. Expressed as a rate, there were 6.07 Switching Fatalities per year related to Operating Recommendations.

In the post-SOFA Report period of 6.96 years, October 1, 1999 through September 15, 2006, there were 21 Switching Fatalities related to the Five Operating Recommendations. Expressed as a rate, there were 3.02 Switching Fatalities per year\* related to Operating Recommendations.

## 69 Switching Fatalities Related to SOFA Operating Recommendations



\* The Switching Fatality at Burlington, IA, on December 4, 2005, is believed to involve a Close Clearance Special Switching Hazard. If further review by the SOFA Working Group determines one or more Operating Recommendations were involved, the Switching Fatality rate after the release of the *SOFA Report* would increase from 3.02 to 3.16.

<sup>2</sup> Findings and Recommendations of the SOFA Working Group. October 1999. Available at <http://www.fra.dot.gov/us/content/102>

## **4 Switching Fatalities in 2006**

**(Information contained in these three Fatality summaries is preliminary pending investigation.)**

**April 2, 2006**

**Lake Superior & Ishpeming Railroad**

**Palmer, Michigan**

A 51-year-old conductor was apparently riding the point of a 60 ore-car (empties) shove move, and may have fallen off, and was run over.

**August 21, 2006**

**Florida East Coast Railroad**

**Bonaventure, Florida**

A three-person crew (and a locomotive engineer learning the territory) was shoving a cut of cars over a highway rail grade crossing equipped with passive warning devices. The conductor was riding the leading end of the movement when he suddenly told the locomotive engineer to dump the train line air. Subsequent investigation revealed that the leading end of the movement had struck a truck at the crossing, and as a result of the collision, the conductor was killed.

**August 25, 2006**

**Norfolk Southern Railroad**

**Chicago, Illinois**

A three-person crew was flat switching when it became necessary to couple a cut of cars into a standing two-car cut. As the conductor directed the cut of cars into the two-car cut, radio communication with the conductor ended, the movement stopped, and the conductor was found run over by one of the cars being coupled to.

**September 10, 2006**

**Alton & Southern Railroad**

**East St. Louis, Illinois**

A two-person crew was in the process of making up a locomotive consist using two adjacent tracks. After having set over one of the locomotives, the conductor was riding the leading end of the two locomotives into the adjacent track when his hand signals went out of sight, the movement was stopped and the engineer went back to discover the conductor had been crushed between the locomotive he had just set out and the locomotive he was riding.

## 13 September Switching Fatalities

#	Date	RR	Location	Age	Service (yrs)	Employee's Job	Employee Act	Employee Location	Fatal Event	SOFA Recommendations	Special Switching Hazard	
1	10/15/92	BN	Omaha, NE	32	14	yard brakeman	other	other location	caught in or compressed by other machinery		Miscellaneous (open pit)	
2	10/23/92	GTW	Dearborn, MI	49	28	road brakemen	standing	between tracks	collision between on-track equipment		Free-Rolling Railcars	
3	10/19/93	SOO	Leal, ND	43	2	road brakemen	riding	on side of car	derailments	5		
4	10/17/94	UP	Donaldsonville, LA	36	16	road brakemen	crossing between	between cars/loc	sudden/unexpected movement of on-track equipment	1		
5	10/04/95	CSXT	Riverdale, IL	39	0.5	yard conductor	adjusting coupler	between cars/loc	struck by on-track equipment	1, 5		
6	10/07/96	UP	Eagle Pass, TX	35	10.1	yard conductor	adjusting coupler	between cars/loc	sudden/unexpected movement of on-track equipment	1, 5		
7	10/16/97	MRL	Laurel, MT	22	0.8	yard brakeman	riding	between cars/loc	lost balance	5		
8	10/26/98	CCP	Cicero, IL	42	18	road engineer	standing	beside track	struck by on-track equipment		Miscellaneous	
9	10/15/00	UP	Houston, TX	47	20	laborer, shop and engine house	getting on	other location on loc	struck against object	3		
10	10/10/01	PAL	Clayburn, KY	38	11	road conductor	riding	on side of car	struck against object		Close Clearance	
11	10/04/04	NS	Harrisburg, PA	58	<b>To be reviewed by SOFA Working Group</b>							Special Switching Hazard
12	10/07/04	UP	Springfield, IL	n/a	<b>To be reviewed by SOFA Working Group</b>							Special Switching Hazard
13	10/07/04	BNSF	Teague, TX	60	<b>To be reviewed by SOFA Working Group</b>							Special Switching Hazard



