

**Please Post Immediately**



**December and January ~ sixteen switching fatalities each since 1992**

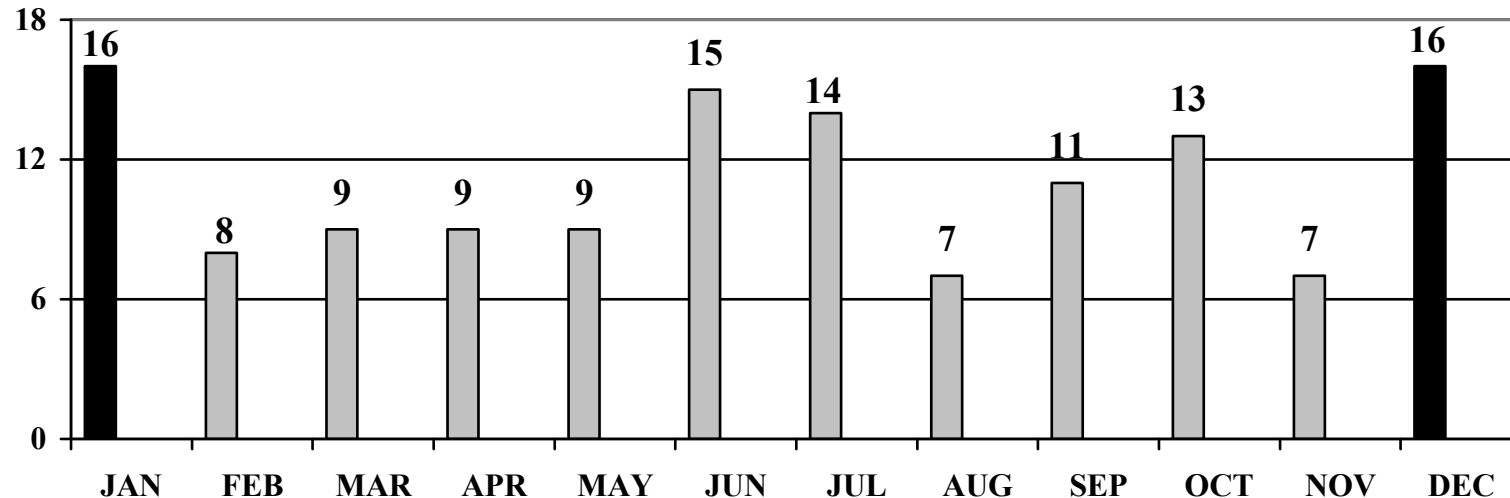
**For December, only three of the 12 years (1992 to 2003) were fatality free ~ 1992, 1999, and 2002**

**Winter ~ a time of increased risk to employees engaged in switching operations**

## Winter Risk ~ December and January

There is always risk to employees engaged in switching operations. Since 1992, 134 switching fatalities have occurred through November 15, 2004. Some months had more fatalities than others ~ but no month was fatality free. December and January ~ each had 16 switching fatalities. And for December, only three years since 1992 have been fatality free ~ 1992, 1999 and 2002.

**134 Switching Fatalities by Month, 1992 to 2004**  
as of November 15, 2004



### Make December and January Switching Fatality Free

- Secure equipment before action is taken.
- Protect employees against moving equipment.
- Discuss safety at the beginning of a job or when a project changes.
- Communicate before action is taken.
- Mentor less experienced employees to perform service safely.

