

Appendix B: Supporting Data from NTSIP 2013-2014 Report

Table 3a. NTSIP incidents with injured people/fatalities, by type of incident and reporting state, NTSIP 2013.

State	Fixed Facility Incidents			Transportation Incidents			Total Incidents		
	#	# with injured people	Total # injured people (fatalities)	#	# with injured people	Total # injured people (fatalities)	#	# with injured people	Total # injured people (fatalities)
California	293	34	155 (2)	72	8	15 (1)	365	42	170 (3)
Louisiana	366	30	101 (3)	135	11	12 (0)	501	41	113 (3)
Missouri	143	19	39 (0)	158	12	36 (1)	301	31	75 (1)
New York	819	131	417 (8)	253	10	17 (1)	1,072	141	434 (9)
North Carolina	138	16	64 (3)	137	7	13 (1)	275	23	77 (4)
Tennessee	152	25	202 (1)	172	3	4 (0)	324	28	206 (1)
Utah	65	9	68 (0)	49	1	1 (0)	114	10	69 (0)
Wisconsin	67	10	24 (1)	112	2	4 (3)	179	12	28 (4)
Total	2,043	274	1,070 (18)	1,088	54	102 (7)	3,131	328	1,172 (25)

Table 3b. NTSIP incidents with injured people/fatalities, by type of incident and reporting state, NTSIP 2014.

State	Fixed Facility Incidents			Transportation Incidents			Total Incidents		
	#	# with injured people	Total # injured people (fatalities)	#	# with injured people	Total # injured people (fatalities)	#	# with injured people	Total # injured people (fatalities)
Missouri	98	6	28 (0)	126	8	10 (3)	224	14	38 (3)
North Carolina	117	30	174 (2)	169	11	17 (1)	286	41	191 (3)
Tennessee	192	25	61 (3)	209	3	6 (2)	401	28	67 (5)
Utah*	44	6	13 (0)	21	0	0 (0)	65	6	13 (0)
Wisconsin	81	11	43 (0)	96	2	3 (1)	177	13	46 (1)
Total	532	78	319 (5)	621	24	36 (7)	1,153	102	355 (12)

*Utah data collection was from 01/01/2014-08/19/2014.

Table 4. Transportation incidents, transportation incidents with injured people/fatalities, and total number of injured people/fatalities by transportation stage, NTSIP 2013-2014.

Transportation Stage	# of Transportation Incidents	# of Transportation Incidents with Injured People	Total # of Injured People (fatalities)
Occurred during unloading of a stationary vehicle or vessel	772	5	6 (0)
En route and later discovered at fixed facility	310	4	8 (0)
From a moving vehicle or vessel	273	48	78 (10)
Occurred from a stationary vehicle or vessel	185	10	14 (2)
Other	106	3	18 (1)
Missing transportation route	63	8	14 (1)
Total	1709	78	138 (14)

Table 5. The Top 10 most common individual chemicals released in fixed facility NTSIP incidents, 2013-2014.

Top 10 Chemicals Involved in NTSIP-eligible Fixed Facility Incidents, 2013-2014			
Rank	Chemical Name	#	Percentage of Total Fixed Facility Incidents (%) ^a
1	Natural gas	329	14.1
2	Ammonia	217	9.3
3	Methamphetamine chemicals NOS	180	7.7
4	Carbon monoxide	171	7.3
5	Mercury	87	3.7
6	Alkaline hydroxide	67	2.9
7	Hydrochloric acid	56	2.4
8	Chlorine	53	2.3
9	Sulfuric acid	53	2.3
10	Propane	52	2.2
Total number of incidents with Top 10 chemicals involved in fixed facility incidents		1,265	54.3

^a Percentages calculated on the basis of the total number of single chemical fixed facility incidents ($n=2,331$)

Table 6. The Top 10 most common individual chemicals released in NTSIP transportation incidents, 2013-2014.

Top 10 Chemicals Involved in NTSIP-eligible Transportation Incidents, 2013-2014			
Rank	Chemical Name	#	Percentage of Total Transportation Incidents (%)^a
1	Alkaline hydroxide	127	7.7
2	Natural gas	88	5.3
3	Sulfuric acid	66	4.0
4	Hydrogen peroxide	63	3.8
5	Acetone	58	3.5
6	Hydrochloric acid	52	3.1
7	Corrosive liquids NOS	37	2.2
8	Ethanol	35	2.1
9	Flammable liquids NOS	30	1.8
10	Corrosive liquid basic inorganic NOS	29	1.7
Total number of incidents with Top 10 chemicals involved in fixed facility incidents		585	35.3

^a Percentages calculated on the basis of the total number of single chemical transportation incidents ($n=1,658$)

^b NOS = not otherwise specified

Table 7. NTSIP incidents and injured people by primary contributing factors and type of incident, NTSIP 2013-2014.