### Same day Fatalities

**SOFA WORKING GROUP**

# September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

## No. 1 of 13: October 15, 1992 – BN – Omaha, NE

A three-person yard crew was in the process of spotting cars over a material unloading pit and after the first of the cars was spotted the switch foreman took the locomotive out of the plant building to get the other car for spotting. The switchman remained in the building, set a handbrake on the spotted car and awaited the return of the foreman with the engine and second car to be spotted. The switchman was killed when he ended up falling into the second pit and was crushed by the industrial machinery located within.

### Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

### Miscellaneous

Unprotected open pit

Grain dust

Day of Week:

Thursday

Time of Fatal Event:

1:25 AM

Time on Duty (hours: minutes):

1:55

Crew's Next Move:

spot load at pit

Death Result of Train Movement?

no

Track Type:

industrial/spot(load/unload)inside

Hit by Own Equipment?

no

Speed of Equipment (mph):

0

Deceased Regular Job?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

No

Emergency Response Procedures Followed?

yes

# September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

## No. 2 of 13: October 23, 1992 – GTW – Dearborn, MI

A three-person train crew found it necessary to drop a car by and in doing so, the car hung up fouling the switch and blocking the locomotive into the track it had cleared up on. The crew decided to "stake" the car to clear the track in which the locomotive sat. This process requires a board or pole placed between the locomotive and car to move the car when it cannot be coupled to. The brakeman was killed when the board used slipped, the car started to move toward the locomotive and the brakeman was caught between the two pieces of equipment.

Deleted: three person

### Special Switching Hazard(s):

Possible Contributing Factor:

External Circumstances:

### Free-Rolling Railcars

Failure to provide adequate space between equipment

Unsafe commonly accepted operational practice

Day of Week:

Friday

Time of Fatal Event:

10:00 AM

Time on Duty (hours: minutes):

2:30

Direction of Movement:

shoved

Crew's Next Move:

line-up car

Death Result of Train Movement?

yes

Track Type:

yard/flat/lead/storage

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

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

## September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 3 of 13: October 19, 1993 – SOO – Leal, ND

A three-person train crew was in the process of picking up 18 cars off a siding. The trainman had 10 weeks of experience, forgot to remove the derail, and was killed when the leading car he was riding derailed on top of him. During the stop, the conductor remained in the cab of the lead locomotive with the engineer.

<b>SOFA Operating Recommendation(s):</b>	<b>5</b>
Possible Contributing Factor:	Derail, failure to apply or remove
Possible Contributing Factor:	Insufficient training
Possible Contributing Factor:	Poor crew utilization
Day of Week:	Tuesday
Time of Fatal Event:	8:17 PM
Time on Duty (hours: minutes):	5:47
Temperature (Fahrenheit):	50
Direction of Movement:	shoved
Crew's Next Move:	make joint
Death Result of Train Movement?	yes
Other Movements Nearby?	no
Track Type:	siding
Hit by Own Equipment?	yes
Speed of Equipment (mph):	10
Deceased Regular Job?	no
Had Deceased Worked There Before?	yes
Crew Size:	3
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

**SOFA WORKING GROUP**

14

**October 2006 UPDATE** (current as of 09/15/06)

## September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 4 of 13: October 17, 1994 – UP – Donaldsonville, LA

Crew switching in class yard, brakeman attempted to cross between equipment separated by an insufficient distance, and engineer moved locomotive in the wrong direction, coupling him up.