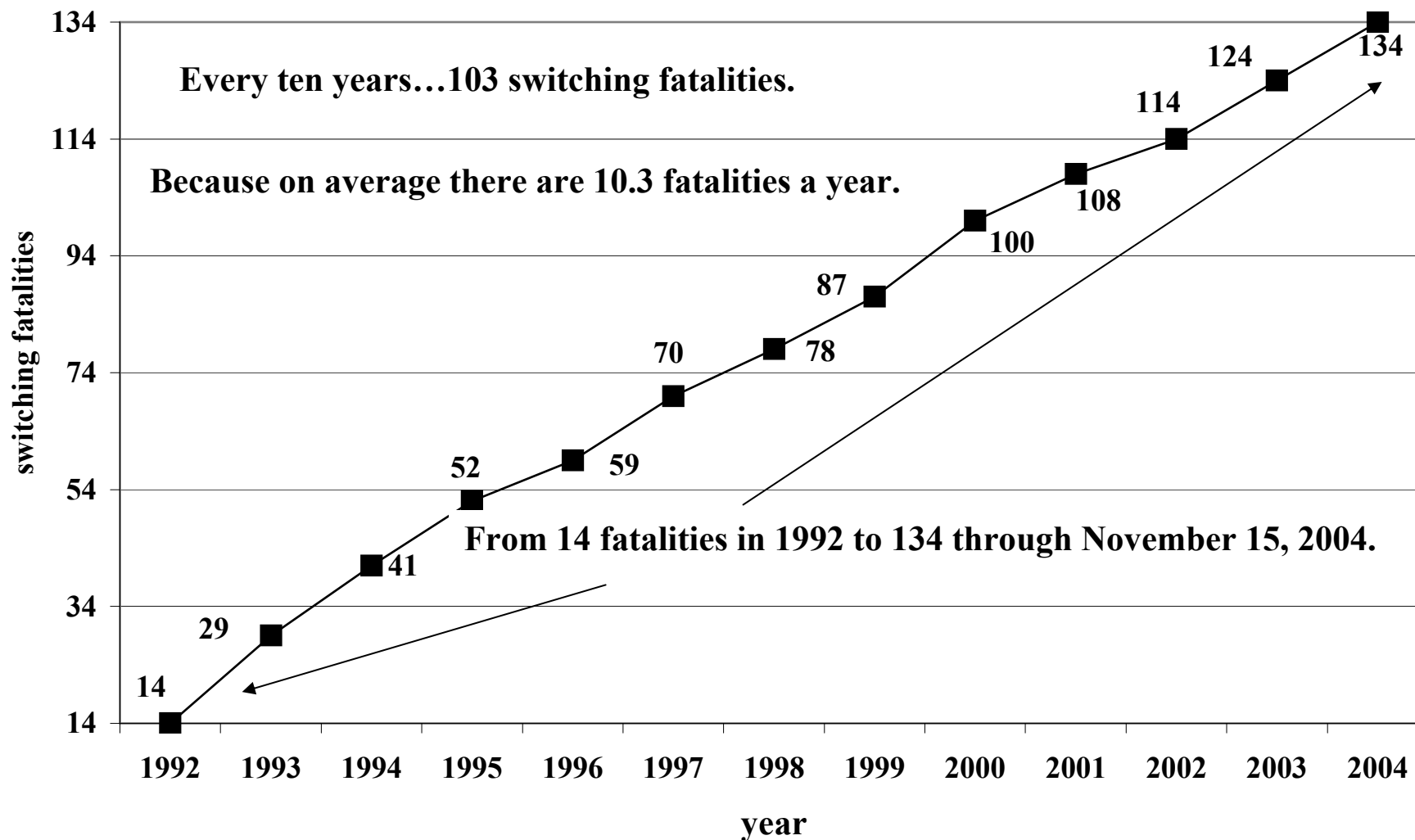
## Sixteen December Switching Fatalities by Calendar Day, 1992 to 2003

Calendar Day	Location of Fatality	Date	Calendar Day	Location of Fatality	Date
1			17		
2	Emporia, KS	12/02/97	18	Chicago, IL	12/18/96
3			19		
4			20		
5	Atlanta, GA	12/05/93	21		
6	Campbell Hall, NY	12/06/94	22	Eden, NC	12/22/01
7	San Antonio, TX	12/07/03	23		
8			24	Lynchburg, VA	12/24/01
9			25		
10			26	Boise, ND	12/26/97
11	Toledo, OH	12/11/95	27		
12			28	Durrant, MS	12/28/98
13	Thorton, CA	12/13/94	28	Dupo, IL	12/28/00
14	Monroe, NC	12/14/95	29	Gillette, WY	12/29/00
15			30	Brook Park, OH	12/30/93
16	Clinton, IA	12/16/96	31		

**Seven December switching fatalities occurred in the 10-day period, December 22 to 31**

## Switching Fatalities Accumulate Quickly

Since 1992, there have been 10.3 switching fatalities on average each year, causing the total number of fatalities to accumulate quickly. Already, in 2004 there have been 10 switching fatalities through November 15, 2004. And the riskiest two months are here ~ December and January.



## Sixteen December Switching Fatalities, 1992 through 2003

- The average age of the sixteen employees was 47.3 years.
- The average length of service was 23.1 years.
- One employee had 2 months of experience. SOFA Recommendation 5 stresses the importance of mentoring less experienced employees to perform service safety.