Primary Contributing Factor	NTSIP-eligible Incidents					
	Fixed Facilities		Transportation		Total	
	#	%	#	%	#	%
Human error	750	29.1	1,070	62.6	1,820	42.5
Equipment Failure	1,214	47.1	489	28.6	1,703	39.8
Illegal Act	318	12.3	36	2.1	354	8.3
Missing	128	5.0	45	2.6	173	4.0
Other	88	3.4	47	2.8	135	3.2
Intentional	44	1.7	11	0.6	55	1.3
Bad weather conditions	33	1.3	11	0.6	44	1.0
Total	2,575	100.0	1,709	100.0	4,284	100.0
Primary Contributing Factor	NTSIP-Number of Injured People					
	Fixed Facilities		Transportation		Total	
	#	%	#	%	#	%
Human error	401	28.9	84	60.9	485	31.8
Equipment Failure	615	44.3	19	13.8	634	41.5
Illegal Act	138	9.9	15	10.9	153	10.0
Missing	101	7.3	6	4.3	107	7.0
Other	46	3.3	6	4.3	52	3.4
Intentional	77	5.5	5	3.6	82	5.4
Bad weather conditions	11	0.8	3	2.2	14	0.9
Total	1,389	100.0	138	100.0	1,527	100.0

Table 8. Number of injured people per incident and type of incident, NTSIP 2013-2014.

# of Injured People per Incident	NTSIP-eligible Incidents					
	Fixed Facilities		Transportation		Total	
	# of incidents	Total # of injured people	# of incident	Total # of injured people	# of incidents	Total # of injured people
None	2,223	0	1,631	0	3,854	0
1 person	155	155	49	49	204	204
2 people	70	140	20	40	90	180
3 people	40	120	3	9	43	129
4 people	17	68	3	12	20	80
5 people	10	50	1	5	11	55
6+ people	60	856	2	23	62	879
Total	2,575	1,389	1,709	138	4,284	1,527

Table 9. Number of injured people by severity/disposition and type of incident, NTSIP 2013-2014.

Severity and Disposition of Injured People	Number of Injured People in NTSIP-eligible incidents					
	Fixed Facilities		Transportation		Total	
	#	%	#	%	#	#
Treated on scene (first aid)	244	17.6	8	5.8	252	16.5
Treated at hospital (not admitted)	394	28.4	18	13.0	412	27.0
Treated at hospital (admitted)	193	13.9	17	12.3	210	13.8
Treated at hospital (admission unknown)	394	28.4	64	46.4	458	30.0
Observation at hospital; no treatment	100	7.2	4	2.9	104	6.8
Seen by private physician within 24 hours	7	0.5	7	5.1	14	0.9
Injuries experienced within 24 hours of incident and reported by official (e.g. fire department, EMT)	14	1.0	3	2.2	17	1.1
Death on scene/on arrival at hospital	17	1.2	12	8.7	29	1.9
Death after arrival at hospital	6	0.4	2	1.4	8	0.5
Missing severity/ disposition	20	1.4	3	2.2	23	1.5
Total	1,389	100.0	138	100.0	1,527	100.0

Table 10. Injured people by category and type of incident, NTSIP 2013-2014.

Category of Injured People	Number of Injured People					
	Fixed Facilities		Transportation		Total	
	#	%	#	%	#	%
Missing	67	4.8	18	13.0	85	5.6
Employee	534	38.4	66	47.8	600	39.3
Public	693	49.9	45	32.6	738	48.3
General public	571	41.1	45	32.6	616	40.3
Student	122	8.8	0	0.0	122	8.0
Responder	95	6.8	9	6.5	104	6.8
Police officer	53	3.8	4	2.9	57	3.7
Career firefighter	18	1.3	1	0.7	19	1.2
Volunteer firefighter	9	0.6	0	0.0	9	0.6
Firefighter (not specified)	2	0.1	4	2.9	6	0.4
EMT personnel	8	0.6	0	0.0	8	0.5
Responder (not specified)	4	0.3	0	0.0	4	0.3
Employee response member	1	0.1	0	0.0	1	.1

Table 11. Injured people by category and gender and age, NTSIP 2013-2014.

