



SOFA Switching Fatality and Severe Injury Update – 2nd Quarter 2017

PLEASE POST IMMEDIATELY

Switching Operations Fatality Analysis (SOFA)

- A voluntary, non-regulatory, railroad-safety partnership of representatives from AAR, ASLRRRA, BLET, FRA, and UTU-SMART-TD
- Seeks to prevent switching fatalities through education based on facts about causes
- SOFA is not part of a rulemaking or regulatory process
- Recognizes that all have responsibility for switching safety: employees, managers, and regulators
- SOFA's goal is Zero Switching Fatalities achieved through education and non-punitive interactions among stakeholders

Find SOFA reports and information at: <http://www.fra.dot.gov/SOFA>

2017 SOFA Related Fatalities to date *(All information is preliminary until investigation is complete)*

- **January 31 – UP – Wallula, WA:** A conductor with 12 years' experience was riding an empty center beam lumber car (not on the deck) during a shove move. Last radio transmission was "2 cars". Engineer stopped movement and conductor was found fatally struck by his own train. Weather was 30° with slight snow.
- **June 27, 2017 – CSX – Washington DC:** On June 27, 2017 at about 11:18 pm EDT, a CSX Conductor with 4 years' service and a qualifying Conductor with 2 years' service, were struck from behind by a southbound Amtrak train traveling on Main 3, resulting in both persons being fatally injured. At the time of the accident, they were performing a walking inspection of their assigned train on Main 2. Weather at the time of the incident was dark, clear and about 61°.



SOFA-defined Severe Injury Update

Definition: Based on its interests (i.e., potentially involving the same factors as fatalities), *Severe Injuries* are defined by the SOFA Working Group as (1) potentially life threatening; (2) having a high likelihood of permanent loss of function, permanent occupational limitation, or other permanent disability; (3) likely to result in significant work restrictions; and (4) resulting 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. 1997 is the first year these Injuries to train and engine service employees can be determined as defined by the interest of the SOFA Working Group. For more information, see *Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics*. July 2001.

Note: The definition of *SOFA-defined Severe Injuries* is not to suggest that other injuries and illnesses resulting from operations are not also ‘severe’ and/or cause hardship to employees.

Severe Injuries Year-to-Date and Previous Five Years

Full Year: Present and Past Years	2017	2016	2015	2014	2013	2012
SIs	32	47	57	76	68	47
Amputations*	3	7	5	13	8	6

*Counts for amputations included in SIs

April 2017, is the most recent month available for SIs as defined by SOFA in its report, *Severe Injuries to Train and Engine Service Employees: Data Description and Injury Characteristics* (July 2001). Feel free to circulate and reference this information, which was extracted from the FRA’s publicly-available, electronic files on June 29, 2017.



2017 First Quarter SOFA Severe Injuries

There have been 32 SIs with 3 of those being amputations reported through 2nd Quarter 2017.

#	Month	Day	State	Age	Injury	Body Location	Description
1	January	01	CA	41	AMPUTATION	leg or foot	Struck by moving locomotive while walking on ground at main/branch location.
2	January	04	IL	47	fracture	head or face	Slipped, fell, stumbled, other while walking on ground at yard location.
3	January	06	MO	54	fracture	leg or foot	Slipped, fell, stumbled, etc. due to climatic condition while walking on ground at main/branch location.
4	January	07	CO	54	fracture	leg or foot	Slipped, fell, stumbled, etc. due to climatic condition while walking on ground at yard location.
5	January	08	AL	52	fracture	leg or foot	Slipped, fell, stumbled, etc. due to climatic condition while walking on ground.
6	January	09	OH	51	fracture	torso	Struck by a freight train moving while walking on ground at industry location.
7	January	10	MT	53	fracture	torso	Collision/impact-auto, truck, bus, van, etc. while riding in passenger van at highway/roadway.
8	January	11	IA	40	fracture	leg or foot	Slipped, fell, stumbled, etc. due to climatic condition while walking on ground at yard location.
9	January	15	IL	60	fracture	torso	provided narrative: "WHILE WALKING FROM PARKING LOT TO LOCOMOTIVE, EMPLOYEE SLIPPED ON ICE AND INJURED RIB ON GROUND"
10	January	17	TN	31	fracture	head or face	Injured from sudden release of air while coupling an air hose of freight car at yard location.
11	January	17	WY	52	fracture	leg or foot	Slipped, fell, stumbled, etc. due to climatic condition while walking on ground at siding location.
12	January	31	TX	26	amputation	leg or foot	"KNOCKING BRAKES OFF OF TRAIN AND HANGING EOT DEVICE CROSSING TRACKS. TEAM MEMBER LOST SITUATIONAL AWARENESS AND STEPPED IN FRONT OF MOVING LOCOMOTIVE."