<b>SOFA Operating Recommendation(s):</b>	<b>1</b>
Possible Contributing Factor:	Failure to provide adequate space between equipment
Possible Contributing Factor:	Radio communication, failure to comply
External Circumstances:	Improper reverser position
Day of Week:	Monday
Time of Fatal Event:	12:30 PM
Time on Duty (hours: minutes):	6:30
Temperature (Fahrenheit):	76
Direction of Movement:	shoved
Crew's Next Move:	pull ahead
Death Result of Train Movement?	yes
Other Movements Nearby?	no
Track Type:	yard/classification/flat
Hit by Own Equipment?	yes
Striking Train Within Rules?	no
Speed of Equipment (mph):	1
Deceased Regular Job?	no
Had Deceased Worked There Before?	yes
Crew Size:	3
Emergency Response Procedures Followed?	yes

## September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 5 of 13: October 04, 1995 – CSX – Riverdale, IL

Crew performing switching in class yard. Switch foreman placed himself between the rails to adjust a misaligned coupler on the fifteenth car after the cut was stretched. Switch foreman was facing the coupler with his back to a cut of seven cars that rolled in on top of him and coupled him up.

#### SOFA Operating Recommendation(s):

Possible Contributing Factor:	1, 5
Possible Contributing Factor:	Failure to provide adequate space between equipment
External Circumstances:	Insufficient training
	Other train operation/human factors

Day of Week:	Wednesday
Time of Fatal Event:	12:40 AM
Time on Duty (hours: minutes):	1:10
Temperature (Fahrenheit):	80
Direction of Movement:	free-running
Crew's Next Move:	coupling
Death Result of Train Movement?	yes
Track Type:	yard/flat/classification
Hit by Own Equipment?	yes
Striking Train Within Rules?	no
Speed of Equipment (mph):	1
Deceased Regular Job?	no
Crew Size:	4
Drugs Present?	no
Drugs a Factor?	no
Emergency Response Procedures Followed?	yes

## September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 6 of 13: October 07, 1996 – UP – Eagle Pass, TX

Three-person crew was switching in class yard, locomotive failed to couple to cut of seven standing cars. Yard foreman used hand signals to separate the locomotive by twenty feet. While adjusting the locomotive drawbar, the seven cars rolled in and coupled him up.

#### SOFA Operating Recommendation(s):

Possible Contributing Factor:

1, 5

Failure to properly secure hand brake on car(s) railroad employee

Possible Contributing Factor:

Inoperable control due to bent rod

Possible Contributing Factor:

Hard to open knuckle on engine

Possible Contributing Factor:

Failure to provide adequate space between equipment

Day of Week:

Monday

Time of Fatal Event:

8:48 PM

Time on Duty (hours: minutes):

2:48

Direction of Movement:

free-running

Crew's Next Move:

shove cars

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

classification

Hit by Own Equipment?

yes

Striking Train Within Rules?

no

Speed of Equipment (mph):

1

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

## September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 7 of 13: October 16, 1997 – MRL – Laurel, MT

Yard switch crew, engineer, switch foreman and switchman, were shoving a cut 41 cars up a grade to a stop. While this was taking place the ground crew boarded the first two cars so they could apply the hand brakes. FE (switchman) fell off the first car while attempting this. This car was found to have a brake platform with a decreasing width. Under the hand brake this platform was found to be 2 inches under the required width over a length of about 30 inches. FE had 10 months experience.

<b>SOFA Operating Recommendation(s):</b>	<b>5</b>
Possible Contributing Factor:	Bent cross over platform under hand brake
Possible Contributing Factor:	Employee falling from moving equipment
External Circumstances:	Moving equipment
Day of Week:	Thursday
Time of Fatal Event:	10:20 PM
Time on Duty (hours: minutes):	6:20
Temperature (Fahrenheit):	63
Direction of Movement:	shoved
Crew's Next Move:	stop
Death Result of Train Movement?	yes
Other Movements Nearby?	no
Track Type:	yard/flat/classification
Hit by Own Equipment?	yes
Striking Train Within Rules?	yes
Speed of Equipment (mph):	1
Deceased Regular Job?	yes
Crew Size:	3
Drugs Present?	no
Drugs a Factor?	no

# September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

## No. 8 of 13: October 26, 1998 – CCP – Cicero, IL

An engineer, having just gone off duty, was distracted and subsequently struck and killed by a lite engine move being operated by a hostler. The hostler was operating the locomotive consist from the trailing end at the time and did not have anyone on the leading end when the engineer was struck.

### Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

External Circumstances:

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?

Striking Train Within Rules?

Speed of Equipment (mph):

Deceased Regular Job?

Crew Size:

Drugs Present?

Drugs a Factor?