#	Date	RR	Location	Age	Service (yrs)	Employee's Job	Employee Act	Employee Location	Fatal Event	Movement Direction
1	12/05/93	SOU	Atlanta, GA	59	29	road conductor	getting off	between tracks	struck by on-track equipment	pulled
2	12/30/93	CR	Brook Park, OH	61	38	yard conductor	riding	in or on loco	derailment	<b>shoved</b>
3	12/06/94	CR	Campbell Hall, NY	28	<b>2 months</b>	brakeman trainee	riding	in caboose	rain into on-track equipment	<b>shoved</b>
4	12/13/94	UP	Thorton, CA	48	26	road brakeman	adjusting drawbar	between cars/loco	sudden/unexpected movement of equipment	pulled
5	12/11/95	NS	Toledo, OH	53	32	yard brakeman	standing	on ground near equipment	rolled between fixed object and moving equipment	pulled
6	12/14/95	CSXT	Monroe, NC	54	33	road conductor	riding	on side of car	stuck against object	<b>shoved</b>
7	12/16/96	UP	Clinton, IA	51	21	road brakeman	riding	between cars/loco	struck by on-track equipment	pulled
8	12/18/96	IC	Chicago, IL	45	26	yard conductor	riding	on end of car	struck by on-track equipment	<b>shoved</b>
9	12/02/97	BNSF	Emporia, KS	50	30	road conductor	standing	between tracks	struck by on-track equipment	pulled

## Sixteen December Switching Fatalities, 1992 through 2003 (continued)

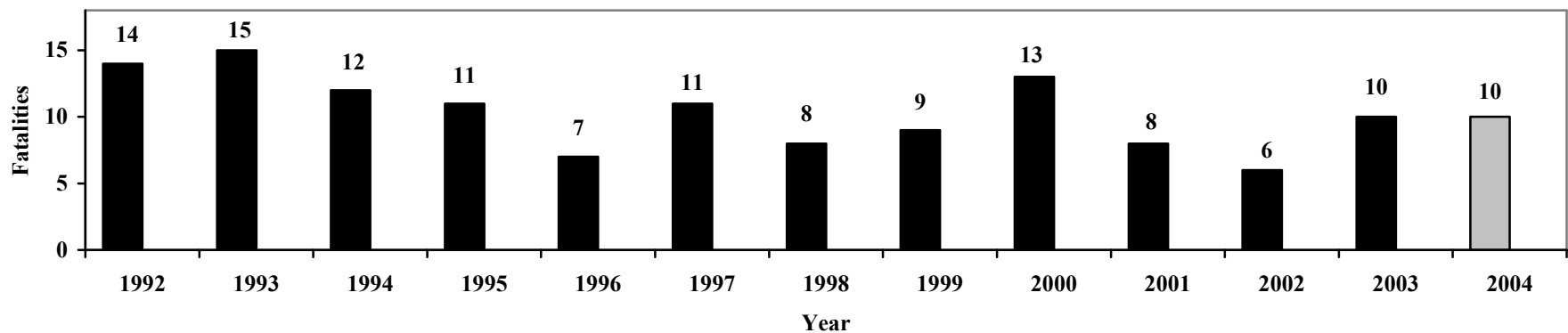
- **Shoving was the direction of movement in 7 fatalities. Shoving is a Special Switching Hazard requiring extreme caution. Fifty-three (53) percent of all switching fatalities involve shoving.**

#	Date	RR	Location	Age	Service (yrs)	Employee's Job	Employee Act	Employee Location	Fatal Event	Movement Direction
10	12/26/97	UP	Boise, ID	55	32	road conductor	opening/closing angle cocks	on track	sudden/unexpected movement of equipment	<b>shoved</b>
11	12/28/98	IC	Durrant, MS	55	26	road conductor	riding	riding bulkhead flat car	derailment	<b>shoved</b>
12	12/28/00	UP	Dupo, IL	52	30	yard brakeman	standing	on track	struck by on-track equipment	pulled
13	12/29/00	BNSF	Gillette, WY	29	6	road conductor	walking	on track	struck by on-track equipment	pulled
14	12/22/01	NS	Eden, NC	50	29	road brakeman	riding	on side of car	collision/impact – auto, truck, van, bus, etc.	<b>shoved</b>
15	12/24/01	NS	Lynchburg, VA	30	5	road conductor	walking	on ground near equipment	struck by on-track equipment	pulled
16	12/07/03	UP	San Antonio, TX	37	6	other train and engine service	operating	on track	struck by on-track equipment	pulled

## 134 Switching Fatalities Since 1992

The Switching Operations Fatality Analysis (SOFA) Group has reviewed each switching fatalities back to 1992. Since then, there have been 134 fatalities. On average, 10.3 fatalities occur each year.