Category of Injured People	Number of Injured People					
	Gender			Age		
	Male	Female	Missing	Child*	Adult**	Missing
Missing	0	0	85	0	0	85
Employee	224	96	280	1	452	147
Public	185	115	438	204	219	315
General public	154	93	369	91	211	314
Student	31	22	69	113	8	1
Responder	53	5	46	0	91	13
Police officer	32	4	21	0	49	8
Career firefighter	1	0	18	0	18	1
Volunteer firefighter	8	0	1	0	8	1
Firefighter (not specified)	3	0	3	0	4	2
EMT personnel	7	1	0	0	7	1
Responder (not specified)	2	0	2	0	4	0
Employee response member	0	0	1	0	1	0
Total	462	216	849	205	762	560

* Child: under 18 years old

** Adult: 18 years old or greater

Table 12. Injured people by adverse health effects and type of incident, NTSIP 2013-2014.

Adverse Health effects	Total # of Injured People					
	Fixed Facilities		Transportation		Total	
	#	%	#	%	#	%
Respiratory symptom problems	262	18.9	13	9.4	275	18.0
Other	197	14.2	5	3.6	202	13.2
Burns	102	7.3	15	10.9	117	7.7
<i>Thermal*</i>	62		11		73	
<i>Chemical</i>	19		4		23	
<i>Both</i>	7		0		7	
<i>Missing</i>	14		0		14	
Dizziness or other CNS problem**	89	6.4	1	0.7	90	5.9
Eye irritation	39	2.8	0	0.0	39	2.6
Headache	32	2.3	0	0.0	32	2.1
Trauma	26	1.9	50	36.2	76	5.0
<i>Chemical-related</i>	2		0		2	
<i>Not chemical-related*</i>	17		44		61	
<i>Both</i>	0		3		3	
<i>Missing</i>	7		3		10	
GI problems	16	1.2	1	0.7	17	1.1
Skin irritation	10	0.7	1	0.7	11	0.7
Heat stress	6	0.4	0	0.0	6	0.4
Heart problems	6	0.4	0	0.0	6	0.4
Shortness of breath	4	0.3	0	0.0	4	0.3
2 adverse health affects	322	23.2	22	15.9	344	22.5
3 adverse health affects	180	13.0	25	18.1	205	13.4
More than 3 adverse health affects	59	4.2	5	3.6	64	4.2
Missing	39	2.8	0	0.0	39	2.6
Total	1,389	100.0	138	100.0	1,527	100.0

*Non-chemical related traumas and thermal burns may be related to a fire, explosion, or a traffic accident, rather than from exposure to a chemical.

**Other CNS problems includes fainting, passing out, lightheadedness, ataxia, numbness, tingling, and twitching

Table 13. Total number of responders by responder type , NTSIP 2013-2014.

Responder	Total	
	#	%
No Response	162	3.8
Company response team	1,804	42.1
3rd party clean up contractor	157	3.7
Fire department	150	3.5
Department of works/utilities/transportation	87	2.0
Law enforcement agency	71	1.7
EPA response team	37	0.9
Certified HazMat team	20	0.5
EMS	15	0.4
Other	15	0.4
Health department	8	0.2
State/county/local emergency manager or committees	1	0.0
4+ types or responders	378	8.8
3 types or responders	450	10.5
2 types or responders	692	16.2
Missing	237	5.5
Total	4,284	100.0

Table 14. Type of industries by incidents and injuries, NTSIP 2013-2014^a.

NAICS Code	# Incidents	# Injured people (fatalities)
11—Agriculture, Forestry, Fishing, and Hunting	101	41 (2)
21-Mining	33	4 (0)
22-Utilities	275	14 (0)
23-Construction	47	1 (0)
31-33-Manufacturing	604	254 (6)
42-Wholesale Trade	118	48 (2)
44-45-Retail Trade	116	84 (2)
48-49-Transportation and Warehousing	1,566	71 (1)
51-52-Information, Finance, and Insurance	7	2 (0)
53-Real Estate and Rental Leasing	134	82 (1)
54—Professional, Scientific, and Technical Services	13	3 (0)
56—Administrative, Support, Waste Management and Remediation Services	41	21 (0)
61—Educational Services	90	258 (1)
62—Health Care and Social Assistance	54	56 (3)
71—Arts, Entertainment and Recreation	25	23 (0)
72—Accommodation and Food Services	73	109 (3)
81—Other Services	29	25 (0)
92—Public Administration	54	83 (0)
Vehicle or Residence	469	245 (7)
Not Identified	169	43 (0)
Not an Industry	266	60 (9)
Total	4,284	1,527 (37)