2017 First Quarter SOFA Severe Injuries (cont'd)

#	Month	Day	State	Age	Injury	Body Location	Description
13	February	01	NC	52	fracture	torso	Sudden unexpected movement of a motor vehicle at a yard location.
14	February	02	WI	59	fracture	torso	Accompanying narrative: "THE EMPLOYEE WAS WALKING ALONGSIDE OF THE RAILROAD TRACKS WHEN HE SLIPPED ON A PATCH OF ICE FALLING TO THE GROUND LANDING ON HIS LEFT SIDE CRUSHING HIS RADIO THAT WAS ATTACHED TO HIS SAFETY VEST. EMPLOYEE FELT IMMEDIATE PAIN IN CHEST AREA"
15	February	04	IL	65	fracture	various body parts	Accompanying narrative: "NOT FEELING WELL, ENGINEER STOPPED TRAIN TO GO BACK TO SECOND UNIT. FELL ONCE INSIDE THE CAB, GOT UP AS HE WAS WALKING ON THE OUTSIDE WALKWAY OF THE LEAD UNIT, HE PASSED OUT AND FELL BETWEEN THE WALKWAY AND THE RAILING LANDING ON THE GROUND."
16	February	08	WA	52	fracture	leg or foot	Slipped, fell, stumbled while walking at a yard location.
17	March	05	CO	36	fracture	torso	Struck by on-track equipment while walking between tracks.
18	March	06	NY	32	fracture	head or face	"CONDUCTOR HEARD NOISE ON ROOF OF LOCOMOTIVE AND ATTEMPTED TO LOOK ON ROOF BY STICKING HIS HEAD OUT THE WINDOW UPON STRIKING AN OVERHEAD CATENARY SUPPORT BRACKET WITH HIS HEAD."
19	March	07	MS	48	fracture	leg or foot	"EMPLOYEE WAS WALKING BESIDE THE NORTH END LEAK TRACK AT NISSAN WHEN HE STEPPED IN A RUT OR HOLE CAUSING HIM TO TWIST HIS ANKLE AND FALL." [accompanying narrative]
20	March	15	IA	58	fracture	leg or foot	Slipped, fell, stumbled getting off side of moving freight car at a yard location.
21	March	19	LA	32	fracture	torso	"EMPLOYEE WAS STANDING BETWEEN TRACKS 213 AND 214 TO WATCH THE CARS ON TRACK 213 UNAWARE THAT HE FOULED THE TRACK ON 214 WITH A LOCOMOTIVE APPROACHING." [accompanying narrative]
22	March	21	WI	60	fracture	torso	"EMPLOYEE WAS CLIMBING THE LOCOMOTIVE STAIRS TO RETURN TO THE CAB WHEN HE SLIPPED AND FELL OFF THE LOCOMOTIVE LANDING ON THE GROUND." [accompanying narrative]
23	March	29	PA	39	AMPUTATION	leg or foot	Slipped, fell, stumbled while riding on side of a moving freight car at a yard location.
24	March	30	IL	44	fracture	Leg or foot	"Tripped on metal pipe"