Already in 2004 there have been 10 switching fatalities...December brings additional risk to employees engaged in switching operations.



### Please Make December a Safe Switching Month

The SWG urges employees engaged in switching operations to be aware of The Five Lifesavers. The 'Lifesavers' are a shortened version of the Five Operating Recommendations, which can be obtained by downloading the *SOFA Report* from the FRA's Web site: <http://www.fra.dot.gov/Content3.asp?P=102>

- **Secure equipment before action is taken.**
- **Protect employees against moving equipment.**
- **Discuss safety at the beginning of a job or when a project changes.**
- **Communicate before action is taken.**
- **Mentor less experienced employees to perform service safely.**

## Ten (10) Switching Fatalities in 2004

1. **JAN 14**....Norfolk Southern (NS) conductor killed when struck by a train he was switching in Kankakee Yard, Kankakee, IL.
2. **MAR 10**...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.
3. **MAY 13**...38-year old Michigan Southern Railroad (MSO) conductor killed when he apparently slipped and fell from a car he was riding near Sturgis, MI.
4. **MAY 18**...35-year old Norfolk Southern (NS) brakeman, with 6-years of service, killed when the lead car he was riding was struck by a tractor-trailer in Elwood, IN.
5. **SEP 02**....28-year old Burlington Northern Santa Fe (BNSF) switchman killed when the tank car he was riding derailed during a shove move near Clovis, NM.
6. **SEP 20**....44-year old Ann Arbor Railroad (AA) brakeman killed when crushed between track equipment and the car he was handling in Saline, MI.
7. **OCT 04**...58-year old Norfolk Southern (NS) conductor was struck and killed by a shove move being performed by another crew when he stepped in front of the leading end of the move in Harrisburg, PA.
8. **OCT 07**...Union Pacific (UP) student trainman killed while walking along side a shove move in Springfield, IL. Several cars derailed, one landing on the trainman.
9. **OCT 07**...60-year old Burlington Northern Santa Fe (BNSF) trainman killed when cars he was between moved in Teague, TX.
10. **NOV 01**...47-year-old Burlington Northern Santa Fe (BNSF) conductor killed when struck by a passing train, he was positioning himself to observe, in Bowdoin, MT.

(Note: Information on the ten switching fatalities is preliminary, pending investigation.)

## Recognizing Special Switching Hazards...

“In addition to the Five Operating Recommendations, the SWG wants to make those engaged in switching operations aware of Special Switching Hazards. In its review of each of the 124 fatalities, the SWG identified a number of fatalities involving close clearances (10 fatalities), being struck by mainline trains (8 fatalities), and occurring during shove movements (61 fatalities). The number of fatalities involving close clearance and being struck by mainline trains would be greater if those classified both as a Special Switching Hazard and an Operating Recommendation were included in these fatality counts.” - from *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. p. xiv.

### List of Special Switching Hazards Identified by SOFA Working Group...

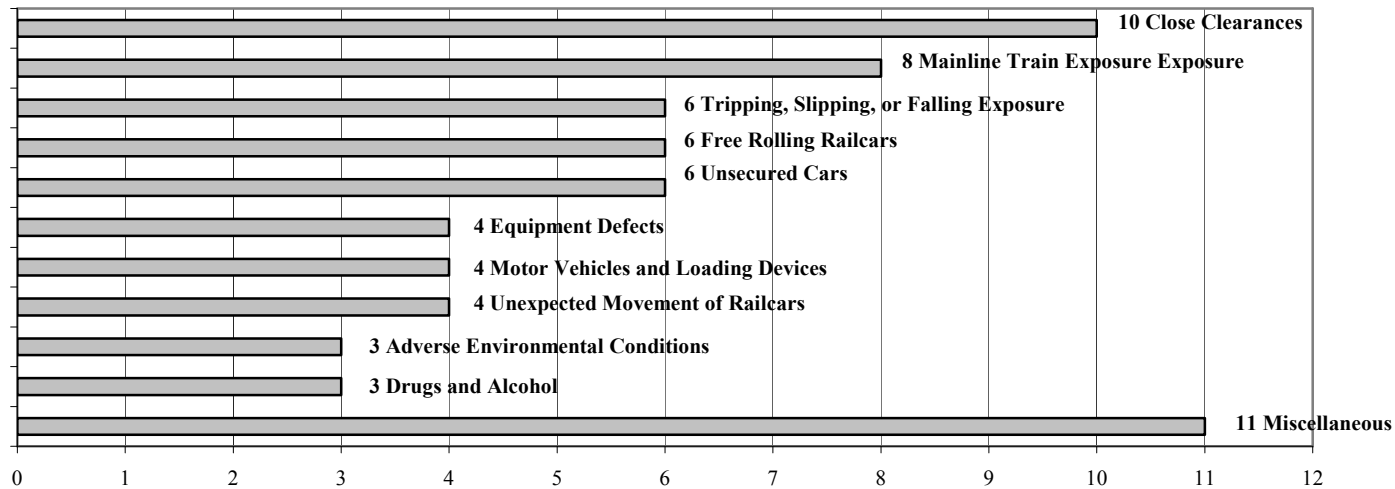
- Close Clearances\*
- Free Rolling Railcars
- Exposure to Mainline Trains
- Tripping, Slipping, or Falling Exposures
- Adverse Environmental Conditions
- Shoving Movements
- Unsecured Cars
- Unexpected Movement of Cars
- Equipment Defects
- Motor Vehicles or Loading Devices
- Drugs and Alcohol