Emergency Response Procedures Followed?

### Miscellaneous

Failure to communicate unsafe condition

Employee on or fouling track

Poor intra-crew communication about work in progress

Other general switching rules

Shoving movement, absence of a man on or at leading end of movement

Momentarily distracted

Monday

8:55 AM

11:55

60

shoved

tie up

yes

yes

yard/flat/service

no

no

5

yes

2

no

no

yes

# September Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

## No. 9 of 13: October 15, 2000 – UP – Houston, TX

Employees failed to discuss movement, resulting in employee falling from locomotive platform and being rolled between the locomotive and the elevated walkway.

### SOFA Operating Recommendation(s):

Possible Contributing Factor:

Possible Contributing Factor:

External Circumstances:

3

Poor intra-crew communication about work in progress

Close or no clearance

Non-compliance of federal Hours of Service Regulations

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?

Striking Train Within Rules?

Speed of Equipment (mph):

Deceased Regular Job?

Crew Size:

Drugs Present?

Drugs a Factor?

Emergency Response Procedures Followed?

Sunday

4:50 AM

13:50

72

shoved

spot locomotive

yes

no

yard/hump/service/inspect

yes

no

5

yes

2

no

no

yes

## October Switching Fatality

Note: The Switching Fatality narrative summary is from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. All other information is from the SOFA Matrix, the SOFA Working Group's electronic database.

### No. 10 of 13: October 10, 2001 – PAL – Clayburn, KY

A three-person, local freight train crew was switching a plant and had 2 engines 6 cars and a caboose when they moved over a small bridge and coupled to 5 standing cars in the storage track. The conductor made the coupling and told the engineer to pull the cars out of the track. The conductor got on the side of the trailing end of the second last car in the cut and was knocked off the car by a metal pole adjacent to the storage track. He fell between the car he was riding and the last car in the cut being pulled. He died when the lead wheels of the last car rolled over him.

#### Special Switching Hazard(s):

Possible Contributing Factor:

Possible Contributing Factor:

Possible Contributing Factor:

#### Close Clearance

Close or no clearance

Employee physical condition, other

Other general switching rules

Day of Week:

Wednesday

Time of Fatal Event:

1:05 PM

Time on Duty (hours: minutes):

9:05

Direction of Movement:

pulled

Crew's Next Move:

switch plant

Death Result of Train Movement?

yes

Other Movements Nearby?

no

Track Type:

main/industrial/spot(load/unload)/outside

Hit by Own Equipment?

yes

Striking Train Within Rules?

yes

Speed of Equipment (mph):

6

Deceased Regular Job?

yes

Crew Size:

3

Drugs Present?

no

Drugs a Factor?

no

Emergency Response Procedures Followed?

yes

**SOFA WORKING GROUP**

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**October 2006 UPDATE** (current as of 09/15/06)

## **October Switching Fatality**

**No. 11 of 13: October 04, 2004 – NS – Harrisburg, PA**

**(To be reviewed by SOFA Working Group. Information is preliminary.)**

A conductor age 58 was struck and killed by a shove move performed by another crew when he stepped in front of the leading end of the move.

## **October Switching Fatality**

**(To be reviewed by SOFA Working Group. Information is preliminary.)**

**No. 12 of 13: October 07, 2004 – UP – Springfield, IL**

A student trainman was killed while walking along side a shove move. Several cars derailed, one landing on the trainman.

## **October Switching Fatality**

**(To be reviewed by SOFA Working Group. Information is preliminary.)**

**No. 13 of 13: October 07, 2004 – BNSF – Teague, TX**

A trainman age 60 was killed when cars he was between moved.

### **The Five Lifesavers (based on SOFA Operating Recommendations)**

- **Secure equipment before action is taken.**  
(Three October Switching Fatality involved this Lifesaver. One 2006 Fatality may also involve this Lifesaver.)
- **Protect employees against moving equipment.**
- **Discuss safety at the beginning of a job or when a project changes.**  
(One October Switching Fatality involved this Lifesaver.)
- **Communicate before action is taken.**
- **Mentor less experienced employees to perform service safely.**  
(Four October Switching Fatalities involved this Lifesaver.)

**These eight October Fatalities illustrate the importance of *Applying SOFA Operating Recommendations***