2017 Second Quarter SOFA Severe Injuries

#	Month	Day	State	Age	Injury	Body Location	Description
25	April	2	LA	55	fracture	torso	Missed handhold, grabiron, step, etc. while getting off ladder of a standing freight car at a yard location.
26	April	8	MT	47	fracture	torso	“ENGINEER ON 0655 T/W (014) REMOTE TURNED TO SEE HOW MUCH ROOM HE HAD MADE. TURNED AROUND TO LOOK AT CO-WORKER AGAIN HE IMPACTED. ENGINEER WAS STANDING ON THE BOTTOM STEP (FIREMAN’S SIDE) OF THE LOCOMOTIVE. ENGINEER WAS THROWN TO GROUND.”
27	April	10	WV	55	fracture	leg or foot	“CONDUCTOR WHILE DISMOUNTING CAR HIS RIGHT FOOT WAS CAUGHT BETWEEN LADDER AND CAR CAUSING HIM TO LOSE BALANCE AND FALL FROM THE CAR INSTEAD OF HIS NORMAL DISMOUNT.” [accompanying narrative]
28	April	14	IL	46	fracture	leg or foot	Slipped, fell, stumbled, other while riding a moving locomotive at a yard location.
29	April	14	PA	23	fracture	torso	Hurt in derailment while riding in/on a moving locomotive at a yard location.
30	April	28	NC	29	fracture	torso	“EMPLOYEE WAS DISMOUNTING THE LEADING END OF A TANK CAR ON AN INDUSTRIAL TRACK. EMPLOYEE’S HIGH RISK VEST CAUGHT ON CARS DEFECT CARD HOLDER AND PULLED HIM BY A SHED SUPPORT COLUMN CLOSE TO THE TRACK.”
31	April	28	TX	31	fracture	leg or foot	Hurt while riding a moving freight train from slack action during a yard switching operation.
32	April	29	TX	36	Injury	various body parts of equal severity	“EMPLOYEE STATED THAT HE WAS FEELING ILL AND DECIDED TO WALK BACK TO THE RESTROOM ON THE SECOND LOCOMOTIVE. HE STATES THAT HE ENCOUNTERED STRONG WIND AS HE STEPPED TO THE OTHER ENGINE AND FELL FROM THE TRAIN.”

Note: April 2017, is the most recent month available.



Switching Fatalities, SOFA-defined Severe Injuries, and Other Reportable Events

Year	SOFA Switching Fatalities	Employee On-duty Fatalities	T&E Employee On-duty Fatalities	SOFA-defined Severe Injuries	Amputations (Included in SOFA-defined Severe Injuries)	T&E Employees Reportable Casualties (includes Fatalities and Severe Injuries)	Train Accidents	Human Factor Accidents	Percent of Human Factor Train Accidents
2007	6	17	4	110	16	2,520	2,693	1,047	39 %
2008	12	26	4	87	8	2,217	2,481	910	37 %
2009	8	16	2	53	6	1,972	1,912	656	34 %
2010	8	20	5	63	6	1,883	1,902	650	34 %
2011	4	21	11	69	11	1,735	2,032	752	37 %
2012	3	16	4	47	6	1,553	1,765	666	38 %
2013	1	14	2	68	8	1,742	1,851	712	38 %
2014	2	10	2	76	13	1,912	1,875	740	40 %
2015	3	11	1	57	5	1,727	1,925	760	39 %
2016	3	14	6	47	7	1,483	1,622	627	39 %
2017	3	7	4	32	3	528	527	173	33 %

Source: Information extracted from FRA’s publicly available data. Additional known SOFA related fatality counts added into this table and are not reflected in the publicly available data.

Note: Among *SOFA Updates*, counts previously presented may change based on revisions to FRA data. (data accessed 7/14/17)