\* The SOFA Working Group has broadened the traditional definition of ‘close clearances’ to include situations “When an employee is passing, or being passed, by an object or equipment and the conditions are such that there is not enough room for the employee to avoid being struck.” From *Findings and Recommendations of the SOFA Working Group: August 2004 Update*. p.48-50.

# Special Switching Hazards

In its recent report, the SOFA Working Group (SWG) identified 60 of 124 switching fatality cases – 48.4 percent – that occurred from 1992 through 2003 that did not involve one or more of its Five Operating Recommendations. The SWG believes that employees engaged in switching operations must be aware of these Special Switching Hazards in addition to the Five SOFA Operating Recommendations – if the goal of Zero Switching Fatalities is to be achieved.

**Sixty Switching Fatalities Involving Special Switching Hazards**  
**Five of the 60 fatalities involve two Special Switching Hazards**  
**None of the SOFA Five Operating Recommendations apply to these 60 Fatalities**



**To achieve the Zero Switching Fatality Goal, Special Switching Hazards must be recognized.**

# SOFA-defined Severe Injuries <sup>1</sup>

## Injuries

## Amputations <sup>2</sup>

January 1992 to August 2004

	1997	1998	1999	2000	2001	2002	2003	2004	1997	1998	1999	2000	2001	2002	2003	2004
JAN	11	13	16	15	21	12	11	11	1	0	2	1	0	0	2	2
FEB	17	15	9	9	9	13	17	14	0	1	0	1	0	2	1	2
MAR	14	12	17	11	10	10	13	10	3	4	3	2	1	1	3	1
APR	8	10	6	10	12	6	9	13	1	2	0	1	2	0	1	1
MAY	6	12	8	8	12	14	9	5	1	2	3	0	2	2	2	0
JUN	9	10	8	11	8	5	10	8	2	1	1	0	1	0	0	1
JUL	9	14	10	8	10	7	6	10	1	5	1	0	4	0	1	2
AUG	13	10	11	14	8	10	7	13	1	0	1	4	0	1	0	2
<b>YTD <sup>3</sup></b>	<b>87</b>	<b>96</b>	<b>85</b>	<b>86</b>	<b>90</b>	<b>77</b>	<b>82</b>	<b>84</b>	<b>10</b>	<b>15</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>6</b>	<b>10</b>	<b>11</b>
SEP	10	11	15	10	20	12	5		2	4	3	2	5	4	0	
OCT	12	12	16	10	5	11	9		2	5	2	2	0	0	2	
NOV	12	9	12	11	13	14	10		2	2	2	2	3	0	1	
DEC	18	9	7	22	12	9	8		4	1	0	4	1	1	2	
<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>20</b>	<b>27</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>11</b>	<b>15</b>	

The previous seven years have averaged 86.1 Severe Injuries for the period January through August.

The previous seven years have averaged 10.1 amputations for the period January through August.

<sup>1</sup> 'Severe Injuries' were 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. This report may be found on the FRA website.

<sup>2</sup> Amputations are a type of SOFA-defined Severe Injury and are counted in 'Injuries'. Amputations are broken out separately because of the extreme nature of trauma to employees engaged in switching operations, and the potential for permanent occupational limitation.

<sup>3</sup> August is the latest month of Severe Injuries available from the FRA's Web site as of November 15, 2004.